

CITY OF SAUSALITO

SPECIAL PROVISIONS-SPECIFICATIONS-BID DOCUMENTS

FOR

MLK Park Athletic Field Improvements Project

October 2018

CITY OF SAUSALITO MARIN COUNTY

PUBLIC WORKS DEPARTMENT 420 Litho Street Sausalito, California 94965 (415) 289-4106

JONATHON GOLDMAN, PE DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

Bid Opening: October 16, 2018

Pre-Bid Conference: September 26, 2018

Contract Performance Time: 80 Working Days Liquidated Damages: \$1,500 per Calendar Day

Engineer's Attest:

The following plans and specifications have been prepared under the supervision of the undersigned who hereby certifies that he is a Registered Engineer in the State of California:

Roland Lambert, PE C 50971



TABLE OF CONTENTS

NOTICE TO BIDDERS
SECTION 1 - BIDDING AND CONTRACT REQUIREMENTS
1-1 INVITATION TO BID
1-2 INSTRUCTIONS TO BIDDERS
BID CHECKLIST
BID PROPOSAL
SCHEDULE OF BID ITEMS
BASE BID
BIDDER'S BOND
CONTRACTOR'S LICENSING STATEMENT
CONTRACTOR'S EXPERIENCE STATEMENT
DESIGNATION OF SUBCONTRACTORS/SUPPLIERS
NONCOLLUSION AFFIDAVIT
DESIGNATION OF INSURANCE AGENT OR BROKER
STATEMENT OF BIDDER
STATEMENT OF MANDATORY SITE VISIT45
AFFIDAVIT OF SAFETY COMPLIANCE
CONTRACTOR SAFETY OPERATIONS REQUIREMENTS
AGREEMENT52
BOND OF FAITHFUL PERFORMANCE
PAYMENT BOND66
ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION
GENERAL LIABILITY ENDORSEMENT (Form A-1)74

AUTO LIABI	LITY ENDORSEMENT (Form B-1)	78
SECTION 2 -	GENERAL CONDITIONS	82
2-1	GENERAL	82
2-2	ADMINISTRATION	84
2-3	OWNER	87
2-4	CONTRACTOR	90
2-5	CONTROL OF WORK AND MATERIALS	101
2-6	PROGRESS OF THE WORK	102
2-7	MODIFICATION PROCEDURES	Error! Bookmark not defined.
2-8	SCOPE OF WORK - CHANGES IN THE WORK	113
2-9	PAYMENT	117
2-10	EXISTING UTILITIES	127
2-11	FINAL CLEANUP	129
SECTION 3 -	SUPPLEMENTARY GENERAL CONDITIONS	130
3-1	MODIFICATIONS TO THE GENERAL CONDITION	ONS130
3-2	TIME ALLOWED FOR COMPLETION	130
3-3	DAMAGES FOR DELAYS	130
3-4	WEATHER DAYS	130
SECTION 4 -	INDEMNITY AND INSURANCE	131
4-1	INDEMNIFICATION	131
4-2	INSURANCE REQUIREMENTS	131
SECTION 5 -	GENERAL REQUIREMENTS	135
5-1	SUMMARY OF WORK	135
5-2	MEASUREMENT AND PAYMENT	136
5-3	MODIFICATION PROCEDURES	138
5-4	FIELD ENGINEERING	142
5-5	REGULATORY REQUIREMENTS	143
5-6	REFERENCES	143
5-7	ABBREVIATIONS	149

	5-8	PROJECT MEETINGS	150
	5-9	PROGRESS SCHEDULES	152
	5-10	SHOP DRAWINGS, PRODUCT DATA AND SAMPLES	156
	5-11	QUALITY CONTROL	159
	5-12	CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS	161
	5-13	MATERIAL AND EQUIPMENT	170
	5-14	NOT USED	172
	5-15	CONTRACT CLOSEOUT	172
SECTIO	ON 6 - N	Not Used	176
SECTIO	ON 7 - N	lot Used	176
SECTIO	N 8 - N	lot Used	176
SECTIO	ON 9 - N	lot Used	176
SECTIO	ON 10 -	TECHNICAL SPECIFICATIONS	177
	10-1	MOBILIZATION	177
	10-2	CLEARING AND GRUBBING	177
	10-3	EARTHWORK	177
	10-4	LAYDOWN AREA	178
	10-5	ALTERATIONS	178
	10-6	TRAFFIC CONTROL SYSTEM	179
	10-7	WATER POLLUTION AND EROSION CONTROL	182
	10-8	HYDROSEED – EROSION CONTROL (TYPE D)	183
	10-9	DEMOLITION	188
	10-10	PROTECTION OF EXISTING FACILITIES	191
	10-11	EXPLORATORY EXCAVATION	192
	10-12	DISPOSAL OF MATERIALS	193
	10-13	DEMOLISH AND ABANDON EXISTING STORM DRAIN FACILITIES	193
	10-14	SUBGRADE PREPARATION	193
	10-15	HOT MIX ASPHALT (HMA)	194
	10-16	LANDSCAPE RESTORATION	196

10-17 EXCAVATION, BEDDING, PIPE INSTALLATION, AND BACKFILL	196
10-18 EXCAVATION DEWATERING	201
10-19 STORM DRAIN PIPE	203
10-20 UTILITY STRUCTURES	206
10-21 MINOR CONCRETE (Field GYm pad)	213
10-22 CONCRETE FORMWORK	214
10-23 CLASS 2 AGGREGATE BASE	217
10-24 4' wide x 1' deep and 6' wide x 1.5' deep GRASS LINED SWALE	218
10-25 CONTROLLED DENSITY FILL	218
10-26 SOD AND SEED	220
10-27 IRRIGATION	231
10-28 24' WIDE FENCE GATE	250
10-29 AS-BUILT DRAWINGS	257
10-30 SITE CLEAN-UP	257
APPENDIX A	258
Standard Conditions for	258
Encroachment Permit	258

NOTICE TO BIDDERS

MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT

NOTICE IS HEREBY GIVEN that the City of Sausalito will receive sealed bids for the **MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT**. Such sealed bids shall be received at the Office of the City Clerk of the City of Sausalito at 420 Litho St. until **October 16, 2018 at 2:00 PM**, at which time they will be publicly opened and read. On a date to be determined later, such bids shall be tabulated and submitted to the City Council for consideration and action consistent with the provisions of Public Contract Code Division 2, Part 3, Chapter 1, Article 4.

GENERAL DESCRIPTION OF WORK: The project provides for installation of landscaping and irrigation, concrete gym pad, asphalt ADA path, storm drain pipe and inlets, grass lines swales, concrete lined ditch, 24' wide chain link fence sliding gate, earthwork, grading as shown on the project plans.

PRE-BID MEETING:

Time: September 26, 2018 at 10:00 AM

Location: City Hall Conference Room, 420 Litho St., Sausalito, CA

BIDDERS' REQUIREMENTS: Each Bid shall be made in accordance with the Plans, Specifications and Contract Documents prepared therefore, and available for review at the office of the City Engineer.

As noted in the Instructions to Bidders, all bid questions must be in writing and can be emailed to Andrew Davidson: adavidson@sausalito.gov.

Bids shall be submitted only upon proposal forms included in the bid documents. The Contract will be awarded, if at all, to the responsible Bidder submitting the lowest responsive Bid based on the Total Base Bid amount. Copies of Contract Documents are available for public inspection at the City of Sausalito. Digital copies of the plans and specifications will be available on the City website at http://www.sausalito.gov/departments/public-works/bid-notices. Those wishing for paper copies of the plans and specifications shall make their own printing arrangements.

Each Bid must be accompanied by a Proposal Guarantee in the form of a certified or cashier's check, currency or Bid Bond, equal to ten percent (10%) of the aggregate amount of the Bid. The check or Bond shall be made payable to the City of Sausalito. Bidders must use the bond form enclosed with the bid documents; other bond forms will not be accepted. Any Bid not accompanied by a Bid Security may be rejected. Such amount accompanying the Bid shall be given as a guarantee that the Bidder will enter into the contract if awarded thereto and the Bidder will file the Contract Bonds and other requisite documents required within the specified time period in accordance with the Instructions to Bidders.

The City Council reserves the right to reject any and all Bids, to make any awards or rejections in which it alone considers to be the best interest of the City, and to waive any irregularity or informality in any Bid received.

Pursuant to Section 1770, *et seq.* of the California Labor Code, the Contractor and all Subcontractors shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations and shall be responsible for complying with requirements concerning the employment of apprentices and apprenticeable occupations.

Bidders shall be licensed in accordance with California law at the time bids are submitted. The licenses required to perform this project is a class A (GENERAL ENGINEERING).

Bidders should have fully inspected the project site in all particulars and become thoroughly familiar with the terms and conditions of the Contract Documents and local conditions affecting the performance and costs of the work prior to submitting a bid. Submission of a Bid by Bidder warrants that Bidder has visited the site of the Project and is thoroughly familiar with the work required of the Contract Documents.

Upon award of the contract, the successful bidder shall furnish a bond for faithful performance in the amount of one hundred percent (100%) of the contract price; it shall also furnish a labor and material bond to secure the payment of all claims of labor and material in the amount of 100 percent (100%) of the contract price. Such bonds shall be secured from a surety company satisfactory to the City of Sausalito. No bid or bid security may be withdrawn for 60 calendar days after the bids are opened. Payment and Performance Bonds are required to be filed and approved by the City Engineer before the Contractor begins the Work. Aforementioned Faithful Performance Bond, upon City acceptance of Notice of Completion, shall serve as a one-year Warranty Bond or the Contractor shall submit a new one-year Warranty Bond to the City in the amount of 25% of the base bid.

Contract amounts to be paid under this contract will be subject to 10% retention to ensure performance. Pursuant to Public Contract Code Section 22300, for monies earned by the CONTRACTOR and withheld by the City of Sausalito to ensure the performance of the Contract, the CONTRACTOR may, at its option, choose to substitute securities meeting the requirements of Public Contract Code Section 22300. The value of any securities so substituted shall be valued by the City's Finance Director, whose decision on the valuation of the securities shall be final.

CONTRACTOR RESPONSIBILITIES RELATING TO THE DEPARTMENT OF INDUSTRIAL RELATIONS: 1) No contractor or subcontractor may be listed on a bid proposal for a Public Works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1 (a)]. 2) No contractor or subcontractor may be awarded a contract for Public Works on a Public Works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code 1725.5, 3) This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations, and 4) All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).

By order of the City Council of the City of Sausalito, County of Marin, State of California.

The Engineer's estimate of construction costs for this project is \$1,035,000.

The project is to be completed within **Eighty (80) consecutive working days** from the effective date of the Notice to Proceed.

Dated: September 14, 2018

CITY OF SAUSALITO

by: _____

Jonathon Goldman, Director of Public Works/City Engineer

SECTION 1 - BIDDING AND CONTRACT REQUIREMENTS

1-1 INVITATION TO BID

SEALED BIDS will be received by the **Office of the City Clerk of the City of Sausalito at 420 Litho St** until **October 16, 2018 at 2:00 PM** per the clock in the office of the City Clerk at which time they will be publicly opened and read for performing work as described within the Notice to Bidders section of these Bid Documents.

The project is to be completed within **Eighty (80) consecutive working days** from the effective date of the Notice to Proceed.

Copies of Contract Documents are available for public inspection at the City of Sausalito. Digital copies of the plans and specifications will be available on the City website at http://www.sausalito.gov/departments/public-works/bid-notices. Those wishing for paper copies of the plans and specifications shall make their own printing arrangements.

Bidding procedures are prescribed in the Project Manual. Bids shall be executed upon the forms bound and made a part of said Manual. Bid guaranty in an amount not less than ten percent (10%) of the total bid dollar amount and conforming to the prescribed bidding procedures is required to be submitted with each bid, as a guaranty to be forfeited should the bidder, if awarded the contract, fail to enter into the same, or fails to furnish in a timely manner the bonds and/or proof of insurance within 10 days after notice that his bid has been accepted. Bid guarantees are to be in the form of certified or cashiers check, currency, or bid bond.

Pursuant to the provisions of California Labor Code Section 6707, each bid submitted in response to this Invitation to Bid shall contain, as included in the various bid items, adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life and limb in any trenches and open excavation, which shall conform to applicable safety orders. By including this sum, the bidder warrants that its action does not convey tort liability to the City, the Design Consultant, the Engineer, and their employees, agents, and sub consultants.

Pursuant to the provisions of Article 108, et. seq. of Title 8 of the California Code of Regulations, each bid submitted in response to this Invitation to Bid, shall ensure that bidder will provide all necessary personnel, equipment and perform all necessary construction in conformance with the applicable safety orders.

Pursuant to Section 1770, et. seq., of the California Labor Code, the successful bidder shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of such prevailing rate of per diem wages are on file at the office of the **Office of the City Clerk of the City of Sausalito** which copies will be made available to any interested party on request.

This contract is subject to the State contract nondiscrimination and compliance requirements pursuant to Government Code Section 12990. The City of Sausalito hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in

response to this invitation and will not be discriminated against on the grounds of race, color or national origin for consideration for an award.

The successful bidder must ensure that its policies and practices provide equal opportunity to all applicants and employees without regard to race, color, creed, sex, age, religion, ancestry, citizenship, national origin, handicap, mental condition, veteran or marital status. The successful bidder must comply with the Americans with Disabilities Act.

Pursuant to Public Contract Code Section 22300, for monies earned by the Contractor and withheld by the **City of Sausalito** to ensure the performance of the Contract, the Contractor, may, at its option, choose to substitute securities meeting the requirements of said Public Contract Code Section 22300.

All bidders shall be licensed under the provisions of Chapter 9, Division 3 of the Business and Professions Code of the State of California to do the type of work contemplated in the project. In accordance with provisions of California Public Contract Code Section 3300, the City has determined that the Contractor shall possess a valid Class "A" License at the time that the bid is submitted.

Failure to possess the specified license shall render the bid as non-responsive. The successful bidder will be required to furnish a Payment bond in the amount equal to one hundred percent (100%) of the Contract price, as well as a Faithful Performance Bond in the amount equal to one hundred percent (100%) of the Contract price.

Each bidder shall submit with its bid a statement setting forth its experience on the forms included in the Bid Proposal.

Telephones will not be available to bidders for the preparation of bids or for calling in bid results. Bid forms received after the designated time will not be accepted.

No bidder may withdraw its bid for a period of sixty (60) days after the date set for the opening of bids.

The City reserves the right to reject any or all bids, and to waive any irregularities in the bids.

1-2 INSTRUCTIONS TO BIDDERS

1-2.1 WORK TO BE DONE

The work to be done consists of furnishing all plant, labor, materials, methods, and processes, implements, tools and machinery, except as otherwise specified, which are necessary and required to construct and complete the work designated in the contract, and to leave the grounds in a neat condition.

The scope of work is as described in the "Notice to Bidders" section of these Special Provisions.

The City reserves the right to increase or decrease the quantity of any item or portion of the work as may be deemed necessary or advisable by the City Engineer; also to make such alterations or deviations, increases or decreases, additions or omissions, in the plans and specifications, as determined to be necessary and advisable.

In the event materials and/or equipment are to be furnished by the City, as designated in the Special Provisions or as agreed on, this shall not relieve the Contractor of the above requirements to furnish all other plant, labor, materials, and equipment to complete the contract.

The Contractor shall be required to provide, at its own cost and expense, all necessary insurance, as required by law or these specifications, and shall pay the cost and expense of any and all incidental matters herein required.

1-2.2 EXAMINATION OF CONTRACT DOCUMENTS

The bidder shall carefully examine the project proposal, plans, specifications, video logs and tapes, and contract forms. It will be assumed that the bidder has made a complete investigation and is satisfied as to the character, quality and quantities of work to be performed, the materials to be furnished, and the requirements of the plans, specifications, and the contract. It is mutually agreed that submission of a proposal shall be considered prima facie evidence that the bidder has made such examination.

The failure or neglect of a bidder to receive or examine any of the Contract Documents shall in no way relieve it from any obligation with respect to its proposal or to the Contract. No claim for additional compensation will be allowed which is based upon a lack of knowledge of any Contract Documents.

1-2.3 INTENT OF PLANS AND SPECIFICATIONS

The intent of the plans and specifications is to describe the details for the construction and completion of the work which the Contractor undertakes to perform in accordance with the terms of the contract. Where the plans or specifications describe portions of the work in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the finest quality are to be used.

1-2.4 APPROXIMATE ESTIMATE

The quantities given in the specifications, proposal and contract are approximate only. They are given only as a basis for comparison of bids. The City does not expressly or by implication, agree that the actual amount of the work will correspond therewith, and reserves the right to increase or decrease the amount of any class or portion of work, or omit portions of work, as deemed necessary or advisable by the City Engineer.

1-2.5 INSPECTION OF SITE

Bidders are required to inspect the site of the work to satisfy themselves by personal examination or by such other means as they may prefer, of the location of the proposed work, and of the actual conditions, including subsurface, of and at the site of work. If, during the course of its examination, a bidder finds facts or conditions, which appear to be in conflict with the letter or spirit of the bidding documents, the Bidder may apply to the City, in writing, for additional information and explanation before submitting its bid.

Submission of a bid by the bidder shall constitute conclusive evidence that, if awarded the Contract, it has relied and is relying on its own examination of (1) the site of the work, (2) access to the site, (3) all other data and matters requisite to the fulfillment of the work and on its own knowledge of existing facilities on and in the vicinity of the site of the work to be constructed under the Contract, (4) the conditions to be encountered, (5) the character, quality and scope of the proposed work, (6) the quality and quantity of the materials to be furnished, and (7) the requirements of the bid, the plans, the specifications, and the other Contract Documents.

The information provided by the City is not intended to be a substitute for, or a supplement to the independent verification by the bidder to the extent such independent investigation of site conditions is deemed necessary or desirable by the bidder.

1-2.6 INTERPRETATION OF CONTRACT DOCUMENTS

Questions regarding documents, discrepancies, omission or doubt as to meaning shall be referred immediately, and in any even at not less than five (5) days prior to the opening of bids, to the City of Sausalito, who will send written instructions clarifying such questions to each bidder. The City shall not be held responsible for any oral instructions.

Andrew Davidson Senior Engineer adavidson@sausalito.gov

Requests to clarify the source of materials, equipment, suppliers or any other such matter which does not modify, change, increase, or decrease the scope of work requires no action by the City other than a response to the bidder requesting the clarification. Requests to clarify possible ambiguous or incomplete statements or designs, or any other such clarification, which modifies, changes, increases or decreases the scope of work, requires issuance of an addendum by the City for the interpretation to become effective.

The right is reserved, by the City, as may be required, to revise or amend the specifications, plans, drawings or other contract documents, prior to the date set for opening of bids. Such revisions and amendments, if any, will be announced by an addendum or addenda to the Notice to Bidders. If the revisions and amendments are of a nature which require material changes in quantities or bid prices or both, the date set for opening of bids may be postponed by such number of days as in the opinion of the City Engineer will be necessary for bidders to revise their bid. In such case, the addenda will include the announcement of the new date for opening bids. Bidders are required to acknowledge receipt of all addenda on the bid proposal submitted. Failure to acknowledge all such addenda may cause rejection of the bid.

Any information shown on the plans as to the soils or material borings or tests of existing material is for the purpose of design. The information is not guaranteed, and no claims for extra work or damages will be considered if it is found during construction that the actual soil or material conditions vary from those indicated unless provided for in the Special Provisions.

1-2.7 POSTPONEMENT OF OPENING

The City reserves the right to postpone the date and time for receiving and/or opening of bids at any time prior to the date and time established in the Invitation to Bid. Postponement notices shall be mailed to plan holders of record in the form of addenda.

1-2.8 OPENING OF BIDS

All bids, irrespective of any irregularities or informalities, if received on time, will be opened and publicly read aloud at the time and place set forth in the Invitation to Bid. Bidders, their representatives and other interested persons may be present at the opening and reading of bids.

Any bids received after the time for receiving and opening bids as set forth in the Invitation to Bid or as postponed by addenda will be considered nonresponsive and will not be opened. Any such bids will be returned unopened to the Bidder.

The public reading of each bid will include at least the following:

- A. Name and address of bidder.
- B. The total amount of bid.
- C. The nature and amount of the security furnished with the bid.

1-2.9 PREPARATION OF BID FORMS

Bids shall be made on the blank forms in this manual and must be submitted at the time and place stated in the Invitation to Bid. All blanks in the bid forms must be appropriately filled in, either in ink or typed, and all prices must be stated in figures. All bids must be submitted in sealed envelopes bearing on the outside the name of the bidder, its address, and the name of the project for which the bid is submitted. It is the sole responsibility of the bidder to see that its bid is received in proper time. Any bid received after the scheduled closing time for receipt of bids will be returned to the bidder unopened. City shall not be responsible for

errors or omissions in the bid. Bidders shall write their names on each bid form at the space provided.

1-2.10 BIDDER'S SIGNATURE AND AUTHORITY

If the bid is made by an individual, his/her name, signature, and post office address must be shown; if made by a firm or partnership, the name and post office address of the firm or partnership, a list of the partners, and the signature of at least one of the general partners must be shown; if made by a corporation, the bid shall show the name of the state under the laws of which the corporation is chartered, the name and post office address of the corporation, and the title of the person who signs on behalf of the corporation. If the bid is made by the corporation, a certified copy of the bylaws or resolution of the Board of Directors of the corporation shall be furnished showing the authority of the officer signing the bid to execute Contracts on behalf of the corporation. If the bid is made by a joint venture, the bid shall be signed by a representative of one of the joint venture firms. Additionally, the bid shall include a copy of the resolution or agreement empowering the representative to execute the bid and bind the joint venture.

1-2.11 ERASURES AND CORRECTIONS

The bid submitted must not contain any erasure, interlineations, or other corrections unless each such correction is suitably authenticated by affixing in the margin immediately opposite the correction the signature or signatures of the person or persons submitting the bid.

1-2.12 BID IRREGULARITIES

Changes in or additions to the bid form, recapitulations of the work bid upon, alternative bids, or any other modifications of the bid form which are not specifically called for in the Contract Documents may result in rejection of the bid by the City, as not being responsive to the Invitation to Bid. No oral or telephonic modification of any bid submitted will be considered.

1-2.13 MODIFICATION OF BID

On written request filed with the City, a bid already received may be modified or withdrawn at any time prior to the time established for receiving bids. The request must be executed by the bidder or its authorized representative as described in **Section 1-2.10**, **BIDDER'S SIGNATURE AND AUTHORITY**. Modifications shall be made in writing, executed, and submitted in the same form and manner as the original bid. Withdrawal of a bid does not prejudice a bidder's right to submit a new bid within the time designated for the submission of bids. No bid may be withdrawn after the time established for receiving bids except as provided in **Section 1-2.14**, **WITHDRAWAL OF BIDS**.

1-2.14 WITHDRAWAL OF BIDS

In accordance with Public Contract Code 5103, within five days after the opening of bids, a bidder may withdraw its bid providing the bidder can establish to the City's satisfaction that a mistake was made in preparing the bid. A bidder desiring to withdraw shall give written notice to the City, specifying, in detail, how the mistake occurred and how the mistake made

the bid materially different than it was intended to be. Withdrawal will not be permitted for mistakes resulting from errors in judgment or carelessness in inspecting the site of the work or in reading the Contract Documents.

1-2.15 ADDENDA

Addenda issued during the time of bidding shall become a part of the documents furnished bidders for the preparation of bids, shall be covered in the bids, and shall be made a part of the Contract. Each bid shall include specific acknowledgement in the space provided of receipt of all Addenda issued during the bidding period. Failure to so acknowledge may result in the bid being rejected as not responsive. Failure of any bidder to receive such Addenda shall not be grounds for non-compliance with the terms of the instructions.

1-2.16 BID PRICES

Bid prices shall include everything necessary for the completion of the work including but not limited to providing the materials, equipment, tools, plant and other facilities, and the management, superintendence, labor and services. Bid prices shall include allowance for all federal, state and local taxes.

In the event of a difference between a price quoted in words and a price quoted in figures for the same quotation, the words shall be the amount bid. In the event that the product of a unit price and an estimated quantity does not equal the extended amount quoted, the unit price shall govern, and the correct product of the unit price and the estimated quantity shall be deemed to be the amount bid. If the sum of two or more items in a bidding schedule does not equal the total amount quoted, the individual item amounts shall govern and the correct total shall be deemed to be the amount bid.

1-2.17 BID GUARANTY

The bid form shall be accompanied by a bid guaranty bond provided by a surety company authorized to carry on business in the State of California with a minimum "A: VII" rating with Best's Rating Guide for payment to the City in the sum of at least ten (10) percent of the total amount of the bid price, or, alternatively, by a certified or cashier's check, or cash, payable to the City in the sum of at least ten (10) percent of the total amount of the bid price. The bid guaranty bond shall be provided on the form **BID GUARANTY BOND**, of this Project Document. The amount payable to the City under the bid guaranty bond, the certified or cashier's check, or cash and the amount thereof, as the case may be, shall be forfeited to the City as liquidated damages in case of a failure or neglect of the bidder to furnish, execute, and deliver to the City the required performance and payment bonds, evidences of insurance; and to enter into, execute, and deliver to the City the Agreement on the form provided herewith, within five (5) calendar days after receiving written notice from the City that the award has been made and the Agreement is ready for execution.

The bid guarantees of the three lowest bidders will be retained until the Agreement is signed, evidence of insurance provided, and satisfactory bonds furnished or other disposition made thereof. The bid guarantees of all bidders except the three lowest, responsive bids will be returned within 15 calendar days after the bids are opened.

After the successful bidder has executed all necessary contract documents, all other bid guarantees will be returned to the remaining bidders.

1-2.18 QUALIFICATION OF BIDDER

Each bidder shall complete and submit with their bid **CONTRACTOR'S EXPERIENCE STATEMENT.**

The bidder may be required to establish to the satisfaction of the City the reliability and responsibility of the persons or entities proposed to furnish and perform the work described in the Documents.

Each bidder shall be licensed in accordance with the provisions of Chapter 9, Division 3 of the Business and Professions Code, and shall be skilled and regularly engaged in the general class or type of work called for under this contract.

It is the intention of the City to award a contract only to a bidder who furnishes satisfactory evidence that he has the requisite experience, ability, capital, facilities, and plant to enable him to prosecute the work successfully and promptly, and to complete it within the time stated in the contract.

To determine the degree of responsibility to be credited to the bidder, the City will weigh any evidence that the bidder or personnel guaranteed to be employed in responsible charge of the work has performed satisfactorily on other contracts of like nature and magnitude of comparable difficulty at similar rates or progress.

1-2.19 SUBCONTRACTORS

In accordance with California Public Contracting Code Section 4100, et. seq., each bid shall have listed on **DESIGNATION OF SUBCONTRACTORS/SUPPLIERS**, the name, portion of work to be performed, and location of the place of business of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the work or improvement, or of any subcontractor licensed by the State of California who, under subcontract to the bidder, will specially fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of one percent of the bidder's total bid, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of one percent of the bidder's total bid or Ten Thousand Dollars (\$10,000.00), whichever is greater.

Failure to list subcontractors may render the bid non-responsive and may be grounds for rejection of the bid. Failure to comply with the provisions of the California "Subletting and Subcontracting Fair Practices Act" shall make the Contractor subject to the sanctions as set forth in the Act.

The Contractor shall perform at a minimum the percentage of work specified in **Section 5-1.3 CONTRACTOR'S WORK PERCENTAGE** with its own forces and shall not subcontract out this portion of work.

1-2.20 SUBSTITUTIONS DURING BIDDING

Manufacturers or suppliers of materials and equipment may offer an alternative product to the Contractor and request that alternatives to specified products be considered equal. Inclusion of such alternatives in the bid is the responsibility of the Contractor. Inclusion should only be considered if the Contractor believes the offered alternative is equal in quality and performance to the specified product.

1-2.21 BIDDERS INTERESTED IN MORE THAN ONE BID

No person, firm, or corporation, under the same or different name, shall make, file, or be interested in more than one bid for the same work unless alternate bids are called for. A person, firm, or corporation may, however, submit subproposals or quote prices on materials to more than one bidder.

Pursuant to Public Contract Code Section 7106, bidders shall execute and furnish with their bids, **NON-COLLUSION AFFIDAVIT.** Reasonable grounds to believe that any individual, partnership, corporation, or combination is interested in more than one bid for the proposed work may cause rejection of all bids in which that individual, partnership, corporation, or combination is interested.

1-2.22 SHEETING, SHORING AND BRACING

Pursuant to the provisions of California Labor Code Section 6707, each bid submitted shall contain, in the various bid items adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life and limb in any trenches and open excavation, which shall conform to applicable safety orders. By including this sum, the bidder warrants that its action does not convey tort liability to the City, the Design Consultant, the Engineer, and their employees, agents, and subconsultants.

1-2.23 WAGE RATES

Pursuant to provisions of the Labor Code Section 1770, et. seq., of the State of California, the Director of the Department of Industrial Relations has ascertained the prevailing rate of per diem wages of the locality in which the Work is to be performed and applicable to the work to be done. Copies of these wage determinations are on file with the City.

Bidders shall promptly notify the City, in writing, about all the classifications of labor not listed in the prevailing wage determinations but necessary for the performance of the Work, before bids are submitted.

1-2.24 LABOR CODE REQUIREMENTS

The Contractor's attention is directed to the following requirements of the Labor Code:

Hours of Labor - Per Section 7-1.0-IA (1) of the State Specifications.

Prevailing Wage - Per Section 7-1.0-1A (2) of the State Specifications. The wage rates as determined by the Director of Industrial Relations are maintained by each Agency for review and copying by the Contractor.

Travel and Subsistence Payments - Per Section 7-1.01 (2) (a) of the State Specifications.

Payroll Records - Per Section 7-1.01 A (3) of the State Specifications.

Labor Nondiscrimination - Per Section 7-1.01A(4) of the State Specifications.

Apprentice - Per Section 7-1.01A (5) of the State Specifications.

Worker's Compensation - Per Section 7-1.01A (6) of the State Specifications.

Fair Labor Standards Act - Per Section 7-1.01A(7) of the State Specifications.

Suits to Recover Penalties and Forfeitures - Per Section 7-1.01A(7) of the State Specifications

1-2.25 OFFER OF ASSIGNMENT OF ANTITRUST ACTIONS

As provided by Section 4552, et. seq., of the California Government Code, in submitting a bid to the City, the bidder offers and agrees that if the bid is accepted, it will 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 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the City pursuant to the bid. Such assignment shall be made and become effective at the time the City tenders final payment to the bidder.

1-2.26 ASSIGNMENT OF CONTRACT

Any attempted assignment by the Contractor of any contract to be entered into hereunder, or any part thereof, or of funds to be received thereunder by the Contractor, is void unless such assignment has had prior written approval of City, and the Surety has been given due notice of such assignment in writing and has consented thereto in writing.

The Contractor shall give his personal attention to the fulfillment of the contract and shall keep the work under his control.

Subcontractors will not be recognized as such. All persons engaged in the work of construction will be considered as employees of the Contractor, and he will be held responsible for their work.

1-2.27 REJECTION OF BIDS

The City reserves the right to reject any and all bids and further reserves the right to reject any bids which are nonresponsive, incomplete, obscure, or irregular; any bids which omit a bid on any one or more items on which the bids are required; any bids in which unit prices

are unbalanced in the opinion of the City; any bids accompanied by insufficient or irregular bid guaranty; any bids from bidders who have previously failed to perform properly or to complete on time Contracts of any nature; and any bidder who fails to provide satisfactory documentation of its qualifications as required by **Section 1-2.18**, **QUALIFICATION OF BIDDER.** The City reserves the right to waive irregularities.

1-2.28 CONTRACT AND BONDS

The successful bidder, simultaneously with the execution of the Agreement, will be required to furnish, in triplicate, a Payment Bond on forms provided by the City in an amount equal to one hundred percent (100%) of the Contract Price, a Faithful Performance Bond in an amount equal to one hundred (100%) of the Contract Price, the WORKERS COMPENSATION INSURANCE CERTIFICATE and evidences of insurance. Said insurance and bonds shall be secured from a surety company satisfactory to City with a minimum "A: VII" rating with Best's Rating Guide.

The form of **Agreement** which the successful bidder as Contractor will be required to execute, and the forms of bonds as provided in these Special Provisions, which it will be required to furnish, shall be carefully examined and signed by the bidder. The Faithful Performance Bond is to secure the faithful performance of the Contract, and the Payment Bond is to secure the payment of those to whom the bidder may become legally indebted for labor, materials, tools, equipment, or services of any kind used or employed by the bidder in performing the work.

1-2.29 DEFECTIVE MATERIAL AND WORKMANSHIP BOND

As a condition precedent to the completion of the contract, the Contractor shall furnish, in triplicate, a bond of a surety company acceptable to the City in an amount equal to 10 percent of the total contract price, to hold good for a period of 1 year after the completion of and acceptance of the work, to protect the City against the results of defective materials or workmanship during that time. This bond must be delivered to the City before final payment under the contract will be made.

1-2.30 AWARD OF CONTRACT

Within thirty (30) days after the time of opening of the bids, the City will act either to accept a bid or to reject all bids. The acceptance of a bid will be evidenced by a Notice of Award of Contract in writing, delivered in person or by certified mail to the bidder whose bid is accepted. No other act of City will constitute acceptance of a bid. The Award of Contract shall obligate the bidder whose bid is accepted to furnish performance and payment bonds and evidences of insurance, and to execute the Agreement in the form set forth in the Contract Documents. The Contract will require the completion of the work according to the Contract Documents.

1-2.31 EXECUTION OF CONTRACT

The submittal of the Agreement (Contract) to the Contractor for execution shall constitute Notice of Award. The Contractor shall sign the Agreement (Contract) and return it to the City

within ten (10) days after receiving the Notice of Award. The executed Agreement shall be returned, together with the following:

1. The originals and one copy of each of the contract bonds specified in these special provisions.

2. One of the following:

- a. Two copies of a certificate of consent to self-insureds issued by the Director of Industrial Relations of the State of California.
- b. Two copies of a certificate of worker's compensation insurance issued by an admitted insurer.

3. Either of the following:

- Two certified copies of the Contractor's insurance policies specified in these special provisions.
- Executed insurance endorsements (use either blank forms provided in these bid documents equivalent insurer form) evidencing contractor's insurance policies specified in these special provisions.

The failure to execute the Contract Documents or to furnish the bonds or insurance required by these instructions within ten (10) days after receiving written Notice of Award constitutes a default. In the event of a default, the City may award the Contract to the next lowest bidder or may readvertise for bids. The City may charge against the defaulting bidder the greater of (1) the amount of the bid bond, or (2) the difference between the amount of the bid and the amount for which a Contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the bid bond. If a more favorable bid is received by readvertising, the defaulting bidder shall have no claim against the City for a refund.

1-2.32 CONSTRUCTION DOCUMENTS

Contract documents which shall constitute the entire contract for said work shall include the following:

- 1. All addenda issued
- 2. Notice to Bidders
- 3. Special Provisions
- 4. Bid Schedule
- 5. Proposal
- 6. Agreement
- 7. Plans, Drawings and Specifications identified as "MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT" dated August 24, 2018" prepared by CSW/ST2 Engineering.

Within five (5) days after the execution of the Contract, the City will furnish the Contractor 5 specifications, full-size plans and, if available, half-size plans. The Contractor may obtain additional copies as described in **Section 1-1, INVITATION TO BID**.

1-2.33 LEGAL RESPONSIBILITIES

The Contractor shall keep himself fully informed of all existing and future State and Federal laws and County and Municipal ordinances and regulations which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. He shall at all times observe and comply with, and shall cause all his agents and employees to observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees of bodies or tribunals having any jurisdiction or authority over the work; and shall protect and indemnify the City, and all officers, employees, and their agents thereof connected with the work, including but not limited to the City Engineer, against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by himself or his employees. If any discrepancy or inconsistency is discovered in the plans, drawings, specifications, or contract for the work in relation to any such law, ordinance, regulation, order or decree the Contractor shall forthwith report the same to the City Engineer in writing.

1-2.34 ADDITIVE AND DEDUCTIVE ITEMS ALTERNATES

Pursuant to Public Contract Code Section 20103.8, if this bid solicitation includes additive and/or deductive items, the following method shall be used to determine the lowest bid:

- <u>X</u> (a) The lowest bid shall be the lowest bid price on the base contract without consideration of the prices on the additive or deductive items.
- ____ (b) The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items that were specifically identified in the bid solicitation or Bid Proposal as being used for the purpose of determining the lowest bid price.
- _____ (c) The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items taken in order from a specifically identified list of those items that, when in the solicitation, and added to, or subtracted from, the base contract, are less than, or equal to, a funding amount publicly disclosed by City before the first bid is opened.

1-2.35 CONTRACTOR REGISTRATION- DEPARTMENT OF INDUSTRIAL RELATIONS

Contractor and all subcontractors listed on the bid proposal shall be registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Contractor must provide proof of registration with the California Department of Industrial Relations (DIR) in the form of a PDF extract from DIR Public Works Registration website.

Pursuant to California SB854, Contractor and subcontractor must submit certified payroll records (CPRs) to the Labor Commissioner.

Project is subject to compliance monitoring and enforcement by the DIR.

BID CHECKLIST

This checklist has been prepared and furnished to aid Bidders in including all necessary supporting information with their Bid. Bidder's submittals shall include, the following, in addition to any other materials which Bidder may wish to submit:

<u>Item</u>	Checked
Bid Proposal Form	
Certification of Bidder's Experience and Qualifications	
Designation of Subcontractors	
Site Visit Affidavit	
Non-Collusion Affidavit	
Affidavit of Safety Compliance	
Copy of BIDDER'S California State Contractor's License	
BIDDER'S proof of registration with the California Department of Industrial Relations	

Name of bidder:

BID PROPOSAL

PROPOSAL TO THE CITY COUNCIL OF THE CITY OF SAUSALITO

STATE OF CALIFORNIA, FOR PROJECT KNOWN AS:

"MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT"

Address of bidder:
Telephone Number:
Fax Number:
Date of bid:
The undersigned as bidder declares that the only person or persons interested in this proposal as Principal, are those named herein; that the proposal is made without collusion with any other person, firm or corporation, that he has carefully examined the site and the location of the proposed work and improvement and all the contract documents relating to said project, and that he proposes to provide all necessary transportation, equipment, tools, apparatus, permits, materials and other means of construction, and to do all the work and labor required and specified for the following amount:
TOTAL BID, BASED ON ATTACHED SCHEDULE OF BID PRICE IS (IN WORDS & NUMBERS)
DOLLARS (\$).
All addenda bound with the Specifications or issued during time of bidding are included in this proposal. Receipt of the following addenda and date thereof is acknowledged.
Addendum No, Date
Addendum No, Date
Addendum No, Date
The undersigned has carefully checked all bid figures and agrees that City shall not be responsible or

chargeable for any errors or omissions on the part of the undersigned in making up this bid. If this proposal shall be accepted and the undersigned shall fail to contract as aforesaid and to give the two bonds in the sum to be determined, as provided in the contract, with surety satisfaction to the City of

Sausalito, within ten (10) calendar days, after the bidder has received notice that the contract has been $Page \mid 23$

security accompanying this proposal shall operate and the sum shall be the property of the City of Sausalito. Accompanying this proposal is _____* in the amount equal to at least ten percent (10%) of the total base bid and all additive bid items. The bidder's contractor license number is _______. The license expiration date is The foregoing representations are made under penalty of perjury. Name of Bidder:_____ Signature of Bidder:____ Address of Bidder:_____ If bidder is a corporation, state legal name of corporation, state of incorporation, and name of president and secretary; if a partnership, state full name of all general partners and names under which business is conducted. Name of Corporation State of Incorporation Name of President Name of Secretary State of incorporation:

awarded, the City of Sausalito may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void, and the forfeiture of same

PARTNERSHIP

If a partnership, state full na	name of all general partners and name under which business is	conducted.
Name of partnership:		
Names of general partners:	:	_
		_
		_
Signature of Bidder:		_
• • •	s)", "cashier's check," "certified check," or "bidder's boay be.	ond," as the case

SCHEDULE OF BID ITEMS BASE BID

	BID SCHEDULE	=			
	BASE BID				
	ITEM NO. DESCRIPTION	QUANTITY		Unit Price (\$)	Item Total (\$)
101	Mobilization (3%)	1	LS		
102	Clearing and Grubbing	1	LS		
103	Earthwork	7,700	CY		
104	Water Pollution and Erosion Control	1	LS		
105	Demolition	1	LS		
106	5' Wide Pedestrian Asphalt Concrete ADA Path	11,085	SF		
107	5' Wide Vehicle Asphalt Concrete ADA path	2,820	SF		
108	Landscape- Finish Grading Soil Prep	193,000	SF		
109	Install Turf Seed, Topdress	170,000	SF		
110	Bioswale Planting - Hydroseed	7,065	SF		
111	Install Mulch	10,000	SF		
112	Baseball Field - Skinned Field, Mound and bases	1	LS		
113	Baseball Diamond Valve with Lateral Lines and Hunter Head	1	EA		
114	Turf Irrigation Valves with Lateral Lines and Hunter Heads	13	EA		
115	Shrub Irrigation Valves with Lateral Lines and Drip	1	EA		
116	New 3", 1" and 1-1/4" Mainline and New Wiring	300	LF		
	New Quick Coupler	2	EA		
118	New Wiring, Trenching Sleeving to Controller for Additional Valves	1	LS		
	Master Valve, Flow sensor and wiring, trenching	1	EA		
120	6" CMP Storm Drain Pipe	30	LF		
121	8" PVC Storm Drain Pipe	70	LF		
122	10" PVC Storm Drain Pipe	20	LF		
123	12" PVC Storm Drain Pipe	340	LF		
124	15" PVC Storm Drain Pipe	230	LF		
125	24" PVC Storm Drain Pipe	20	LF		
126	12" Trench Drain/Including Grate	1	LS		
	Turning Structures (18"x18" and 24"x24")	2	EA		
	48" X 48" Drain Inlet W/ Side Opening	2	EA		
	Modified Type "B" Headwall Per UCS DWG. 280	2	EA		
	Type "D" Storm Drain Catch Basin Per UCS DWG. 240	1	EA		
	Modified Type "A" Concrete Lined Ditch Per UCS DWG. 290	230	LF		
	Minor Concrete (Field Gym Pad)	1,750	SF		
	4' Wide X 1' Deep Grass Lined Swale	845	LF		
	6" Wide X 1.5' Deep Grass Lined Swale	530	LF		
	Install 24' Wide Sliding Gate	1	LS		

PROJECT BASE BID TOTAL (IN NUMBERS)	
PROJECT BASE BID TOTAL (IN WORDS)	

The City reserves the right to reject any and all Bids and to waive any and all irregularities and informalities in Bids not involving price, time or changes in the Work. The City reserves the right to reject any nonconforming, nonresponsive, incomplete, unbalanced or conditional Bids.

In case of discrepancy between the unit price and the line item cost set forth for a unit price 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. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between bid amounts stated in words and in figures will be resolved in favor of the amount stated in words. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the unit price.

If the contract is to be awarded, it will be awarded to responsible Bidder that submits the lowest responsive bid. City of Sausalito will determine the lowest bid on the basis of the grand total of the base bid.

BIDDER'S BOND

KNOW ALL PERSONS BY THESE PRESENTS:

That we,

as Principal, and

as Surety, are held and firmly bound unto the City of Sausalito, County of Marin, State of California (hereinafter call "City") in the penal sum of 10% of the total aggregate amount of the bid of the Principal above named, submitted by said Principal 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, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that a bid to City for certain construction specifically described as follows,

MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT

has been submitted by Principal to City:

NOW, THEREFORE, if the aforesaid Principal shall not withdraw said bid within the period specified therein after the opening of the same or, if no period be specified, within sixty (60) days after said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) calendar days after the prescribed forms are presented to him for signature, enter into a written contract with City, in the prescribed form, in accordance with the bid as accepted, and file the two bonds with City, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by law, and evidence of the required insurance, or in the event of the withdrawal of said bid with the period specified or the failure to enter into such contract and give such bonds and evidence of insurance within the time specified, if the Principal shall pay the City the difference between the amount specified in said bid and the amount for which the City may procure the required Work, if the latter amount be in excess of the former, together with all costs incurred by the City in again calling for bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety for value received, hereby stipulates and agrees that no change, extension of time, alterations, or addition to the terms of the contract or the call for bids, or to the Work to be performed thereunder, or the specifications accompanying the same, shall in anyway affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of specifications.

In the event suit is brought upon said bond by City and judgment is recovered, the Surety shall pay all costs incurred by City in such suit, including a reasonable attorney's fee to be fixed by the court.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this _	day of	<u>,</u> 20
(Seal)		
(Seal)		
(Seal) Principal		
(Seal)		
(Seal)		
(Seal)		
Surety		

Address

NOTE: Signature of those executing for Surety must be acknowledged and evidence of corporate authority attached.

CONTRACTOR'S LICENSING STATEMENT

The undersigned is licensed in accordance registration of Contractors.	with the	e laws	of	the	State	of	California	providing	g for	the
Contractor's License Number										
Name of Individual Contractor (Print or Type)):									
Signature of City										
Business Address and Telephone Number										
Name of Firm										
Business Address and Telephone Number										
Signature, title, and address of members sign	ning on b	ehalf o	of th	ne pa	artner	ship):			
Name	_Title									
Address										
Name	_Title									
Address										

Name of Corporation
Business Address and Telephone Number
Corporation organized under the laws of the State of
Signature of President of Corporation
Signature of Secretary of Corporation

CONTRACTOR'S EXPERIENCE STATEMENT

The following outline is a record of the undersigned Bidder's experience in construction of a type similar in magnitude and character to that contemplated under this Contract. Additional numbered pages may be attached as needed.

CONTRACTOR INFORMATION AND EXPERIENCE FORM

A. 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 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? Under what other or former names has Bidder's organization 5.1 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:

Vice-President's Name(s):

6.4

6.5	Secretary's Name:
6.6	Treasurer's Name:
If an i	ndividual 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)
If oth	er than a corporation or partnership, describe organization and name principals
List of	ther states in which Bidder's organization is legally qualified to do business.
What	type of work does the Bidder normally perform with its own forces?

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:

14.0	List Trade References:	
		_
15.0	List Bank References (Bank and Branch Address):	
16.0	Name of Bonding Company and Name and Address of Agent:	

LIST OF COMPLETED PROJECTS - LAST THREE YEARS

Duplicate Page if needed for listing additional completed projects.

The Bidder shall list below at least three (3) projects completed in the last three (3) years of at least \$100,000 in Contract Amount involving construction of storm drain infrastructure that indicate the Bidder's experience as a Contractor. If the Bid is submitted by a Joint Venture, list at least four (4) completed projects, at least two (2) of which shall be by the Joint Venture. It is acceptable to submit this information on other forms as long as the information required below is included. Failure to provide this information with the Bid may render the Bid non-responsive and may be the basis for rejection of the Bid. Please include only those projects which are similar enough in size and complexity to demonstrate Bidder's ability to perform the required Work.

Project / City/Contact Information	Description and Value of Bidder's Work	Contract Time

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 pers	son's job title, name and percent of time to be allocated to this pro	ject:
2.	Summarize e	ach person's specialized education:	
3.	List each pers	son's years of construction experience relevant to the project:	
4.	Summarize sı	uch experience:	

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

DESIGNATION OF SUBCONTRACTORS/SUPPLIERS

In compliance with the Subletting and Subcontracting Fair Practices Act of the Public Contract Code of the State of California, each bidder shall set forth below: (a) the name and the location of the place of business and (b) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work in an amount in excess of one-half of one percent (0.5%) of the Contractor's Total Bid Price. Notwithstanding the foregoing, if the work involves streets and highways, then the Contractor shall list each subcontractor who will perform work or labor or render service to Contractor in or about the work in an amount in excess of one-half of one percent (0.5%) of the Contractor's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If no subcontractor is specified, for a portion of the work, or if more than one subcontractor is specified for the same portion of Work, to be performed under the Contract in excess of one-half of one percent (0.5%) of the Contractor's Total Bid Price or \$10,000, whichever is greater if the work involves streets or highways, then the Contractor shall be deemed to have agreed that it is fully qualified to perform that Work, and that it shall perform that portion itself.

Portion of Work	Subcontractor	Location of Business

Portion of Work	Subcontractor	Location of Business
Portion of work	Subcontractor	Education of Business
		,
Ву:		
Bidder's Signature		

Page | 38

SAFETY QUALIFICATION CRITERIA

The following information will be used to determine if the bidder meets the minimum safety requirements for this Project. To qualify to bid and be awarded the Project, the Contractor's three year average Workers' Compensation Experience Modification (EMR) must not be greater than 1.1 (110%). The Bidder shall list its Experience Modification Rate for the last three (3) complete years (available from your insurance carrier). If the EMR is greater than 1.1 the bidder may submit additional support documentation with an explanation of the exceedance and the City reserves the right to qualify the bid after analysis of the explanation.

Name of Bidder:	
Year	EMR
	-
Three Year Average	=
carrier. The Bidder s	e information, the City will contact the Bidder's Workers' Compensation Insurance hall authorize its carrier to release this information. Failure to release this information being non-responsive and result in automatic disqualification of the Bid.
Worker's Compensa	ition Insurance Company:
Contact Person for I	nsurance Company:
Telephone Number:	()

Additional Bidder's Statements:

above, and which w	that there is additional information which has not been included in the questionnaire vould contribute to the qualification review, it may add that information in a statement hed sheet, appropriately marked:
B. VERIFICATI	ON AND EXECUTION
These Bid Forms sh	all be executed only by a duly authorized official of the Bidder:
I declare under per is true and correct:	alty of perjury under the laws of the State of California that the foregoing information
Name of Bidder	
Signature	
Name	
Title	
Dated	

NONCOLLUSION AFFIDAVIT

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

State of California	}		
County of Marin	} ss. }		
		, being first du	ly sworn, deposes and says that he or she
(Bidder's Authorized R	epresentative)		
is	of		the party making the foregoing bid
(Title of Representati	ive) (Bidd	der's Name)	
has not directly or ind not directly or indirect in a sham bid, or that a indirectly, sought by a bidder or any other bi any other bidder, or to interested in the prop- the bidder has not, dir contents thereof, or di corporation, partnersh thereof to effectuate a	irectly induced or solicity colluded, conspired, anyone shall refrain frogreement, communicated dder, or to fix any overous secure any advantage osed contract, that all ectly or indirectly, substituting in company, associating collusive or sham bid.	cited any other k , connived, or agon bidding; that ation, or conferce erhead, profit, or ge against the pu statements con mitted his or he data relative the ion, organization	ne and not collusive or sham; that the bidder bidder to put in a false or sham bid, and has greed with any bidder or anyone else to put the bidder as not in any manner, directly or ence with anyone to fix the bid price of the cost element of the bid price, or of that of ablic body awarding the contract of anyone tained in the bid are true; and, further, that is bid price or any breakdown thereof, of the reto, or paid, and will not pay, any fee to any in, bid depository, or to any member or agent
declare under penalt correct.	y of perjury under the	laws of the Stat	e of California that the foregoing is true and
		(Seal)
Signature of:	President, Secretary,	,	
	Manager, City or		
	Representative		

Subscribed and sworn to before me		
this day of, 2018		
Signature of Notary Public in and for		
the County of,		
State of .		

This Affidavit to be fully executed and submitted with the bid.

DESIGNATION OF INSURANCE AGENT OR BROKER

It is proposed that the following insurance agent or broker will provide policies of insurance or insurance certificates as are required by the Contract Documents.

Insurance Agent or Broker
Street
City, Zip
Telephone

STATEMENT OF BIDDER

Please state whether you, or any officer of yours, or any employee of yours who may have a proprietary interest in your bid, have ever been disqualified, removed, or otherwise prevented from bidding on or completing a federal, state, or local government project because of a violation of law (including the False Claims Act) or safety regulations.		
YES NO		
If your answer is yes, explain the circumstances.		
I declare under penalty of perjury that the foregoing information is true and correct.		

Executed at ______ on

STATEMENT OF MANDATORY SITE VISIT

The Bidder certifies that he has visited the construction sit in the Instructions to Bidders.	e during the bid period, per the requirements
Bidder's Signature	Date

AFFIDAVIT OF SAFETY COMPLIANCE

TO BE EXECUTED BY BIDDER, NOTARIZED AND SUBMITTED WITH BID

MLK PARK ATHLETIC FIELD IMPROVEMENT PROJECT

The Contractor agrees in accordance with the requirements of Section referred to as **SAFETY**, that for purposes of California Labor Code Section 6400 and related provisions of law, the Contractor, the Contractor's privities and any other entities acting pursuant to this Contract will be "employers" responsible for furnishing employment and a place of employment that is safe and healthful for the employees, if any, of such entities acting pursuant to this Contract and that the City will not be responsible for having hazards corrected and/or removed at the location where the Work under the Contract is to be performed.

The Contractor hereby acknowledges City concerns regarding safety at its facility and at the Project worksite. The Contractor shall conduct its operations to eliminate or reduce hazards and risks associated with Contractor's activities, to prevent accidents and injuries, and to prevent property damage. Therefore, the Contractor is fully responsible for and shall be in compliance with all of the most current safety, health and environmental regulations (federal, state and local). Non-compliance with these regulations may result in suspension or termination of work in progress. The Contractor's Safety Programs must accomplish the foregoing objectives. The Contractor certifies that its Safety Programs comply and will satisfy these requirements. The Contractor also certifies that each Subcontractor and Sub-subcontractors and other parties with which it has agreements to perform work on the Project worksite will also comply and will satisfy these requirements.

Parts A, B, C and D of the Contractor Safety Operations Requirements included with the Contract Documents are not required to be completed and submitted with the Bid. The completed forms shall be submitted for the City's review with the Contractor's Safety Program prior to commencement of work on the Project as required in **Section 2-4.12.2 Safety Program** —. The Contractor certifies that it can furnish satisfactory evidence of compliance with the elements identified in the attached Contractor Safety Operations Requirements and the Contractor's Safety Program. The Contractor further acknowledges that its Subcontractors and Sub-subcontractors will provide all Safety Compliance documents to Contractor in accordance with the **AFFIDAVIT OF SAFETY COMPLIANCE** and the **Section 2-4.12 SAFETY**.

Executed On:,,	
Signature	Name of Bidder
Name (Print)	Title

(Attach a Certificate of Acknowledgement for the Notary to the Affidavit)

CERTIFICATE OF ACKNOWLEDGMENT

State of California)
)
County of)
On	before me,	
Date		Name, Notary Public
personally appeared		
	Name	, Title of Officer
personally known to n	ne - OR -	proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within the 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.
		Witness my hand and official seal.
		Signature of Notary

CONTRACTOR SAFETY OPERATIONS REQUIREMENTS

(To be submitted with Contractor's Safety Program prior to commencing work)

PART A - Safety Programs

Please indicate below whether your firm has the following written safety programs. If any of the programs listed do not apply to your operations or this project, please make note of this in the "Comments" column. Include any information that you think would be helpful to us in making this assessment. Those programs that are indicated as mandatory must be available for review before commencing work on this Project. Other safety programs may be requested if it is later determined that they are applicable to the Project, and as such, must be made available for review upon request, at no additional charge to the City.

Program			Written Program		gram eets OSHA teria	Sub will Provide	Project Employees Trained		Training Documented		Comments
Mandatory	Name	Yes	No	Yes	No		Yes	No	Yes	No	
YES	Injury and Illness Prevention										
YES	Hazard Communication										
YES	Confined Space Operations										
	Respiratory Protection										
YES	Emergency Response										
YES	Hearing Conservation										
YES	Lockout/Tagout										
YES	New Employee Orientation										
YES	Excavation Safety										
YES	Code of Safe Practices										
YES	Personal Protective Equipment (PPE)										
YES	Drugs/Alcohol										
YES	Traffic Control Safety										
YES	Fall Prevention Plan ¹										

¹ If conventional fall protection measures cannot be used.

PART B - Safety Equipment

Identify what safety equipment will be available and used for this Project.

Туре	Description / Comments
[] Gas Detectors	
[] Ventilation Equipment	
[] Approved Harnesses and Lanyards	
[] Mechanical Hoists	
[] Fire Extinguishers	
[] First Aid Kits	
[] Respirators	
[] Hard Hats	
[] Hearing Protection	
[] Safety Goggles	
[] Steel Toed Footwear	
[] Hand Protection	
[] Fall Protection	
[] Confined Space Rescue Equipment	
[] Life Jackets	
[] Life Rings	
[]	

PART C - Specialized Training and Certification

Identify the areas of specialized training or certification that will have been completed by employees who will be assigned to this Project. Be prepared to provide documentation as requested.

[]	CPR / First Aid	[]	Fork Lift Operation
[]	Cranes / Hoists Operation	[]	Heavy Equipment Operation
[]	Powder-Actuated Tools Use	[]	Confined Space Operations and Rescue
[]	Respirators	[]	Trenching and Shoring Competent Person
	[] Air-Supplying	[]	Welding
	[] Air-Purifying	[]	Asbestos Abatement
[]	Scaffolding	[]	Flagging
[]	Traffic Control		

PART D – Job site Safety Practices

1.	Name of person who will have responsibility for job site safety?
2.	Who will be responsible for conducting and documenting accident investigations?
	Does your company perform near-miss investigations?
	Please provide sample copy of investigation forms.
3.	How often are job site safety audits or inspections performed,
	and by whom?
4.	correct unsafe conditions of work practices?
5.	Who will be designated the competent person for excavation safety on the project?
	Provide substantiation of training for the competent person.
6. 7.	How often are job site tailgate or toolbox safety meetings held?
8.	Please list any Cal/OSHA citations and penalties you have received in the last three years.
9.	Have there been any on-the-job fatalities at any job site managed by the Contractor in the last five years? If yes, please explain.

10.	. Does your company have a safety incentive program?	
	If yes, please explain.	

PART E – Evaluation Worksheet

(FOR USE BY THE CITY ONLY)

ltem	Mandatory Program	Contractor has Written Program	Contractor States Program Meets Cal/OSHA Criteria	Comments
Part A: Safety Programs				
Part B: Safety Equipment				
Part C: Training & Certification				
Part D: Job Site Safety Practice				
Responsible Person Named				
Accident Investigations				
Worksite Safety Inspections				
Competent Person				
Safety Meetings				
Compliance w/ Safety Requirements				
Cal/OSHA Citations/Penalties				
Fatalities				
Safety Incentives				

*END OF SECTION**

AGREEMENT

THIS AGREEMENT, made and concluded, in triplicate, this _____ day of _____, 2018, between the

AGREEMENT FOR THE CONSTRUCTION OF MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT

CITY O	F SAUSALITO ("City") and("Contractor").
The Ci	ty and Contractor, in consideration of the mutual covenants hereinafter set forth, agree ass:
WITI	NESETH:
1.	That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the City, and under the conditions expressed in the two bonds, bearing even date with these presents, Contractor shall at his/her own proper cost and expense, to do all the Work and furnish all the materials necessary to construct and complete in good workmanlike and substantial manner the project entitled: MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT strict conformity with the Contract Documents prepared therefore, which said Contract Documents are hereby specially referred to and by said reference made a part hereof.
2.	Contractor hereby agrees to complete the Work in its entirety in accordance with the Contract Documents for the sum of
3.	•

4. The Contractor and any subcontractor performing or contracting any work shall comply with all applicable provisions of the California Labor Code for all workers, laborers and mechanics of all crafts, classifications or types, including, but necessarily limited to the following:

to the full performance of the covenants herein contained.

themselves, their heirs, executors, administrators, successors and assigns, do hereby agree

(a) The Contractor shall comply with all applicable provisions of Sections 1810 to 1815, inclusive, of the California Labor Code relating to working hours. The Contractor shall, as a penalty to the City, forfeit the sum of twenty-five dollars (\$25) for each worker employed in the execution of the 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 one (1) calendar day and forty (40) hours in any one calendar week, unless such worker

- receives compensation for all hours worked in excess of eight (8) hours at not less than 1-1/2 times the basic rate of pay.
- (b) Pursuant to the provision of California Labor Code, Section 1770 et seq., the Contractor and any subcontractor under him shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Pursuant to the provisions of California Labor Code Section 1773.2, the Contractor is hereby advised that copies of the prevailing rate of per diem wages and a general prevailing rate for holidays, Saturdays and Sundays and overtime work in the locality in which the work is to be performed for each craft, classification, or type of worker required to execute the Contract, are on file in the office of the City, which copies shall be made available to any interested party on request. The Contractor shall post a copy of said prevailing rate of per diem wages at each job site.
- (c) As required by Section 1773.1 of the California Labor Code, the Contractor shall pay travel and subsistence payments to each worker needed to execute the Work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this Section.
- (d) To establish such travel and subsistence payments, the representative of any craft, classification, or type of workman needed to execute the contracts shall file with the Department of Industrial Relations fully executed copies of collective bargaining agreements for the particular craft, classification or type of work involved. Such agreements shall be filed within ten (10) days after their execution and thereafter shall establish such travel and subsistence payments whenever filed thirty (30) days prior to the call for bids.
- (e) The Contractor shall comply with the provisions of Section 1775 of the California Labor Code and shall, as a penalty to the City, forfeit up to fifty dollars (\$50) for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of per diem wages for each craft, classification, or type of worker needed to execute the Contract. The Contractor shall pay each worker an amount equal to the difference between the prevailing wage rates and the amount paid worker for each calendar day or portion thereof for which a worker was paid less than the prevailing wage rate. Contractor is required to pay all applicable penalties and back wages in the event of violation of prevailing wage law, and Contractor and any subcontractor shall fully comply with California Labor Code Section 1775, which is incorporated by this reference as though fully set forth herein.
- (f) As required under the provisions of Section 1776 of the California Labor Code, Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, and 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 him or her in connection with the public work. Said payroll shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:
 - (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
 - (2) A certified copy of all payroll records enumerated in Paragraph 4(f), herein, shall be made available for inspection or furnished upon request to the City, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
 - (3) A certified copy of all payroll records enumerated in Paragraph 4(f), herein, shall be made available upon request by the public for inspection or for copies thereof; provided, however, that a request by the public shall be made through the City, the

Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph 4(e) herein, the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal offices of the Contractor.

The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.

Each Contractor shall file a certified copy of the records, enumerated in Paragraph 4(f) with the entity that requested the records within ten (10) days after receipt of a written request. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by 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. The Contractor shall inform the City of the location of the records enumerated under Paragraph 4(f) including the street address, city and county, and shall, within five (5) working days, provide a notice of change of location and address. The Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Paragraph 4(f). In the event that the Contractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or the City, forfeit \$25.00 dollars 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, these penalties shall be withheld from progress payments then due. Responsibility for compliance with Paragraph 4(f) lies with the Contractor.

- (g) CONTRACTOR RESPONSIBILITIES RELATING TO THE DEPARTMENT OF INDUSTRIAL RELATIONS: 1) No contractor or subcontractor may be listed on a bid proposal for a Public Works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1 (a)]. 2) No contractor or subcontractor may be awarded a contract for Public Works on a Public Works project (awarded on or after April 1,2015) unless registered with the Department of Industrial Relations pursuant to Labor Code 1725.5, 3) This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations, and 4) All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).
- (h) The Contractor and any subcontractors shall, when they employ any person in any apprenticeable craft or trade, apply to the joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the construction site for a certificate approving the Contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected; and shall comply with all other requirements of Section 1777.5 of the California Labor Code. The

responsibility of compliance with California Labor Code Section 1777.5 during the performance of this Contract rests with the Contractor. Pursuant to California Labor Code Section 1777.7, in the event the Contractor willfully fails to comply with the provisions of California Labor Code Section 1777.5, the Contractor shall be denied the right to bid on any public works contract for up to three (3) years from the date noncompliance is determined and be assessed civil penalties.

(i) In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860), and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the California Labor Code, the Contractor is required to secure the payment of compensation to its employees and for that purpose obtain and keep in effect adequate Workers' Compensation Insurance. If the Contractor, in the sole discretion of the City satisfies the City of the responsibility and capacity under the applicable Workers' Compensation Laws, if any, to act as self-insurer, the Contractor may so act, and in such case, the insurance required by this paragraph need not be provided.

The Contractor is advised of the provisions of Section 3700 of the California Labor Code, which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code and shall comply with such provisions and have Employer's Liability limits of \$1,000,000 per accident before commencing the performance of the Work of this Contract. Contractor and its subcontractors shall comply with the provisions of Section 3700 of the Labor Code, including Longshoremen's and Harbor Workers' Compensation and Jones Act coverages, if applicable, before commencing the performance of the work of this contract.

Contractor shall not commence work until the Contractor submits written evidence that it has obtained full Workers' Compensation Insurance coverage for all persons whom it employs or may employ in carrying out the Work under this Contract. This insurance shall be in accordance with the requirements of the most current and applicable state Workers' Compensation Insurance Laws. In accordance with the provisions of Section 1861 of the California Labor Code, the Contractor in signing this agreement certifies to the City as true the following statement: "I am aware of the provisions of Section 3700 of the Labor Code which requires 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."

A subcontractor is not allowed to commence work on the project until verification of Workers' Compensation Insurance coverage has been obtained and verified by the Contractor and submitted to the Construction Manager for the City's review and records.

- (j) In accordance with the provisions of Section 1727 of the California Labor Code, the City, before making payment to the Contractor of money due under a contract for public works, shall withhold and retain therefrom all wages and penalties which have been forfeited pursuant to any stipulation in the Contract, and the terms of Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). But no sum shall be withheld, retained or forfeited, except from the final payment, without a full investigation by either the Division of Labor Standards Enforcement or by the City.
- 5. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this Agreement and the bid proposal of Contractor, then this Agreement

shall control, and nothing herein contained shall be considered as an acceptance of the terms of Contractor's proposal conflicting herewith.

- 6. The Contractor agrees to provide and maintain insurance coverage, and to indemnify and save harmless the parties named and in the manner set forth in Section 4 INDEMNITY AND INSURANCE, of the Supplementary General Conditions of the Specifications. The duty of Contractor to indemnify and save harmless, as set forth herein, shall include a duty to defend as set forth in Section 2778 of the California Civil Code; provided, however, that nothing herein shall be construed to require Contractor to indemnify against any responsibility or liability in contravention of Section 2782 of the California Civil Code.
- 7. The Contractor shall diligently prosecute the Work so that it shall be substantially completed within the time specified in the Special Provisions.
- 8. Except as otherwise may be provided herein, Contractor hereby expressly guarantees for one (1) full year from the date of the Substantial Completion of the Work under this Agreement and acceptance thereof by the City, to repair or replace any part of the Work performed hereunder which constitutes a defect resulting from the use of inferior or defective materials, equipment or workmanship. If, within said period, any repairs or replacements in connection with the Work are, in the opinion of the City, rendered necessary as the result of the use of inferior or defective materials, equipment or workmanship, Contractor agrees, upon receipt of notice from the City, and without expense to the City, to promptly, and in no event more than ten (10) days, after receipt of written notice from City repair or replace such material or workmanship and/or correct any and all defects therein. If Contractor, after such notice, fails to proceed promptly to comply with the terms of this guarantee, the City may perform the work necessary to effectuate such correction and recover the cost thereof from the Contractor or its sureties.

In special circumstances where a particular item of work or equipment is placed in continuous service before substantial completion of the Work, the correction period for that item may start to run from an earlier date. This date shall be agreed upon by the Contractor and the City on or before the item is placed in continuous service.

Any and all other special guarantees which may be applicable to definite parts of the Work under this Agreement shall be considered as an additional guarantee and shall not reduce or limit the guarantee as provided by Contractor pursuant to this paragraph during the first year of the life of such guarantee.

9. The Contractor shall provide, on the execution of this Agreement, a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of amount bid, which bond shall be on the form provided by the City in the Special Provisions, and be conditioned upon the faithful performance of all Work required to be performed by the Contractor under this Agreement. Said bond shall be liable for any and all penalties and obligations which may be incurred by Contractor under this Agreement. The surety bond shall be issued by a corporate surety authorized to conduct business in California. At its discretion, the City may request that a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner of the State of California be submitted by the surety to the City. At its discretion, the City may also require the insurer to provide copies of its most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

- 10. In addition to the bond required under Paragraph 9, hereof, Contractor shall furnish a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of amount of bid, which bond shall be on the form provided by the City in the Special Provisions, and conform strictly with the provisions of Chapter 7, Title 15, Part 4, Division 3, of the Civil Code of the State of California, and all amendments thereto. The corporate surety bond shall be issued by a corporate surety authorized to conduct business in California. At its discretion, the City may request that a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner of the State of California be submitted by the surety to the City. At its discretion, the City may also require the insurer to provide copies of its most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.
- 11. The Contractor may substitute securities for the amounts retained by the City to ensure performance of the Work in accordance with the provisions of Section 22300 of the Public Contract Code.
- 12. The Contractor shall be provided the time period specified in the Special Provisions, for submission of data substantiating a request for a substitution of an "or equal" item.
- 13. As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches five feet or more in depth, the Contractor shall submit in advance of excavations, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety in Title 8, Subchapter 4, Article 6, California Code of Regulations, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor, and all costs therefore shall be included in the price named in the Contract for completion of the Work as set forth in the Contract Documents. Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this Section shall be construed to impose tort liability on the City, the Design Consultant, Construction Manager nor any of their agents, consultants, or employees. The City's review of the Contractor's excavation plan is only for general conformance to the California Construction Safety Orders.

Prior to commencing any excavation, the Contractor shall designate in writing to the Construction Manager the competent person(s) with the authority and responsibilities designated in the Construction Safety Orders.

- 14. In accordance with Section 7104 of the Public Contract Code, whenever any work involves digging trenches or other excavations that extend deeper than four feet below the surface, the provisions of DIFFERING SITE CONDITIONS, shall apply.
- 15. In accordance with Section 7103.5 of the Public Contract Code, the Contractor and subcontractors shall conform to the following requirements. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the 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 U.S.C. Section 15) or under the Cartwright Act [Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods, materials or services

pursuant to this Contract or the subcontract. Such assignment shall be made and become effective at the time the City tenders final payment to the Contractor, without further acknowledgment by the parties.

- 16. In accordance with Section 4552 of the Government Code, the Contractor shall conform to the following requirements. In submitting a Bid to the City, the Contractor offers and agrees that if the Bid is accepted, it will 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 U.S.C. Section 15) or under the Cartwright Act [Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchase of goods, materials, or services by the Contractor for sale to the City pursuant to the Bid. Such assignment shall be made and become effective at the time the City tenders final payment to the Contractor.
- 17. Pursuant to Public Contract Code Section 7100, the acceptance by the Contractor of an undisputed payment made under the terms of the Contract shall operate as, and shall be, a release to the City, and their duly authorized agents, from all claim of and/or liability to the Contractor arising by virtue of the Contract related to those amounts. Disputed contract claims in stated amounts may be specifically excluded by the Contractor from the operation of the release.
- 18. In accordance with California Business and Professions Code Section 7030, the Contractor is 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 years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning the Contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.
- 19. The acceptance of each payment made to Contractor under this Agreement shall constitute a warranty that all subcontractors, laborers and material suppliers on the Project have been paid for all work, material, labor provisions, provender, equipment, or other supplies and efforts made toward the construction of improvements.
- 20. **INDEMNIFICATION**. Contractor shall indemnify, defend with counsel acceptable to City, and hold harmless to the full extent permitted by law, the City and its officers, officials, employees, agents and volunteers, Construction Manager, Design Consultant and all of their respective agents and employees; (collectively "the Indemnified Parties") in accordance with the requirements of **Indemnification**.
- 21. **SEVERABILITY**. If any term or portion of this Agreement is held to be invalid, illegal, or otherwise enforceable by a court of competent jurisdiction, the remaining provisions of this Agreement shall continue in full force and effect.
- 22. **LICENSE.** Contractor's attention is directed to Business and Professions Code Sections 7000 et seq. concerning the licensing of contractors. At the time Contractor enters into this Contract and all times Contractor is performing the Work, Contractor shall have a valid license issued by the Contractors State License Board in the classification stated in the Special Provisions. All bidders and subcontractors shall be licensed in accordance with the laws of this State and any contractor or subcontractor not so licensed is subject to penalties imposed by such laws.

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 YEARS OF THE DATE OF THE ALLEGED VIOLATION. A COMPLAINT REGARDING A LATENT ACT OR OMISSION PERTAINING TO STRUCTURAL DEFECTS MUST BE FILED WITHIN 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.

	WHEREOF , 20	parties	hereto	have ex	ecuted	this	Agreeme	ent this	5	day	of
				CON	TRACTO	DR					
				THE	CITY OF	SAUS	SALITO				
				Ву:							
							olitzer, Ci		ager		
				APPF	ROVED	AS TO	FORM:				
				Ву:							
							Wagner,	Esq.			
					City At	torne	ξÀ				

END OF SECTION

BOND OF FAITHFUL PERFORMANCE

BOND NO
KNOW ALL PERSONS BY THESE PRESENTS:
THAT WHEREAS, the City Council of the City of Sausalito (hereinafter referred to as "City") has awarded to (hereinafter referred to as the "Contractor") an agreement (the "Contract") for construction of the MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT (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 the Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of the 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, 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

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-year guarantee of all materials and workmanship; and shall indemnify, defend and save harmless the City, its officers and agents, 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 attorneys' fees and expert fees, incurred by City in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Project, 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 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:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) 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.
- (3) 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.

rioject.	
Upon City of Sausalito filing Project Notice Contractor for a one-year warranty period.	of Completion, this bond secures the obligation of the
IN WITNESS WHEREOF, we have hereunto set 20	our hands and seals this day of,
/Comparato Socily	
(Corporate Seal)	Contractor/ Principal
	Ву
	Title
(Corporate Seal)	Surety
	By Attorney-in-Fact
(Attach Attorney-in-Fact Certificate)	Title
SIGNATURES OF THOSE SIGNING FOR SURET	Y MUST BE NOTARIZED, AND EVIDENCE OF CORPORATE
AUTHORITY ATTACHED.	
The rate of premium on this bond is	per thousand. The total amount of premium charges,
(The above must be filled in by corporate attor	rney.)

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 differe from	ent		above)
(Telephone number of Surety	and		
Agent or of process in California	Representative	for	service

END OF SECTION

PAYMENT BOND

	BOND NO
KNOW	ALL PERSONS BY THESE PRESENTS:
to	WHEREAS, the City Council of the City of Sausalito (hereinafter referred to as "City") has awarded, (hereinafter referred to as the "Contractor") an agreement (the
	act") for construction of the MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT after referred to as the "Project").
	WHEREAS, the work to be performed by the Contractor is more particularly set forth in the ct Documents for the Project dated, (hereinafter referred to as "Contract ents"), the terms and conditions of which are expressly incorporated herein by reference; and
	WHEREAS , the Contractor is required by the Contract Documents to furnish a bond to secure nt for all work, labor, materials, equipment or services furnished in connection with the uction Contract;
the pe	NOW, THEREFORE, CONTRACTOR, as principal, and
other it	CONTRACTOR and Surety, jointly and severally, bind themselves, their heirs, executors, strators, successors and assigns to CITY to pay for work, labor, materials, equipment, services, or tems furnished for use and actually used in the performance of the Construction Contract, which is brated herein by reference.
2.	With respect to CITY, this obligation shall be null and void if CONTRACTOR:
	2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
	2.2 Defends, indemnifies and holds CITY harmless from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for work, labor, materials, equipment, services or other items furnished for use in the performance of the Construction Contract, provided CITY has promptly notified CONTRACTOR and Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to CONTRACTOR and Surety.
3. payme	With respect to Claimants, this obligation shall be null and void if CONTRACTOR promptly makes nt, directly or indirectly, for all sums due.
4.	Surety shall have no obligation to Claimants under this Bond until:

Claimants who are employed by or have a direct contract with **CONTRACTOR** have given

notice to Surety (at the address described below) and sent a copy, or notice thereof, to CITY,

stating that a claim is being made under this Payment Bond and, with substantial accuracy, the amount of the claim.

- 4.2 Claimants who do not have a direct contract with the **CONTRACTOR**:
- 4.3. Have furnished written notice to **CONTRACTOR** and sent a copy, or notice thereof, to **CITY**, as required by and conforming with Civil Code sections 3252 and 3091; and
- 4.4. Not having been paid within 30 days of sending the required notice, have sent a written notice to Surety (at the address described below) and sent a copy to the CITY, stating that a claim is being made under this Payment Bond and enclosing a copy of the previous written notice furnished to **CONTRACTOR**.
- 5. When the Claimant has satisfied the conditions of Paragraph 4, Surety shall promptly and at Surety's expense take the following actions:
 - 5.1 Send an answer to the Claimant, with a copy to **CITY**, within 20 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
 - 5.2 Pay or arrange for payment of any undisputed amounts.
- 6. Surety's total obligation shall not exceed the amount of this Payment Bond, and the amount of this Payment Bond shall be credited for any payments made in good faith by Surety.
- 7. Amounts owed by **CITY** to **CONTRACTOR** under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under the Performance Bond. By **CONTRACTOR** furnishing and **CITY** accepting this Payment Bond, they agree that all funds earned by **CONTRACTOR** in the performance of the Construction Contract are dedicated to satisfy obligations of **CONTRACTOR** and Surety under this Bond, subject to the **CITY'S** priority to use the funds for the completion of the work or the satisfaction of **CITY'S** claims, including liquidated damages, under the Construction Contract.
- 8. Surety shall not be liable to **CITY**, Claimants or others for obligations of the **CONTRACTOR** that are unrelated to the Construction Contract. **CITY** shall not be liable for payment of any costs or expenses of any Claimants under this Payment Bond, and shall have under this Payment Bond no obligation to make payments to, give notices on behalf of, or otherwise have any obligation to Claimants under this Payment Bond.
- 9. Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- 10. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction. The prevailing party in any such action shall be entitled to recover its attorneys' fees, to be taxed as costs.

- 11. Notice to Surety, **CITY** or **CONTRACTOR** shall be mailed or delivered to the address shown on the signature page.
- 12. This Payment Bond has been furnished to comply with Civil Code sections 3247 through 3252. Any provision in this Payment Bond conflicting with those statutory requirements shall be deemed deleted and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Payment Bond shall be construed as a statutory bond and not as a common law bond.
- 13. Upon request by any person or entity appearing to be a potential beneficiary of this Payment Bond, the Contractor shall promptly furnish a copy of this Payment Bond or shall permit a copy to be made.

14. **DEFINITIONS**

- 14.1 Claimant: An individual or entity identified in California Civil Code sections 3181 or 3248.
- 14.2 Construction Contract: The agreement between CITY and CONTRACTOR identified above, including all Contract Documents and changes thereto.

IN WITNESS WHEREOF, the above-bound part	ies have executed this instrument under their seals this	
	rate seal of each corporate party being hereto affixed and	
these presents duly signed by its undersigned	representative, pursuant to the authority of its governing	
body.		
(Corporate Seal)		
	Contractor/ Principal	
	Ву	
	Title	
(Corporate Seal)	Surety	
	Ву	
	Attorney-in-Fact	
(Attach Attorney-in-Fact Certificate)	Title	
(Attach Attorney-in-Fact Certificate)	Attorney-in-Fact Title	

SIGNATURES OF THOSE SIGNING FOR SURETY MUST BE NOTARIZED, AND EVIDENCE OF CORPORATE AUTHORITY ATTACHED.

The rate of premium on this bond is \$		The total amount of premit	ım charges,
(The above must be filled in by corpora	te attorney.)		
THIS IS A REQUIRED FORM			
Any claims under this bond may be add	lressed 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 of process in California	Representative	for	service

^{**}END OF SECTION**

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT

This Escrow Agreement is made and entered into by and between; the City of Sausalito, whose address is 420 Litho Street, Sausalito, CA 94965; hereinafter called "City", and			
	(Contractor)		
whose	address ishereinafter called "Contractor", and		
_	(Escrow Agent)		
whose	address is		
herein	after called "Escrow Agent."		
For the	e consideration hereinafter set forth, the City, Contractor, and Escrow Agent agree as follows:		
1.	Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities which meet the requirements set forth in said Section 22300, with Escrow Agent, as a substitute for retention earnings required to be withheld by the City pursuant to the Construction Contract entered into between the City and Contractor for MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT in the amount ofDOLLARS,		
	(\$		
2.	The City shall make progress payments to Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.		
3.	When the City makes payment of retentions earned directly to the Escrow Agent the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this Contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the City pays the Escrow Agent directly.		
4.			

- 5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the City.
- 6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the City to the Escrow Agent that the City consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- 7. The City shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven (7) days' written notice to the Escrow Agent from the City of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the City.
- 8. Upon receipt of written notification from the City certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.
- 9. Escrow Agent shall rely on the written notifications from the City and the Contractor pursuant to Sections (5) to (8), inclusive, of this Agreement, and the City and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.
- 10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the City and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On Behalf of the City:	On Behalf of Contractor:
City Manager	
Title	Title
Adam W. Politzer	
Name	Name
Signature	Signature
420 Litho St., Sausalito, CA 94965	
Address	Address
On Behalf of Escrow Agent:	
	_ Title
Name	<u> </u>
	_
Signature	
	-
Address	

At the time the Escrow Account is opened, the City and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

City: City of Sausalito	Contractor:
City Manager	
Title	Title
Adam W. Politzer	
Name	Name
Signature	Signature

END OF SECTION

GENERAL LIABILITY ENDORSEMENT (Form A-1)

THE CITY OF SAUSALITO (City)

420 Litho Street Sausalito, CA 94965

MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT

Article 1 – POLICY INFORMATION

1.	Insurance Company:	
	Policy Number:	
2.	Policy Term (From) (To)	
	Endorsement Effective Date:	
3.	Named Insured:	
4.	Address of Named Insured:	
5.	Limit of Liability Any One Occurrence / Aggregate	
	\$	
6.	Deductible or Self-Insured Retention (Nil unless otherwise specified)	1
	\$	

Article 2 – POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto it is agreed as follows:

- INSURED. The City, the Design Consultant, the Construction Manager, City Engineer, and each of
 their officers, partners, employees, and agents are included as additional insureds with regard to
 damages and defense of claims arising from: (a) activities performed by or on behalf of the Named
 Insured, (b) products and completed operations of the Named Insured, or (c) premises owned,
 leased or used by the Named Insured.
- 2. CONTRIBUTION NOT REQUIRED. As respects: (a) work performed by the Named Insured for or on behalf of the City; or (b) products sold by the Named Insured to the City; or (c) premises leased by the Named Insured from the City, the insurance afforded by this policy shall be primary insurance as respects the City, the Design Consultant and the Construction Manager, and each of their officers, employees, and agents; or stand in an unbroken chain of coverage excess of the Named Insured's scheduled underlying primary coverage. In either event, any other insurance maintained by the City, the Design Consultant and the Construction Manager and each of their officers, employees, and agents shall be excess of this insurance and shall not contribute with it.
- 3. **SCOPE OF COVERAGE.** The policy: (1) if primary, affords coverage at least as broad as Insurance Services Office Commercial General Liability Coverage (occurrence form CG 0001, Edition 1987); or (2) if excess, affords coverage which is at least as broad as the primary insurance forms referenced in the preceding Section (1).
- 4. **SEVERABILITY OF INTEREST.** The insurance afforded by this policy applies separately to each insured who is seeking coverage or against whom a claim is made or a suit is brought, except with respect to the Company's limit of liability.
- 5. **PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS.** Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, the Design Consultant and the Construction Manager and each of their officers, employees, and agents.
- 6. **CANCELLATION NOTICE**. The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior notice by certified mail return receipt requested has been given to the City. Such notice shall be addressed as shown in the heading of this endorsement.

Article 3 – INCIDENT AND CLAIM REPORTING PROCEDURE

Incidents and claims are to be reported to the insurer at:

Attn:

(Title) (Department)

(Company)

(Street Address)

(Agency) (State) (Zip Code)

(Telephone Number)

Article 4 – SIGNATURE OF INSURER OR UNDERWRITER

so bind this co	have authority to bind the below list mpany. By signature below, the sur by of the certificate of authority i	rety warrants that if request	ed by the City, it will furnish
Signature of:	Insurer or Underwriter		
	(original signature required or	n endorsement furnished to	the City)
ORGANIZATIO	N:	TITLE:	
ADDRESS:		TELEPHONE: ()_	

END OF SECTION

AUTO LIABILITY ENDORSEMENT (Form B-1)

CITY OF SAUSALITO ("City")

420 Litho Street Sausalito, CA 94965

MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT

Article 1 – POLICY INFORMATION

1.	Insurance Company:
	Policy Number:
2.	Policy Term (From) To)
	Endorsement Effective Date:
3.	Named Insured:
4.	Address of Named Insured:
5.	Limit of Liability Any One Occurrence / Aggregate:
6.	Deductible or Self-Insured Retention (Nil unless otherwise specified)
	\$

Article 2 - POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto it is agreed as follows:

- 1. INSURED. The City, the Design Consultant, the Construction Manager, City Engineer, and each of their officers, partners, employees, and agents are included as additional insureds with regard to damages and defense of claims arising from Cityship, operation, maintenance, use, loading or unloading of any auto owned, leased, hired, or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the City, the Design Consultant and the Construction Manager and each of its officers, employees, and agents.
- 2. CONTRIBUTION NOT REQUIRED. As respects work performed by the Named Insured for or on behalf of the City, the insurance afforded by this policy shall: (a) be primary insurance as respects the City, the Design Consultant, and the Construction Manager and each of their officers, employees, and agents; or (b) stand in an unbroken chain of coverage excess of the Named Insured's primary coverage. In either event, any other insurance maintained by the City, the Design Consultant and the Construction Manager and each of their officers, employees, and agents shall be excess of this insurance and shall not contribute with it.
- **3. SCOPE OF COVERAGE**. The policy affords coverage to the Named Insured, which is at least as broad as Insurance Services Office form number CA 0001 (Ed. 1/87) covering automobile liability, Code 1 ("any auto").
- **4. SEVERABILITY OF INTEREST.** The insurance afforded by this policy applies separately to each insured who is seeking coverage or against whom a claim is made or a suit is brought, except with respect to the Company's limit of liability.
- 5. PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, the Design Consultant and the Construction Manager and each of their officers, employees, and agents.
- **6. CANCELLATION NOTICE**. The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior notice by Certified Mail Return Receipt requested has been given to the City. Such notice shall be addressed as shown in the heading of this endorsement.

Article 3 – INCIDENT AND CLAIM REPORTING PROCEDURE

Incident	s and claims are to be reported to th	e insurer at:	
Attn:			
	(Title)	(Department)	
,	(Company)		
	(Street Address)		
	(Agency)	(State)	(Zip Code)
	(Telephone Number)		

Article 4 – SIGNATURE OF INSURER OR UNDERWRITER

	•	surance company and by my signature hereon do
	•	arrants that if requested by the City, it will furnisl by the Insurance Commissioner of the State o
Signature of		
	er or Underwriter	
(0	riginal signature required on endo	rsement furnished to the City)
ORGANIZATION:		TITLE:
ADDRESS:		TELEPHONE: ()

END OF SECTION

SECTION 2 - GENERAL CONDITIONS

2-1 GENERAL

The scope of work is as described in the "Notice to Bidders" section of these Special Provisions.

Plans

The proposed work is shown on a set of drawings entitled MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT "" dated August 24, 2018 prepared by CSW/ST2 Engineers.

Standards

The work embraced herein shall be done in accordance with these Special Provisions and the Standard Specifications ("Standard Specifications") and Standard Plans ("Standard Plans") of the California Department of Transportation with the editions as defined in Section 5-6.1. Construction methods shall be done in accordance with Part 3 of the latest edition of the Standard Specifications for Public Works Construction.

Precedence of Contract Documents

If there is a conflict between Contract Documents, the document highest in precedence shall control. The precedence shall be:

- 1. Special Provisions
- 2. City of Sausalito Project Plans
- 3. CALTRANS Standard Plans
- 4. CALTRANS Standard Specifications
- 5. Standard Plans for Public Works Construction, Current Edition
- 6. Standard Specifications for Public Works Construction, Current Edition
- 7. Uniform Construction Standards for Cities and County of Marin
- 8. Sausalito-Marin City Sanitary District
- 9. Title 24, State Building Code

Contract Change Orders, Supplemental Agreements and approved revisions to City of Sausalito Plans shall take precedence over Items 1 through 8 above. Detailed plans shall have precedence over general plans.

2-1.1 NOT USED

2-1.2 INTENT OF CONTRACT DOCUMENTS

The intent of the Plans and Specifications is to describe the details for the construction and completion of the Work, which the Contractor undertakes to perform in accordance with the terms of the Contract. Plans and Specifications are divided into groups for the convenience of the Owner, Design Consultant, and Engineer. These divisions are not for the purpose of apportioning work or responsibility for work among subcontractors, suppliers, and manufacturers.

Where the Plans or Specifications describe portions of the Work in general terms but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used. Unless otherwise specified, the Contractor shall furnish tools, equipment, and incidentals, and do all the work involved in executing the Contract in a satisfactory and workmanlike manner.

Unless specifically noted otherwise, all sections of the Specifications and the Plans shall be complementary and applicable to each other.

In the event the materials and/or equipment are to be furnished by the Owner, as designated in the General Requirements or as agreed on, this shall not relieve the Contractor of the above requirements to furnish all other labor, materials, and equipment to complete the Contract.

Words and abbreviations which have well known technical or trade meaning are used in the Contract Documents in accordance with such recognized meanings. For the definition of terms and abbreviations used in these Contract Documents see **Section 5-7 ABBREVIATIONS.**

The proposed work is shown on a set of drawings entitled "MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT" (Plans) referenced in these Special Provisions.

2-1.3 DISCREPANCIES AND OMISSIONS

Any discrepancies or omissions found in the Contract Documents shall be reported to the Engineer immediately. The Engineer will clarify discrepancies or omissions, in writing, within a reasonable time.

2-1.4 HEADINGS

Headings to parts, divisions, sections, articles, paragraphs, subparagraphs, and forms are inserted for convenience of reference only and shall not affect the interpretation of the Contract Documents.

2-1.5 PENALTY FOR COLLUSION

If, at any time, it is found that the person, firm, or corporation to whom the Contract has been awarded has, in presenting any bid or bids, colluded with any other party or parties, then the Contract shall be null and void, and the Contractor and its sureties shall be liable for loss or damage which the Owner may suffer thereby, and the Owner may advertise for new bids for said Work.

2-1.6 SUCCESSORS AND ASSIGNS

The Owner and the Contractor, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to the partners, successors, assigns, and legal representatives of such other party with respect to all covenants, agreements, and obligation contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other.

2-1.7 ASSIGNMENT TO OWNER

Pursuant to Public Contract Code 7103.5, in entering into the Contract and all subcontracts, to supply goods, services, or materials pursuant to the Contract, the Contractor and its subcontractors offer and agree to assign to the Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the Contract and subcontracts. This assignment shall be made and become effective at the time the Owner tenders final payment to the Contractor, without further acknowledgment by the parties.

2-1.8 RIGHTS AND REMEDIES

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to, and not a limitation of, any duties, obligations, rights, and remedies otherwise imposed or available by law.

No action or failure to act by the Owner, the Design Consultant, or the Engineer shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

2-2 ADMINISTRATION

2-2.1 ADMINISTRATION OF THE CONTRACT

The Owner's Representatives, the Engineer, and the Design Consultant will provide administration of the Contract as hereinafter discussed. The duties, responsibilities and limitations of authority of the Design Consultant and the Engineer as the representatives of the Owner during the construction, as set forth in the Contract Documents, will not be modified or extended without written consent of the Owner.

In case of the termination of the employment of the Design Consultant or the Engineer, the Owner shall appoint a Design Consultant or Engineer whose status under the Contract Documents shall be that of the former Design Consultant or Engineer, respectively.

2-2.2 OWNER'S REPRESENTATIVE

- **2-2.2.1** General –The Owner's Representative Has The Authority To Act On Behalf Of The Owner On Change Orders, Progress Payments, Contract Decisions, Acceptability Of The Contractor's Work, And Early Possession.
- **2-2.2.2** Change Orders The City Engineer Has The Authority To Accept Or Reject Change Orders And Cost Proposals Submitted By The Contractor Or As Recommended By The Engineer.

- **2-2.2.3** Progress Payments The Owner's Representative Has The Authority To Accept Or Reject Requests For Progress Payments Which Have Been Submitted By The Contractor And Recommended By The Engineer.
- **2-2.2.4** Contract Decisions Should The Contractor Disagree With The Engineer's Decision With Respect To The Contract, The Contractor May Appeal To The Owner's Representative In Accordance With The Provisions Of The Contract.
- **2-2.2.5** Acceptability Of Work The Owner's Representative Has The Authority To Make The Final Determination Of The Acceptability Of The Work. The Owner's Representative Also Has The Authority To Accept Or Reject The Design Consultant's Recommendations Regarding Retention Of Defective Work As Provided.

2-2.3 ENGINEER

2-2.3.1 GENERAL -

The Engineer is a representative of the Owner employed to act as advisor and consultant to the Owner in construction matters related to the Contract.

All instructions to the Contractor and all communications from the Contractor to the Owner or the Design Consultant shall be forwarded through the Engineer. The Engineer will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents. The Owner has delegated its authority to the Engineer to make initial decisions regarding questions which may arise as to the quality or acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work under the Contract. The Engineer shall interpret the intent and meaning of the Contract and shall make initial decisions with respect to the Contractor's fulfillment of the Contract and the Contractor's entitlement to compensation. The Contractor shall look initially to the Engineer in matters relating to the Contract.

The Engineer's authority to act under **Section 2-2.1 ADMINISTRATION OF THE CONTRACT**, and any decision made by it in good faith either to exercise or not to exercise such authority shall not give rise to any duty or responsibility of the Owner or Engineer to the Contractor, any subcontractor, any of their agents or employees, or any other person performing any of the Work.

2-2.3.2 REPRESENTATIVE -

The Engineer will be represented at the Site by a resident Engineer or resident engineer who will observe the progress, quality, and quantity of the Work to determine, in general, if the Work is proceeding in accordance with the intent of the Contract Documents. The Engineer shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work.

In accordance with the provisions detailed elsewhere in these General Conditions, the Engineer will make decisions relative to all matters of interpretation or execution of the Contract Documents.

2-2.3.3 INSPECTION OF CONSTRUCTION -

The Engineer shall have the authority to reject work and materials which do not conform to the Contract Documents, and to require special inspection or testing.

In addition to the resident Engineer, there may be one or more inspectors to observe the Work and to act in matters of construction under this Contract. An inspector is not authorized to revoke, alter, or waive any requirements of the Specifications. The inspector is authorized to call the attention of the Contractor to any failure of the Work, materials or workmanship to conform to the Contract Documents. The inspector shall have the authority to reject materials or, in any emergency, suspend the Work. The Contractor may appeal any such issue which it disagrees with to the Engineer for decision.

2-2.3.4 ACCEPTABILITY OF THE WORK -

The Engineer, with the approval of the City Engineer, has the authority to make a recommendation as to the acceptability of the Work.

2-2.3.5 CHANGE ORDERS -

The Engineer has the authority to initiate change orders; to reject change orders proposed by the Contractor or Design Consultant; to negotiate and recommend acceptance of change orders; or to order minor changes in the Work at no cost to the Owner.

2-2.3.6 CONSTRUCTION SCHEDULE -

The Engineer with the approval of the City Engineer, has the authority to review and recommend acceptance of the progress schedule submitted by the Contractor at the start of the Work and subsequent significant revisions for conformance to the specified sequence of work and logic.

2-2.3.7 PROGRESS PAYMENTS -

The Engineer has the authority to recommend acceptance or rejection of requests for progress payments which have been submitted by the Contractor.

2-2.3.8 FINAL PAYMENT -

The Engineer, with the assistance of the Design Consultant will conduct inspections to determine the dates of substantial completion of the Work and final completion of the Work, and will receive and forward to the Owner, for the Owner's review, written warranties, and related documents required by the Contract and assembled by the Contractor.

2-2.3.9 EARLY POSSESSION -

The Engineer has the authority to recommend early possession.

2-2.4 DESIGN CONSULTANT

2-2.4.1 GENERAL -

The Design Consultant will have the authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

2-2.4.2 INTERPRETATIONS -

The Design Consultant has the authority to be the initial interpreter of the technical requirements of the Contract Documents. Either party to the Contract may make written request to the Engineer for interpretations necessary for the proper execution or progress of the Work. The Engineer shall refer such written requests to the Design Consultant, who will render such interpretations. Where the Contractor has requested an interpretation from the Engineer, or been notified by the Engineer that such interpretation has been requested by the Owner, any work done before receipt of such interpretations, if not in accordance with same, shall be removed and replaced or adjusted as directed by the Engineer without additional expense to Owner.

2-2.4.3 ACCEPTABILITY OF THE WORK -

The Design Consultant has the authority to make a recommendation as to the acceptability of the Work. The Design Consultant has the authority to recommend acceptance regarding the retention of defective work.

2-2.4.4 SITE OBSERVATIONS -

The Design Consultant may visit the Site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. However, the Design Consultant will not be required to make extensive or continuous on-site inspections to check the quality or quantity of the Work.

2-2.4.5 SUBMITTAL -

The Contractor shall submit, through the Engineer, all shop drawings, product data and samples for review in accordance with **Section 5-10, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.**

2-2.4.6 DESIGN CONSULTANT

The Design Consultant has the authority to review and take other appropriate action upon the Contractor's submittals such as shop drawings, product data and samples, but only for conformance with the design concept of the Work and the information given in the Contract Documents.

2-3 OWNER

2-3.1 GENERAL

The Owner, acting through the Owner's Representative or the Engineer, shall have the authority to act as the sole judge of the Work and materials with respect to both quantity and quality as set forth in the Contract.

2-3.1.1 AUTHORITY OF THE CITY ENGINEER

The City Engineer shall answer all questions which may arise as to:

- a. The quality and acceptability of the final work product
- b. The interpretations of the plans and specifications
- c. The acceptable fulfillment of the contract on the part of the Contractor
- d. Compensation

The decision of the City Engineer shall be final.

If at any time any worker or employee employed by the Contractor or any of his Subcontractors who is declared to be incompetent or unfaithful in the execution of the work, the Contractor, on receiving written notice from the City Engineer, shall remove said worker or employee from the project and shall not again employ said worker or employee on any part of the work.

2-3.2 ATTENTION TO WORK

The Owner shall notify the Contractor in writing of the name of the individual designated as the Owner's Representative and the name of the individual designated to act as the Engineer.

2-3.3 INSPECTION

In addition to the Engineer, the Owner may employ one or more inspectors to observe the Work and to act in matters of construction under this Contract. An inspector is not authorized to revoke, alter, or waive any requirements of the specifications. The inspector is authorized to call the attention of the Contractor to any failure of the Work or materials to conform to the Contract Documents. The inspector shall have the authority to reject material or, in any emergency, suspend the Work. The Contractor may appeal any such issue which it disagrees with to the Engineer for its decision. Separate and independent from the inspection above, the project may be inspected by Building Officials for code compliance. Such inspectors shall have the authority provided to them by local jurisdiction.

2-3.4 OWNER'S RIGHT TO CARRY OUT THE WORK

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, and fails within 48 hours after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, after 48 hours following receipt by the Contractor of an additional written notice and without prejudice to any other remedy make good such deficiencies.

The Owner also reserves the right to perform any portion of the work due to an emergency threatening the safety of the Work, public, Owner, and any property or equipment.

In either case an appropriate Change Order shall be issued unilaterally deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies and/or for performing such work, including compensation for the Design Consultant's, the Engineer's and Owner's additional services made necessary by such default, neglect, failure or emergency.

2-3.5 OWNER'S RIGHT TO USE OR OCCUPY

The Owner reserves the right, prior to Substantial Completion, to occupy, or use, any completed part or parts of the Work, providing these areas have been approved for occupancy by the Owner. The exercise of this right shall in no way constitute an acceptance of such parts, or any part of the Work, nor shall it in any way affect the dates and times when progress payments shall become due from the Owner to the Contractor or in any way prejudice the Owner's rights in the Contract, or any bonds guaranteeing the same. The Contract shall be deemed completed only when all the Work contracted has been duly and properly performed and accepted by the Owner.

Prior to such occupancy or use, the Owner and Contractor shall agree in writing regarding the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents.

In exercising the right to occupy or use completed parts of the Work prior to the Substantial Completion thereof, the Owner shall not make any use which will materially increase the cost to the Contractor, without increasing the Contract Amount, nor materially delay the completion of the Contract, without extending the time for completion.

The part or parts of the Work, if any, which the Owner anticipates the use or occupancy of prior to Substantial Completion are noted in **Section 4-2.8 OCCUPANCY**. Failure to include a part of the Work in the above section, shall not limit the Owner's right to use or occupy parts of the Work not listed.

2-3.6 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

The Owner reserves the right to perform the work related to the Project with the Owner's own forces, and to award separate Contracts in connection with the Project or other work on the Site under these or similar Conditions of the Contract. If the Contractor claims that delay, damage, or additional cost is involved because of such action by the Owner, the Contractor shall make such claim as provided elsewhere in the Contract Documents.

When separate Contracts are awarded for different portions of the Project or other work on the Site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Agreement.

The Owner will provide for the coordination of the work of the Owner's own forces and of each separate Contractor with the Work of the Contractor, who shall cooperate therewith as provided in **Section 2-4.8 OWNER-CONTRACTOR COORDINATION.**

2-4 CONTRACTOR

2-4.1 OFFICE

The Contractor's office at the Project Site is hereby designated as the legal address of the Contractor for the receipt of documents, samples, notices, letters, and other articles of communication.

2-4.2 CONTRACTOR'S REPRESENTATIVE

The Contractor shall notify the Owner in writing of the name of the person who will act as the Contractor's representative and shall have the authority to act in matters relating to this Contract. The Contractor, acting through its representative, shall give personal attention to, and shall manage the Work, so that it shall be prosecuted faithfully. The Contractor's representative shall be an employee of the Contractor. Upon written request of the Contractor, this requirement may be waived by the Owner. The Owner's waiver, if granted, will be in writing. There is no obligation by the Owner to waive this provision regardless of the effect on the Contractor's operations.

At all times during the progress of the Work, the Contractor's representative shall be personally present at the Project site, or a designated alternate shall be at the Project site who has the authority to act in matters relating to the Contract. The Contractor's representative or designated alternate shall have the authority to carry out the provisions of the Contract and to supply materials, equipment, tools, and labor without delay for the performance of the Work. If neither the Contractor's representative or a designated alternate is at the Project site, the Owner acting through the Engineer shall have the authority as provided in **Section** Error! Reference source not found. Error! Reference source not found., to suspend the work until such a representative is at the Project site.

Before initial work is begun on the Contract, the Contractor shall file with the Engineer, addresses and telephone numbers where the Contractor's and all subcontractors' representatives can be reached during all hours, including nights and weekends when work is not in progress.

2-4.3 CONSTRUCTION PROCEDURES

The Contractor will supervise and direct the work. The Contractor has the authority to determine the means, methods, techniques, sequences, and procedures of construction, except in those instances where the Owner, to define the quality of an item of work, specifies in the Contract, a means, method, technique, sequence, or procedure for construction of that item of Work.

2-4.4 CONTRACTOR'S EMPLOYEES

The Contractor shall be responsible for the adequacy, efficiency, and sufficiency of its employees. Workers shall have sufficient knowledge, skill, and experience to perform properly the work assigned to them.

The Contractor shall employ only competent, skillful workers to perform the Work. If any subcontractor or person employed by the Contractor or its subcontractors, appear to the Engineer to be incompetent or act in a disorderly or improper manner, such person or subcontractor shall be discharged from the site immediately by the Contractor upon written direction of the Engineer, and such person shall not again be employed on the Project.

2-4.5 SUBCONTRACTORS

Subcontractors will not be recognized as having a direct relationship with the Owner. The persons engaged in the Work, including employees of subcontractors and suppliers will be considered employees of the Contractor. The Contractor will be responsible for their work and their work shall be subject to the provisions of the Contract. The Contractor is as fully responsible to the Owner for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by them as the Contractor is for the acts and omissions of persons directly employed by the Contractor. Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the Owner. References in the Contract Document to actions required of subcontractors, manufacturers, suppliers, or any party other than the Contractor, the Owner, the Engineer, or the Design Consultant shall be interpreted as requiring that the Contractor shall require such subcontractor, manufacturer, supplier, utility company, or party to perform the specified action, unless the Contract Documents specifically state that the Work is not included in the Contract.

The Contractor shall not employ any subcontractors that are not properly licensed in accordance with State law. Prior to commencement of any work by a subcontractor, the Contractor shall submit verification to the Engineer that the subcontractor is properly licensed for the work it will perform. Changes to subcontractors listed in the Bid in accordance with Public Contract Code 4100 et. seq., shall be made only with the approval of the Owner.

2-4.6 CONTRACTOR'S EQUIPMENT AND FACILITIES

The Contractor shall furnish and maintain in good condition all equipment and facilities as required for the proper execution and inspection of the Work. Such equipment and facilities shall meet all requirements of applicable ordinances and laws.

2-4.7 PUBLIC SAFETY AND CONVENIENCE

The Contractor shall conduct its work so as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the Work and to insure the protection of persons and property at no extra cost to the Owner. The Contractor shall have under construction no greater length or amount of work than it can prosecute properly with due regard to the rights of the public.

2-4.8 OWNER-CONTRACTOR COORDINATION

2-4.8.1 SERVICE OF NOTICE -

Notice, order, direction, request, or other communication given by the Engineer or Owner to the Contractor shall be deemed to be well and sufficiently given to the Contractor if delivered to the Contractor's Representative designated in **Section 2-4.2**, **CONTRACTOR'S REPRESENTATIVE**, to the Contractor's office designated in **Section 2-4.1 OFFICE**, or to the Contractor's address provided in the Bid Proposal.

2-4.8.2 SUGGESTIONS TO CONTRACTOR -

Plans or methods of work suggested by the Owner, the Engineer, or the Design Consultant to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor. The Owner, and Engineer, or the Design Consultant assume no responsibility therefor, and in no way will be held liable for any defects in the Work which may result from or be caused by use of such plan or method of work.

2-4.8.3 COOPERATION -

The Contractor shall afford the Owner, the Engineer and separate Contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate the Work with theirs as required by the Contract Documents.

If any part of the Contractor's Work depends for proper execution or results upon the work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the Engineer any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acceptance of the Owner's or separate contractor's work as fit and proper to receive the Work, except as to latent defects which subsequently become apparent in such work by others.

If requested by the Contractor, the Owner shall arrange meetings with other contractors performing work on behalf of the Owner to plan coordination of construction activities. The Owner shall keep the Contractor informed of the planned activities of other contractors.

Differences and conflicts arising between the Contractor and other contractors employed by the Owner or between the Contractor and the workers of the Owner with regard to their

work, shall be submitted to the Owner for its decision in the matter. If such separate contractor sues the Owner on account of any delay or damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor who shall, at the Owner's election, defend such proceedings at the Contractor's expense. If any judgment or award against the Owner arises from any such litigation whether defended by Owner or by Contractor, the Contractor shall pay or satisfy said judgment or award and shall reimburse the Owner for all attorney's fees and court costs which the Owner has incurred or for which it is liable.

2-4.9 PERMITS

Unless specifically stated to be provided by the Owner, Contractor shall apply for, obtain, and comply with all the terms, conditions and requirements attached to all permits, bonds and licenses required by local, state, or federal agencies to perform work, construct, erect, test and startup of any equipment or facility for this Contract. Where operating permits are required, the Contractor shall apply for and obtain such operating permits in the name of the Owner and provide the permit in an appropriate frame or file holder when the Owner accepts substantial completion of the equipment or facility. The Contractor shall give all notices necessary or incidental to the due and lawful prosecution of the work.

Any permits, bonds, licenses and fees therefore required for the performance of work under this Contract and not specifically mentioned herein as having been obtained and paid by the Owner shall be included in the Contractor's bid price.

The Contractor shall apply for and obtain in its name the necessary building, plumbing and electrical permits and shall be responsible for satisfying all code requirements, calling for inspections, and obtaining final approvals. Code inspections will be coordinated by the Engineer. The Contractor shall comply with all construction conditions stipulated in the permits. The Contractor shall include in its bid the fees for any permits required.

The Contractor shall apply for and obtain all safety permits for excavations, tunneling, trenches, construction (building structure, scaffolding, or falsework) and demolition required by CAL/OSHA including but not limited to, the permits required by Labor Code Section 6500.

2-4.10 CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS

Until acceptance of the Work, the Contractor shall have the charge and care of the Work and of the materials to be used therein and shall bear the risk of injury, loss, or damage, to any part thereof (regardless of whether partial payments have been made on such damaged portions of the Work) by the action of the elements or from any other cause, whether or not arising from the non-execution of the Work. The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the Work or the materials occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except for such injuries, losses, or damages as are directly and approximately caused by acts of the Owner.

2-4.11 LAWS TO BE OBSERVED

The Contractor shall keep fully informed of all existing and future County, State, and national laws and regulations and all municipal ordinances and regulations of the Owner which in any manner affect those engaged or employed in the Work and of all such orders and decrees of bodies having any jurisdiction or authority over the same; and shall protect and indemnify the Owner and all of its officers, agents, and servants against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, orders, or decrees whether by the Contractor or its employees. If any discrepancy or inconsistency is discovered in the plans, drawings, specifications or Contract for the Work in relation to any such law, ordinance, regulations, order or decree, the Contractor shall immediately report the same to the Engineer in writing.

2-4.11.1 PREVAILING WAGE -

In accordance with Section 1770 of the Labor Code, the Owner has ascertained and does hereby specify that the prevailing wage rates shall be those provided in **Section 1-2.23 WAGE RATES**. The said rates shall include all employer payments that are required by Section 1773.1 of the Labor Code. The Owner will furnish to the Contractor, upon request, a copy of such prevailing rates. It shall be the duty of the Contractor to post a copy of such prevailing wages at the job site.

For each worker paid less than the stipulated rate in the execution of the Contract by the Contractor, or any subcontractor under the Contractor, in violation of the provisions of the Labor Code, and in particular, Section 1770 to Section 1780, inclusive, the Contractor shall be subject to the provisions and penalties of Section 1775 of the Labor Code. In addition to said penalty, and pursuant to said Section 1775, the difference between such stipulated prevailing wage rates and the amounts paid to each worker for each calendar day, or portion thereof, for which each worker was paid less than the stipulated prevailing rate shall be paid to each worker by the Contractor.

The wage rates set forth are the minimum that may be paid by the Contractor. Nothing herein contained shall be construed as preventing the Contractor from paying more than the minimum set forth.

No extra compensation whatever shall be allowed by the Owner due to the inability of the Contractor to hire labor at the minimum rate nor for any necessity for payment by the Contractor for subsistence, travel time, overtime, or other added compensation, all of which possibilities are elements to be considered and ascertained to the Contractor's own satisfaction in preparing the bid.

If it becomes necessary to employ a craft other than those listed, the Contractor shall notify the Owner immediately and the Owner will obtain the additional prevailing rate from the Director of the Department of Industrial Relations and the rate thus determined shall be applicable as a minimum at the time of initial employment.

The Contractor shall pay travel and subsistence payments to workers needed to execute the work as such travel and subsistence payments are defined in the applicable collective

bargaining agreement filed with the Department of Industrial Relations pursuant to Labor Code Section 1773.8.

2-4.11.2 CERTIFIED PAYROLLS -

In accordance with Section 1776 of the Labor Code, each Contractor and subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the project.

The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

- a. A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
- b. A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of the Owner, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
- c. A certified copy of all payroll records shall be made available upon request by the public in accordance with Section 1776 of the Labor Code.

The Contractor is responsible for its and its subcontractors compliance with the provisions of Section 1776 of the Labor Code.

2-4.11.3 OVERTIME REQUIREMENTS -

The Contractor shall forfeit, as a penalty to the Owner, the penalty as provided in Section 1813 of the Labor Code for each worker employed in the execution of the Contract by the Contractor, or any subcontractor under the Contractor, for each day during which such worker is required or permitted to work more than eight (8) hours in any one day and forty (40) hours in any one week, in violation of the provisions of the Labor Code, and in particular, Section 1810 to Section 1815 thereof, inclusive, except that work performed by employees of Contractors in excess of eight (8) hours a day and forty (40) hours during one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day, at not less than one and a half (1½) times the basic rate of pay as provided for in Section 1815 of the Labor Code.

2-4.11.4 APPRENTICE AND TRAINEE -

Attention is directed to the provisions in Section 1777.5 of the Labor Code and in accordance with the regulations of the California Apprenticeship Council concerning the employment of apprentices by the Contractor or any subcontractor under the Contractor.

Section 1777.5 requires the Contractor or subcontractors employing tradespersons in any apprentice occupation to apply to the joint apprenticeship committee nearest the site of the project which administers the apprenticeship program in that trade for a certificate of approval. The Contractor and subcontractors are required to submit contract award information to the applicable joint apprenticeship committee. As provided for in Section 1777.5 of the Labor Code, the Contractor is required to make contributions to funds established for the administration of apprenticeship programs.

It shall be the responsibility of the Contractor to abide by the provisions of Section 1777.5 of the Labor Code and to require all subcontractors employed by or contracting with the Contractor to abide by said provisions. The Contractor shall furnish the Owner any and all evidence of compliance with this code section when requested by the Owner.

For failure to comply with Section 1777.5 of the Labor Code, the Contractor shall be subject to the penalties in Section 1777.7 of the Labor Code.

2-4.11.5 WORKERS' COMPENSATION INSURANCE -

The Contractor Is Required To Secure The Payment Of Compensation To Its Employees In Accordance With The Provisions Of Sections 1860 And 3700 Of The Labor Code And On **Section 4-2.5 WORKERS' COMPENSATION INSURANCE**

2-4.12 SAFETY

2-4.12.1 CONTRACTORS SAFETY RESPONSIBILITY -

The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor (OSHA), the California Occupational Safety and Health Act, and all other applicable Federal, State, County, and local laws, ordinances, codes, the requirements set forth below, and any regulations that may be detailed in other parts of these Contract Documents. Where any of these are in conflict, the more stringent requirement shall be followed.

No provision of the Contract Documents shall act to make the Owner, the Engineer or any other party than the Contractor responsible for safety. The Engineer shall not have authority for safety on the project. The Contractor shall indemnify, defend and hold harmless the Owner, Engineer, or other authorized representatives of the Owner, from and against any and all actions, damages, fines, suits, and losses arising from the Contractor's failure to meet all safety requirements and/or provide a safe work site.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the Engineer and the Owner. In addition, the Contractor must promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the Work whether on, or adjacent to, the Site, giving full details and statements of witnesses. The Contractor shall make all reports as are, or may be, required by any authority having jurisdiction, and permit all safety inspections of the work being performed under this Contract.

If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

2-4.12.2 SAFETY PROGRAM -

The Contractor shall establish, implement, and maintain a written injury prevention program as required by Labor Code Section 6401.7. Before beginning the Work the Contractor shall prepare and submit to the Engineer a Contractor Safety Program that provides for the implementation of all of the Contractor's safety responsibilities in connection with the Work at the site and the coordination of that program and its associated procedures and precautions with safety programs, precautions and procedures of each of its subcontractors and other prime Contractors performing work at the site. The Contractor shall be solely responsible for initiating, maintaining, monitoring, coordinating, and supervising all safety program, precautions, and procedures in connection with the Work and for coordinating its programs, precautions, and procedures of the other prime contractors and subcontractors performing the Work at the site. The Safety Program should contain all the necessary elements for the Contractor to administer its program on site. At a minimum, this written Safety Program shall address the elements required by Labor Code Section 6401.7. The program shall also address the following:

- A. Compliance with Laws, Rules, and Regulations
- B. Infractions of Safety Rules
 - 1. Reported to Contractor's designated Safety Supervisor
 - 2. Time correction
 - 3. Contractor to enforce safety requirements on its subcontractors
 - 4. Noncomplying employees to be removed from the Project
- C. Housekeeping
 - 1. Continuous cleaning required
 - 2. Final clean up required
- D. Means of Implementing the Program
 - 1. All new employees to receive training on the Contractor's Safety Program prior to starting work.
 - 2. Periodic tool box meetings with agenda recorded
 - 3. Documented safety inspections by Safety Supervisor
 - 4. Establish emergency procedures and telephone numbers including the procedure for the immediate removal to a hospital or a doctor's care of persons who may be injured on the jobsite. The Contractor shall maintain at its office or other well-known place at the Site safety equipment applicable to the Work as prescribed by the aforementioned authorities, and all items necessary for giving first aid to the injured.
 - 5. Project bulletin board with required policies
 - 6. At least two employees on each shift should have First Aid training and maintain a current First Aid card issued by an agency such as the American Red Cross.
 - 7. Completion of a job hazard analysis for specific construction activities.
 - 8. Establish a hazard communication program for informing the Contractor's and subcontractor's personnel, Engineer, Owner, and other affected parties of specific hazards on the project.
- E. Define the duties and responsibilities of Contractor management personnel for safety.

- Project Manager
- 2. General Superintendent
- 3. Foreman
- 4. Safety Supervisor
- F. Accident Investigation
 - 1. Investigate all accidents and near misses.
 - 2. Develop steps to prevent a reoccurrence.
 - 3. Completion of all reporting paperwork.

The Contractor's compliance with requirements for safety and/or the Engineer's review of the Contractor's Safety Program shall not relieve or decrease the liability of the Contractor for safety. The Engineer's review of the Contractors Safety Program is only to determine if the above listed elements are included in the program. The cost of this work shall be included in the various bid items and no additional payment will be allowed.

2-4.12.3 SAFETY SUPERVISOR -

The Contractor shall appoint an employee as safety supervisor who is qualified and authorized to supervise and enforce compliance with the Safety Program. The Contractor shall notify the Engineer in writing prior to the commencement of work of the name of the person who will act as the Contractors safety supervisor and furnish the safety supervisor's resume to the Engineer. The Contractor will, through and with his Safety Supervisor, ensure that all of its employees and its subcontractors of any tier, fully comply with the Project Safety Policies. The Safety Supervisor shall be a full-time employee of the Contractor whose responsibility shall be for supervising compliance with applicable safety requirements on the work site and for developing and implementing safety training classes for all job personnel. The Owner shall have the authority to require removal of the Contractor's Safety Supervisor if the representative is judged to be improperly or inadequately performing the duties; however, this authority shall not in any way affect the Contractor's sole responsibility for performing this work safely, nor shall it impose any obligation upon the Owner to ensure the Contractor perform its work safely.

2-4.12.4 SAFETY COORDINATION MEETINGS -

The Contractor and its affected subcontractors shall attend safety coordination meetings with the Engineer and any other affected parties. The meeting shall be held at least monthly and prior to the start of new construction activities. Construction activities will be reviewed prior to the start of work in the various areas to determine potential hazards. The Contractor will be responsible for preparing job hazard analyses to breakdown the activities to be performed in a step-by-step procedure and provide safety guidelines for each step and any special equipment necessary to protect workers. The Contractor will act as facilitator for the meeting. The Engineer will participate in the Safety coordination meetings but will not direct the Contractor on how to perform its safety operations.

2-4.12.5 SAFETY AND PROTECTION -

The Contractor shall take all necessary protection to prevent damage, injury, and loss to:

- ♦ All employees on the Project, employees of all subcontractors, and other persons and organizations who may be affected thereby;
- All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and of underground facilities and utility owners when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor, supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the Contractor.

2-4.12.6 EXCAVATION SAFETY -

In accordance with the provisions of Section 6705 of the Labor Code, the Contractor shall submit, in advance of excavation five feet or more in depth, detailed plans showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from hazard of caving ground during such excavation. If such plans vary from the shoring system standards set forth in the Construction Safety Orders in Title 8, California Code of Regulations, the plans shall be prepared and signed by a registered civil or structural engineer. Shoring, bracing, sloping, or other protective system shall not be less effective than required by the California Construction Safety Orders. The Owner's review of the Contractor's excavation plan is only for general conformance to the California Construction Safety Orders.

Prior to commencing any excavation, the Contractor shall designate in writing to the Engineer the "competent person(s)" with the authority and responsibilities designated in the Construction Safety Orders.

2-4.12.7 CONFINED SPACES

If portions of the work will be performed in existing storm drains and appurtenant structures. Contractor shall conduct all activities in accordance with Title 8, Article 108, #5156 through #5159, Article 108 "Confined Spaces" of the California Code of Regulations.

The cost of personnel training, equipment and field procedures to ensure compliance with confined space regulations is the Contractor's sole responsibility. Full compensation for confined space compliance shall be considered in the Unit Price for Unit Price Items included in the various items of work.

2-4.12.8 SAFETY EMERGENCIES -

In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Engineer, is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Engineer prompt written notice if the Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby.

2-4.12.9 SAFETY VIOLATIONS -

Should the Contractor fail to correct an unsafe condition, the Engineer shall immediately notify the Owner of the Contractor's failure to correct the unsafe condition. The Owner shall then notify the Contractor through the Engineer that the unsafe condition must be corrected or the work in question will be stopped in accordance with **Section** Error! Reference source not found., Error! Reference source not found. until the condition is corrected to the satisfaction of the Owner. No extension of time or additional compensation will be granted as a result of any stop order so issued. The notification and suspension of such work or the failure to provide such notification and suspension by the Engineer and Owner shall not relieve the Contractor of its sole responsibility and liability for safety.

The Owner shall have the authority to require the removal from the project of the foreman and/or superintendent in responsible charge of the work where safety violations occur.

2-4.12.10 EQUIPMENT SAFETY PROVISIONS –

The completed Work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items, required by the State and Federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the Work, including Owner-selected equipment, subject to such safety regulations shall be fabricated, furnished, and installed in compliance with these requirements. All equipment furnished shall be grounded and provided guards and protection as required by safety codes. Where vaportight or explosion-proof electrical installation is required by safety codes, this shall be provided. Contractors and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. The Contractor shall notify all equipment suppliers and subcontractors of the provisions of this paragraph.

2-4.12.11 CONTRACTOR COORDINATION WITH OTHER CONTRACTORS-

Contractor shall coordinate his work with the Contractors working on these other projects and schedule his work so the work crews do not conflict or interfere with each other. Contractor shall notify Owner immediately if work by other contractors impacts completion of any portion of the project within the time allowed or specified in these Special Provisions. Payment for coordination with other contractors shall be included in other items of work and no separate payment will be made.

2-5 CONTROL OF WORK AND MATERIALS

2-5.1 MEANS AND METHODS

It is expressly stipulated that the drawings, specifications and other Contract Documents set forth the requirements as to the nature of the completed Work and do not purport to control the method of performing work except in those instances where the nature of the completed Work is dependent on the method of performance.

Except as provided elsewhere in the Contract Documents, neither the Owner, Design Consultant nor the Engineer will be responsible for or have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work. Except as provided elsewhere in the Contract Documents, neither the Owner, Design Consultant nor the Engineer will be responsible for or have control or charge over the acts or omissions of the Contractor, or any of their subcontractors, agents or employees, or any other persons performing any of the Work. Any general control of the Work exercised by the Owner or its authorized representatives shall not make the Contractor an agent of the Owner, and the liability of the Contractor for all damages to persons and/or to public or private property arising from the Contractor's execution of the Work shall not be lessened because of such general control.

Neither the inspection by the Owner, Design Consultant, or Engineer, nor any order, measurement, approved modification, or payment of monies, nor acceptance of any part or whole of the Work by the Owner, Design Consultants, Engineer, or their agents shall operate as a waiver of any provision of the Contract.

Acceptance by the Engineer, Owner and/or Design Consultant of any drawings, or any information regarding materials and equipment the Contractor proposes to furnish or method of work shall not be regarded as an assumption of risks or liability by the Engineer, Design Consultant, or the Owner, or any officer or employee thereof, and the Contractor shall have no claim under the Contract on account of the failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Such acceptance shall be considered to mean merely that the Engineer, Owner, and/or Design Consultant has no objection to the Contractor using, upon its own full responsibility, the plan or method of work proposed, or furnishing the materials and equipment proposed.

2-5.2 OWNER-FURNISHED MATERIALS

Materials, if furnished by the Owner, will be made available as designated in the General Requirements. The cost of loading, unloading, hauling and handling, and placing Owner-furnished materials shall be considered as included in the price bid for the Contract item involving such Owner-furnished material.

Contractor shall inspect and assure itself of the amount and soundness of such materials.

The Contractor will be held responsible for all materials furnished to it, and shall pay all demurrage and storage charges. Owner-furnished materials lost or damaged from any cause whatsoever shall be replaced by the Contractor. The Contractor will be liable to the Owner

for the cost of replacing Owner-furnished material and such costs may be deducted from any monies due or to become due the Contractor.

2-5.3 DEFECTIVE AND UNAUTHORIZED WORK

Materials and workmanship not conforming to the requirements of the Contract Documents shall be considered defective and will be subject to rejection. Defective work or material, whether in place or not, shall be removed immediately from the Site by the Contractor, at its expense, when so directed by the Engineer.

Any work done beyond the limits of work, lines, and grades shown on any approved plans or established by the Engineer, or any extra work done without written authority, will be considered as unauthorized and will not be paid for.

Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this paragraph, the Engineer shall have authority to cause defective work to be remedied, on removed and replaced, and unauthorized work to be removed, and to deduct the costs thereof from any monies due or to become due the Contractor. The time, cost and compliance requirements stipulated in Section 2-3.4, OWNER'S RIGHT TO CARRY OUT THE WORK, shall apply for this paragraph also.

2-5.4 UNNOTICED DEFECTS

Any defective work or material that may be discovered by the Owner, Engineer, or Design Consultant before the final acceptance of the Work, or before final payment has been made, or during the warranty period, shall be removed and replaced by work and materials which shall conform to the provisions of the Contract Documents. Failure on the part of the Owner, Engineer, or Design Consultant to condemn or reject bad or inferior work or materials shall not be construed to imply acceptance of such work or materials.

2-5.5 RIGHT TO RETAIN IMPERFECT WORK

If any part or portion of the work performed or material furnished under this Contract shall prove defective and not in accordance with the Drawings and Specifications, and if the imperfection in the same shall not be of sufficient magnitude or importance as to make the work dangerous or unsuitable, or if the removal of such work will create conditions which are dangerous or undesirable, the Owner shall have the right and authority to retain such work but shall make such deductions in the final payment therefor as may be just and reasonable.

2-6 PROGRESS OF THE WORK

2-6.1 BEGINNING OF WORK

The Contractor shall begin work within ten (10) calendar days of the effective date of the Notice to Proceed and shall diligently prosecute the same to completion within the time limit provided.

The City intends to award the project in **October 2018** and to start the work soon thereafter. The Contractor shall make such arrangements and schedule his work accordingly with no such additional compensation made by the City to accommodate this criterion.

The Contractor shall submit within 10 calendar days from the date of award of the contract the following:

- 1. A detailed work schedule and sequencing progression;
- 2. Storm water Pollution Prevention Program/Water Pollution Control Program;
- 3. Traffic control and haul route plan for completion of all work items.

Upon approval of the work schedule, Erosion and Sedimentation Control Plan (ECP), traffic and haul route plan and all contract documents, a Notice to Proceed will be issued. If Contractor fails to submit the above within 10 calendar days from the date of award, delaying the Notice to Proceed, the Time Allowed for Completion in Section 3-2 may be reduced, so that the project will be completed prior to the first day of the consecutive school year in August for the Sausalito Middle and Elementary schools. Contractor will be responsible for all additional costs to complete the work in the reduced duration, if such is caused by the Contractor's late submittal of the above.

Should the Contractor begin work in advance of receiving Notice to Proceed, any work performed in advance of the said date of approval shall be considered as having been done by the Contractor at its own risk and as a volunteer.

The Contractor shall not commence construction on any of the work until he has, on the grounds, or can furnish definite assurance that there will be available when required, all materials necessary to complete the portion of work on which work is begun.

Before covering or obliterating any manhole, monument, other surface structure and/or traffic striping the same shall be referenced by the Contractor with a sufficient number of control points to reestablish the alignment and location. The Contractor shall submit to the Engineer a list of the referenced control points before any pavement delineation or structure is removed or covered. The references shall include the limits or changes in striping pattern, including one- and two-way barrier lines, limit lines, crosswalks, parking stalls, and other pavement markings. Full compensation for referencing surface structures and pavement delineation shall be considered as included in the contract prices paid for traffic striping and no additional compensation will be allowed there for.

The Contractor shall schedule his work to occur only from Monday to Friday, and between the hours of 8:00 a.m. and 6:00 p.m., except otherwise noted on the plans. No work shall be performed on weekends and holidays, unless permitted with written approval of the City Engineer.

No paving shall be placed on the last working day preceding a weekend or holiday that will leave an exposed longitudinal joint during the subsequent period of non-working days, unless permission has been obtained from the City Engineer.

The contractor shall submit to the City Engineer a schedule based on the above, indicating the sequence of the work, estimated time for completion of each phase of the project and the method of operation required to complete the project in the time specified. The Contractor's schedule shall be submitted to the City Engineer within 10 calendar days from the date of the award of contract. The Contractor shall prepare the work schedule based on the following requirements:

2-6.2 TIME OF COMPLETION

Time shall be of the essence of the Contract. The Contractor shall complete all or any designated portion of the work called for under the contract in all parts and requirements within the working days noted in **Section 3-2 TIME ALLOWED FOR COMPLETION.**

It is expressly understood and agreed by and between the Contractor and the Owner that the Contract time for completion of the work described herein is a reasonable time taking into consideration the average climatic and economic conditions and other factors prevailing in the locality and the nature of the work.

2-6.3 DELAYS

2-6.3.1 NOTICE OF DELAYS -

When the Contractor foresees a delay in the prosecution of the Work and, in any event, immediately upon the occurrence of a delay, the Contractor shall notify the Engineer in writing of the probability of the occurrence and the estimated extent of the delay, and its cause. This notice must be received by the City within 5 days of the occurrence of issue which caused delay. If notice is not received within this time period, any future claim due to this occurrence will not be accepted. The Contractor shall take immediate steps to prevent, if possible the occurrence or continuance of the delay. The Contractor agrees that no claim shall be made for delays which are not called to the attention of the Engineer at the time of their occurrence.

2-6.3.2 NON-EXCUSABLE DELAYS -

Non-excusable delays in the prosecution of the Work shall include delays which could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its subcontractors, at any tier level, or suppliers.

2-6.3.3 EXCUSABLE DELAYS -

Excusable delays in the prosecution or completion of the Work shall include delays which result from causes beyond the control of the Contractor and Owner and which could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its subcontractors, at any tier level, or suppliers.

2-6.3.4 ABNORMAL DELAYS -

Delays caused by acts of god, fire, unusual storms, floods, tidal waves, earthquakes, strikes, labor disputes, freight embargoes, and shortages of materials shall be considered as excusable delays insofar as they prevent the Contractor from proceeding with at least seventy-five (75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical activity item(s) on the latest favorably reviewed progress schedule.

2-6.3.5 WEATHER DELAYS -

Should inclement weather conditions or the conditions resulting from weather prevent the Contractor from proceeding with seventy-five (75) percent of the normal labor and equipment force engaged in the current critical activity item for a period of at least five (5) hours per day toward completion of such operation or operations, and the crew is dismissed as a result thereof, it shall be a weather delay day.

2-6.3.6 MATERIAL SHORTAGES -

Upon the submission of satisfactory proof to the Engineer by the Contractor, shortages of material will be acceptable as grounds for granting a time extension. In order that such proof may be satisfactory and acceptable to the Engineer, it must be demonstrated by the Contractor that the Contractor has made every effort to obtain such materials from all known sources within reasonable reach of the proposed Work. Only the physical shortage of material, caused by unusual circumstances, will be considered under these provisions as a cause for extension of time, and no consideration will be given to any claim that material could not be obtained at a reasonable, practical, or economical cost or price, unless it is shown to the satisfaction of the Engineer that such material could have been obtained only at exorbitant prices entirely out of line with current rates, taking into account the quantities involved and usual practices in obtaining such quantities. A time extension for shortage of material will not be considered for material ordered or delivered late or whose availability is affected by virtue of the mishandling of procurement. The above provisions apply equally to equipment to be installed in the work

2-6.3.7 COMPENSABLE DELAYS -

Compensable delays in the prosecution or completion of the Work shall include delays that occur through no fault of the Contractor and prevent the Contractor from proceeding with at least seventy-five (75) percent of the normal labor and equipment force for at least five (5) hours per day toward completion of the current critical activity item(s) on the latest favorably reviewed progress schedule due to the following cause(s):

- a. Delays due solely to the actions and/or inactions of the Owner.
- Delays due to differing site conditions as defined in Section 2-8.3, DIFFERING SITE CONDITIONS
- c. Delays due to other Contractors employed by the Owner who interfere with the Contractor's prosecution of the Work as defined above.

2-6.3.8 CONCURRENT DELAYS -

Concurrent delays are those delay periods when the prosecution of the Work is delayed during the same period of time due to causes from a combination of the delays defined in Section 2-6.3.2, Non-Excusable Delays, 2-6.3.3, Excusable Delays, or 2-6.3.7, Compensable Delays. During such concurrent delay periods, time extensions will be granted in accordance with Section 2-6.4, Time Extensions; however, the Contractor shall not be compensated for its overhead costs as defined in Section 2-6.4.3, Indirect Overhead, and the Owner shall not assess its actual costs as defined in Section 2-6.3.2, Non-excusable Delays.

2-6.4 TIME EXTENSIONS

2-6.4.1 NON-EXCUSABLE DELAYS -

The Owner may grant an extension of time for non-excusable delays if the Owner deems it is in its best interest. If the Owner grants an extension of time for non-excusable delays, the Contractor agrees to pay the Owner's actual costs, including charges for engineering, inspection and administration incurred during the extension.

2-6.4.2 EXCUSABLE OR COMPENSABLE DELAYS -

If the Contractor is delayed in the performance of its work as defined in **Section 2-6.3.3**, **Excusable Delays**, or **2-6.3.7**, **Compensable Delays**, then the Contract completion date may be extended by the Owner for such time that, in the Owner's and Engineer's determination, the Contractor's completion date will be delayed, provided that the Contractor strictly fulfills the following:

- a. The Contractor shall provide notification, in accordance with Section 2-6.3.1, Notice of Delays, and submit in writing a request for an extension of time to the Engineer stating at a minimum the probable cause of the delay and the number of days being requested. The time extension request shall be submitted in accordance with the requirements of Section 2-6.4.2.c and must be submitted within 5 days. Cost estimations for these delays must be submitted within 5 days following notice of the delay.
- b. If requested by the Engineer, the Contractor shall promptly provide sufficient information to the Engineer to assess the cause or effect of the alleged delay, or to determine if other concurrent delays affected the work.
- c. A time impact analysis of the project schedule that illustrates the effect on the scheduled completion date due to schedule changes or disruptions where a request for adjustment of contract time is made.
- d. Weather Delays. The Contractor will be granted a non-compensable time extension for weather caused delays, pursuant to Section 2-6.3.5, Weather Delays, over and above an allowance as provided for in Section 2-6.4 TIME EXTENSIONS. No time extensions for weather delays will be granted until the total number of weather days exceeds this allowance.

Should the Contractor fail to fulfill any of the foregoing, which are conditions precedent to the right to receive a time extension, the Contractor waives the right to receive a time extension.

During such extension of time, neither extra compensation for engineering, inspection and administration nor damages for delay will be charged to the Contractor. It is understood and agreed by the Contractor and Owner that time extensions due to excusable or compensable delays will be granted only if such delays involve controlling operations which would prevent completion of the whole Work within the specified Contract time.

Should the Contractor fail to complete the work within the time specified in the contract, as extended in accordance with this clause if appropriate, the Contractor shall pay to the Owner liquidated damages in accordance with Section Error! Reference source not found., Error! Reference source not found.

2-6.4.3 INDIRECT OVERHEAD -

The Contractor shall be reimbursed for indirect overhead expenses for periods of time when the Work is delayed as defined in **Section 2-6.3.7**, **Compensable Delays**. However, no reimbursement for indirect overhead shall be made for compensable delays which occur during a concurrent delay as defined in **Section 2-6.3.8**, **Concurrent Delays**. No reimbursement for indirect overhead as covered in this section shall be made for any time extensions granted for Contract change orders as provided in **Section 5-3**, **MODIFICATION PROCEDURES**. As a condition precedent to any reimbursement, the Contractor must fulfill all conditions as provided in **Section 2-6.3.7**, **Compensable Delays**. No additional markup for overhead or profit shall be provided for such indirect overhead expenses.

Payment to the Contractor for indirect overhead expenses will be made only if the extended Contract period granted for the compensable delay(s) is required to complete the work following the depletion of the original contract period and any time extensions granted other than compensable time extensions.

2-6.4.4 INDIRECT FIELD OVERHEAD -

For those allowable delay periods as defined in Section **2-6.4.3**, **Indirect Overhead**, the Contractor shall be reimbursed for its indirect field overhead based on:

- a. Invoices for all field office equipment.
- b. Actual salary for field office staff.
- c. Fair rental values acceptable to the Engineer

2-6.4.5 MEASUREMENT OF QUANTITIES

General -

Measurements of the completed work shall be in accordance with, and by instruments and devices calibrated to United States Standard Measures and the units of measurement for payment, and the limits thereof, shall be made as shown on the Plans, Specifications, General Conditions, General Requirements and the **Technical Specifications**.

Units of Measurement -

Measurements shall be in accordance with U.S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds avoirdupois. The unit of liquid measure is the U.S. gallon.

Certified Weights -

When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales, or when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing the actual net weights. The Owner will accept the certificates as evidence of the weights delivered.

Methods of Measurement -

Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the method stipulated in the particular sections involved. In determining quantities, all measurements shall be made in a horizontal plane unless otherwise specified.

Material not used from a transporting vehicle shall be determined by the Engineer and deducted from the certified tag.

When material is to be measured and paid for on a volume basis and it would be impractical to determine the volume, or when requested by the Contractor in writing and approved by the Engineer in writing, the material will be weighed and converted to volume measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities will be adopted.

Full compensation for all expense involved in conforming to the above requirements for measuring and weighing materials shall be considered as included in the unit prices paid for the materials being measured or weighed and no additional allowances will be made therefor.

Quantities of material wasted or disposed of in a manner not called for under the Contract; or rejected loads of material, including material rejected after it has been placed by reason of failure of the Contractor to conform to the provisions of the Contract; or material not unloaded from the transporting vehicle; or material placed outside the lines indicated on the plans or given by the Engineer; or material remaining on hand after completion of the Contract, will not be paid for and such quantities will be deducted from the final total quantities. No compensation will be allowed for hauling rejected material.

MODIFICATION PROCEDURES

CHANGES IN CONTRACT PRICE

Whenever corrections, alterations, or modifications of the work under this Contract are ordered by the Engineer and approved by the Owner and increase the amount of work to be done, such added work shall be known as extra work; and when such corrections, alterations, or modifications decrease the amount of work to be done, such subtracted work shall be known as work omitted.

The difference in cost of the work affected by such change will be added to or deducted from the amount of said Contract price, as the case may be, by a fair and reasonable valuation, which shall be

Contract price, as the case may be, by a fair and reasonable valuation, which shall be determined in one or more of the following ways as **directed** by the Engineer:

By unit prices accepted by the Owner and stated in the Contract Documents;

By unit prices subsequently fixed by agreement between the parties;

By an acceptable lump sum proposal from the Contractor; or

By Force Account when directed in writing and administered by the Owner through its agents or representatives.

When required by the Engineer, the Contractor shall submit, in the form prescribed by the Engineer, an itemized breakdown with supporting data of the quantities and prices used in computing the value of any change that may be ordered.

2-7 THE ENGINEER WILL REVIEW THE CONTRACTOR'S PROPOSAL FOR THE CHANGE AND NEGOTIATE AN EQUITABLE ADJUSTMENT WITH THE CONTRACTOR. AFTER THERE IS AN AGREEMENT THE ENGINEER WILL PREPARE AND PROCESS THE CHANGE ORDER AND MAKE A RECOMMENDATION FOR ACTION BY THE OWNER. ALL CHANGE ORDERS MUST BE APPROVED BY THE OWNER IN WRITING BEFORE THE WORK CAN BE AUTHORIZED AND THE CHANGE ORDER EXECUTED.

2-7.1

2-7.2 THE PRICES AGREED UPON AND ANY AGREED UPON ADJUSTMENT IN CONTRACT TIME SHALL BE INCORPORATED IN THE WRITTEN ORDER ISSUED BY THE OWNER, WHICH SHALL BE WRITTEN SO AS TO INDICATE AN ACCEPTANCE ON THE PART OF THE CONTRACTOR AS EVIDENCED BY ITS SIGNATURE. BY SIGNATURE OF THE CHANGE ORDER, THE CONTRACTOR ACKNOWLEDGES THAT THE ADJUSTMENTS TO COST AND TIME CONTAINED IN THE CHANGE ORDER ARE IN FULL SATISFACTION AND ACCORD, PAYMENT IN FULL, AND SO WAIVES ANY RIGHT TO CLAIM ANY FURTHER COST AND TIME IMPACTS AT ANY TIME DURING AND AFTER COMPLETION OF THE CONTRACT FOR THE CHANGES ENCOMPASSED BY THE CHANGE ORDER.

NEGOTIATED CHANGE ORDERS

Under the methods described above, the Contractor shall submit substantiating documentation with an itemized breakdown of Contractor and subcontractor direct costs, including labor, material, equipment rentals, and approved services, pertaining to such ordered work in the form and detail acceptable to the Engineer. The direct costs shall include only the payroll cost for workers and foremen, including wages, fringe benefits as established by negotiated labor agreements or state prevailing wages, workers' compensation and labor insurance, and labor taxes as established by law. No other fixed labor burdens will be considered, unless approved in writing by the Engineer; the cost of materials used and equipment delivered and installed in such work as substantiated by appropriate documents; the cost of construction machinery and equipment based on fair rental or ownership values acceptable to the Engineer and the cost of incidentals directly related to such work. The direct costs shall not include any labor or office costs pertaining to the Contractor's managers or superintendents, its office and engineering staff and office facilities, or anyone not directly employed on such work, nor the cost of small tools as all such indirect costs form a part of the Contractor's overhead expense.

Under the method described in this section, the maximum percentage, which will be allowed for the Contractor's combined overhead and profit will be:

For work by its own organization, the Contractor may add the following percentages:

- Direct Labor 33 percent
- Materials 15 percent
- Equipment (owned or rented)
 15 percent

- a. For all such work done by subcontractors, such subcontractor may add the same percentages as the Contractor as listed in (1) above to its actual net increase in costs for combined overhead and profit and the Contractor may add up to five (5) percent of the subcontractor's total for its combined overhead and profit.
- b. For all such work done by subtier-subcontractors, such sub-subcontractors may add the same percentages as the Contractor as listed in (a) above to its actual net increase in costs for combined overhead and profit, and the subcontractor may add up to ten (10) percent of the sub-subcontractor's total for its combined overhead and profit. The Contractor may add up to five (5) percent of the subcontractor's total for its combined overhead and profit.
- c. To the total of the actual costs and fees allowed herein under, not more than two (2) percent shall be added by the Contractor for additional bond and insurance other than labor insurance.
- d. The above fees represent the maximum limits which will be allowed, and they include the Contractor's and all subcontractors' indirect home office expenses and all costs for cost proposal preparation.

When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any, for each area of work, i.e. direct labor, materials, equipment, and subcontractors. The amount of credit to be allowed by the Contractor to the Owner for any such change which results in a net decrease in cost will be the amount of the actual net decrease and a credit in accordance with the markups. The Contractor shall not claim for anticipated profits on work that may be omitted.

FORCE ACCOUNT PAYMENT

2-7.2.1 INDIRECT HOME OFFICE OVERHEAD -

For those allowable delay periods as defined in Section **2-6.4.3, Indirect Overhead**, the Contractor shall be reimbursed for its home office overhead based on the following formula:

Contract Bid Price (\$) _____ x (0.04) = Daily Home Office Overhead (\$/Day) Contract Period (Days)

As it is impractical to determine the actual home office overhead, such reimbursement shall be mutually agreed between the Owner and Contractor to encompass full payment for any home office overhead expenses for such periods of time for the Contractor and all subcontractors. The Contractor agrees to indemnify, defend and hold the Owner harmless for any indirect overhead claims from its subcontractors.

2-7.3 LIQUIDATED DAMAGES

It is agreed by the parties to the Contract that time is of the essence in the completion of this Work, and that in case any intermediate time limit Work or all the Work called for under the Contract is not completed before or upon the expiration of the intermediate time limit or final time limit as set forth in these Contract Documents, as modified by extensions of time granted

by the Owner, damage will be sustained by the Owner. As it is impracticable to determine the actual delay damage; it is, therefore, agreed that the Contractor shall pay liquidated damages to the Owner in the amount set forth in these Special Provisions, per day for each and every day's delay beyond the time prescribed to complete any intermediate time limit Work and to complete all the Work by the final time limit. The Contractor agrees to pay such liquidated damages and in case the same are not paid, agrees that the Owner may deduct the amount thereof from any monies due or that may become due the Contractor under the Contract.

2-7.4 TEMPORARY SUSPENSION OF WORK

2-7.4.1 DEFECTIVE WORK

If the Contractor fails to correct defective work as required by **Section 2-5.3, Defective and Unauthorized Work,** or fails to carry out the Work in accordance with the Contract Documents or any other applicable rules and regulations, the Owner, by a written order of the Owner's representative or signed personally by an agent specifically so empowered by the Owner, in writing, may order the Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity. All delays in the Work occasioned by such stoppage shall not relieve the Contractor of any duty to perform the Work or serve to extend the time for its completion. Any and all necessary corrective work done in order to comply with the Contract Documents shall be performed at no cost to the Owner.

2-7.4.2 SUSPENSION OF WORK

In the event that a suspension of Work is ordered, as provided in this paragraph, the Contractor, at its expense, shall perform all work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public, pedestrian, and vehicular traffic, during the period of such use by suspension. Should the Contractor fail to perform the Work as specified, the Owner may perform such work and the cost thereof may be deducted from monies due the Contractor under the Contract.

2-7.4.3 SUSPENSION AUTHORITY

The Owner shall also have authority to suspend the Work wholly or in part, for such period as the Owner may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the Work. Such temporary suspension of the Work will be considered justification for time extensions to the Contract in an amount equal to the period of such suspension if such suspended work includes the current critical activity on the latest favorably reviewed progress schedule.

2-7.5 TERMINATION OF CONTRACT

If at any time the Contractor is determined to be in material breach of the Contract, notice thereof in writing will be served upon the Contractor and its sureties, and should the Contractor neglect or refuse to provide means for a satisfactory compliance with the Contract, as directed by the Engineer, within the time specified in such notice, the Owner or the

Owner's Representative in such case shall have the authority to terminate the operation of the Contract.

Upon such termination, the Contractor shall discontinue the Work, or such parts of it as the Owner may designate. Upon such termination, the Contractor's control shall terminate and thereupon the Owner or its fully authorized representative may take possession of all or any part of the Contractor's materials, tools, equipment, and appliances upon the premises and use the same for the purposes of completing the Work and hire such force and buy or rent such additional machinery, tools, appliances, and equipment, and buy such additional materials and supplies at the Contractor's expense as may be necessary for the proper conduct of the Work and for the completion thereof; or the Owner may employ other parties to carry the Contract to completion, employ the necessary workers, substitute other machinery or materials and purchase the materials contracted for, in such manner as the Owner may deem proper; or the Owner may annul and cancel the Contract and delete the Work or any part thereof. Any excess of cost arising therefrom over and above the Contract price will be charged against the Contractor and its sureties, who will be liable therefore.

In the event of such termination, all monies due the Contractor or retained under the terms of this Contract shall be held by the Owner; however, such holdings will not release the Contractor or its sureties from liability for failure to fulfill the Contract. Any excess cost over and above the Contract amount incurred by the Owner arising from the termination of the operations of the Contract and the completion of the Work by the Owner as above provided shall be paid for by any available funds held by the Owner. The Contractor will be so credited with any surplus remaining after all just claims for such completion have been paid.

In addition to the Owner's rights under this section, if at any time before completion of the work under the Contract, it shall be determined by the Owner that reasons beyond the control of the parties hereto render it impossible or against the interests of the Owner to complete the work, or if the work shall be stopped by an injunction of a court of competent jurisdiction or by order of any competent authority, the Owner may, upon ten (10) days written notice to the Contractor, discontinue the work and terminate the Contract. Upon service of such notice of termination, the Contractor shall discontinue the work in such manner, sequence, and at such times as the Engineer may direct. The Contractor shall have no claim for damages for such discontinuance or termination, nor any claim for anticipated profits on the work thus dispensed with, nor any other claim except for the work actually performed up to the time of discontinuance, including any extra work ordered by the Engineer to be done, nor for any claim for liquidated damages.

2-8 SCOPE OF WORK - CHANGES IN THE WORK

2-8.1 INCREASED OR DECREASED QUANTITIES

Section 4-1.03B Increased or Decreased Quantities of the Standard Specifications shall be modified such that the increase or decrease in the quantities limit shall be fifty percent (50%) instead of twenty-five percent (25%) of the quantities shown for any bid item.

2-8.2 CHANGE ORDERS

Without invalidating the Contract and without notice to sureties or insurers, the Owner through the Engineer, may at any time or from time to time, order additions, deletions, or revisions in the Work; these will be authorized by Field Directive, Field Order, or Change Order. A Change Order will not be issued for a Field Directive unless the Engineer concurs with an appeal by the Contractor that such Field Directive is a change in the scope of the Contract. The Contractor shall comply promptly with the requirements for all Change Orders, Field Orders, or Field Directives. The work involved in Change Orders shall be executed under the applicable conditions and requirements of the Contract Documents. If any Field Order causes an increase or decrease in the Contract Amount or an extension or shortening of the Contract Time, an equitable adjustment will be made by issuing a Change Order. Contractor must submit request for reasonable costs within 5 days from time of receiving the directive. If the Contractor does not respond in writing within 5 days, it will be deemed to be accepted by the Contractor. If the Contractor accepts a Change Order that does not include a time extension, the Contractor waives any claim for additional time for the work covered by that Change Order. Additional or extra work performed by the Contractor without written authorization of a Field Order or Change Order will not entitle the Contractor to an increase in the Contract Amount or an extension of the Contract Time.

Extra work shall be that work not shown or detailed on the Contract Drawings and not specified. Such work shall be governed by all applicable provisions of the Contract Documents. In giving instructions, the Engineer shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work; but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Owner through the Engineer, and no claim for an addition to the total amount of the Contract shall be valid unless so ordered.

In case any change increases or decreases the work shown, the Contractor shall be paid for the work actually done at a mutually agreed upon adjustment to the Contract price, based upon the provisions of Section 5-3, MODIFICATION PROCEDURES.

If the Contractor refuses to accept a Change Order, the Owner may issue it unilaterally. The Contractor shall comply with the requirements of the Change Order. The Owner shall provide for an equitable adjustment to the Contract, and compensate the Contractor accordingly. If the Contractor does not agree that the adjustment is equitable, it may submit a claim in accordance with **Section 2-8.5, CLAIMS.**

2-8.3 DIFFERING SITE CONDITIONS

Pursuant to Public Contract Code Section 7104, the Contractor shall promptly, and before such conditions are disturbed, notify the Engineer in writing, of any:

- e. 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.
- f. Subsurface or latent physical conditions at the site differing from those indicated.

g. Unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The Owner shall promptly, investigate the conditions, and if it finds that the conditions do materially differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work the Owner shall cause to be issued a change order under the procedures provided in Section 2-8.2, CHANGE ORDERS.

In the event that a dispute arises between the Owner and the Contractor 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. The 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 contracting parties, Section 2-8.4, RESOLUTION OF DISPUTES.

No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required.

2-8.4 RESOLUTION OF DISPUTES

2-8.4.1 CONTRACT INTERPRETATION BY THE ENGINEER -

Questions Regarding The Meaning And Intent Of The Contract Documents Shall Be Referred In Writing By The Contractor To The Engineer. Where Practical, The Engineer Shall Respond To The Contractor In Writing With A Decision Within Ten (10) Days Of Receipt Of The Request.

2-8.5 **CLAIMS**

2-8.5.1 NOTICE -

If the Contractor disagrees with the Engineer's decision in Section 2-8.4.1, Contract Interpretation by the Engineer, or in any case where the Contractor deems additional compensation or a time extension to the Contract period is due the Contractor for work or materials not covered in the Contract or which the Engineer has not recognized as extra work, the Contractor shall notify the Engineer, in writing, of its intention to make claim. Claims pertaining to decisions provided in Paragraph 2-7.4.1 or such other determinations by the Engineer shall be filed in writing to the Engineer within five (5) days of receipt of such decision. All other claims notices for extra work shall be filed in writing to the Engineer prior to the commencement of such work. Written notice shall use the words "Notice of Potential Claim". Such Notice of Potential Claim shall state the circumstances and the reasons for the claim, but need not initially state the amount. However, Contractor has 5 days to submit estimate of claimed amount and supporting backup. Additionally, no claim for additional compensation

or extension of time for a delay will be considered unless the provisions of **Section 2-6.3 Delays** and **2-6.4**, **Time Extensions**, are complied with. No claim filed after the date of final payment will be considered.

It is agreed that unless notice is properly given, the Contractor shall not recover costs incurred by it as a result of the alleged extra work, changed work or other situation which had proper notice been given would have given rise to a right for additional compensation. The Contractor should understand that timely notice of potential claim is of great importance to the Engineer and Owner, and is not merely a formality. Such notice allows the Owner to consider preventative action, to monitor the Contractor's increased costs resulting from the situation, to marshal facts, and to plan its affairs. Such notice by the Contractor, and the fact that the Engineer has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim.

2-8.5.2 RECORDS OF DISPUTED WORK -

In proceeding with a disputed portion of the Work, the Contractor shall keep accurate records of its costs and shall make available, to the Engineer, a daily summary of the hours and classification of equipment and labor utilized on the disputed work, as well as a summary of any materials or any specialized services which are used. Such information shall be submitted to the Engineer on a monthly basis, receipt of which shall not be construed as an authorization for or acceptance of the disputed work.

2-8.5.3 SUBMISSION OF CLAIM COSTS -

Within 30 days after the last cost of work for which the Contractor contends it is due additional compensation is incurred, but if costs are incurred over a span of more than 30 days, then within 15 days after the thirtieth day and every month thereafter, the Contractor shall submit to the Engineer as best the Contractor is able its costs incurred for the claimed matter. Claims shall be made in itemized detail and should the Engineer be dissatisfied with format or detail of presentation, upon request for more or different information, the Contractor will promptly comply, to the satisfaction of the Engineer. If the additional costs are in any respect not knowable with certainty, they shall be estimated as best can be done. In case the claim is found to be just, it shall be allowed and paid for as provided in Section 5-3, MODIFICATION PROCEDURES.

2-8.5.4 CLAIM MEETINGS -

From time to time the Engineer may call a special meeting to discuss outstanding claims should it deem this of possible help. The Contractor shall cooperate and attend prepared to discuss its claims, making available the personnel necessary for resolution, and all documents which may reasonably be requested by the Engineer.

2-8.5.5 RESOLUTION OF CLAIMS -

Unless this Contract provides otherwise, all claims, counterclaims, disputes, and other matters in question between the Owner and the Contractor that are not resolved between the Owner and the Contractor and are not governed by Public Contract Code 20104 shall be

decided by a court of competent jurisdiction. Arbitration shall not be used for resolution of these disputes. Should either party to this Agreement bring legal action against the other, the case shall be handled in the California county where the work is being performed.

2-9 PAYMENT

2-9.1 SCOPE OF PAYMENT

2-9.1.1 GENERAL -

The Contractor shall accept the compensation, as herein provided, as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary for completing the Work according to the Contract Documents, and no additional compensation will be allowed therefor. Neither the payment of any partial payment estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.

2-9.1.2 PAYMENT FOR PATENTS AND PATENT INFRINGEMENT —

All fees or claims for any patented invention, article, or arrangement that may be used upon, or in, any manner connected with the performance of the work or any part thereof shall be included in the price bid for doing the work, and the Contractor and its sureties shall defend, protect, and hold the Owner, the Engineer, and Design Consultants, together with all their officers, agents, and employees harmless against liability of any nature or kind for any and all costs, legal expenses, and damages made for such fees or claims and against any and all suits and claims brought or made by the holder of any invention or patent, or on account of any patented or unpatented invention, process, article, or appliance manufactured for or used in the performance of the Contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract. Before final payment is made on the Contract, the Contractor shall furnish an affidavit to the Owner regarding patent rights for the project. The affidavit shall state that all fees and payments due as a result of the work incorporated into the project or methods utilized during construction have been paid in full. The Contractor shall certify in the affidavit that no other fees or claims exist for work in this project.

2-9.1.3 PAYMENT OF TAXES -

The Contractor shall pay and shall assume exclusive liability for all taxes levied or assessed on or in connection with the Contractor's performance of this Contract, including, but not limited to, State and local sales and use taxes, Federal and State payroll taxes or assessments, and excise taxes, and no separate allowance will be made therefor, and all costs in connection therewith shall be included in the total amount of the Contract price.

2-9.1.4 PAYMENT FOR LABOR AND MATERIALS -

The Contractor shall pay and require its subcontractors to pay any and all accounts for labor including worker's compensation premiums, state unemployment and federal social security payments and other wage and salary deductions required by law. The Contractor also shall pay and cause its subcontractors to pay any and all accounts for services, equipment, and materials used by the Contractor and its subcontractors during the performance of work under this Contract. Such accounts shall be paid as they become due and payable. If requested by the Owner, the Contractor shall furnish proof of payment of such accounts to the Owner.

2-9.2 PARTIAL PAYMENTS

In consideration of the faithful performance of the work prosecuted in accordance with the provisions of these Specifications and the Contract, the Owner will pay the Contractor for all such work installed on the basis of percentage completion. Amounts earned will be based on accepted Cost Breakdown, **Section 5-2, MEASUREMENT AND PAYMENT**.

Payments will be made by the Owner to the Contractor on estimates duly certified and approved by the Engineer, based on the value of equipment installed and tested, labor and materials incorporated into said permanent work by the Contractor during the preceding month, and acceptable materials and equipment on hand materials and equipment furnished and delivered to the site by the Contractor and not yet incorporated into the work

accompanied by an approved invoice). Payments will not be made for temporary construction unless specifically provided for in the Contract Documents.

Partial payments will be made monthly based on work accomplished as of a day mutually agreed to by the Owner and the Contractor.

The Contractor shall submit its estimate of the work completed during the prior month and the work completed to date in a format corresponding to the accepted cost breakdown. Additionally, the Contractor shall submit a detailed statement of the Contractor's request for payment of acceptable materials and equipment on hand in compliance with Section 2-9.2, PARTIAL PAYMENTS. Upon receipt of Contractor's requests for payment, the Owner shall act in accordance with the following:

- (a) The Engineer shall review the submitted estimates, as soon as practical after receipt for the purpose of determining that the estimates are a proper request for payment, and shall prepare a certified estimate of the total amount of work done and acceptable materials and equipment on hand.
- (b) Any request for payment determined not to be a proper payment request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven (7) days after receipt. A request for payment returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the request for payment is not proper.
- (c) The number of days available to the Owner to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the Owner exceeds the seven (7) day return requirement set forth in subdivision (b) above.

If requested, the Contractor shall provide such additional data as may be reasonably required to support the partial payment request. The Engineer will be available to meet to discuss the partial payment request prior to its resubmittal(s). When the Contractor's estimate of amount earned conforms with the Engineer's evaluation, the Engineer will calculate the amount due the Contractor, prepare the progress payment request for signature by the Contractor, and submit the recommended progress payment request for the Owner's approval and processing. Payment will be made by the Owner to the Contractor in accordance with Owner's normal accounts payable procedures; the Owner shall retain amounts in accordance with Section 2-9.4, RIGHT TO WITHHOLD AMOUNTS.

No such estimate or payment shall be required to be made, when in the judgment of the Engineer, the Work is not proceeding in accordance with the provisions of the Contract, or when in the Engineer's judgment the total value of the Work done since the last estimate amounts to less than One Thousand Dollars (\$1,000.00).

Subject to the provisions of this section, the Owner shall pay the Contractor within thirty (30) days after receipt of undisputed and properly submitted request for payment from the Contractor. In accordance with Public Contract Code Section 20104.50, if the Owner fails to pay an undisputed request for payment within the allotted thirty (30) days, the Owner shall pay interest to the Contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

2-9.3 PARTIAL PAYMENTS - INCLUSION OF MATERIALS ON HAND

Materials, as used herein, shall be considered to be those items which are fabricated and manufactured goods and equipment. Only those materials for which the Contractor can transfer clear title to the Owner will be qualified for partial payment. The Contractor may request payment of seventy-five (75) percent of the actual net cost of these materials.

To receive partial payment for materials and equipment delivered to the Site, but not incorporated in the Work, it shall be necessary for the Contractor to submit to the Engineer a list of such materials, at least seven (7) days prior to submitting the monthly estimate of amount earned for work completed. At the Engineer's sole discretion, the Engineer will approve items for which partial payment is to be made subject to the following:

- h. Only equipment or materials which have received favorable review of shop drawings will qualify.
- i. Eligible equipment or materials must be delivered and properly stored, protected, and maintained in a manner favorably reviewed by the Engineer, at the job site or at a bonded warehouse.
- j. The Contractor's actual net cost for the materials must be supported by paid invoices of suppliers, or other documentation requested by the Engineer.
- k. Materials or equipment delivered to the Site less than thirty (30) days prior to their scheduled incorporation in the Work shall not qualify.
- I. Final payment shall be made only for materials actually incorporated in the Work. Upon acceptance of the Work, all materials remaining for which advance payments had been made shall revert to the Contractor, unless otherwise agreed, and partial payments made for these items shall be deducted from the final payment for the Work.
- m. Partial payments for materials and equipment on hand shall not be deemed to be final payment for the material nor relieve the Contractor of its obligations under the Contract.
- n. Partial payments for materials and equipment on hand shall be subject to retention in accordance with **Section 2-9.4**, **RIGHT TO WITHHOLD AMOUNTS**.

2-9.4 RIGHT TO WITHHOLD AMOUNTS

2-9.4.1 RETENTION -

The Owner Will Deduct From Each Partial Payment And Retain As Part Security, Five (5) Percent Of The Amount Earned Until The Final Payment.

Pursuant to Public Contract Code Section 22300, for monies earned by the Contractor and withheld by the Owner to ensure the performance of the Contract, the Contractor, may, at his or her option, choose to substitute securities meeting the requirements of said Section 22300.

In the event the Contractor wishes to choose this option, the Contractor shall enter into an escrow agreement with the Owner, and the escrow agent, a qualified bank to be chosen by Owner, in the form of the agreement included in the project specifications. The costs of such escrow shall be paid by the Contractor. The securities to be deposited in said escrow account shall be equivalent, in fair market value, to the amount to be withheld as performance retention. The securities shall be held in accordance with the provisions of Public Contract Code Section 22300, and the implementing agreement.

Contractor shall have the obligation of ensuring that such securities deposited are sufficient so as to maintain, in total fair market value, an amount equal to the cash amount of the sums to be withheld under the Contract. If, upon written notice from the Owner, or from the appropriate escrow agent, indicating that the fair market value of the securities has dropped below the dollar amount of monies to be withheld by the Owner to ensure performance, Contractor shall, within five days of the date of such notice, post additional securities as necessary to ensure that the total fair market value of all such securities held by the Owner, or in escrow, is equivalent to the amount of money to be withheld by the Owner under the Contract.

Any Contractor wishing to exercise this option shall give notice in writing to Owner, and shall thereafter execute an escrow agreement in the following form:

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between;
The City of Sausalito, California
whose address is 420 Litho Street Sausalito, CA 94965
hereinafter called "Owner', and
whose address is
hereinafter called "Contractor", and
whose address is
hereinafter called "Escrow Agent."
For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:
1. Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities which meet the requirements set forth in said Section 22300, with Escrow Agent, as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between Owner and Contractor for in the amount of (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention
under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of Owner, and shall designate the Contractor as the beneficial owner.
 Owner shall make progress payments to Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow

Agent holds securities in the form and amount specified above.

- 3. When the Owner makes payment of retentions earned directly to the Escrow Agent the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this Contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.
- 4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.
- 5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.
- 6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- 7. The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.
- 8. Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.
- 9. Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (4) to (6), inclusive, of this Agreement, and Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.
- 10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On Behalf of Owner:	On Behalf of Contractor:	
Title	Title	
 Name	 Name	

Signature	Signature
Address	Address
On Behalf of Escrow Agent:	
Title	_
Name	_
Signature	-
Address	<u>-</u>
At the time the Escrow Account is opene executed counterpart of this Agreement	ed, Owner and Contractor shall deliver to the Escrow Agent a fully
IN WITNESS WHEREOF, the parties have first set forth above.	re executed this Agreement by their proper officers on the date
OWNER	CONTRACTOR:
 Title	
 Name	Name
raine	Nome
Signature	Signature

2-9.4.2 OTHER WITHHOLDS -

In addition to the amount which the Owner may otherwise retain under the Contract, the Owner may withhold a sufficient amount or amounts of any payment or payments otherwise due the Contractor, as in its judgment may be necessary to cover:

- a. Payments which may be past due and payable for just claims against the Contractor or any subcontractor for labor or materials furnished for the performance of this Contract.
- b. Defective work not remedied.
- c. Failure of the Contractor to make proper payments to its subcontractors or suppliers.
- d. A reasonable doubt that the Contract can be completed for the balance then unpaid.
- e. Damage to another Contractor or third party, or to property.
- f. Failure of the Contractor to keep its work progressing in accordance with its progress schedule or maintaining current "As-Built" record drawings.
- g. The Owner's costs for the Contractor's failure to complete within the allowed time.
- h. Cost of insurance arranged by the Owner due to cancellation or reduction of the Contractor's insurance.
- i. Failure of the Contractor to make proper submissions, as herein specified.
- j. Failure to submit, revise, resubmit, or otherwise conform to the requirements herein for preparing and maintaining a construction schedule.
- k. Payments due the Owner from the Contractor.
- I. Reduction of Contract Amount because of modifications.
- m. The Contractor's neglect or unsatisfactory prosecution of the work including failure to clean up.
- n. Failure by the Contractor to adhere to proper storm water pollution prevention
- o. Provisions of law that enable or require the Owner to withhold such payments in whole or in part.

When the above reasons for withhold amounts are removed, payment may be made to the Contractor for amounts withheld.

The Owner in its discretion may apply any withheld amount or amounts to the payment of valid claims. In so doing, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner shall be considered as a payment made under the Contract by the Owner to the Contractor, and the Owner shall not be liable to the Contractor for such payment made in good faith. Such payments may be made without prior judicial determination of the claim or claims. The Owner will render to the Contractor a proper accounting of such funds disbursed in behalf of the Contractor.

2-9.5 SUBSTANTIAL COMPLETION

When the Contractor considers that the Work is substantially complete, the Contractor shall notify the Engineer in writing. Upon receipt of the notification, the Engineer, the Owner and/or their authorized representatives will make inspection, to determine if the Work is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use. If items are found which prevent such use or occupancy, the Engineer shall notify the Contractor in writing of such items.

Upon the completion of such corrective work, the Contractor shall so notify the Engineer in writing. The Engineer shall inspect the Work to determine its acceptability for Substantial Completion and for determination of other items which do not meet the terms of the Contract. Upon verification that the project is substantially complete the Engineer- shall prepare a Certificate of Substantial Completion. The Certificate shall establish the date of Substantial Completion and the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, commencement of warranties required by the Contract Documents, and shall fix the time, not to exceed 60 days, within which the Contractor shall finish all items on the punch list accompanying the Certificate. When the preceding provisions have been approved by both the Owner and the Contractor, they shall sign the Certificate to acknowledge their written acceptance of the responsibilities assigned to them in such Certificate. By such acknowledgement, the Contractor agrees to pay the Owner's actual costs including, but not limited to, charges for engineering, inspection and administration incurred due to the failure to complete the punchlist within the time period provided in the Certificate of Substantial Completion.

2-9.6 FINAL INSPECTION AND PAYMENT

Upon completion of the Work, and upon completion of final cleaning, the Contractor shall so notify the Engineer in writing. Upon receipt of the notification, the Engineer, the Owner and/or their authorized representatives will make the final inspection, to determine the actual status of the Work in accordance with the terms of the Contract. If materials, equipment, or workmanship are found which do not meet the terms of the Contract, the Engineer shall prepare a punch list of such items and submit it to the Contractor. Following completion of the corrective work by the Contractor, the Engineer shall notify the Owner that the Work, has been completed in accordance with the Contract. Final determination of the acceptability of the Work shall be made by the Owner. After completion of the work, but prior to its acceptance by the Owner, the last partial payment will be made to the Contractor in accordance with Section 2-9.2, PARTIAL PAYMENTS.

After receipt of the last partial payment, but prior to acceptance of the Work by the Owner, the Contractor shall send a letter to the Engineer. The letter, pursuant to California Public Contract Code Section 7100, shall state that acceptance of the final payment described below shall operate as and shall be, a release to the Owner, the Engineer, the Design Consultant, and their duly authorized agents, from all claim of and/or liability to the Contract arising by virtue of the Contract related to those amounts. Disputed Contract claims in stated amounts previously filed as provided in **Section 2-8.5, CLAIMS**, may be specifically excluded by the Contractor from the operation of the release. Following receipt of all required submittals and

the Engineer's written statement that construction is complete and recommendation that the Owner accept the project, the Owner will take formal action on acceptance

Within ten (10) days of the acceptance by the Owner of the completed work embraced in the

Contract, the Owner will cause to be recorded in the office of the County Recorder a Notice of Completion.

Thirty-five (35) days after recording the Notice of Completion of the work involved in the Contract, the Owner will pay the Contractor in lawful money such sums of money as may be due the Contractor including all sums retained but excluding such sums as have previously been paid the Contractor. This payment will constitute the final payment to the Contractor under this Contract.

2-9.7 WARRANTY OF TITLE

No material, supplies, or equipment for the work under this Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The 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 premises, together with all improvements and appurtenances constructed or placed thereon by the Contractor, to the Owner from any claim, liens, security interest, or charges, and further agrees that neither the Contractor nor any person, firm, or corporation furnishing any materials or labor for any work covered by this Contract shall have any right to a lien upon the premises or any improvement or appurtenances thereon.

2-9.8 CORRECTION OF WORK AFTER FINAL PAYMENT

The Contractor shall remedy any defects due to faulty material or inferior quality as a result of this work, and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from date of final payment. Said corrective work to be in accordance with the terms of the contract documents and any special guarantees provided therein. Neither the foregoing nor any provision in the contract documents nor any special guarantee time limit, shall be held to limit the Contractor's liability for defects, to less than the legal limit of liability in accordance with law. The City of Sausalito shall give notice of observed defects within a reasonable time. All questions arising under this article shall be determined by the City Engineer whose decision shall be final and conclusive in the absence of fraud.

2-10 EXISTING UTILITIES

2-10.1 GENERAL

Pursuant to Government Code Section 4216, et. seq., the Contractor shall notify the appropriate required notification center. The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations 10 working days prior to performing any excavation or other work close to any underground pipeline,

conduit, duct, wire or other structure. Regional notification centers include but are not limited to the following:

Notification Center

Telephone Number

Underground Service Alert - Northern California (USA) 1-800-227-2600

Western Utilities Underground Alert, Inc.

1-800-424-3447

2-10.2 NOTIFICATION AND LOCATION

At least ten (10) working days before performing any excavation work, the Contractor shall request the utility owners to mark or otherwise indicate the location of their service. It shall be the Contractor's responsibility to determine the exact location and depth of all utilities, including service connections, which have been marked by the respective owners and which the Contractor believes may affect or be affected by the Contractor's operations. If no pay item is provided in the Contract for this work, full compensation for such work shall be considered as included in the prices bid for other items of work.

Where underground main distribution conduits such as water, gas, sewer, electric power, telephone, or cable television are shown on the plans, the Contractor shall assume that every property parcel will be served by a service connection for each type of utility.

2-10.3 DAMAGE AND PROTECTION

The Contractor shall immediately notify the Engineer and utility owner of any damage to a utility.

2-10.4 UTILITY RELOCATION AND REARRANGEMENT

The right is reserved to the Owner and the owners of utilities or their authorized agents to enter upon the Work area for the purpose of making such changes as are necessary for the rearrangement of their facilities or for making necessary connections or repairs to their properties. The Contractor shall cooperate with forces engaged in such work and shall conduct its operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by such forces and shall allow the respective utilities time to relocate their facility.

The Contractor assumes responsibility for the removal, relocation, or protection of existing facilities wherein said facilities are identified by the Plans, field located by a utility company, or as provided for in the General Requirements. The Contractor shall coordinate with the owner of utility facilities for the rearrangement of said facilities.

In the event that underground utilities are found that are not shown in the Contract documents or are found to exist in a different location than shown in the Contract Documents, the Contractor shall: (1) notify the Engineer of the existence of said facilities immediately; and

(2) take steps to ascertain the exact location of all underground facilities prior to doing work that may damage such facilities.

Requests for extensions of time arising out of utility rearrangement delays shall be determined by Engineer. In accordance with Government Code Section 4215 the Contractor shall not be assessed liquidated damages for delay in completion of the project, when such delay is caused by the failure of the Owner or utility company to provide for the removal or relocation of facilities for which they are the responsible party as defined in **Section 2-10.3**, **DAMAGE AND PROTECTION.**

Temporary or permanent relocation or alteration of utilities desired by the Contractor for its own convenience shall be the Contractor's responsibility and it shall make arrangements and bear all costs.

2-10.5 PRESERVATION OF SURVEY MONUMENTATION

All sections, section subdivision, plat, U.S.E.D., U.S.C. & G.S., U.S.G.S., and any other official survey monuments or benchmarks shall be carefully preserved. If a monument is to be disturbed, its location and elevation shall be referenced to at least four short ties (set iron pipes) and two copies of the field notes showing the ties shall be presented to the Engineer prior to its disturbance.

Monuments requiring replacement or resetting shall be of acceptable type and quality as directed by the Engineer. They shall be placed by a Surveyor registered in the State of California in a manner consistent with good and recognized engineering and surveying practices and in accordance with the detail presented in Appendix A Drawing Number 300, "Monuments", and the State of California regulations. Any replacement or resetting of the monuments shall be the responsibility of the Contractor in coordination with the Engineer.

Payment for Survey Monument Preservation shall be considered as included in various applicable items of work and no additional payment shall be made therefor.

2-11 FINAL CLEANUP

All project areas including drainage facilities shall be left in a neat and clean condition, as reviewed by the Project Engineer, upon completion of the project. If the Contractor fails to keep these areas clean, the Project Engineer will inform the Contractor that the City of Sausalito will clean these areas and back charge the Contractor on a time and materials basis.

END OF SECTION

SECTION 3 - SUPPLEMENTARY GENERAL CONDITIONS

3-1 MODIFICATIONS TO THE GENERAL CONDITIONS

3-1.1 CONTRACT ADMINISTRATION

Andrew Davidson, City of Sausalito, 420 Litho Street, Sausalito, CA 94965

3-1.2 NAME OF ENGINEER

Andrew Davidson, City of Sausalito, 420 Litho Street, Sausalito, CA 94965

3-1.3 NAME OF CONSULTANT ENGINEER

Roland Lambert, CSW/ST2 Engineers, 45 Leveroni Court, Novato, CA 94949

3-1.4 NAME OF CITY'S REPRESENTATIVE

Andrew Davidson, City of Sausalito, 420 Litho Street, Sausalito, CA 94965

3-2 TIME ALLOWED FOR COMPLETION

In accordance with the provisions of **Section 2-6.2, TIME OF COMPLETION,** this project shall be completed within **Eighty (80) consecutive working days** from the effective date of the Notice to Proceed.

3-3 DAMAGES FOR DELAYS

In accordance with the provisions of **Section** Error! Reference source not found., Error! Reference source not found., for the period of time that any portion of the work remains unfinished after the time fixed for completion including intermediate deadlines in the Contract documents, as modified by extensions of time granted by the Owner, it is understood and agreed by the Contractor and the Owner that the Contractor shall pay the Owner one thousand five hundred dollars **(\$1500)** per calendar day liquidated damages.

3-4 WEATHER DAYS

In accordance with the provisions of **Section 2-6.3.5 Weather Delays -**, no allowance has been made for weather caused delays.

END OF SECTION

SECTION 4 - INDEMNITY AND INSURANCE

4-1 INDEMNIFICATION

The Contractor shall indemnify, defend and hold harmless the Owner, its elected officials, officers, agents, employees and representatives from and against any and all claims, demands, actions, damages or judgments, including associated costs of investigation and defense, arising from any omission, fault, negligence, or other conduct of Contractor, its employees, or subcontractors during the performance of this Contract. Approval of any insurance contracts by the Owner does not relieve the Contractor or subcontractors from liability under this section. The Owner will not be liable for any accident, loss, or damage to the work prior to its completion and acceptance.

4-1.1 NOTIFICATION OF SURETY COMPANIES

The surety companies shall familiarize themselves with all of the conditions and provisions of the contract, and shall waive the right of special notification of the change or modification of the contract, or of any other act or acts by the City or its authorized agents, under the terms of the contract. Failure to notify the surety companies of changes shall in no way relieve them of their obligations under the contract.

4-2 INSURANCE REQUIREMENTS

4-2.1 GENERAL

After award of Contract, the Contractor shall promptly obtain, at its own expense, all the insurance required by this section and shall submit coverage verification for review and approval by the Owner upon execution of the Contract. The Notice to Proceed with the Work under this Contract will not be issued, and the Contractor shall not commence work, until such insurance has been approved by the Owner. The Contractor shall not allow any subcontractors to commence work on its subcontract until all similar insurance required of the subcontractor has been obtained and verified by Contractor. Such insurance shall remain in full force and effect at all times during the prosecution of the Work and until the final completion and acceptance thereof. The Notice to Proceed does not relieve the Contractor of the duty to obtain such insurance as required by this section.

4-2.2 INSURANCE REQUIREMENTS

Without limiting Contractor's indemnification obligations provided for elsewhere in the Contract, Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in conjunction with the performance of the work hereunder by the Contractor, his agents, representatives and employees. The contractor shall not allow any subcontractor to commence work on the project until all similar insurance required of the subcontractor shall have all similar insurance required of the subcontractor shall have been furnished and approved.

A. Minimum Scope of Insurance: Coverage shall be at least as large as:

- 1. Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001).
- 2. Insurance Services Office form number CA 0001 (Ed. 1/87) covering automobile Liability, code 1 (any auto).
- 3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance and Employer's Liability Insurance.
- B. Minimum Limits of Insurance: Contractor shall maintain limits no less than:
 - 5. General Liability: \$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 apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
 - 6. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
 - 7. Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
- C. Deductibles and Self-Insured Retentions: Any deductible or self-insured retention must be declared to and approved by the City.
- D. Other Insurance Provisions: The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:
 - 1. The City of Sausalito, its elected or appointed officials, employees, agents and volunteers are included as insured with respect to liability arising out of automobiles owned, leased, hired, borrowed by or on behalf of the contractor including materials, parts or equipment furnished in connection with such work or operations.
 - 2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials and employees. Any insurance or self-insurance maintained by the City, its officials, and employees shall be in excess of the Contractors insurance and shall not contribute to it.
 - 3. The insurance provided by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days written notice has been provided to the City by mail, return receipt requested.
 - 4. The workers' compensation insurance required above shall also contain the following language through which the insurance company agrees to waive all rights of subrogation against the City of Sausalito, its elected or appointed officials, officers, agents and employees for losses paid under the terms of this policy which arise from the work performed by the insured for the City.
- E. Acceptability of Insurers: Insurance is to be placed with a current Best's rating of no less than: A:VII.
- F. Verification of Coverage: Contractor shall furnish the City with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the City or on other than the City's forms or a separate owners policies, provided those forms or policies are approved by the City and amended to conform the city requirements. All certificates and endorsements are to be received and approved by the City before work commences. Failure to provide these forms within the time period specified by the City may result in the award of this agreement to another contractor should the City, in its sole discretion decide to do so.
- G. Subcontractors: Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

4-2.3 DEDUCTIBLES AND SELF-INSURED RETENTION

Any deductibles or self-insured retention must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as respects the City, its officers, officials, employees, agents and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

4-2.4 FORM AND TERM OF INSURANCE

Prior to commencing work under this agreement, the contractor shall submit to the City documentation evidencing the required insurance signed by the insurance agent and companies named. This documentation shall be on forms which are provided by the City and attached hereto. No other forms shall be acceptable to the City unless the City expressly permits the use of such forms. This Agreement shall not be executed until these forms are submitted to and approved by City. Failure to provide these forms within the time period specified by City may result in the Award of this agreement to another Contractor should the City, in its sole discretion, decide to do so.

The insurance herein above specified shall be kept in full force and effect until completion to the satisfaction of the City and acceptance by the City of all work to be performed by the contractor under the Agreement (contract). In the event City receives notification that the Contractor's insurance will be suspended, voided, canceled, reduced in coverage or limits, and the Contractor does not provide for either the reinstatement of that insurance or for the furnishing or alternate insurance containing all of the terms and provisions specified above prior to the termination of the insurance, City may either consider this a contract breach and terminate the agreement, or City may secure the required insurance to satisfy conditions of this agreement and deduct costs of this insurance from monies which would otherwise be due and payable to the contractor for services rendered under the terms of this agreement.

4-2.5 WORKERS' COMPENSATION INSURANCE

The Contractor shall take out and maintain during the life of the Contract, Workers Compensation and Employers' Liability insurance providing coverage for any and all employees of Contractor:

- a. The required policy shall provide coverage for Workers' Compensation (Coverage A).
- b. This policy shall provide coverage for One Million Dollars (\$1,000,000) Employers' Liability (Coverage B).

4-2.6 ENDORSEMENTS

All of the following endorsements are required to be made a part of the policies described in this Section hereof:

- a. "The Owner and Owner's employees, officers, design consultants, elected officials, Engineer, agents, and subconsultants are hereby added as additional insureds insofar as Work done under this Contract is concerned."
- b. "This policy shall be considered primary insurance as respects any other valid and collectible insurance, including self-insured retention, the Owner may possess, and any other insurance the Owner does possess shall be considered excess insurance only."
- c. "This insurance shall act for each insured, and additional insured, as though a separate policy had been written for each. This, however, will not act to increase the limit of liability of the insuring company.
- d. "Thirty (30) days prior written notice of cancellation shall be given to the Owner. Such notice shall be sent to:

Jonathan Goldman Director of Public Works City of Sausalito 420 Litho Street Sausalito, CA 94965

4-2.7 CHANGE IN TERMS

The Contractor shall provide immediate written notice to the Owner of any change in terms and conditions and/or reduction in the coverage of any nature to the insurance policies. The notice shall be sent to the location identified in **Section 4-2.6**, **ENDORSEMENTS**. The Contractor shall be obligated to pay any extra premium for maintaining the insurance requirements specified herein.

4-2.8 OCCUPANCY

The Owner reserves the right to occupy existing facilities under construction or to use or occupy parts of the Work as provided for **in Section 2-3.5, OWNER'S RIGHT TO USE OR OCCUPY.** Insurance policies shall not restrict or limit such use.

END OF SECTION

SECTION 5 - GENERAL REQUIREMENTS

5-1 SUMMARY OF WORK

5-1.1 WORK COVERED BY CONTRACT DOCUMENTS

The proposed work is as described in the Notice to Bidders section of these Special Provisions.

5-1.2 WORK SEQUENCE AND CONSTRAINTS

The Contractor shall submit a schedule of his work to the City indicating how he will meet the following requirements. The Schedule shall be in accordance to the General Requirement.

The order of work shall be:

- 1. Complete a field walk with the Engineer to identify constraints located within the work zone.
- 2. Pothole to confirm underground utilities in the project area.
- 3. Perform clearing and grubbing, demolition work.
- 4. Complete all storm drainage and irrigation work.
- 5. Perform grading, earthwork, and excavation work.
- 6. Perform landscaping, new concrete pad and asphalt ADA paths.

Install 24' wide sliding gate

General Scheduling Requirements

Subgrade compaction shall be achieved to the satisfaction of the Engineer prior to the placement of any asphalt concrete.

The work shall be performed in conformance with the approved phases. Non-conflicting work in subsequent stages or areas may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained with no impacts to traffic or the public in the preceding stages of construction.

The Contractor shall diligently prosecute all work to completion within the time specified in the Instructions to Bidders. Completion of the work shall begin from the date the Notice to Proceed is issued. The Contractor then has ten (10) working days in which to commence work. A working day is defined in **Section 5-6.1**, **DEFINITIONS**.

5-1.3 CONTRACTOR'S WORK PERCENTAGE

The Contractor shall perform at least fifty (50) percent of the Contract bid amount. This portion of work shall encompass the performance of work by the Contractors forces and equipment and the procurement of materials and equipment by the Contractor.

Subcontractors shall not be responsible for the performance of any work or procurement of materials and equipment within the above Contractors work percentage allotment.

5-1.4 UNDERGROUND FACILITIES

The Contractor is responsible for coordinating all project documentation, including but not necessarily limited to, the Contract Documents and existing record drawings for the determination of the location of all underground facilities.

The Contractor shall notify all utility companies, Underground Service Alert (800) 227-2600 and obtain field location markings of facilities 10 working days prior to commencing construction. The Contractor shall also inform the City in writing of the utility agencies which have been notified. Where potential conflict with underground utilities may constitute a safety hazard or interfere with the progress of work, such facilities shall be hand-excavated to determine their precise location. Contractor shall be liable for damage to all utilities whether so located and marked or not.

It is not the intent of the Plans to show the exact location of existing underground utilities or structures, and the City of Sausalito assumes no responsibility therefore.

No warranty therefore, either expressed or implied, as to the completeness or accuracy of this information is set forth herein. It is the Contractor's responsibility to verify and pothole as appropriate all utility locations and immediately notify the Project Engineer in case of conflict. Potholing to determine utility locations as required for work shall be at the Contractor's expense unless otherwise provided for on the bid sheet.

It shall be the Contractor's responsibility to determine the exact depth(s) of all utilities, including service connections, which may have been marked by the respective City and which the Contractor believe may affect or be affected by the Contractor's operations. The Contractor shall exercise care in all excavations to avoid damage to existing underground facilities. This shall include potholing or hand digging in those areas where underground facilities are known to exist until they have been sufficiently located to avoid damage to the facilities.

Prior to fabrication, the Contractor shall verify the location and elevations of existing underground facilities which the Contractor is connecting to.

No additional compensation shall be provided the Contractor for compliance with the provisions of this section or for the damage and repair of facilities due to the lack of such care.

5-2 MEASUREMENT AND PAYMENT

5-2.1 MEASUREMENT OF QUANTITIES

5-2.1.1 GENERAL -

Measurements of the completed work shall be in accordance with, and by instruments and devices calibrated to United States Standard Measures and the units of measurement for payment, and the limits thereof, shall be made as shown on the Plans, Specifications, General Conditions, General Requirements and the Technical Specifications.

5-2.1.2 UNITS OF MEASUREMENT -

Measurements shall be in accordance with U.S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds avoirdupois. The unit of liquid measure is the U.S. gallon.

5-2.1.3 CERTIFIED WEIGHTS -

When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales, or when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing the actual net weights. The Owner will accept the certificates as evidence of the weights delivered.

5-2.1.4 METHODS OF MEASUREMENT -

Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the method stipulated in the particular sections involved. In determining quantities, all measurements shall be made in a horizontal plane unless otherwise specified.

Material not used from a transporting vehicle shall be determined by the Engineer and deducted from the certified tag.

When material is to be measured and paid for on a volume basis and it would be impractical to determine the volume, or when requested by the Contractor in writing and approved by the Engineer in writing, the material will be weighed and converted to volume measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities will be adopted.

Full compensation for all expense involved in conforming to the above requirements for measuring and weighing materials shall be considered as included in the unit prices paid for the materials being measured or weighed and no additional allowances will be made therefor.

Quantities of material wasted or disposed of in a manner not called for under the Contract; or rejected loads of material, including material rejected after it has been placed by reason of failure of the Contractor to conform to the provisions of the Contract; or material not unloaded from the transporting vehicle; or material placed outside the lines indicated on the plans or given by the Engineer; or material remaining on hand after completion of the Contract, will not be paid for and such quantities will be deducted from the final total quantities. No compensation will be allowed for hauling rejected material.

5-3 MODIFICATION PROCEDURES

5-3.1 CHANGES IN CONTRACT PRICE

Whenever corrections, alterations, or modifications of the work under this Contract are ordered by the Engineer and approved by the Owner and increase the amount of work to be done, such added work shall be known as extra work; and when such corrections, alterations, or modifications decrease the amount of work to be done, such subtracted work shall be known as work omitted.

The difference in cost of the work affected by such change will be added to or deducted from the amount of said Contract price, as the case may be, by a fair and reasonable valuation, which shall be determined in one or more of the following ways as directed by the Engineer:

- a. By unit prices accepted by the Owner and stated in the Contract Documents;
- b. By unit prices subsequently fixed by agreement between the parties;
- c. By an acceptable lump sum proposal from the Contractor; or
- d. By Force Account when directed in writing and administered by the Owner through its agents or representatives.

When required by the Engineer, the Contractor shall submit, in the form prescribed by the Engineer, an itemized breakdown with supporting data of the quantities and prices used in computing the value of any change that may be ordered.

The Engineer will review the Contractor's proposal for the change and negotiate an equitable adjustment with the Contractor. After there is an agreement the Engineer will prepare and process the Change Order and make a recommendation for action by the Owner. All Change Orders must be approved by the Owner in writing before the work can be authorized and the Change Order executed.

The prices agreed upon and any agreed upon adjustment in Contract Time shall be incorporated in the written order issued by the Owner, which shall be written so as to indicate an acceptance on the part of the Contractor as evidenced by its signature. By signature of the Change Order, the Contractor acknowledges that the adjustments to cost and time contained in the Change Order are in full satisfaction and accord, payment in full, and so waives any right to claim any further cost and time impacts at any time during and after completion of the Contract for the changes encompassed by the Change Order.

5-3.2 NEGOTIATED CHANGE ORDERS

Under the methods described above, the Contractor shall submit substantiating documentation with an itemized breakdown of Contractor and subcontractor direct costs, including labor, material, equipment rentals, and approved services, pertaining to such ordered work in the form and detail acceptable to the Engineer. The direct costs shall include only the payroll cost for workers and foremen, including wages, fringe benefits as established

by negotiated labor agreements or state prevailing wages, workers' compensation and labor insurance, and labor taxes as established by law. No other fixed labor burdens will be considered, unless approved in writing by the Engineer; the cost of materials used and equipment delivered and installed in such work as substantiated by appropriate documents; the cost of construction machinery and equipment based on fair rental or ownership values acceptable to the Engineer and the cost of incidentals directly related to such work. The direct costs shall not include any labor or office costs pertaining to the Contractor's managers or superintendents, its office and engineering staff and office facilities, or anyone not directly employed on such work, nor the cost of small tools as all such indirect costs form a part of the Contractor's overhead expense.

Under the method described in this section, the maximum percentage, which will be allowed for the Contractor's combined overhead and profit will be:

a. For work by its own organization, the Contractor may add the following percentages:

Direct Labor
 Materials
 Equipment (owned or rented)
 15 percent
 15 percent

- b. For all such work done by subcontractors, such subcontractor may add the same percentages as the Contractor as listed in (1) above to its actual net increase in costs for combined overhead and profit and the Contractor may add up to five (5) percent of the subcontractor's total for its combined overhead and profit.
- c. For all such work done by subtier-subcontractors, such sub-subcontractors may add the same percentages as the Contractor as listed in (a) above to its actual net increase in costs for combined overhead and profit, and the subcontractor may add up to ten (10) percent of the sub-subcontractor's total for its combined overhead and profit. The Contractor may add up to five (5) percent of the subcontractor's total for its combined overhead and profit.
- d. To the total of the actual costs and fees allowed herein under, not more than two (2) percent shall be added by the Contractor for additional bond and insurance other than labor insurance.

The above fees represent the maximum limits which will be allowed, and they include the Contractor's and all subcontractors' indirect home office expenses and all costs for cost proposal preparation.

When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any, for each area of work, i.e. direct labor, materials, equipment, and subcontractors. The amount of credit to be allowed by the Contractor to the Owner for any such change which results in a net decrease in cost will be the amount of the actual net decrease and a credit in accordance with the markups. The Contractor shall not claim for anticipated profits on work that may be omitted.

5-3.3 FORCE ACCOUNT PAYMENT

If either the amount of work or payment for a Change Order cannot be determined or agreed upon beforehand, the City may direct by written Change Order or Field Order that the work be done on a force account basis. The term "force account" shall be understood to mean that payment for the work will be done on a time and expense basis, that is, on an accounting of the Contractor's forces, materials, equipment, and other items of cost as required and used to do the work. For the work performed, payment will be made for the documented actual cost of the following:

- a. Direct labor cost for workers, including foremen, who are directly assigned to the force account work: Direct labor cost is the actual payroll cost, including wages, fringe benefits as established by negotiated labor agreements or state prevailing wages, workers' compensation and labor insurance, and labor taxes as established by law. No other fixed labor burdens will be considered, unless approved in writing by the City.
- b. Material delivered and used on the designated work, including sales tax, if paid for by the Contractor or its subcontractor.
- c. Equipment rental, for items having a value in excess of One Thousand Dollars (\$1,000.00), and necessary transportation.
- d. Additional bond.
- e. Additional insurance, other than labor insurance.

To the preceding costs, there shall be added the following fees for the Contractor, subcontractor, or sub-subcontractor actually performing the work:

- f. A fixed fee not to exceed fifteen (15) percent of the costs of Items a, b, and c above.
- g. To the total of the actual costs and fees allowed hereunder, not more than two (2) percent shall be added for additional bond and insurance as the cost of Items d and e above.

For work performed by an approved subcontractor, the Contractor may add to the total of the actual costs and fixed fees allowed under the preceding paragraph an additional fixed fee of five (5) percent of said total. No further compensation will be allowed for the Contractor's administration of the work performed by the subcontractor.

The added fixed fees shall be considered to be full compensation, covering the cost of general supervision, overhead, profit, and any other general expense. The above fixed fees represent the maximum limits which will be allowed, and they include the Contractor's and all subcontractors' indirect home office expenses and all costs for cost proposal preparation and record keeping.

The City reserves the right to furnish such materials and equipment as it deems expedient, and the Contractor shall have no claim for profit or added fees on the cost of such materials and equipment.

For equipment under Item c above, rental or equivalent rental cost will be allowed for only those days or hours during which the equipment is in actual use. Payment shall be based on actual rental and transportation invoices but shall not exceed the monthly rate in the Rental Rate Blue Book. City-operated equipment rates shall not exceed the monthly rate in the Rental Rate Blue Book plus the labor costs as provided in Item a. above. The rental cost allowed for equipment will, in all cases, be understood to cover all fuel, supplies, repairs, Cityship, and incidental costs and no further allowances will be made for those items, unless specific agreement to that effect is made. For Contractor owned equipment, costs shall be based on either actual cost accounting records or the monthly rates in the Contractor's Equipment Cost Guide published by Data Quest". Hourly rates shall be determined by dividing the monthly rate by 176 hours.

Prior to the commencement of force account work, the Contractor shall notify the Engineer of its intent to begin work. Labor, equipment and materials furnished on force account work shall be recorded daily by the Contractor upon report sheets furnished by the Engineer to the Contractor. The reports, if found to be correct, shall be signed by both the Contractor and Engineer, or inspector, and a copy of which shall be furnished to the Engineer no later than the working day following the performance of said work. The daily report sheet shall thereafter be considered the true record of force account work provided. If the Engineer, or inspector, do not agree with the labor, equipment and/or materials listed on the Contractor's daily force account report, the Contractor and Engineer, or inspector, shall sign-off on the items on which they are in agreement. The Engineer shall then review the items of disagreement and will advise the Contractor, in writing, of its determination. If the Contractor disagrees with this determination, it shall have the right to file a claim notice as provided in the State Standard Specifications.

The Contractor shall maintain its records in such a manner as to provide a clear distinction between the direct costs of work paid for on a force account basis and the costs of other operations.

To receive partial payments and final payment for force account work, the Contractor shall submit, in a manner approved by the Engineer, detailed and complete documented verification of the Contractor's and any of its subcontractor's actual costs involved in the force account pursuant to the pertinent Change Order or Field Order.

The force account invoice shall itemize the materials used and shall cover the direct costs of labor and the charges for equipment rental, whether furnished by the Contractor, subcontractor, or other forces. The invoice shall be in a form acceptable to the Engineer and shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, and also the size, type, and identification number of equipment and hours operated. Material charges shall be substantiated by valid copies of vendor's invoices.

When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any. The amount of credit to be allowed by the Contractor to the City for any such change which results in a net decrease in cost will be the amount of the actual net decrease and a credit in accordance with the

markups allowed under the use of the method described in this Section. The Contractor shall not claim for anticipated profits on work that may be omitted.

5-3.4 UNIT PRICE ADJUSTMENTS DUE TO INCREASED OR DECREASED QUANTITIES

For those specific items of work as detailed on the bid sheet, the Engineer may increase, decrease, or eliminate these items of work. If this occurs, the Engineer shall allow no unit price adjustment or additional compensation.

5-3.5 TIME EXTENSIONS FOR CHANGE ORDERS

If the Contractor requests a time extension for the extra work necessitated by a proposed Change Order, the request must comply with the City's applicable requirements.

5-4 FIELD ENGINEERING

The Contractor shall perform and be responsible for surveying and layout as required for completion of the work as defined in these Plans and Special Provisions. The Contractor shall preserve construction survey stakes and marks for the duration of their usefulness. Contractor shall use a licensed land surveyor or registered civil engineer by the State of California for all project survey work.

5-4.1 DATUM

The Contractor shall be responsible for establishing the elevation and basis of bearing defined in the Plans.

5-4.2 LINES AND GRADES

The Contractor shall lay out all work as defined in the Plans and these Special Provisions and shall be responsible for any errors resulting therefrom. Should there be a discrepancy between the field conditions and the Plans, the Contractor shall notify the Engineer immediately.

As part of the bid price for the construction of the improvements the Contractor shall provide and be responsible for the layout of all work on this project. The Contractor shall provide all necessary surveys, field staking, and positioning for the construction of all components at the proper alignment, elevations, grades, and positions, as indicated on the Drawings and as required for the proper operation and function. The Contractor shall stake the work limits.

The Contractor shall supply such labor as required, at no extra charge, to aid and assist the Engineer in checking location and grades of the work as set by the Contractor, if requested by the Engineer.

All survey, layout, and measurement work shall be the Contractor's responsibility and considered as included in the contract prices paid for the various items of work and no additional compensation will be allowed therefor.

5-5 REGULATORY REQUIREMENTS

5-5.1 FEES AND PERMITS

Procurement of permits and licenses shall conform to the requirements of Section 7-1 .04, "Permits and Licenses," of the Standard Specifications and these special provisions.

5-6 REFERENCES

5-6.1 DEFINITIONS

Unless otherwise stated, the words directed, required, permitted, ordered, instructed, designated, applicable, appropriate, sufficient, proper, desirable, necessary, prescribed, approved, acceptable, satisfactory or words of like import, refer to actions, expressions, and prerogatives of the City, Designer Consultant, or Engineer.

Masculine gender words include the feminine. References to gender, such as "workman" and "flagman" and the pronouns "he" or "his" referring to such titles, are abstract in the specifications, used for the sake of brevity are intended to refer to persons of either sex.

Singular words include the plural and "person" includes firms, companies, and corporations.

Where used in the Contract Documents, the following words and terms shall have the meanings indicated. The meanings shall be applicable to the singular, plural, masculine, and feminine of the words and terms.

Acceptance -- The formal written acceptance by the City of an entire Contract which has been completed in all respects in accordance with the Contract Documents and any modifications thereof previously approved.

Act of God - An earthquake, flood, windstorm, cyclone, or other cataclysmic phenomenon of nature. A rain, high water, or other natural phenomenon, which might reasonably have been anticipated from historical records of the general locality of the work, shall not be construed as an Act of God.

Addenda- Written or graphic instruments issued prior to the bid which modify or interpret the Contract Documents, drawings, and specifications, by additions, deletions, clarifications, or corrections.

Agreement - The written document covering the performance of the Work as more fully described in the Contract Documents.

APWA Standard Plans - Standard Plans for Public Works Construction promulgated by the American Public Works Association (Southern California Chapter) and the Associated General contractors (Southern California Districts), Joint Cooperative Committee.

APWA Standard Specifications - The Standard Specifications for Public Works Construction (1996 Edition, Green Book) written by the Joint Cooperative Committee of the American

Public Works Association and the Associated General Contractors of California (Southern California Chapters).

Bid - The offer or proposal of the Bidder submitted on the prescribed form setting forth the price or the work to be performed.

Bidder - Any properly licensed and qualified individual, firm, partnership, corporation, joint or combination thereof, submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.

Bond(s) - Bid, Performance, or Payment Bonds and other instruments of surety, furnished by the Contractor and Contractor's surety in accordance with the Contract Documents.

Calendar Day - Any day including legal holidays, Saturdays and Sundays.

City - The City of Sausalito.

City Engineer - City Engineer of the City of Sausalito.

Construction Manager - The person designated, in writing, by the City to act as its representative at the construction site and to perform construction inspection services and administrative functions relating to this Contract. Initial contact by the Contractor with the City shall be through the Construction Manager. For the purpose of these Special Provisions, the Construction Manager is also known as the Engineer.

Consultant Engineer - A representative of the firm of CSW/ST2 Engineers.

Contract Change Order - A written order to the Contractor, covering changes in the plans or quantities, or both, and establishing the basis of payment and time adjustments for the work affected by the changes. Also referred to as a Change Order.

Contract Documents - The words "Contract Documents" shall mean any or all of, but not limited to, the following items, as applicable:

Invitation to Bid
Instructions to Bidders
Bid Documents
Designation of Subcontractors
Agreement
Acknowledgments
Performance Bond
Payment Bond
General Conditions
Special Provisions for Project
General Requirements
Standard Specifications
Technical Specifications
Project Drawings

Addenda, if any Executed Change Orders, if any Notice of Award Notice to Proceed

Each of these items is to be considered by reference as part of the Contract Documents, also referred to as Contract.

Contract Price - The amount payable to the Contractor under the terms and conditions of the Contract based on the price given on the bidding schedule, with adjustments made in accordance with the Contract. The base amount given in the bidding schedule shall be either a lump sum bid or the summation of the unit price bids multiplied by the estimated quantities set forth in the bid form. Also referred to as Contract Amount or Contract Sum.

Contract Time- Number of calendar days stated in the Contract for the completion of the Work.

Contract Completion Date - The date on which the City accepts the work as being complete.

Contractor - The person or persons, firms, partnership, corporation, or combination thereof, which has entered with the City, as party or parties of the second part of its or their legal representatives.

Contractor's Plant and Equipment - Equipment, material, supplies, and all other items, except labor, brought onto the site by the Contractor to carry out the Work, but not to be incorporated in the Work.

Controlled Low Strength Material (CLSM) – A cementation material as defined in Section 19-3.02F of the 2010 Standard Specifications.

Day(s) - Calendar Day(s).

Direct - Action of the City or Construction Manager by which the Contractor is ordered to perform or refrain from performing work under the Contract.

Drawings - Refers to the Contract drawings, profiles, cross sections, elevations, details, and other working drawings and supplementary drawings, or reproductions thereof, signed by the Design Consultant, accepted by the City, and are referred to in the Contract Documents, which show the location, character, dimensions, and details of the work to be performed. The terms drawing, plan and plans have the same meaning as the term drawings unless otherwise stated or specified.

Design Consultant - The engineer or architect designated by the City to have design control over the Work or a specified portion of the Work, acting either directly or through duly authorized representatives. Such representatives shall act within the scope of the particular duties delegated to them.

Engineer - The City of Sausalito or their representative authorized to review and inspect the work and provide direction to the Contractor.

Field Directive - Written documentation of the actions of the City or Engineer in directing the Contractor. Also referred to as a Directive.

Field Order - A written instruction given to the Contractor authorizing work that is a change to the scope of work carried out on a time and material basis.

Float - Float or "total float" shall be defined as provided in the Associated General Contractors of America "CPM in Construction, A Manual for General Contractors".

Furnish - To deliver to the job site or other specified location any item, equipment, or material.

General Conditions - Part of the Contract Documents representing the general clauses that establishes how the project is to be administered.

General Requirements - Part of the Contract Documents establishing special conditions or requirements peculiar to the work and supplementary to the General Conditions.

Herein - Refers to information presented in the Project Manual.

Holidays- Legal holidays designated by the City or specifically identified in the Contract.

Inspector - Appointed by the City Engineer for general liaison between Project Engineer and Contractor, for keeping of daily reports, job schedules, records of tests and approvals, general inspection of the work for quality, quantity, and compliance with drawings, plans, specifications and other contract documents. When an inspector has not been appointed, then functions and duties of inspector shall be discharged and performed by Project Engineer.

Install - Placing, erecting, or constructing any item, equipment, or material.

Laboratory - The designated materials testing laboratory authorized by the City to test materials and work involved in the Contract.

Liquidated Damages - The amount prescribed in Paragraph 2-6.5, **Liquidated Damages,** to be paid to the City or to be deducted from any payments due or to become due the Contractor for each day's delay in completing the whole or any specified portion of the Work beyond the time allowed in the specifications.

Notice of Award - A written notice by the City to the Contractor informing it that the Contract has been awarded to the Contractor.

Notice to Proceed - The written notice by the City to the Contractor authorizing the Contractor to proceed with the Work and establishing the date of commencement of the Work.

City - A public or quasi-public agency or authority, corporation, association, partnership, or individual for whom the work is to be performed. Under this contract, the City is identified by name in the agreement.

City's Representative - The person designated in writing by the City to act as its agent on specified matters relating to this Contract. The City's Representative is not the Engineer, but an employee of the City or other individual who has been designated to represent the City.

Paragraph - For references or citation purposes, refers to the paragraph(s), called out by paragraph number and alphanumeric designator.

Person - Includes firms, companies, corporations, partnerships, and joint ventures.

Plans – See drawings.

Project - The undertaking to be performed under the provisions of the Contract.

Project Engineer/Engineer - See engineer.

Project Manual - Those Contract Documents which are bound into one or more volumes prior to bidding.

Provide - Furnish and install, complete in place.

Punch List - List of incomplete items of work and of items of work which are not in conformance with the Contract.

Shall - Refers to actions by either the Contractor or the City and means the Contractor or City has entered into a covenant with the other party to do or perform the action.

Shown - Refers to information presented on the Drawings, with or without reference to the Drawings.

Site- The property as described in the General Conditions or as shown on the Drawings.

Special Provisions - Any provision which supplement or modify the Standard Specifications.

Specifications - That part of the Contract Documents consisting of the General Conditions, General Requirements, applicable State Standard Specifications, and Technical Specifications. These are known as the Special Provisions.

Specify - Refers to information described, shown, noted or presented in any manner in any part of the Contract.

Standard Specifications - Refer to State of California Specifications.

State of California Specifications – The May 2006 State of California Department of Transportation Standard Specifications, including the latest updates in effect at the time of

advertising the Work. Also referred to as State Standard Specifications and CALTRANS Standard Specifications. When specifically noted, the CALTRANS Standard Specifications is the 2010 version including the latest updates in effect at the time of advertising the Work.

State of California Standard Plans – The 2015 edition of Standard Plans of the California Department of Transportation, State of California, including the latest updates in effect at the time of advertising for the Work. Also referred to as State Standard Plans and CALTRANS Standard Plans.

Subcontractor - A subcontractor is a person or entity who has a direct contract with the Contractor to perform any of the Work at the Site. The term subcontractor means a subcontractor or subcontractor's authorized representative. The term subcontractor, does not include any separate contractor or any separate contractor's subcontractors.

Submittals - The information which is specified for submission to the Engineer in accordance with the Project Manual.

Substantial Completion - Substantial Completion is the stage in the progress of the Work when the Work is sufficiently complete in accordance with the Contract Documents so the City can occupy or utilize the Work for its intended use.

Sub-subcontractor - A sub-subcontractor is a person or entity who has a direct or indirect contract with a subcontractor to perform any of the Work at the Site. The term sub-subcontractor means a sub-subcontractor or an authorized representative thereof.

Supplier - Any person, firm, corporation, or organization who supplies materials or equipment for the Work, including that fabricated to a special design, and may also be a Subcontractor or a Sub-subcontractor.

Surety - The person, firm, corporation, or organization that joins with the Contractor in assuming the liability for the faithful performance of the Work and for the payment of all obligations pertaining to the Work in accordance with the Contract Documents by issuing the Bonds required by the Contract Documents or by law.

Will - Actions entered into by the Contractor or the City as a covenant with the other party to do or to perform the action.

Work - The labor, materials, equipment, supplies, and other items necessary for the execution, completion, and fulfillment of the Contract.

Working Day - Any day, other than a holiday, Saturday or Sunday, on which the Contractor may proceed with regular work on the current controlling operation as determined by the Engineer toward the completion of the Contract.

5-7 ABBREVIATIONS

Whenever the following terms are used, the intent and meaning shall be as follows:

Abbreviations Stands For:

AASHTO American Association of State and Highway and Transportation

Officials

AAMA Architectural Aluminum Manufacturers Association

ABMA American Boiler Manufacturers Association

ACI American Concrete Institute

ADC Air Diffusion Council
AGA American Gas Association

AGMA American Gear Manufacturers Association
AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

AMCA Air Moving and Conditioning Association

ANSI American National Standard Institute (formerly United States of

America Standards Institute)

APA American Plywood Association
API American Petroleum Institute

AREA American Railway Engineers Association
APWA American Public Works Association
ASCE American Society of Civil Engineers

ASHRAE American Society of Heating, Refrigerating and Air Conditioning

ASME American Society of Mechanical Engineers
ASTM American Society of Testing and Materials
AWPA American Wood-Preserver's Association

AWS American Welding Society

AWWA American Water Works Association
CAGI Compressed Air and Gas Institute

CAL/OSHA State of California Department of Industrial Relations, Division of

Industrial Safety

CBM Certified Ballast Manufacturers

CBR California Bearing Ratio

CI Chlorine Institute

CISPI Cast Iron Soil Pipe Institute

CMAA Crane Manufacturers Association of America
CPSC Consumer Products Safety Commission

CRA California Redwood Association
CR51 Concrete Reinforcing Steel Institute

CTI Cooling Tower Institute

DFPA Douglas Fir Plywood Association
EIA Electronic Industries Association
EPA U.S. Environmental Protection Agency

ETL Electronic Testing Laboratory

FM Factory Mutual Insurance Company

FPS Fluid Power Society

FS Federal Specifications

GO 95 General Order No. 95, California Public Utilities Commission

Rules for Overhead Electric Line Construction

HI Hydraulic Institute

HMI Hoist Manufacturers Institute

IAPMO International Association of Plumbing and Mechanical Officials

IBR Institute of Boiler and Radiator Manufacturers
ICBO International Conference of Building Officials
IEEE Institute of Electrical and Electronic Engineers

IES Illuminating Engineering Society

IPCE International Power Cable Engineers Association

ISA Instrument Society of America MMWD Marin Municipal Water District

NAAMM National Association of Architectural Metal Manufacturers

NBS National Bureau of Standards

NEC National Electric Code

N EMA National Electrical Manufacturers Association

NFPA National Fire Protection Association
NSF National Sanitation Foundation

NWMA National Woodwork Manufacturers Association

OSHA Occupational Safety and Health Act

PCMAC Prestressed Concrete Manufacturers Association of California

SMACNA Sheet Metal and Air Conditioning Contractors National

Association

SSPC Structural Steel Painting Council TCA Tile Council of America

UBC Uniform Building Code
UPC Uniform Plumbing Code
UL Underwriters Laboratories

WCLIB West Coast Lumber Inspection Bureau WIC Woodwork Institute of California

5-8 PROJECT MEETINGS

5-8.1 PRE-CONSTRUCTION CONFERENCE

The Engineer will schedule a pre-construction conference and organizational meeting at the project site or other convenient location upon award and/or execution of the Contract and no less than five (5) working days prior to commencement of construction activities.

5-8.1.1 ATTENDEES

The City, Design Consultant, Contractor and its superintendent, invited subcontractors, and other concerned parties shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the work.

5-8.1.2 AGENDA

The Engineer will prepare an agenda for discussion of significant items relative to contract requirements, procedures, coordination and construction.

5-8.2 PROGRESS MEETINGS

The Engineer will conduct progress meetings at City Hall at regularly scheduled intervals which may be as frequent as weekly. Frequency of meetings are to be determined at the preconstruction conference. Meeting minutes will be taken by the Engineer and distributed accordingly.

5-8.2.1 ATTENDEES

The City, Engineer, Contractor, and its Superintendent shall each be represented at these meetings. Attendance by subcontractors, suppliers and other entities is subject to issues and/or items of the agenda which may, or may not, require attendance.

5-8.2.2 AGENDA

Review, correct or approve minutes of the previous progress meeting. Review items of significance that could affect progress. Review/discuss topics as appropriate to the current and future status and/or needs of the project. Review the progress of the work in the preceding week and in the subsequent week, coordinate the work with public agencies or other Contractors as required, and allow the Engineer to plan its activities for testing, inspection, etc.

5-8.3 CONFERENCES

At any time during progress of the Work, the City and the Construction Manager shall have the authority to require the Contractor and any subcontractor, suppliers, or service providers to attend job-site conferences. Any notice of such conference shall be duly observed and complied with by the Contractor and subcontractors, suppliers, or service providers.

5-8.4 SUBMITTALS

5-8.4.1 **SUBMITTALS** –

Where the Contractor is required by these Specifications to make submittals, they shall be made according to General Requirements Section 5-10.0, Shop Drawings, Product Data and Samples. The Contractor shall provide a sufficient number of copies to allow three (3) copies to be retained by the Engineer and one (1) for the Contractor of the following items:

Construction Schedule
Materials List
Substitutions List
Shop Drawings
Material Safety Data Sheets
Requests and Notices
Manuals and Instructions
Manufacturer's Affidavits
Affidavits on Patent Fees

Affidavit of Bills Paid Warranty Data Others as Specified in the Technical Specifications

Where the Contractor is required by these Specifications to submit samples of products, the Contractor shall provide a sufficient number of physical samples to allow three (3) to be retained by the Engineer of all structural and architectural products involving color, finish, texture, or the like.

5-8.5 MATERIALS LIST

Within twenty (20) days after the Notice of Award, the Contractor shall submit a List of Materials to the Engineer for review. The List shall include all items of equipment and materials; and the names of manufacturers with whom purchase orders have been or will be placed. Items on the List shall be arranged in the same order as in these Specifications, and shall contain sufficient data to identify precisely the items of material the Contractor proposes to furnish. The List shall include the Specifications or Drawing references. After the submission is favorably reviewed and returned to the Contractor by the Engineer, it shall become the basis for the submission of detailed drawings, catalog cuts, data, and information on each separate item for review as set forth in **Section 5-10**, **SHOP DRAWINGS**, **PRODUCT DATA AND SAMPLES**. The favorable review of shop drawings shall be obtained prior to the fabrication, delivery and construction of items requiring shop drawing submittal.

5-9 PROGRESS SCHEDULES

5-9.1 GENERAL

5-9.1.1 PROCEDURES

The Contractor shall provide with its schedule a procedural outline of any system shutdowns and proposed tie-in procedures, which shall be subject to the favorable review of the Engineer and the City.

5-9.2 CONSTRUCTION SCHEDULE

5-9.2.1 SCHEDULE SUBMITTAL

The Schedule Shall Be Submitted Within Ten (10) Days Of Notice To Proceed And Prior To The Beginning Of Construction, And Must Be Favorably Reviewed By The Engineer Before The First Partial Payment Can Be Made.

5-9.2.2 BASE SCHEDULE

The Contractor shall submit the schedule based on either the bar chart method or the Critical Path Method (CPM). The schedule shall indicate preceding activity relationships and/or restraints where applicable and a controlling path shall be indicated.

The schedule shall be time scaled and shall be drafted to show a continuous flow from left to right. The construction schedule shall clearly show the sequence of construction operations and specifically list:

- 1. The start and completion dates of all work items.
- 2. The dates of submittals, procurement, delivery, installation and completion of each major requirement.
- 3. Progress milestone events or other significant stages of completion.
- 4. The lead time required for testing, inspection and other procedures required prior to acceptance of the work.

Activities shall be no longer than 10 workdays, except for submittals and delivery items. If an activity takes longer, it shall be broken into appropriate segments of work for measurement of progress. This limitation may be waived, upon approval of the Engineer, for repetitious activities of longer durations for which progress can be easily monitored.

5-9.2.3 **REPORTS**

The following reports shall be submitted with the Base Schedule:

Bar Chart: A manually generated report which lists each activity description, early start and finish dates, and all preceding and succeeding activities. Report shall indicate all critical activities. A report with the above information shall be provided with each monthly update in lieu of the report specified in Paragraph 5-9.4.

CPM Schedule: A CPM network report sorted by I-J or activity number which lists each activity description, early start and finish dates, preceding and succeeding activities and restraints, including lead/lag durations. The report shall show the critical path.

CPM network report sorted by total float. CPM network report sorted by early start.

5-9.2.4 REQUIREMENTS AND PENALTY

The Contractor shall maintain flows in the existing swale or be prepared to provide bypass should rain be predicted while the new storm drain pipe is being installed.

All concrete work at any given location must be completed within fourteen (14) calendar days, 72 hours curing time included.

A penalty of \$400.00 per location per day will be charged to the Contractor for non-compliance of this time schedule. All penalties will be deducted from payments due the Contractor.

The Contractor shall notify the Engineer at least 10 working days in advance of the time when he intends to start operations under this contract.

5-9.3 WEATHER CONDITIONS

Seasonal weather conditions shall be considered in the planning and scheduling of work influenced by high or low ambient temperatures or precipitation to ensure the completion of the Work within the Contract Time. No time extensions will be granted for the Contractor's failure to take into account such weather conditions for the location of the Work and for the period of time in which the Work is to be accomplished.

The expected loss of working days shall be included in a separate identifiable critical activity labeled "Weather Days Allowance" to be included at the end of the project schedule. When weather days are experienced, and are approved as such by the Engineer, the Contractor shall either:

- a. Increase the duration of the current critical activity(ies) by the number of weather days experienced, or
- b. Add a critical activity to the schedule to reflect the occurrence of the weather day(s).

The duration of the weather day allowance activity shall be reduced as weather days are experienced and included in the schedule. Any remaining weather days in the weather day allowance activity at the completion of the project shall be considered as float and shall not be for the exclusive use or benefit of either the City or Contractor.

5-9.4 UPDATES

5-9.4.1 SUBMITTAL PERIOD

The Contractor shall submit at monthly intervals a report of the actual construction progress. Each monthly report shall cover a period of approximately thirty (30) days ending around the 30th of each month. The monthly reports shall be submitted within ten (10) days of the end of the reporting period.

5-9.4.2 ALL MONTHLY UPDATES -

All Monthly Updates Shall Include As A Minimum:

- A. Tabulation reports for the following sorts:
- 1.I-J [or Activity] Numbers
- 2.Total Float
- 3. Early Start
- 4. Logic report of proceeding and succeeding activities with all restraints indicated (precedence schedules only)

B.Narrative Report - The report shall show the activities or portions of activities completed during the reporting period. The report shall state the percentage of the work actually completed and scheduled, the remaining duration, and the progress along the critical path in terms of days ahead or behind the allowable dates as of the report date. Any changes made by the Contractor to the schedule, including I-J (or Activity) numbers and activity descriptions, shall be listed.

5-9.4.3 ON-SCHEDULE UPDATES

If the project is proceeding on schedule, the monthly update report may consist of a marked-up copy of the graphical network diagram. This submittal shall clearly indicate the status of any minor shifts in sequence or schedule and the estimated completion date or percent complete of all activities currently in progress. The Contract completion date shall also be indicated. The Contractor shall submit a narrative report relating to status of construction, the schedule, and factors which may affect the remainder of the schedule.

5-9.4.4 DELAYED SCHEDULE UPDATES

If, in the opinion of the Engineer, the project is behind schedule, the monthly report shall include a revised network diagram and/or mathematical analysis showing the Contractor's proposed revised schedule. The schedule shall be revised under the conditions defined in **Section 5-9.5.1, Schedule Revisions.** An analysis of the effect that the delay has on progress along other paths shall also be included in the report. The Contractor shall also submit a narrative report with each updated analysis which shall include but not be limited to a description of current and anticipated problem areas, delaying factors and their impact, and an explanation of corrective actions taken or proposed.

5-9.5 SCHEDULE REVIEW

Once each month, on a date mutually agreed upon, but no later than seven (7) working days after the submittal of the monthly update specified herein, a jobsite meeting will be held to review the Construction Schedule, job progress and the monthly update, or the Engineer will provide written comments on the monthly update.

5-9.5.1 SCHEDULE REVISIONS

The conditions under which the Engineer will require revisions of the Construction Schedule include the following:

- a. When delay in completion of any work item or sequence of work items results in an estimated extension of project completion by either twenty (20) working days or by five percent (5%) of the remaining duration of time to complete the Contract, whichever is less.
- b. When delays in submittals or deliveries make replanning or rescheduling of the work necessary.

- c. When the schedule does not represent actual prosecution and progress of the work.
- d. When any change to the sequence of activities, the completion date for major portions of the work, or changes occur which affect the critical path.
- e. When Contract modification necessitates schedule revision.

5-9.6 WEEKLY ACTIVITIES PLAN

On the last working day of every week the Contractor shall submit to the Engineer the Contractor's Plan of Activities for the following three weeks. The Plan of Activities shall describe the activity and location of the activity and include the activity's I-J or Activity number as provided in the Construction Schedule.

5-9.7 CASH FLOW PROJECTION

A cash flow projection shall be submitted with the Construction Schedule. This cash flow projection shall be revised and resubmitted when revisions of the Construction Schedule will result in changes to the projected cash flow.

5-9.8 WORK HOUR PROJECTION

A work hour projection shall be submitted with the Construction Schedule. The projection shall list projected work hours for each intended trade. The projection shall include work hours for project management, superintendence and administration. The work hour projection shall be revised and resubmitted when revisions to the Construction Schedule will result in changes to the projected manpower.

5-10 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

5-10.1 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall submit, at its own expense submittals and details of structural and reinforcing steel material, pipe, pipe joints, special pipe sections, and other appurtenances as required in technical specifications.

All submittals and supporting data, catalogs, schedules, etc., shall be submitted as the instruments of the Contractor, who shall be responsible for their accuracy and completeness and coordination. Such responsibility shall not be delegated in whole or part to subcontractors or suppliers. These submittals may be prepared by the Contractor, subcontractors, or suppliers, but the Contractor shall ascertain that submittals meet all of the requirements of the Contract Documents, while conforming to structural, space, and access conditions at the point of installation. Designation of work "by others," if shown in submittals, shall mean that the work will be the responsibility of the Contractor rather than the subcontractor or supplier who prepared the submittals. The Contractor shall insure that there is no conflict with other submittals and notify the Engineer in each case where its submittal may affect the work of another contractor or the City. The Contractor shall insure coordination of submittals among the related crafts and subcontractors.

Submittals shall be prepared in such form that data can be identified with the applicable Specification paragraph. The data shall clearly demonstrate compliance with the Contract Plans and Specifications and shall relate to the specific equipment to be furnished. Where manufacturer's standard drawings are employed, they shall be marked clearly to show what portion of the data is applicable to this project.

5-10.2 TRANSMITTAL PROCEDURES

5-10.2.1 TRANSMITTAL FORM

A separate transmittal form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittal documents common to more than one piece of equipment shall be identified with all the appropriate equipment numbers. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole. The specification section to which the submittal is related shall be indicated on the transmittal form.

A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX"; where "XXX" is the sequential number assigned by the Contractor. Resubmittals shall have the following format: "XXX-Y"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals, i.e., A, B, or C being the 1st, 2nd, and 3rd resubmittals, respectively. Submittal 25B, for example, is the second resubmittal of submittal 25.

5-10.2.2 DEVIATIONS FROM THE CONTRACT

If the submittals show any deviations from the Contract requirements, the Contractor shall submit with the submittal submission a separate written description of such deviations and the reasons therefor. If the City accepts such deviation, the City shall issue an appropriate Contract Change Order, except that, if the deviation is minor, or does not involve a change in price or in time of performance, a Change Order need not be issued. If any deviations from the Contract requirements are not noted on the submittal, the review of the shop drawing shall not constitute acceptance of such deviations.

5-10.2.3 SUBMITTAL COMPLETENESS

The Contractor shall check all submittals before submitting them to the Engineer and shall certify on the transmittal letter and on each shop drawing that they have been checked, are in compliance with the Plans and Specifications, and all deviations from the Contract requirements are noted.

If the Contractor submits an incomplete submittal, the submittal will be returned to the Contractor without review. A complete submittal shall contain sufficient data to demonstrate that the items comply with the Specifications, shall meet the minimum requirements for

submissions cited in the technical specifications, shall include materials and equipment data and seismic anchorage certifications where required, and shall include any necessary revisions required for equipment other than first named.

It is considered reasonable that the Contractor shall make a complete and acceptable submittal to the Engineer at least by the second submission of data. The City reserves the right to deduct monies from payments due the Contractor to cover additional costs of review beyond the second submission.

5-10.2.4 SUBMITTAL PERIOD

All submittals shall be completed within ten (10) days after Notice to Proceed by the City, unless the Engineer accepts an alternate schedule for submission of submittals proposed by the Contractor.

5-10.3 REVIEW PROCEDURE

Submittals shall be submitted to the Engineer for review and returned within ten (10) working days after receipt. Review of submittals by the Design Consultant has as its primary objective the completion for the City of a project in full conformance with the Contract Plans and Specifications, unmarred by field corrections, and within the time provided. In addition to this primary objective, submittal review as a secondary objective will assist the Contractor in its procurement of equipment that will meet all requirements of the project Plans and Specifications, will fit the structures detailed on the Plans, will be completed with respect to piping, electrical, and control connections, will have the proper functional characteristics, and will become an integral part of a complete operating facility.

After review by the Design Consultant of each of the Contractor's submissions, the material will be returned to the Contractor with actions defined as follows:

- A) **NO EXCEPTIONS TAKEN (RESUBMITTAL NOT REQUIRED)** -Accepted subject to its compatibility with future submissions and additional partial submissions for portions of the work not covered in this submission. Does not constitute approval or deletion of specified or required items not shown in the partial submission.
- B) MAKE CORRECTIONS NOTED (RESUBMITTAL NOT REQUIRED) Same as A, except that minor corrections as noted shall be made by the Contractor.
- C) **REVISE AND RESUBMIT (RESUBMIT)** Rejected because of major inconsistencies or errors which shall be resolved or corrected by the Contractor prior to subsequent review by the Design Consultant.
- D) **REJECTED (RESUBMIT)** Submitted material does not conform to Plans and Specifications in major respect, i.e.: wrong size, model, capacity, or material.
- E) **SUBMIT SEPCIFIED ITEM** Additional information is needed.

Items A and B above (no resubmittal required) are considered "favorable review." Items C and D above (correction and resubmittal required) are considered "unfavorable review."

It shall be the Contractor's responsibility to copy and/or conform reviewed submittals in sufficient numbers for its files, subcontractors, and vendors.

5-10.4 EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTALS

The Design Consultant's favorable review of submittals shall be obtained prior to the fabrication, delivery and construction of items requiring submittal review.

Favorable review of submittals does not constitute a change order to the Contract requirements.

The favorable review of all submittals by the Design Consultant shall apply in general design only and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein. Favorable review by the Design Consultant shall not relieve the Contractor of its obligation to meet safety requirements and all other requirements of laws, nor constitute a Contract Change Order. Favorable review by the Design Consultant will not constitute acceptance by the Design Consultant of any responsibility for the accuracy, coordination, and completeness of the submittals or the items of equipment represented on the submittals.

5-11 QUALITY CONTROL

5-11.1 QUALITY CONTROL

All materials and equipment shall be new and of the specified quality and equal to the samples found to be acceptable by the Design Consultant if samples have been submitted. It shall be the duty of the Contractor to call the Engineer's attention to apparent errors or omissions and request instructions before proceeding with the Work. The Engineer may, by appropriate instructions, correct errors and supply omissions not involving extra cost, which instructions shall be as binding upon the Contractor as though contained in the original Contract Documents.

At the option of the Engineer, materials and equipment to be supplied under this Contract will be tested and inspected either at their place of origin or at the site of the Work. The Contractor shall give the Engineer written notification at least 20 days prior to the shipment of materials and equipment to be tested and inspected at point of origin. Satisfactory tests and inspections at the point of origin shall not be construed as a final acceptance of the materials and equipment nor shall such tests and inspections preclude retesting or reinspection at the site of the Work.

Inspection of the Work by the City, Engineer and/or Design Consultant shall not relieve the Contractor of its obligations to conduct comprehensive inspections of the Work and to furnish

materials and perform acceptable Work, and to provide adequate safety precautions, in conformance with the intent of the Contract.

5-11.2 INSPECTION

All work and materials are subject to the inspection of the Engineer. The Contractor shall notify the Engineer before noon of the working day before inspection is required. If the Specifications, the Engineer's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give timely notice, in writing, of its readiness for inspection. Unless otherwise determined by the Engineer, all inspections shall be done only in the presence of the Engineer or its authorized representatives. The City, Engineer, Design Consultant and authorized government agents and their representatives shall at all times be provided safe access to the Work wherever it is in preparation or progress and to all warehouses and storage yards wherein materials and equipment are stored, and the Contractor shall provide facilities for such access and for inspection, including maintenance of temporary and permanent access. Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all conditions of the Contract, and improper work will be subject to rejection. Work and materials not meeting such requirements shall be made good, and unsuitable work or materials may be rejected; notwithstanding that such work or materials have been previously inspected by the Engineer or that payment therefore has been included in a progress estimate.

No portion of any work or installed materials shall be covered or concealed in any manner whatsoever without first being inspected by the Engineer. If any work should be covered up without the approval or consent of the Engineer, the Engineer shall have the authority to require that such work be uncovered for examination; defective work, if any, corrected; and recovered at the Contractor's expense.

5-11.3 SAMPLES AND TESTS

At the option of the Engineer, the source of supply of materials for the Work shall be subject to tests and inspection before the delivery is started and before such materials are used in the Work. Representative preliminary samples of the character and quality prescribed shall be submitted by the Contractor or producer of materials to be used in the Work in sufficient quantities or amounts for testing or examination.

All tests of materials furnished by the Contractor shall be made in accordance with the commonly recognized standards of national technical organizations, and such special methods and tests as are prescribed in the Contract Documents.

Certificates of compliance shall be provided by the Contractor as required in the Technical Specifications.

5-11.3.1 **SAMPLING**

The Contractor shall furnish such samples of materials as are requested by the Engineer, without charge. No material shall be used until the Engineer has had the opportunity to test or examine such materials. Samples will be secured and tested whenever necessary to determine the quality of the material. Samples and test specimens prepared at the jobsite, such as concrete test cylinders, shall be taken or prepared by the Engineer or Testing Firm in the presence and with the assistance of the Contractor.

5-11.3.2 TESTING

All testing of Portland cement concrete, asphalt concrete and soils shall be paid for by the City and shall be performed in a laboratory selected by the City and approved by the Engineer. Any retesting required due to failed test or defective material or sample shall be at the Contractor's expense. When required by the Contract or the Engineer, the Contractor shall furnish, at no extra charge, certificates of tests of materials and equipment made at the point of manufacture by a recognized testing laboratory.

The Contractor is responsible for all system and equipment testing as provided for in these Contract Documents.

5-11.3.3 TEST STANDARDS

All sampling, specimen preparation, and testing of materials shall be in accordance with the standards of nationally recognized technical organizations.

The physical characteristics of all materials not particularly specified shall conform to the latest standards published by the American Society for Testing Materials, where applicable.

5-11.3.4 MEASUREMENT AND PAYMENT

The requirements for Quality Control will be measured and paid for under the various bid items and no additional compensation will be allowed

5-12 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

5-12.1 GENERAL

The Contractor shall provide all temporary facilities and utilities required for prosecution of the work, protection of employees and the public, protection of the work from damage by fire, weather or vandalism, and such other facilities as may be specified or required by any legally applicable law, ordinance, rule, or regulation.

5-12.1.1 WORK AREA

The Contractor shall restrict the work to the public right-of-way, public easements, and private areas where the City has obtained a temporary construction easement. The

Contractor must obtain written permission from the property owners to use their property in any fashion.

No stockpiling of excavation material will be allowed on any city streets or in any public right-of-way.

Space for storage of equipment and materials is limited. Exact locations for storage of equipment shall be approved by the City Engineer prior to the start of construction.

5-12.1.2 JOB SITE RESPONSIBILITY

The Contractor agrees that in accordance with generally accepted construction practices, the Contractor will be required to assume sole responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours; and the Contractor further agrees to defend, indemnify and hold the City of Sausalito and its representatives harmless from any and all liability, real or alleged, in connection with the performance of work on this project.

The Contractor shall comply with the obvious intent and meaning of these plans and specifications, which shall be construed to include all materials, measures and modes of work necessary to complete the work in strict accordance with plans, specifications and drawings, and to the satisfaction of the City and the Consultant Engineer. Should any questions arise as to the intent and interpretation of the plans, drawings or specifications, the Contractor shall refer the question (s) in writing to the Consultant Engineer. The Consultant Engineer shall be considered to have the greatest knowledge of the work, the intent and meaning of the drawings, details, plans and specifications.

5-12.2 TEMPORARY UTILITIES

5-12.2.1 ELECTRICAL SERVICE

The Contractor shall arrange, at its own cost, with the local utility to provide adequate temporary electrical service at a mutually agreeable location. The Contractor shall then provide adequate jobsite distribution facilities conforming to applicable codes and safety regulations. The Contractor shall provide, at its own cost, all electric power required for construction, testing, general and security lighting, and all other purposes whether supplied through temporary or permanent facilities.

5-12.2.2 WATER

The Contractor shall pay for, shall construct all facilities necessary, and obtain a water meter from MMWD as necessary to furnish water for its use during construction. Water used for human consumption shall be kept free from contamination and shall conform to the requirements of the State and local authorities for potable water. The Contractor shall pay for all water used for the Contractor's operations prior to final acceptance.

The use of water from any private source, either commercial or residential, is prohibited without prior written consent of the City.

5-12.2.3 SANITARY CONVENIENCE

The Contractor shall provide suitable and adequate sanitary conveniences for the use of all persons at the site of the Work. Such conveniences shall include chemical toilets or water closets and shall be proved with secondary containment and shall be located at appropriate locations at the site of the Work. All sanitary conveniences shall conform to the regulations of the public authority having jurisdiction over such matters. At the completion of the Work, all such sanitary conveniences shall be removed and the site left in a sanitary condition.

5-12.2.4 MEASUREMENT AND PAYMENT

The requirements for Temporary Utilities will be measured and paid for under the bid item for Mobilization and no additional compensation will be allowed.

5-12.3 CONSTRUCTION FACILITIES

Construction hoists, elevators, scaffolds, stages, shoring, and similar temporary facilities shall be of ample size and capacity to adequately support and move the loads to which they will be subjected. Railings, enclosures, safety devices, and controls required by law or for adequate protection of life and property shall be provided.

5-12.3.1 STAGING AND FALSEWORK

Temporary supports shall be designed by a professional registered engineer with an adequate safety factor to assure adequate load bearing capability. If requested by the Engineer, the Contractor shall submit design calculations for staging and shoring prior to application of loads.

Excavation support shall be in accordance with Section 2-4.12, SAFETY.

5-12.3.2 TEMPORARY ENCLOSURES

When sandblasting, spray painting, spraying of insulation, or other activities inconveniencing or dangerous to property or the health of employees or the public are in progress, the area of activity shall be enclosed adequately to contain the dust, over-spray, or other hazard. In the event there are no permanent enclosures of the area, or such enclosures are incomplete or inadequate, the Contractor shall provide suitable temporary enclosures.

5-12.4 WARNING DEVICES AND BARRICADES

The Contractor shall adequately identify and guard all hazardous areas and conditions by visual warning devices and, where necessary, physical barriers. Such devices shall, as a minimum, conform to the requirements of Cal/OSHA and the latest version of the Manual of Uniform Traffic Control Devices, California edition.

5-12.5 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

As required in Section 7.11 "Preservation of Property" of the Standard Specifications, the Contractor shall be responsible for the protection of public and private property at and adjacent to the Work and shall exercise due caution to avoid damage to such property.

The Contractor shall repair or replace all existing improvements, which are not designated for removal (e.g., curbs, pavements, structures, etc.) and are damaged or removed as a result of its operations. Repairs and replacements shall be at least equal to existing improvements and shall match them in finish and dimension.

The Contractor shall preserve survey monuments and control points as defined in **Section 2-10.5 PRESERVATION OF SURVEY MONUMENTATION** of these Special Provisions.

All costs to the Contractor for protecting, removing and restoring existing improvements shall be included in the various bid items and no additional payment will be made.

5-12.6 PROJECT SECURITY

The Contractor shall make adequate provision for the protection of the Work area against fire, theft, and vandalism, and for the protection of the public against exposure to injury.

5-12.6.1 FIRE EXTINGUISHER

Sufficient number of fire extinguishers of the type and capacity required to protect the Work and ancillary facilities, shall be provided and maintained in readily accessible locations.

5-12.6.2 TEMPORARY FENCES

Except as otherwise provided, the Contractor shall enclose the site of the Work with a fence adequate to protect the Work and temporary facilities against acts of theft, violence, or vandalism.

In the event all or a part of the site is to be permanently fenced, this permanent fence or a portion thereof may be built to serve for protection of the Work site, provided however, that any portions damaged or defaced shall be replaced prior to final acceptance.

Temporary openings in existing fences shall be protected to prevent intrusion by unauthorized persons. During night hours, weekends, holidays, and other times when no work is performed at the site, the Contractor shall provide temporary closures or guard service to protect such openings. Temporary openings shall be fenced when no longer necessary.

5-12.6.3 MEASUREMENT AND PAYMENT

The requirements for Project Security will be measured and paid for under the various bid items and no additional compensation will be allowed.

5-12.7 SPECIAL CONTROLS

The Contractor shall take all reasonable means to minimize inconvenience and injury to the public by dust, noise, diversion of storm water, or other operations under its control.

5-12.7.1 CLEANUP AND DUST CONTROL

The Contractor at its expense shall take whatever steps, procedures, or means as are required to control dust conditions being caused by its operations in connection with the execution of the Work; and on any unpaved road which the Contractor or any of its subcontractors are using, demolition operations, or other activities. Control shall be by sprinkling, use of dust palliatives, modification of operations, or any other means acceptable to agencies having jurisdiction. Haul routes shall be kept visibly wet during excavation and hauling operations.

Throughout all phases of construction, including suspension of work, and until final acceptance of the project, the Contractor shall keep the work site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping and sprinkling with water, or other means as necessary. At the end of each working day or as directed by the Engineer, the Contractor shall clean and sweep roadways and on-site paved areas of all materials attributed to or invoiced in the work. The Contractor shall furnish and operate a mechanical/vacuum street sweeper with a spray nozzle at least once each week to keep paved areas acceptably clean whenever construction, including restoration, is incomplete. The Contractor shall not use water to flush down streets in place of street sweeping. Dust control shall conform to the provisions of section 5, "Dust Control", of the Standard Specifications.

Materials and equipment shall be removed from the site as soon as they are no longer necessary; and upon completion of the work and before final inspection, the entire work site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be considered as being included in the various bid items and no additional payment will be made.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned. Asphalt shall not be tracked on adjacent sections of street. Sand may be used to avoid this and cleaned up each evening at close of operations.

Excess excavated material from catch basins or similar structures shall be removed from the site immediately. Sufficient material may remain for use as backfill if permitted by the Specifications. Forms and form lumber shall be removed from the site as soon as practicable after stripping.

Failure of the Contractor to comply with the Project Engineer's cleanup orders may result in an order to suspend work until the condition is corrected. No additional compensation will be allowed as a result of such suspension.

The Contractor shall furnish and operate a self-loading motor sweeper with spray nozzles at times as directed by the Project Engineer. The use of a power broom attachment does not satisfy this requirement.

Unless the construction dictates otherwise, and unless otherwise approved by the Engineer, the Contractor shall furnish and operate a self-loading motor sweeper with spray nozzle at least once each working day to keep paved areas acceptably clean whenever construction, including restoration, is incomplete. A penalty of \$250 per day may be imposed by the Engineer if this specification is not met. All penalties will be deducted from payments due the Contractor.

The use of gas-powered devices to blow leaves, dirt or other debris off sidewalks, driveways, lawns or other surfaces is not allowed.

5-12.7.2 NOISE ABATEMENT

The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances, which apply to any work performed pursuant to the contract.

Each internal combustion engine related to the job shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.

The City of Sausalito requires all construction to meet the following noise levels:

Does not exceed 60 dBA as measured on residential property unless a special permit is obtained. The special permit shall not be issued by the City Engineer unless the Contractor demonstrates that the equipment to be used produces noise levels that are the lowest of currently available equipment.

5-12.7.3 WORKING HOURS

Construction shall be allowed only between the hours of eight (8:00) a.m. and six (6:00) p.m. on weekdays, except otherwise noted. This shall be modified as follows:

- 1. Through traffic shall be maintained for vehicles on Coloma St. and along the adjacent MLK drive isle at all times.
- Pedestrians and vehicle access to driveways shall be maintained to properties and businesses at all times.
- 3. Pedestrians must have an accessible path of travel at all times.

No work shall be performed on weekends and holidays, unless otherwise approved by the City Engineer in writing.

The Contractor shall be responsible for any inspection and additional administration costs incurred by the City, or its agents and representatives, for work by the Contractor outside the hours defined above on weekdays, or any work on weekends or holidays recognized by the City. Such costs shall be withheld from the succeeding monthly progress payment. Any work as required as detailed in the Plans or these Special Provisions, specifically required to be performed outside the normal working hours is excluded from the provisions of this paragraph.

The Contractor shall notify the Engineer at least 24 hours prior to any work outside the normal working hours defined above, on weekends or holidays.

5-12.7.4 DRAINAGE CONTROL

In all construction operations, care shall be taken not to disturb the existing drainage pattern whenever possible. Particular care shall be taken not to direct drainage water onto private property. Drainage water shall not be diverted to streets or drainage ways inadequate for the increased flow. Drainage means shall be provided to protect the Work and adjacent facilities from damage due to water from the site or due to altered drainage patterns from construction operations.

Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete or other acceptable material will be permitted when necessary to protect the work, provided their use does not create a hazard or nuisance to the public. Such dams shall be removed from the site as soon as their use is no longer necessary.

Temporary provisions shall be made by the Contractor to insure the proper functioning of gutters, storm drain inlets, drainage ditches, culverts, irrigation ditches, and natural water courses.

5-12.7.5 CONSTRUCTION CLEANING

The Contractor shall, at all times, keep property on which work is in progress and the adjacent property free from accumulations of waste material or rubbish caused by employees or by the Work. All surplus material shall be removed from the site immediately after completion of the work causing the surplus materials. Upon completion of the construction, the Contractor shall remove all temporary structures, rubbish, and waste materials resulting from its operations. Incomplete or inadequate job-site cleanup shall justify withholding of partial payments due the Contractor for work performed at the particular site (as determined by the engineer) until the Contractor cleans the site to the satisfaction of the engineer.

5-12.7.6 DISPOSAL OF MATERIAL

The Contractor shall make arrangements for disposing of materials outside the Site and the Contractor shall pay all costs involved. The Contractor shall first obtain permission from the City on whose property the disposal is to be made and absolve the Engineer from any and all responsibility in connection with the disposal of material on said property. When material is disposed of as above provided, the Contractor shall conform to all required codes pertaining to grading, hauling, and filling of earth.

5-12.7.7 PARKING AND STORAGE AREAS

All stockpiled materials and parked equipment at the job site shall be located to avoid interference with private property and to prevent hazards to the public. Locations of stockpiles, parking areas, and equipment storage must be approved by the Engineer. Storage of equipment and materials on the public right-of-way shall not be permitted.

The Contractor shall make his own arrangements at his own expense for a staging area for the temporary stockpiling of material and equipment storage. The Contractor will not be allowed to use public streets or property for such purpose without the written approval of the City.

A penalty of \$200/hour will be charged in hourly increments for the unauthorized use of any 9' x 20' space for the storage of construction equipment and/or materials in the public right-of-way. All penalties will be deducted from payments due the Contractor.

5-12.7.8 AIR POLLUTION CONTROL

The Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.

5-12.7.9 VERMIN CONTROL

At the time of acceptance, structures entirely constructed under the contract shall be free of rodents, insects, vermin and pests. Necessary extermination work shall be arranged and paid for by the Contractor as part of the work within the contract time and shall be performed by a licensed agency in accordance with requirements of governing authorities. The Contractor shall be liable for injury to persons or property and responsible for the elimination of offensive odors resulting from extermination operations.

5-12.8 TRAFFIC REGULATION

5-12.8.1 GENERAL

Traffic Control shall follow section 10-6 Traffic Control of these Special Provisions.

5-12.9 PUBLIC SAFETY

5-12.9.1 SAFETY ORDERS

The Contractor shall have at the work site, copies or suitable extracts of: Construction Safety Orders, Tunnel Safety Orders, and General Industry Safety Orders issued by the State Division of Industrial Safety. The Contractor shall comply with provisions of these and all other applicable laws, ordinances, and regulations.

Before excavating any trench 5 feet (1.5m) or more in depth, the Contractor shall submit to the City a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for the workers' protection from the hazard of caving ground during the excavation of such trench. If the plan varies from the shoring system standards, the plan shall be prepared by a registered Civil Engineer. No excavation shall start until the Engineer has accepted the plan and the Contractor has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to the City Engineer.

Payment for performing all work necessary to provide safety measures shall be included in the prices bid for other items of work except where separate bid items for excavation safety are provided.

5-12.9.2 USE OF EXPLOSIVES

Explosives shall not be used.

5-12.9.3 SPECIAL HAZARDOUS SUBSTANCES AND PROCESSES

Materials that contain hazardous substances or mixtures may be required on the work. A Material Safety Data Sheet as described in Section 5194 of the California Administrative Code shall be provided by the Contractor from the manufacturer of any hazardous product used.

Material usage shall be accomplished with strict adherence to California Division of Industrial Safety requirements and all manufacturer's warnings and application instructions listed on the Material Safety Data Sheet and on the product container label.

The Contractor shall notify the City Engineer if a specified product cannot be used under safe conditions.

The Contractor shall absorb in its bid, the patent fees or royalties on any patented article or process which may be furnished or used in the work. The contractor shall indemnify and hold the City and its agents harmless from any legal action that may be brought for infringement of patents.

5-12.9.4 LAWS TO BE OBSERVED

The Contractor shall keep fully informed of State and National laws and County and municipal ordinances and regulations which in any manner affect those employed in the work or the

materials used in the work or in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances and regulations.

5-12.9.5 ANTITRUST CLAIMS

Section 4551 of the Government Code provides:

"In entering in to a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, the 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 54 of the Clayton Act (15 U.S.C. Sec. 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 purchase of goods, services, or materials pursuant to the public works contract or the 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".

5-12.9.6 CITY SERVICE CHARGES

In the event that Contractor fails to adequately provide for the public safety during the course of construction under this contract, and the City is therefore required to provide for said public safety, the Contractor shall pay to the City the cost of each such service call required. The minimum charge for each service call shall be \$200.00 (Two Hundred Dollars).

Any and all costs incurred by the City as a result of the failure of the Contractor to provide for the public safety as specified hereinabove will be deducted from the payment due the Contractor.

5-13 MATERIAL AND EQUIPMENT

5-13.1 STORAGE OF MATERIALS

Construction materials shall not be stored in streets, roads, or highways for more than 5 days after unloading. All materials or equipment not installed or used in the construction within 5 days after unloading shall be stored elsewhere by the Contractor at its expense unless authorized additional storage time. All storage areas shall be approved by the City Engineer prior to the arrival of construction materials as part of the contractors encroachment permit. Materials shall be stored in such a manner as to ensure the preservation of their quality and fitness for the Work. When considered necessary by the Engineer, materials shall be placed on platforms or other hard, clean surfaces, and covered when directed.

Materials shall be stored so as to facilitate inspection. Storage areas shall be suitably fenced, if necessary to protect the public or the material. Construction equipment shall not be stored at the work site before its actual use on the work nor for more than 15 days after it is no longer needed on the work. Time necessary for repair or assembly of equipment may be authorized by the Engineer.

Excavated material, shall not be stored in public streets, roads, or highways unless otherwise permitted. After placing backfill, all excess materials shall be removed immediately from the site.

A penalty of \$200 per hour per 9' by 20' area or portion thereof will be charged for the unauthorized use of public right-of-way for the storage of construction equipment and/or materials. All penalties will be deducted from payments due to the Contractor.

Unless otherwise designated in the General Requirements, locations and arrangements for storage sites for materials and equipment outside the limits of work, shall be selected and maintained by the Contractor at its expense. Full compensation for furnishing such storage sites as may be necessary or required by the Contractor shall be considered as included in the price bid and no additional compensation will be allowed therefor. The Owner shall be specifically exempted in any agreement from any liability incurred from the use of private property for construction purposes. Use of portions of the Owner's area at the site for materials and equipment storage shall be permitted only upon the approval of the Engineer.

All construction materials shall be stored at least ten (10) feet away from inlets, catch basins, and curb returns. The Contractor shall not allow any material to enter the storm drain system. At the end of each working day, the Contractor shall collect and dispose of all scrap, debris, and waste material.

During wet weather or when rain is forecast, the Contractor shall store materials that can contaminate rainwater or be transported by storm water or other runoff to the storm drain system inside a building or cover them with a tarp or other waterproof materials secured with weighted tires or sandbags to prevent contact with rain.

5-13.2 HAZARDOUS MATERIALS

The storage and handling of potential pollution causing and hazardous materials, including but not necessarily limited to, gasoline, oil and paint shall be in accordance with all local, state and federal requirements. All hazardous materials shall be stored and handled in strict accordance with the Material Safety Data Sheets for the products. Material Safety Data Sheets, shall be submitted to the Engineer prior to the delivery of materials to the project.

5-13.3 MATERIAL AND EQUIPMENT SUBSTITUTIONS

5-13.3.1 **GENERAL**

In preparing these Special Provisions, the Design Consultant has named those products which to its knowledge meet the Specifications and are equivalent in construction, functional efficiency, and durability.

Wherever catalog numbers and specific brands or trade names preceded by "similar and equal" or followed by the designation "or approved equal" are used in conjunction with a designated material, product, thing, installation, or service mentioned in these Specifications, they are used to establish the standards of quality and utility required.

5-13.3.2 SUBSTITUTIONS

Substitutions which are equal in quality and utility to those specified will be permitted, subject to the following provisions. For this purpose, the Contractor shall submit to the Engineer in accordance with Public Contract Code Section 3400, no later than thirty five (35) days after the Notice of Award, a typewritten list containing a description of each proposed substitute item or material. Sufficient data, drawings, samples, literature, calculations, or other detailed information as will demonstrate to the Design Consultant that the proposed substitute is equal in quality and utility to the material specified shall be appended to this list. The Design Consultant will favorably review in writing such proposed substitutions as are, in its opinion, equal in quality to the items or materials specified. In the event that a substitute is favorably reviewed, fifty percent (50%) of all savings shall be credited to the Owner.

Failure of the Contractor to submit proposed substitutions for review in the manner described above and within the time prescribed shall be sufficient cause for rejection by the Engineer of any substitutions otherwise proposed.

5-13.3.3 MODIFICATIONS AND COSTS

If alternative named or substitutions are proposed by the Contractor and favorably reviewed by the Design Consultant, the Contractor is responsible for providing, at no additional cost to the Owner, any related changes or testing that may be required to accommodate or provide the particular material the Contractor desires to use. Any deviation from the Specifications or the Drawings resulting from the type of material to be used shall not be the basis for any "extra charges" above and in excess of the original bid price of the work.

In addition the Contractor is responsible for all additional costs to the Owner, and its agents and representatives, for evaluation of data submitted by the Contractor for alternative named or substitutions and any redesign necessary. The Owner shall deduct said costs from the Contract monies due the Contractor.

5-14 NOT USED

5-15 CONTRACT CLOSEOUT

5-15.1 FINAL CLEANING

Before final inspection of the Work, the Contractor shall clean the construction area, material sites, adjacent property and streets, and all ground occupied by the Contractor in connection with the Work of all rubbish, excess materials, form lumber, etc. All parts of the Work shall be left in a neat and presentable condition. Refer to Section 4-1.02, "Final Cleaning Up," CALTRANS Standard Specifications.

5-15.2 RECORD DRAWINGS

The Contractor shall keep at the Site a copy of the plans and specifications, including addenda and change orders, to which the Design Consultant, Engineer, and Owner's Representative shall have access at all times.

The Contractor shall maintain one (1) set of specifications and full size prints and mark thereon any deviation from plan dimensions, elevations, or orientations, and all changes from addenda, change orders, and clarifications. The Contractor shall submit the record drawings in good condition to the Engineer upon completion of the Work as a condition of acceptance of the Work.

Marked prints shall be updated at least weekly and shall be available to the Owner and its representatives for review. The Owner may withhold partial payments if it does not find the record drawings to be satisfactory.

5-15.3 WARRANTY

The Contractor hereby agrees to make, at its own expense, all repairs or replacements necessitated by defects in materials or workmanship, supplied under terms of this Contract, and pay for any damage to other works resulting from such defects, which becomes evident within one (1) year after the date of acceptance of the project or the Substantial Completion date whichever is applicable or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. The Contractor further assumes responsibility for a similar guarantee for all work and materials provided by subcontractors or manufacturers of packaged equipment components. The Contractor also agrees to indemnify, defend, and hold the Owner harmless from liability of any kind arising from damage due to said defects.

The Contractor shall execute and submit a completed Warranty Form in the format as appended to this section for the Work, and any portion of the Work possessed in accordance with **Section 2-3.5, OWNER'S RIGHT TO USE OR OCCUPY.** The Warranty Form shall be submitted prior to the Substantial Completion date or the final acceptance of the project or within five (5) days of the occupancy or use of a portion of the Work, whichever is applicable.

The Contractor shall, upon the receipt of notice in writing from the Owner, promptly make all repairs arising out of defective materials, workmanship, or equipment. The Owner is hereby authorized to make such repairs, and the Contractor and its Surety shall be liable for the cost thereof, if ten (10) days after giving of such notice to the Contractor, the Contractor has failed to make or undertake the repairs with due diligence. In case of emergency, where in the opinion of the Owner delay could cause serious loss or damage, repairs may be made without notice being sent to the Contractor, and the expense in connection therewith shall be charged to the Contractor, and its Surety shall be liable for the cost thereof.

Prior to the expiration of the Warranty period, the Owner reserves the right to hold a meeting and require the attendance of the Contractor. The purpose of the meeting is to review warranties, bonds and maintenance requirements and determine required repair or replacement of defective items.

For the purpose of this paragraph, acceptance of the Work or a portion of the Work by the Owner, shall not extinguish any covenant or agreement on the part of the Contractor to be performed or fulfilled under this Contract which has not, in fact, been performed or fulfilled at the time of such acceptance. All covenants and agreements shall continue to be binding on the Contractor until they have been fulfilled.

The Owner and the Contractor agree that warranty on the parts of the work possessed and used by the Owner in accordance with **Section 2-3.5**, **OWNER'S RIGHT TO USE OR OCCUPY**, shall commence on the date that the Owner takes possession of such work and so notifies the Contractor in writing. The Owner and Contractor further agree that such possession, and use of the work shall not be deemed as Substantial Completion or acceptance of any other part of the Work.

WARRANTY FORM
Warranty For
MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT
Sausalito, California
We hereby guarantee the MLK PARK ATHLETIC FIELD IMPROVEMENTS PROJECT that we have constructed for a period of one (1) year from the date of acceptance of the work/substantial completion by the
The following are excluded from the provisions of this warranty:
We agree that if any of the equipment should fail due to any reason other than improper maintenance or improper operation, if any pipe or appurtenances should develop leakage, or if any settlement of fill or backfill occurs, or should any portion of the work fail to fulfill any of the requirements of the Specifications, we will, within ten days after written notice of such defects, commence to repair or replace the same together with any other work which may be damaged or displaced in so doing.
In the event of our failure to comply with the above mentioned conditions within a reasonable time after being notified, or should the exigencies of the case require repairs or replacements to be made before we can be notified or respond to notification, we do hereby authorize the City of Sausalito to proceed to have the defect repaired and made good at our expense, and we will pay the cost therefor upon demand.
The warranty provided herein shall not be in lieu of, but shall be in addition to any warranties or other obligations otherwise imposed by the Contract Documents and by law.
Contractor:
Signed:

END OF SECTION

SECTION 6 - Not Used

SECTION 7 - Not Used

SECTION 8 - Not Used

SECTION 9 - Not Used

END OF SECTION

SECTION 10 - TECHNICAL SPECIFICATIONS

10-1 MOBILIZATION

Mobilization shall conform to the provisions in Section 11, "Mobilization," of the Standard Specifications, and shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, supplies incidental to the project site, for the establishment of all offices, buildings and other facilities necessary for work on the project and for all other work and operations which must be performed or for project costs incurred prior to beginning work on the various Contract items.

Temporary utility connections to any of the Contractor's facilities will be the responsibility of the Contractor at no additional cost to the City of Sausalito. Mobilization shall include the furnishing of and providing regular maintenance for sanitary unit(s) on the job for the duration of the project. Failure to comply with this requirement will result in withholding of mobilization payments in the amount deemed appropriate by the Engineer.

PAYMENT The Contract lump sum price paid for "Mobilization" (Bid Item 101) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the applicable work specified in Section 11 of the Standard Specifications and no additional compensation shall be allowed.

10-2 CLEARING AND GRUBBING

GENERAL. Clearing and grubbing shall conform to the applicable provisions of Section 16 of the Standard Specifications and these Special Provisions, the Geotechnical Report from Miller Pacific and the landscape plans.

Clearing and grubbing shall include, but not be limited to, the removal from the area of work all turf (to a depth of 6" or as specified in the Geotechnical Report), brush, roots, tree stumps and all other items conflicting with the work as shown on the plans, including the pruning of trees as necessary to accommodate construction operations, or as directed by the Engineer.

All roots within the work zone shall be removed by the Contractor.

All removed material, unless otherwise indicated on the plans specified herein, shall become the property of the Contractor who shall dispose of same outside the road right-of-way at a legal dump site.

PAYMENT - The contract lump sum price paid for "Clearing and Grubbing" (Bid Item 102) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in earthwork, complete in place as specified in these Special Provisions, as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefor.

10-3 EARTHWORK

This work shall be performed in accordance with Section 19, "Earthwork," of the Standard Specifications, these Special Provisions, the Geotechnical Report from Miller Pacific and as directed by the Engineer. If soft subgrades are encountered after milling operations contractor shall excavate soil as shown on the plans.

Excavation shall be accomplished with properly selected equipment, which has been approved by the Engineer and in such manner that the stability of the subgrade is maintained to the greatest extent possible and to

prevent damage to underground utilities. The prepared subgrade shall not be permitted to dry and/or crack prior to placement of the next covering layer.

All surplus and/or unsatisfactory excavated material shall be disposed of outside the roadway right of way in accordance with section **10-12 DISPOSAL OF MATERIALS** of these Special Provisions.

Following the removal of the materials to the selected depth, the subgrade soils shall be scarified in accordance with Section **10-14 SUBGRADE PREPARATION** of these Special Provisions and the Geotechnical Report. The final subgrade shall be prepared in accordance with Section 19-1.03, "Grade Tolerance" of the Standard Specifications.

Utilities and underground pipelines, which are to remain in place shall be worked around and protected from damage or interruption of service. All improvements damaged by construction shall be replaced at the Contractor's expense. It shall be the contractor's responsibility to ascertain the location of all utilities, including manholes and monuments.

The Contractor shall provide no less than 48 hours' notice to the Engineer, in writing of the need for compaction testing of the subgrade.

PAYMENT - The contract lump sum price paid for "Earthwork" (Bid Item 103) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in earthwork, complete in place as specified in these Special Provisions, as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefor.

10-4 LAYDOWN AREA

The Contractor shall not maintain staging, equipment parking, or materials within the project limits. The Contractor shall obtain a site for use as a Construction Staging Area near the project. This area should be of sufficient size to store the contractor's equipment, materials and other items necessary for completing the project. The City has made no provision for a Construction Staging Area

PAYMENT - Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-5 ALTERATIONS

The City reserves the right to increase or decrease the quantity of any item or portion of the Work or omit portions of the Work as may be deemed necessary or advisable by the Engineer; also, to make such alterations or deviations, additions to, or omissions from the Plans and Special Provisions, as may be determined during the progress of the Work to be necessary and advisable for the proper completion thereof. Upon written order of the Engineer, the Contractor shall proceed with the Work as increased, decreased or altered.

Increases or Decreases in the Quantity of Work: The Engineer will not adjust the unit price if the total bid item quantity exceeds 125 percent shown on the bid item list. The Engineer will not adjust the unit price if the total bid item quantity is less than 75 percent shown on the bid item list. The Engineer hereby deletes the provisions of Sections 9-1.06B and 9-1.06C of the Standard Specifications.

Revocable Bid Items. Items marked with "Revocable" on the bid schedule, may be deleted entirely or for which the quantity may be decreased, as determined by the City Engineer based on circumstances that may not be known until after Work on the Project has commenced. If any such item is deleted or the quantity decreased, the Contract Price will be adjusted by a Change Order and the Engineer will offer no additional compensation.

PAYMENT - Compensation for the provisions in this section shall be considered as included in the contract prices paid for the various bid items and no additional compensation will be allowed

10-6 TRAFFIC CONTROL SYSTEM

The Contractor shall not implement a traffic control system until public noticing described in these Special Provisions is complete, obtain an encroachment permit (no fee charged) from the City of Sausalito, and obtain approval of the traffic control plans from the Engineer. For the purpose of this section, traffic pertains to truck and motor vehicles, pedestrians, bicyclists, and public transit operations.

The Contractor shall implement the traffic control system as approved by the Engineer. If warranted by field conditions, the Contractor shall adjust the system as directed by the Engineer. The Contractor shall provide and implement all traffic handling devices and equipment as described in Sections 12-3 and 12-4 of the Standard Specifications.

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 the component to its original condition or replace the component, and shall restore the component to its original location.

The Contractor shall provide advanced warning signs and changeable message boards as part of the traffic Control plan.

The Contractor shall provide flaggers to control traffic. <u>Section 12-1.03 of the Standard Specifications is deleted; the cost for flaggers is the Contractor's responsibility.</u>

All excavations shall be backfilled or covered with steel trench plates suitable for traffic loading, at the end of each day's work, refer to City of Sausalito Encroachment Permit. Trench plates shall be securely anchored in place. No open excavation of any depth and accessible to the public will be permitted to remain overnight.

"Traffic Control System" shall conform to Sections 7-1.03 "Public Convenience," 7-1.04 "Public Safety" and Section 12 "Temporary Traffic Control" of the current State of California Department of Transportation Standard Specifications (Standard Specifications), insofar as they may apply, and the following special provisions.

The Contractor shall be held solely responsible for complying with the listed reference documents and these Special Provisions for the complete duration of project. The Traffic Control Plans shall be prepared by a licensed engineer or otherwise certified individual.

The Standard Specifications Sections 7-1.03, 7-1.04 and Section 12 regarding signs and other traffic control devices are hereby revised to provide that all signs and other warning devices (including construction and warning signs placed beyond the limits of work) shall be provided and maintained by the Contractor at his or her expense, and shall remain his property after the completion of the contract. The applicable sections of

Section 7-1.03 "Public Convenience" and Section 12-1.03 "Flagging Costs" are further revised to provide that all flaggers shall be provided by the Contractor at his or her expense. Flaggers shall be properly equipped and trained in accordance with "Instructions to Flaggers," published by the Department of Transportation.

The Contractor shall not implement a traffic control system until public noticing is complete, obtain an encroachment permit from the City of Sausalito, and obtained approval of the traffic control plans from the Engineer. For the purpose of this section, traffic pertains to truck and motor vehicles, pedestrians, bicyclists, and public transit operations on both public streets and private property a may be required..

Traffic Control shall be implemented only during the Working Hours as defined in these Special Provisions.

However, traffic control devices shall remain in place at all times during construction to warn the public of the work zone. The Engineer will make no exceptions to this requirement.

TRAFFIC CONTROL PLAN SUBMITTAL

The Contractor shall submit a detailed plan describing how you propose to manage traffic while performing the work within the City of Sausalito. This Plan shall be coordinated and approved by the City of Sausalito. Access to MLK from Coloma St. shall be maintained at all times for the duration of the project. Access to the businesses and schools located at the MLK site shall not be inhibited and traffic circulation at MLK shall be maintained at all times. Work shall be coordinated with school traffic to minimize impacts during school drop-off and pick-up.

The Plan shall detail:

- 1. Your sequence of work to be performed.
- 2. Your proposed traffic handling through the work zone.
- 3. Accessible pedestrian detour plan.
- 4. Bicycle detour plan
- 5. Maintenance of access and traffic circulation on the MLK site.

The traffic control plans shall not be general, but specific to the project and of sufficient detail for the Engineer to understand your method of traffic management. Your plans shall be consistent with the current California edition of the Manual of Uniform Traffic Control Devices.

The Engineer will NOT issue the Notice to Proceed until the traffic control plan is approved.

LANE CLOSURE

All lane closures proposed by the Contractor shall be defined in the Traffic Control Plans described previously in this section. For each closure, the Contractor shall submit an application to the City of Sausalito at least five (5) working days in advance of the closure for review and approval.

If approved by the Engineer, the Contractor shall:

1. At least 72 hours prior to any lane closures, detours or any other alterations that can impact traffic, the Contractor shall place electronic message boards at each end of the project to inform the public of

the planned alterations to the normal flow of traffic. The location of the message boards shall be approved by the Engineer prior to their installation.

No work may begin under contract until City Engineer's representative has approved Progress Schedule, General Project Notice, Street Construction Notice, and Traffic Control Plan.

Time required for review and approval of these items shall not constitute a basis for time extension.

City of Sausalito Community Wide Email System shall be used, in a cooperative effort with the City Public Works Department, to inform the public of pending work scheduled.

Traffic Control shall be implemented only during the Working Hours as defined in these Special Provisions. The Engineer will make no exceptions to this requirement.

On the day of lane closure, the Contractor shall notify the Police Department (415)289-4170, Fire Department (415)388-8182, and notify County Dispatch (415)499-7234.

CONSTRUCTION AREA SIGNS

Once construction starts, the Contractor shall furnish and install construction area signs to inform motorists, pedestrians, and bicyclists of work in the streets and sidewalks. These signs may include, but are not limited to, "Road Construction Ahead", "Detour Ahead", "Road Closed". 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 Devices" of the State Standard Specifications and these Special Provisions. Construction area signs shall be metal, with reflective coating, black on orange, and securely mounted. Signs shall be kept clean and in good repair. The Contractor's traffic control plan shall show the location of the signs.

The Contractor shall be responsible for providing, placing, and installing all construction area signs. The signs shall not be installed on trees, utility poles, private property, traffic signals, or any other appurtenance, unless approved by the Engineer.

CHANGEABLE MESSAGE SIGNS

At the request of the City, up to two (2) changeable message signs shall be made available during the project, as requested by the City and shall remain in service for as long as construction is in effect. The changeable message sign shall be a pull-type, solar-powered LED sign.

PROJECT INFORMATION SIGN

The Contractor shall install one (1) City supplied Project Sign, to be bolted to 4" x 4" redwood posts at a location to be designated by the Engineer. The sign shall be installed prior to construction and maintained in place for the duration of the project by the Contractor. Sign shall be repaired or replaced at no cost to the City of Sausalito, if damaged or stolen.

The Contractor shall remove the project sign at the end of the contract and return it to the City of Sausalito.

TRAFFIC CONTROL SYSTEM MAINTENANCE

It shall be the responsibility of the Contractor to maintain signs and barricades overnight and on weekends. It shall be the responsibility of the Contractor to make sure that the signs remain posted until no longer required and are protected from vandalism or removal.

PAYMENT - Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

Compensation for providing the traffic control, pedestrian path of travel, Traffic Control Plan, Pedestrian Detour Plan, construction area signs, electronic changeable message signs, and any other requirements of this section shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor

10-7 WATER POLLUTION AND EROSION CONTROL

The Contractor shall provide all materials, equipment, and labor necessary to furnish, place, and maintain all water pollution control systems, including construction, maintenance, and inspection of said systems, as required to perform the work in accordance with Section 13, "Water Pollution Control," Section 5-1.36, "Property and Facility Preservation," of the Standard Specifications.

The Contractor shall submit an Erosion and Sedimentation Control Plan (ECP) for work in the public right of way to the Engineer for review and must be accepted prior to beginning of work and submitted through the City of Sausalito Encroachment Permit Process. The Contractor shall be fully responsible for implementing, maintaining, and repairing all storm water pollution controls as described in his approved ECP and as shown and described on the project plans and specifications for the duration of the construction contract. The Contractor shall make any repairs to the storm water pollution controls and amend the ECP if, in the opinion of the Engineer, the Contractor is not in compliance with the ECP.

The Contractor shall be responsible for any fines imposed by the Regional Water Quality Control Board or other agency as a result of noncompliance, negligence, or violation of permit conditions.

Construction vehicles and equipment entering existing paved areas shall be free of mud, silt and other debris during all phases of work. No mud, silt and other debris shall be tracked on paved surfaces. If such materials are tracked on the streets or other paved areas both public and private, the Contractor shall immediately remove these materials prior to these materials entering into the storm drain system.

Stockpiling of materials on the street will not be allowed unless otherwise approved by the Engineer through the contractor's Encroachment Permit. The Contractor shall cover with secured plastic any construction or excavated materials which may possibly erode and enter the storm drain system of paved streets or other paved areas both public and private. Stockpiling of dirt on paved areas will not be allowed.

The Contractor shall sweep the work area and clean up the work site daily before leaving the site or more frequently as may be directed by the Engineer.

The Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting and maintaining the control measures included in the plans, specifications and ECP and any amendments thereto and for removing and disposing of temporary control measures.

To ensure the proper implementation and functioning of temporary erosion control measures, the Contractor shall regularly inspect and maintain the construction site for the control measures identified in the ECP. The Contractor shall identify corrective actions and time frames to address any damaged measures or reinitiate any measures that have been discontinued.

During the length of the project, inspections of the construction site shall be conducted by the Contractor to identify deficient measures. The inspections shall be, but not limited to as follows:

- 1. Prior to a predicted storm;
- After all precipitation which causes runoff capable of carrying sediment from the construction site;
- 3. At 24 hours intervals during extended precipitation events; and
- 4. Routinely, on a minimum daily basis.
- 5. If the Contractor identifies a deficiency in the deployment or functioning of an identified control measure, the deficiency shall be corrected in a timely manner.
- 6. If the Engineer identifies a deficiency in the deployment or functioning of an identified control measure, the Contractor will be notified and the deficiencies shall be corrected by the Contractor in a timely manner
- 7. Failure to make the necessary repairs or other necessary maintenance when directed by the Engineer shall result in the necessary repair work being done by City forces the Contractor will be billed at double the rate of all City expenses.

Records of all inspections and compliance reporting must be retained as part of the ECP for review at any time by the Engineer. Upon completion of the project construction records shall be retained by the City/operator with a copy of the final ECP.

PAYMENT -The contract lump sum price paid for "Water Pollution and Erosion Control" (Bid Item 104) shall include full compensation for maintaining and furnishing all labor, materials, tools, equipment, and incidentals, complete in place as specified in these Special Provisions, as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefore.

10-8 HYDROSEED – EROSION CONTROL (TYPE D)

Work under this section includes erosion control (Type D):

- A. Applying erosion control materials to embankment and excavation slopes and other areas disturbed by construction activities. Erosion control (Type D) must comply with Section 20-3, "Erosion Control," of the Caltrans Standard Specifications and these technical specifications.
- B. Apply erosion control (Type D) when an area is ready to receive erosion control as determined and when required by the Engineer or the Project Manager.
- C. Before applying erosion control materials, prepare soil surface under Section 19-2.05, "Slopes," of the Caltrans Standard Specifications, except that rills and gullies exceeding 2 inches in depth or width must be leveled. Remove vegetative growth, temporary erosion control materials, and other debris from areas to receive erosion control.
- D. Place stakes or other suitable markers at the locations shown in the Contract Drawings. Furnish all tools, labor and materials required to adequately indicate the various locations.

RELATED SECTIONS

A. Section 31 25 16 Fiber Rolls

REFERENCES

A. State of California, Department of Transportation (Caltrans), Standard Specifications May 2006

1. Section 19-2.05 Slope

2. Section 20-3 Erosion Control

PRODUCTS

- A. Hydroseed- Erosion Control (Type D) Materials
 - 1. Seed:
 - a. Seed must comply with Section 20-2.10, "Seed," of the Caltrans Standard Specifications. Seed not required to be labeled under the California Food and Agricultural Code shall be tested for purity and germination by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists. Measure and mix individual seed species in the presence of the Engineer. At the time of seed sampling, provide the Engineer a glassine lined bag and custody seal tag for each seed lot sample.
 - b. Seed must contain at most 1.0 percent total weed seed by weight.
 - c. Deliver seed to the job site in unopened separate containers with the seed tag attached. Containers without a seed tag attached are not accepted.
 - d. Seed must comply with the following:

Botanical Name	Pounds Pure Live Seed Per Acre
(Common Name)	(Slope Measurement)
Native Hydroseed	

Achillea millefolium	0.75
Achinea minejonam	0.75
()	
(yarrow)	
Artemisia douglasiana	2.0
(mugwort)	
Bromus carinatus	8.0
(California brome)	
Eschscholzia californica	2.0
(California poppy)	
Hordeum brachyantherum	8.0
(meadow barley)	8.0
Leymus triticoides	
	4.0
(creeping wild rye)	
Lupinus bicolor	4.0
(annual lupine)	
Nassella pulchr	8.0
·	
(purple needle-grass)	
Scrophularia californica	2.0
(beeplant)	
Sisyrinchium bellum	2.0
,	
(California blue-eyed grass)	
Trifolium obtusiflorum	6.0
(creek clover)	
Vulpia microstachys	6.0
(three-weeks fescue)	
120	52.75
	31.73

2. Compost:

- a. The compost producer must be fully permitted as specified under the California Integrated Waste Management Board, Local Enforcement Agencies and any other State and Local Agencies that regulate Solid Waste Facilities. If exempt from State permitting requirements, the composting facility must certify that it follows guidelines and procedures for production of compost meeting the environmental health standards of Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7.
- b. The compost producer must be a participant in United States Composting Council's Seal of Testing Assurance program.
- c. Compost may be derived from any single, or mixture of any of the following feedstock materials:

- i. Green material consisting of chipped, shredded, or ground vegetation; or clean processed recycled wood products
- ii. Biosolids
- iii. Manure
- iv. Mixed food waste
- d. Compost feedstock materials to reduce weed seeds, pathogens and deleterious materials as specified under Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7, Section 17868.3
- e. Compost must not be derived from mixed municipal solid waste and must be reasonably free of visible contaminates. Compost must not contain paint, petroleum products, pesticides or any other chemical residues harmful to animal life or plant growth. Compost must not possess objectionable odors.
- f. Metal concentrations in compost must not exceed the maximum metal concentrations listed in Title 14, California Code of Regulations, Division 7, Chapter 3.1, Section 17868.2.
- g. Compost must comply with the following:

Physical/Chemical Requirements

Property	Test Method	Requirement
рН	*TMECC 04.11-A, Elastometric pH 1:5 Slurry Method, pH Units	6.0–8.0
Soluble Salts	TMECC 04.10-A, Electrical Conductivity 1:5 Slurry Method dS/m (mmhos/cm)	0-10.0
Moisture Content	TMECC 03.09-A, Total Solids & Moisture at 70+/-5 deg C, % Wet Weight Basis	N/A
Organic Matter Content	TMECC 05.07-A, Loss-On-Ignition Organic Matter Method (LOI), % Dry Weight Basis	30–65
Maturity	TMECC 05.05-A, Germination and Vigor	
	Seed Emergence	80 or Above
	Seedling Vigor	80 or Above
	% Relative to Positive Control	
Stability	TMECC 05.08-B, Carbon Dioxide Evolution Rate mg CO ₂ -C/g OM per day	8 or below
Particle Size	TMECC 02.02-B Sample Sieving for Aggregate Size Classification % Dry Weight Basis	95% Passing 5/8 inch
		70% Passing 3/8 inch
Pathogen	TMECC 07.01-B, Fecal Coliform Bacteria < 1000 MPN/gram dry wt.	
		Pass
Pathogen	TMECC 07.01-B, Salmonella < 3 MPN/4 grams dry wt.	
		Pass

Physical	TMECC 02.02-C, Man Made Inert Removal and	
Contaminants	Classification:	
	Plastic, Glass and Metal, % > 4mm fraction	
		Combined Total: < 1.0
Physical	TMECC 02.02-C, Man Made Inert Removal and	
Contaminants	Classification:	
	Sharps (Sewing needles, straight pins and	None Detected
	hypodermic needles), % > 4mm fraction	

^{*} TMECC refers to "Test Methods for the Examination of Composting and Compost," published by the United States Department of Agriculture and the United States Compost Council (USCC).

- h. Before compost application, provide the Engineer with a copy of the compost producer's compost technical data sheet and a copy of the compost producers Seal of Testing Assurance certification. The compost technical data sheet includes:
 - i. Laboratory analytical test results
 - ii. Directions for product use
 - iii. List of product ingredients
- i. Before compost application, provide the Engineer with a Certificate of Compliance under Section 6-1.07, "Certificates of Compliance," of the Caltrans Standard Specifications May 2006.
- j. Stabilizing emulsion:
 - i. Must be in a dry powder form
 - ii. Must be a processed organic adhesive used as a soil tackifier
 - iii. May be reemulsifiable

EXECUTION

A. Application

- 1. Apply erosion control materials in separate applications in the following sequence:
 - a. Seed shall be applied by hand, and raked into the surface to ensure good soil contact. Hydraulic application of native hydroseed shall be applied by hose, from the ground. Native hydroseed shall be applied onto the surface such that the materials are well integrated. Application shall be perpendicular to the surface such that finished grading and erosion control netting is not damaged.
 - b. Apply the following mixture with hydroseeding equipment at the rates indicated within 60 minutes after the seed has been added to the mixture:

Material	Pounds Per Acre
	(Slope Measurement)
Native Seed	53 (Pure Live Seed)
Fiber	285

Material	Cubic Yards Per Acre
	(Slope Measurement)
Compost	1.1

- c. Compost may be dry applied at the total of the rates specified in the preceding table and the following table instead of including it as part of the hydro-seeding operations. In areas where the compost is dry applied, all compost for that area must be applied before the next operation.
- d. Apply the following mixture with hydro-seeding equipment at the corresponding rates:

Material	Pounds Per Acre
	(Slope Measurement)
Fiber	285
Stabilizing Emulsion (Solids)	125

- e. The ratio of total water to total stabilizing emulsion in the mixture must be as recommended by the manufacturer.
- f. The Engineer or the Project Manager may change the rates of erosion control materials to meet field conditions.
- B. Establishment of Seeded Grass
 - 1. The work includes a grass-establishment period of 30 calendar days, commencing immediately after completion and acceptance of the initial hydroseeding application.
 - 2. If, during the establishment period, areas are lacking in sufficient grass seeding to assure an adequate stand of grass, such areas shall be recultivated and reseeded within 24 hours after written notification from the Engineer.
 - 3. The establishment period, in this case, shall be continued until the work meets specified requirements.
 - 4. The establishment period shall include continuous operation of watering, weeding, and any other normal operation required to assure proper growth.

MEASUREMENT AND PAYMENT

PAYMENT – Payment for Hydroseed-Erosion Control shall be included in the contract lump sum price paid for "Water Pollution and Erosion Control" (Bid Item 104) shall include full compensation maintaining and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in earthwork, complete in place as specified in these Special Provisions, as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefor.

10-9 **DEMOLITION**

GENERAL:

- A. Specifications for the demolition, removal, and legal disposal of materials at Martin Luther King Park, as indicated.
- B. Extent of demolition work shall be as shown on the design plans.
- C. Restoration of existing structures and facilities to remain in place which are damaged by demolition and removal operations.

PERMITS:

- A. Obtain all special permits and licenses and give all notices required for performance and completion of the demolition and removal work, hauling, and disposal of debris.
- B. Submit copies of demolition, hauling, and debris disposal permits and notices for record purposes. Include description of proposed haul routes.

SITE CONDITIONS:

- A. Erect and maintain temporary bracing, shoring, lights, barricades, signs, and other measures as necessary to protect the public, workers, and adjoining property from damage from demolition work, all in accordance with applicable codes and regulations.
- B. Open depressions and excavations occurring as part of this work shall be barricaded and posted with warning lights when accessible through adjacent property or through public access. Open depressions and excavations shall be filled at the end of each working day to the satisfaction of the Engineer.
- C. Protect utilities, pavements, and facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by demolition operations.
- D. Protection of Utilities: Protect active sewer, water, gas, electric, and other utilities; and drainage and irrigation lines indicated or, when not indicated, found or otherwise made known to the Contractor before or during demolition work.
- E. Maintain existing utilities and protect from damage as necessary to satisfy the requirements of jurisdictional utility companies and related codes and regulations.
- F. Make arrangements with affected utility companies and City to provide the information and services necessary to coordinate and complete the Work.
- G. Do not disconnect or shut down any part of the existing utilities and services, except by permission of authorities having jurisdiction. Submit schedule of estimated shut-down time in order to obtain such permission, and notify all interested parties, neighbors, utilities, and municipal and county authorities, as required.

- H. Utilities to be removed shall not be removed until shut-down time can be kept to a minimum. Do not remove an existing utility line or service until the replacement line, crossover, or capping is ready to be performed.
- Notify the Engineer and utility owners 72 hours before performing any excavation work. Notify
 affected utilities by calling Underground Service Alert (USA) at 1-800-227-2600. Contact utility
 owners not covered by USA, by calling the affected utility owners directly.
- J. Protect active underground utilities from damage. If underground utilities are damaged in any way, notify the Engineer and affected utilities immediately for corrective action.
- K. Noise and Dust Abatement: Provide continuous noise and dust abatement as required to prevent disturbance and nuisance to the public and workers and to the occupants of adjacent premises and surrounding areas. Dampen or cover areas affected by
- L. The Contract Drawings and related documents may not represent all surface conditions at the site and adjoining areas. The known surface conditions are as indicated, and shall be compared with actual conditions before commencement of work.
- M. Existing utilities and drainage systems below grade are located from surface facilities such as manholes, valve boxes, area drains, and other such surface fixtures.
- N. If existing active services encountered are not indicated or otherwise made known to the Contractor and interfere with the permanent facilities under construction, notify the Engineer in writing, requesting instructions on their disposition. Take immediate steps to ensure that the service provided is not interrupted, and do not proceed with the work until written instructions are received from the Engineer.

MATERIALS, EQUIPMENT, AND FACILITIES:

A. Furnish all materials, tools, equipment, devices, appurtenances, facilities, and services as required for performing the demolition and removal work.

DEMOLITION

- A. Demolish concrete and masonry in small sections. Perform demolition with small tools as much as possible. Blasting will not be permitted.
- B. Backfill and compact depressions caused by excavations, demolition, and removal in accordance with the requirements of the contract documents.

RESTORATION OF EXISTING STRUCTURES AND FACILITIES:

A. All damage to existing structures and facilities, including utilities, which are to remain in place, shall be repaired to a condition equal to that existing prior to the beginning of demolition and

removal operations. The cost of repairing existing structures and facilities damaged by the Contractor's operations shall be at the Contractor's expense.

CLEANUP:

A. Provide a clean and orderly site.

Existing turf, storm drain pipe, catch basins, tree roots, track, concrete curb, where specified on the plans shall be removed and disposed of or salvaged as indicated on the plans and in accordance with the provisions of Section 7-1.13 of the Standard Specifications, existing concrete removal shall conform to Section 15-3, "Removing Concrete," of the Standard Specifications.

Demolition shall also include the removal and disposal of all items as shown on the plans conflicting with the work; removal and disposal of signs and posts to be permanently removed from project limits; saw cutting; removal and disposal of asphalt concrete; removal and disposal of miscellaneous concrete, and removal and disposal of bricks and miscellaneous planter material, or work as directed by the Engineer.

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PAYMENT – The contract lump sum price paid for "Demolition" (Bid Item 105) shall include full compensation for furnishing all labor, materials and equipment necessary to perform the removal and disposal of materials, including but not limited to existing curb, track, benches, storm drain pipe, catch basins and other miscellaneous items, as directed by the Engineer to complete the work as shown on the plans and specified herein, shall be included in the lump sum price paid for under "Demolition". No additional compensation will be allowed.

10-10 PROTECTION OF EXISTING FACILITIES

Protection of existing facilities shall conform to the provisions in Section 15, "Existing Highway Facilities" of the Standard Specifications and these Special Provisions, except that full compensation for conforming to the requirements of this Section for which payment is not otherwise provided shall be considered as included in the contract prices paid for the various items of work and no separate payment will be made therefor.

Removed materials to be disposed of shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way" of the Standard Specifications and **Section 10-12 DISPOSAL OF MATERIALS** of these Special Provisions.

This project includes work on streets and in MLK Park with mature trees adjacent to the project improvements. In some locations, the tree canopy extends over the improvements. It is the responsibility of the Contractor to conduct construction operations around said tree canopy such that the work is accomplished without damaging or injuring tree or tree limbs in any way. The Contractor shall coordinate with the City prior to trimming trees in order to facilitate construction operations. Any tree trimming must be approved by the City.

This project includes work on streets with overhead utility and service lines. In some locations, these utility and service lines may have minimal vertical clear distance or clearance above the existing elevations within the limits of work. It is the Contractor's responsibility to conduct operations around the facilities such that the work is accomplished without damage to these facilities. The Contractor shall notify each utility City at least two (2)

working days prior to the planned work operation around these overhead facilities, and shall satisfy all requirements and safety standards for working in close proximity to these utility and service lines, as required.

The fact that any underground facility is not shown upon the plans shall not relieve the Contractor of his or her responsibility under Section 8-1.10, "Utility and Non-Highway Facilities" of the Standard Specifications. It shall be the Contractor's responsibility, pursuant thereto, to ascertain the location of such underground improvements or facilities, which may be subject to damage because of his or her operations. The Contractor shall determine the location of all utilities as described in Section 10-11 EXPLORATORY EXCAVATION of these Special Provisions.

Existing traffic stripes, pavement markings and pavement markers that are outside the limits of work that are to remain in place shall be protected from wheel marks and other damage by the Contractor. Existing traffic stripes, pavement markings and pavement markers that have been damaged or tracked with bituminous materials shall be cleaned or replaced as approved by the Engineer. The restoration of such objects will be at the Contractor's expense and in conformance with these Special Provisions.

PAYMENT - Compensation for conforming to this Section shall be included in the various other items of work and no separate payment will be made therefor.

10-11 EXPLORATORY EXCAVATION

The Contractor shall perform exploratory excavations to determine the location and depth of existing utility lines to support all tasks required for the successful completion of this project. Exploratory excavation shall conform to Section 7-1.11, "Preservation of Property" and Section 8-1.10, "Utility and Non-highway Facilities" of the Standard Specifications.

The Contractor shall contact Underground Service Alert to determine the extent of potholing required. Exploratory excavation (potholing) shall be at the Contractor's expense.

Potholes shall be taken as frequently as necessary to define the location of utilities within the work area.

The Contractor shall cut neatly the asphalt or concrete and use a vacuum type excavation device to remove soil to the depth of the utility. The Contractor shall coordinate with the City and outside utility agencies prior to exploratory excavation.

The Contractor shall provide backfill and surface restoration. Backfill shall be per the County of Marin standard drawings. The Contractor shall replace pavement or surfacing material in kind so that no discontinuity between the new and existing surface results. The minimum thickness of asphalt shall be four inches.

The Contractor shall provide the Engineer a description (material, diameter, etc.) of existing utility exposed by the exploratory excavation prior to commencing construction. The exploratory excavation log shall be a neatly redlined plan that shows the horizontal and vertical location (the depth) of each exploratory excavation. The Contractor shall immediately notify the Engineer of any conflicts that prevent the satisfactory completion of the work.

The Contractor shall take care not to damage any existing facilities during exploratory excavation. Existing facilities damaged by the Contractor's operations, as determined by the Engineer, shall be repaired or replaced to the satisfaction of the Engineer, the City and the owner of the damaged facility, all at the Contractor's expense.

PAYMENT - Compensation for conforming to this Section shall be included in the various other items of work and no separate payment will be made therefor.

10-12 DISPOSAL OF MATERIALS

The City has not made arrangements for disposal of material, which may include but is not limited to soil, concrete, asphalt, pipe, rock, chain link fence, tree roots and vegetation. All excess and unsuitable material shall be disposed of by the Contractor in a legal manner.

The Contractor shall schedule disposal of materials such that weather does not impair access to the disposal facility.

PAYMENT - Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-13 DEMOLISH AND ABANDON EXISTING STORM DRAIN FACILITIES

In the location as shown in the Plans, the Contractor shall remove storm drain lines and structures as well as abandon storm drain lines.

- 1. All pipelines shown on the plans to be abandoned in place shall be filled with sand and plugged with concrete. If an abandon utility is to remain below a proposed footing of structural element, it should be filled with lean or structural concrete.
- All pipelines shown on the plans to be removed or that are in conflict with improvements shall be removed to the required limits and with approved soil and compacted as detailed in section 10-3 EARTHWORK of these Specifications. Lean or structural concrete should be used as backfill below at proposed foundation locations in lieu of engineered fill.

All material removed shall become the property of the Contractor and shall be disposed of as indicated in **section 10-12 DISPOSAL OF MATERIALS** of the Special Provisions section of these Specifications.

PAYMENT - Full compensation for conforming to the provisions in this section shall be included in the contract lump sum price paid for "**Demolition**" (**Bid Item 105**) and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing and disposing the pipeline as well as backfilling and compacting, complete in place as specified in these Special Provisions, as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefor.

10-14 SUBGRADE PREPARATION

This work shall consist of the scarification and re-compaction of native soil underneath the asphalt paving, concrete improvements and turf area as shown on the Plans.

Upon excavation to subgrade depth in locations to receive hot mix asphalt or concrete, the upper 6-inches should be moisture conditioned to within 2 percent of the optimum moisture content and compacted to at least 95 percent relative compaction to the maximum dry density as determined in the laboratory according to ASTM D1557 and as specified in the Geotechnical Report prepared my Miller Pacific

The Contractor shall protect from damage all existing improvements, drainage facilities, sanitary sewage facilities, water facilities, traffic signal facilities, landscaped areas, trees and shrubbery that are not required to be removed during construction. Any existing improvements, drainage facilities, sanitary sewage facilities, water facilities, traffic signal facilities, landscaped areas, etc., damaged as a result of the Contractor's construction activities shall be replaced by the Contractor at no cost to the City.

Shallow utilities are located within the scarification area. New utilities as installed by the Contractor are shallow and located within the scarification area. The Contractor shall identify these utilities as required in **Section 10-11 EXPLORATORY EXCAVATION** and protect during scarification. The Contractor may need to use alternative methods to re-compact the soil to protect these shallow utilities.

It is the Contractor's responsibility to plan the preparation of the subgrade with respect to weather conditions. If poor weather creates excessive moisture in the subgrade or the inability to meet minimum compaction standards, the Contractor shall implement alternative methods as approved by the Engineer to continue subgrade preparation in accordance with these Special Provisions.

The Contractor shall saw cut the pavement shall be required at all edges to be joined. Asphalt Concrete that has been removed shall be disposed of outside the project in a legal manner unless otherwise directed by the Engineer.

PAYMENT- Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-15 HOT MIX ASPHALT (HMA)

Hot mix asphalt used for asphalt concrete pavement (fill) and full depth asphalt concrete paving shall conform to the provisions of in Section 39, "Hot Mix Asphalt," of the 2010 Standard Specifications and these Special Provisions.

Materials used include:

- 1. Asphalt Concrete for the surface course shall be 1/2" Type A.
- 2. The asphalt concrete binder shall be PG 64-16.

The quality control measures for the asphalt concrete shall be as outlined in Section 39-1.04 "Contractor Quality Control" of the Standard Specifications.

Certificates of Compliance, in accordance with Section 6-1.07, "Certificates of Compliance" of the Standard Specifications, shall be required from the supplier of the asphalt concrete and submitted to the Engineer not less than 10 working days prior to any scheduled asphalt concrete paving. The Contractor shall submit asphalt concrete mix design.

Prior to placing the surface course, the finished surface of the previous layer shall not vary at any point more than 0.05-foot above or below the grade established by the Engineer.

All trimming of the surface shall be completed while the temperature of the mix is above 200° F.

The final lift of asphalt concrete (the top lift) shall be placed in one continuous operation over the entire path.

The Contractor shall not perform paving operations when the weather is rainy or foggy. It shall be the Contractor's responsibility, based on weather predictions, to schedule his paving operations to avoid paving in the rain or fog. If the day's operations are canceled because of predicted rain or fog, a non-working day will be allowed regardless of actual working conditions.

Asphalt concrete shall not be placed on any surface which contains ponded water or excessive moisture in the opinion of the City Engineer.

If paving operations are in progress and rain or fog forces a shutdown, loaded trucks shall return to the plant and no compensation will be allowed therefor.

The Contractor shall furnish and use canvas tarpaulins to cover all loads of asphalt concrete from the time that the mixture is loaded until it is discharged from the delivery vehicle, unless otherwise directed in writing by the Engineer.

Immediately before Asphalt Concrete is placed, a tack coat (asphaltic emulsion) shall be applied to all horizontal and vertical surfaces as specified in Section 39-1.02B "Tack Coat" of the Standard Specifications.

No traffic shall be allowed on the asphalt tack coat with the exception of vehicles unloading asphalt concrete. All vehicles involved with the Contractor's operations shall turn around within the road right-of-way. Driveways and other private property shall not be used without prior written consent of the involved property, a dated copy of which shall be delivered to the Engineer prior to the use thereof.

The area to which the tack coat has been applied shall be closed to public traffic. Care shall be taken to avoid tracking the asphaltic emulsion material onto existing pavement surfaces beyond the limits of construction.

All asphalt concrete spillage and/or tracking of tack coat (asphaltic emulsion) or other materials on public streets shall be removed or cleared within 48 hours of the hot mix asphalt placement. If existing striping is marked by emulsion or other materials, it shall be repainted/restored. Alternatively, existing striping may be protected by a method approved by the Engineer.

Conform cuts between existing pavement and newly constructed pavement shall be made by cutting the existing pavement to a neat, smooth line at the limit lines and constructing a vertical-face butt joint.

Batch data and load slips shall be presented to the Engineer as asphalt is delivered to the project site. Failure to do so may result in non-payment for questionable quantities or rejection of the load.

The Contractor shall place the asphalt to match the slope and grade of the existing condition unless noted otherwise. If the Contractor does not comply with this condition, the Engineer will order a correction at no additional cost to the City.

PAYMENT - Full compensation for conforming to the provisions in this section shall be included in the contract unit price paid per square foot for "5' Wide Pedestrian Asphalt Concrete Path" (Bid Item 106) and 5' Wide Vehicle Asphalt Concrete Path (Bid Item 107) which price shall include all labor, materials and equipment necessary to complete the work (including excavation, removal and disposal, subgrade preparation) as shown on the plans and specified herein.

10-16 LANDSCAPE RESTORATION

Any damaged or disturbed landscaping within the project areas shall be restored to their original condition. Landscape restoration shall conform to the provisions of Section 20 "Erosion Control and Highway Planting" Section 57 "Timber Structures" and Section 80 "Fences" of the Standard Specifications and these Special Provisions.

All landscaping and hardscape removed or damaged during the Contractor's operation shall be replaced inkind.

The Contractor shall repair any landscaping and irrigation system removed or damaged as a result of the Contractor's operation. Active irrigation lines necessary for landscaping shall be relocated and made operational within 48 hours of their removal.

Topsoil shall conform to the provisions of Section 20-2.01, "Topsoil" of the State Standard Specifications and these Technical Provisions. Topsoil shall be compacted to 90% minimum, and fine graded to leave a neat, smooth finished surface.

Landscape replacement shall be "in-kind" replacement with relatively the same size and dimensions of the plant that was removed or damaged or as directed by the Engineer.

The contractor shall protect all irrigation within the project areas.

PAYMENT - Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-17 EXCAVATION, BEDDING, PIPE INSTALLATION, AND BACKFILL

The Contractor shall provide all labor, materials, and equipment necessary to perform all excavation, bedding, backfill and grading operations required for construction of underground utilities that may include, but are not limited to storm drain pipelines and related appurtenances.

The Contractor shall perform Excavation, Bedding, Pipe Installation, and Backfill as shown in the Plans. The work shall be completed as detailed in County of Marin Standard Drawings 330, 340 and 350, titled "TRENCH DETAILS," "STANDARD TRENCH BACKFILL & RESURFACING," AND "TRENCH NOTES" respectively.

QUALITY ASSURANCE

- A. The Engineer will provide all compaction testing for the project.
- B. Where soil material is required to be compacted to a percentage of maximum density, the maximum density at optimum moisture content will be determined in accordance with ASTM D 1557. Where

- cohesionless, free draining soil material is required to be compacted to a percentage of relative density, the calculation of relative density will be determined in accordance with ASTM D 4253 and D 4254. Field density in-place tests will be performed in accordance with ASTM D 1556, ASTM D 6938. At a minimum, compaction tests shall be conducted for each fifty (50) feet of trench and for each two (2) feet of trench depth.
- C. If a first test and a subsequent re-test of the bedding or backfill show noncompliance with the density required under this Section, the Contractor shall remove and re-compact the material represented by the test/retest as necessary to ensure compliance. The Contractor shall pay costs for re-tests.
- D. The Contractor shall provide access in the excavation for the soil compaction testing technician and Engineer. This shall include providing site-specific safety equipment and temporary shoring to enable compaction testing at each required level within the excavation. Should the Contractor have backfilled to an elevation above that required to be tested, he or she shall excavate the backfill down to the necessary level for testing and provide shoring at his or her cost. Subsequent backfilling shall also be at the Contractor's cost.

UNSUITABLE MATERIAL

- A. Unsuitable materials for bedding and backfill shall include soils, which when classified under ASTM D 2487 fall in the classifications of PT, OH, CH, MH, or OL. In addition, any soil that cannot be sufficiently compacted to achieve the percentage of maximum density specified for the intended use shall be considered unsuitable.
- B. Materials which are too wet to be compacted to specified compaction shall not be rejected solely because they are too wet for proper compaction. The Contractor may at its option, dry these materials to the satisfaction of the Engineer prior to compaction.
- C. Backfill placed within six (6) inches of any structure or pipe shall be free of rocks or unbroken clods of earth larger than four (4) inches in any dimension.
- D. All material that is determined to be unsuitable for use as bedding and backfill or that is in excess of the amount required shall be removed immediately and disposed of properly by the Contractor as described in Section 10-12 DISPOSAL OF MATERIALS of these Special Provisions.

EXECUTION - GENERAL

- A. There may be underground utilities crossing and parallel to the trench alignment. Not all are shown in the Plans. The Contractor shall contact Underground Service Alert, perform a field investigation, and complete potholing as described in Section 10-11 of these Special Provisions.
- B. There may be parallel utility pipelines and trenches located near the new pipeline. The Contractor shall protect these existing pipelines in place.
- C. Water to control dust resulting from grading operations, excavation, backfill, and the passage of traffic through the work area shall be applied by means that will ensure a uniform application of water with no runoff.
- D. Except when specifically provided to the contrary, excavation shall include the removal of all materials of whatever nature encountered, including all obstructions of any nature that would interfere with the proper execution and completion of the work. The removal of these materials shall conform to the lines and grades shown on the plans or as directed by the Engineer. Unless otherwise provided, the entire construction site shall be stripped of all vegetation and debris, and such material shall be removed from the site prior to performing any excavation or placing any fill.
- E. The Contractor shall remove and dispose of all excess excavated material, pipelines, and related appurtenances as required in **Section 10-12 DISPOSAL OF MATERIALS.**

- F. The Contractor shall furnish, place, and maintain all supports and shoring that may be required for the sides of the excavations, and all pumping, ditching, or other measures required for the removal or exclusion of water, including storm water, groundwater, and wastewater reaching the site of the work from any source so as to provide dry working conditions and to prevent damage to the work or adjoining property.
- G. Excavations shall be benched, sloped, shored or otherwise supported in a safe manner in accordance with applicable State safety requirements and the requirements of OSHA Safety and Health Standards for Construction (29CFR1926).
- H. Excavation under structures, manholes, vaults and others: Except where otherwise specified for a particular structure or directed by the Engineer, excavation shall be carried to the grade of the bottom of the bedding. Where shown on the plans or directed by the Engineer, areas beneath structures shall be over-excavated. The exposed surface shall be scarified to a depth of six (6) inches, brought to optimum moisture content, and compacted to ninety-five percent (95%) Relative Compaction. Where over-excavation is directed by the Engineer to provide for the placement of foundation rock over wet or soft soils, scarification and re-compaction shall not be performed.

TRENCH EXCAVATION

- A. The Contractor shall saw cut asphalt in accordance with **Section 10-13 DEMOLISH AND ABANDON EXITING STORM DRAIN FACILITIES** of these Special Provisions. Asphalt Concrete that has been removed shall be disposed of outside the project in a legal manner unless otherwise directed by the Engineer.
- B. Excavation for storm drain pipe shall be made only after pipe and other necessary materials are delivered on the site of the work. After such delivery, trench excavation shall proceed as rapidly as possible, and the pipe installed and the trench backfilled without undue delay. In public street areas, excavation and pipe installation shall be coordinated to the end that a minimum of interference with public traffic will result.
- C. The trench shall be excavated to the width and depth shown in the Plans and as described in these Special Provisions.
- D. The Contractor shall dewater the excavation according to Section 10-18 EXCAVATION DEWATERING of these Special Provisions.
- E. The pipe bedding shall be given a final trim, using a string line for establishing grade, such that each pipe section when first laid will be continually in contact with the bedding along the bottom of the pipe. The Contractor shall excavate bell holes at pipe joints.
- F. Where the bottom of the trench becomes soft or is unstable due to groundwater and/or movement of construction equipment, the Contractor shall over-excavate unsuitable material to a minimum depth of eighteen (18) inches below the base elevation to establish a stable foundation for the bedding or to a depth as otherwise directed by the Inspector. Geotextile fabric shall be placed on the over-excavated trench bottom and staked to the trench walls, coarse bedding material in conformance with these specifications shall be placed on the fabric, and the fabric shall then be un-staked from the trench wall and wrapped over the coarse bedding material forming a closed envelope with a minimum one (1) foot overlap at the top edges of the fabric.
- G. Any over-excavation carried below the grade ordered, specified, or shown, shall be backfilled and compacted to the required grade with the specified material.

BEDDING AND BACKFILL

- A. Except for required foundation material (in an envelope of geotextile fabric) coarse bedding material being placed in over-excavated areas, where water or soft ground is present, backfill shall not be placed until after all water is removed from the excavation according to **Section 10-18 EXCAVATION DEWATERING.**
- B. Pipe zone bedding and backfill operations shall be performed in accordance with the following requirements:
 - a. Type I Bedding and Backfill Material (Class 2 Aggregate Base) shall be placed and properly compacted in the pipe zone. The pipe zone is defined as that portion of the vertical trench cross-section lying between a plane four (4) to six (6) inches below the bottom surface of the pipe, i.e., the trench sub-grade, and a plane at a point twelve (12) inches above the top outside surface of the pipe. The sub-zones of the pipe zone are defined as follows:
 - "Bedding is that portion of the Pipe Zone between the bottom of the trench or the top of required foundation material and the lowest point on the outside surface of the pipe barrel excepting bells;
 - ii. "Haunching" is that portion of the Pipe Zone between the top of the Bedding and the horizontal centerline of the pipe;
 - iii. "Shading" is that portion of the Pipe Zone between the top of the Haunching and a horizontal plane from six (6) to twelve (12) inches above the highest point on the outside surface of the pipe barrel excepting bells and as shown in the Plans.
- C. Controlled Low Strength Material (CLSM) can be provided in lieu of Type I Bedding and Backfill Material. Contractor shall provide a method to prevent pipe from floating during backfill. The remaining portions of the trench shall be backfilled as specified elsewhere in this Section.
- D. After compacting the bedding, the Contractor shall perform a final trim using a stringline for establishing grade, such that each pipe section when laid will be continually in contact with the bedding along the bottom of the pipe. The Contractor shall provide bell holes at each pipe joint.
- E. Backfill in trenches shall be placed uniformly on each side of the pipe to prevent displacement. The Contractor shall exercise care to prevent damage to the pipeline coating, cathodic bonds, or the pipe itself during the installation and backfill operations. The Contractor shall hand shovel slice the bedding along the sides of the pipe in order to ensure filling any voids under the pipe haunches.
- F. A colored detectable metallic foil core plastic tape, at least three (3) inches in width, shall be placed on top of the pipe zone backfill wherever sewers are installed. The tape shall have printed on it the words "Caution: Sewer Buried Below" or "Caution: Storm Buried Below" The warning tape shall be utilized for all pipes (mains and laterals).
- G. After the pipe zone backfill has been placed as specified above, and after all excess water has completely drained from the trench, backfilling of the trench zone may proceed. The trench zone is defined as that portion of the trench excavation between the top of the Shading and the ground surface in unpaved areas, and the horizontal plane at lowest point of the pavement structural section in paved areas.
- H. "Final Backfill" is that portion of the Trench Zone in paved areas between the top of the trench backfill and the lowest point of the pavement structural section.

PLACING AND SPREADING OF BACKFILL

A. Backfill materials shall be placed and spread evenly in layers. The backfill layers shall be evenly spread so that each layer shall not exceed eight (8) inches in un-compacted thickness. Backfill layers greater than eight (8) inches but no more than twenty-four (24) inches may be used after the Contractor demonstrates by compaction testing that required compaction levels will be achieved.

- B. During spreading, each layer shall be thoroughly mixed as necessary to promote uniformity of material in each layer. Pipe zone backfill materials shall be manually spread around the pipe so that when compacted, the pipe zone backfill will provide uniform bearing and side support.
- C. Where the backfill material moisture content is below the optimum moisture content, water shall be added before or during spreading until the proper moisture content is within the range where the specified compaction can be achieved.
- D. Where the backfill material moisture content is too high to permit the specified degree of compaction, the material shall be bladed, aerated or dried and/or mixed with dryer material until the moisture content is satisfactory.
- E. Whenever selection is possible, embankment material having a sand equivalent value of less than ten (10) shall be deposited in the lower portions of embankments and no such material shall be placed within three (3) feet of planned finished grade.
- F. When the embankment material consists of large rocky material, or hard lumps such as hardpan or cemented gravel which cannot be broken readily, such material shall be well distributed throughout the embankment, and sufficient earth or other fine material shall be placed around the large material as it is deposited so as to fill the interstices and produce a dense compact embankment, but in no case shall any material exceed twenty-four (24) inches in any dimension.

COMPACTION OF BACKFILL

- A. Each layer of backfill material as defined herein, shall be mechanically compacted to the specified percentage of maximum density. Equipment that is consistently capable of achieving the required degree of compaction shall be used and each layer shall be compacted over its entire area while the material is at the required moisture content. Compaction at the top of the pipe zone shall be done using a plate compactor.
- B. Flooding, ponding, or jetting shall not be used.
- C. Equipment weighing more than ten thousand (10,000) pounds shall not be used within a horizontal distance equal to the depth of the trench. Hand operated power compaction equipment shall be used where use of heavier equipment is impractical or restricted due to weight limitations.
- D. The following compaction requirements shall be in accordance with ASTM D 1557 except for free draining materials (i.e., Coarse Bedding Material/Drain Rock/Foundation Material), which shall be in accordance with ASTM D 4253 and D 4254 for cohesionless free draining type materials.

<u>Location or Use of Fill</u> <u>Percent (%) Relative Compaction</u>

Pipe zone backfill including bedding 90 and over excavated 90

foundation zone

Final backfill beneath paved areas or 95 structures 95

Trench backfill in unpaved easement or future 90 street areas 90

Trench Zone backfill 90

Backfill under structures 95

Backfill around structures under paved areas 95

Backfill around structures in landscaped areas 90

Embankment material 90

E. The Contractor shall maintain the indicated trench cross section at a minimum of twelve (12) inches above the top of the pipe (the top of the "Pipe Zone").

PAYMENT - Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-18 EXCAVATION DEWATERING

The Contractor shall be responsible for removing, managing, and disposing of all groundwater encountered during trenching, installing of pipelines, and backfilling.

The Contractor shall:

- Secure and comply with the provisions of permits required for dewatering operations, including
 permits from the Marin County for exploration, construction and abandonment of dewatering
 wells. No water shall be discharged into existing sanitary sewers, or new sanitary sewers
 constructed unless permissions is received from both the City of Sausalito and the SausalitoMarin City Sanitary District.
- 2. No groundwater may be discharged into the storm drain system, creeks, or on private property.
- 3. Provide all labor, materials, and equipment necessary to adequately dewater excavations so that pipe and structures that are installed in excavations are free from standing, flowing or boiling groundwater, surface water, storm water, precipitation, or wastewater; filter soil; and prevent loss of ground from dispersion or erosion.
- 4. Drawdown the groundwater level a minimum of two (2) feet below the trench bottom and beyond excavation sidewalls where shoring is not designed to resist hydrostatic pressures.
- 5. Control the rate and effect of dewatering so as to avoid settlement, subsidence or damage to structures or facilities adjacent to areas of proposed dewatering.
- 6. Provide adequate standby equipment to ensure efficient dewatering and maintenance of dewatering operations during power failure.
- 7. Be fully responsible and liable for all damages that result from failure to adequately keep excavations dewatered, and shall repair, restore and/or replace facilities or structures damaged as a result of dewatering operations.

CONTRACTOR SUBMITTALS

The Contractor shall submit a plan for all excavation dewatering procedures to the Engineer. The dewatering plan shall include the following:

- 1. Location(s) where water is to be disposed.
- 2. Scale drawings showing locations of dewatering systems.
- 3. Details of dewatering systems, such as:
 - a. Drilled hole and well casing diameter, slotted and solid lengths;
 - b. Sand packer gradation;
 - c. Size and capacity of pumps;
 - d. Tanks, settlement, and filter systems.

QUALITY ASSURANCE

Where structures, utilities and/or facilities exist adjacent to areas of proposed dewatering, the Contractor shall establish reference points and shall survey these reference points daily to detect any settlement, subsidence or damage that may develop during or following dewatering operations.

EQUIPMENT

Dewatering, where required, may include the use of wells, well points, sump pumps, temporary pipelines for water disposal, tanks, filters, rock or gravel placement, standby pumps and/or generators, and other means.

EXECUTION

- The Contractor's dewatering operations shall not interfere with vehicle or pedestrian traffic. Under no circumstances shall dewatering water be allowed to flood streets or cause hazardous conditions for traffic. Dewatering pump noise shall be mitigated.
- Dewatering for structures and pipelines shall commence when groundwater is first encountered, and shall continue until water can be allowed to rise without affecting structures, piping, and other project features.
- 3. Site grading shall promote drainage. Surface runoff shall be diverted prior to it entering excavations to maintain the bottom of the excavation free from standing water.
- 4. Dewatering shall be conducted to preserve the undisturbed bearing capacity of the subgrade soils at the proposed bottom of excavation, filter soil particles and prevent loss of ground due to dispersion and erosion. Dewatering shall lower the water outside the excavation, if necessary to insure that seepage and migration of soil particles does not occur through openings in the shoring.
- 5. If subgrade soils are disturbed or loosened by the seepage or flow of water, the affected areas shall be excavated and replacement backfill placed in accordance with **Section 10-17 EXCAVATION, BEDDING, PIPE INSTALLATION, AND** BACKFILL.
- 6. The Contractor shall prevent pipeline and/or structure flotation by maintaining a positive and continuous removal of water.
- 7. If dewatering wells are used, they shall be adequately spaced to provide the required dewatering, and the Contractor shall use sand packing and/or other means to prevent pumping of soil particles (e.g., fine sand) from the subsurface. The Contractor shall continuously monitor the dewatering water discharge to ensure that subsurface soil is not being removed by the dewatering operation.
 - a. Dewatering wells placed outside of the excavation is prohibited.
- 8. The demobilization of dewatering operations shall be performed to allow groundwater to rise to its ambient (static) level without disturbing natural foundation soils or compacted backfill, and prevent flotation or movement of structures, pipelines, and sewers.
- 9. The Contractor is advised that it is possible that sand, silty sand and/or gravel strata inter-bedded with less permeable clay and silty clay materials varying in depth, thickness and location may exist in the project area. These potentially water-bearing strata may represent areas of increased trench dewatering difficulty. The Contractor shall carefully consider the possibility of encountering these strata, and plan dewatering operations accordingly.
- 10. The Contractor shall properly dispose of water in a legal manner without nuisance or damage to adjacent property. At the Contractor's option, the water may be disposed in the City's sanitary sewer collection system provided all of the following conditions are met:
 - a. The Contractor must acquire, complete, and submit a permit application to the City for approval. An approved permit will provide maximum allowable concentrations of pollutants and flow rate as well as approved time of discharge.
 - b. The Contractor shall provide and operate holding tanks, separators, screens, and/or filters as required to comply with the permit conditions.

- c. The Contractor shall test all groundwater prior to discharge to the sewer system to the satisfaction of the City. Tests shall be completed by a certified water quality laboratory. All costs shall be paid by the Contractor.
- d. A permit does not allow the Contractor to discharge water to the sewer system. The Contractor must obtain approval from both the Sausalito-Marin City Sanitary District and the Engineer prior to discharging water.

PAYMENT - Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

10-19 STORM DRAIN PIPE

The Contractor shall provide and place Storm Drain Pipe consistent with the requirements of Section 64 "Plastic Pipe" of the Standard Specifications.

1.01 SECTION INCLUDES

A. Specifications for site and subdrainage and area runoff collection system and connection to existing storm drainage system as indicated.

1.02 RELATED SECTIONS

- A. Section 10-17 Excavation, Bedding, Pipe Installation and Backfill
- B. Section 10-20 Utility Structures
- C. Section 64 "Plastic Pipe" of the Standard Specifications

1.03 REFERENCES

A. American Society of State Highway and Transportation Officials (AASHTO)

AASHTO Specification for Corrugated Polyethylene Pipe

M252M

AASHTO Specification for Corrugated Polyethylene Pipe, 300 1200 mm

M294M

B. American Society for Testing and Materials (ASTM)

ASTM F667 Standard Specification for Large Diameter Corrugated Polyethylene

Pipe and Fittings

ASTM F405 Standard Specification for Corrugated Polyethylene Pipe and Fittings

ASTM C76 Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer

Pipe

- C. Marin County Uniform Construction Standards May 2008
- D. Caltrans Standard Specifications Latest Edition

1.04 SUBMITTALS

A. Shop Drawings

Detailed drawings that indicate site drainage in plan and section, including relationship to other systems, interfaces, and drainage structures, connections, alignment, grade, bedding and backfill, and other pertinent data.

B. Product Data

Submit manufacturer's product data for pipe and pipe connection materials.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Pipe Connection Requirements

Ends of pipe shall be bell and spigot, except PVC Perp., to assure continuous alignment of pipe and leakproof joints.

B. Corrugated Metal Pipe (CMP)

Pipe: CMP shall conform to Section 66 of the Stated Standard Specifications.

C. High Density Polyethylene Pipe (HDPE)

Pipe: HDPE pipe conforming to ASTM D3212, or ASTM 1417 for pipe sizes four inch - 60 inch (ADS N-12 1B WT pipe or equivalent)

D. PVC Pipe (PVC)

Pipe: PVC Pipe shall conform to ASTM D-3034, SDR 26, Bell and Spigot rubber joints for pipe sizes 4" through 8". The fittings shall meet ASTM F 1336 and the Joint Gaskets shall be an Elastomeric seal meeting ASTM F 477.

E. PVC Perforated Pipe (PVC Perp)

Pipe: PVC Perforated Pipe shall conform to ASTM D-3034, SDR 26, solvent weld joints for pipe sizes 4", 6" and 8". Perforations shall be 2 rows of ½" holes on 5" centers, 120° apart.

PART 3 - EXECUTION

3.01 INSTALLATION OF PIPE

A. Laying Pipe

- 1. Lay pipe to line and grade indicated. Bell and spigot type, lay bells in cross-cuts cut in trench. Lay pipe with the bell or grooved end uphill.
- 2. Prevent dirt from getting into pipe joints.
- 3. Remove pipe which is cracked, checked, spalled, or damaged from the work.
- 4. Clean interior of pipe of cement, dirt, and extraneous matte as the work progresses.

B. Pipe Joints

- 1. Pipe joints shall be made secure and watertight.
- 2. Employ appropriate equipment to draw the sections of the pipe tightly together.

C. Visual Test Method

 Slowly pull a television camera through storm drain and inspect for visual leaks, separated joints and cracks in pipe and manholes. Repair leaks and joints. Replace cracked pipe. Re-inspect pipe. Submit tape of entire length of system to owner for approval.

D. Backfilling

- 1. Piping shall not be covered with backfill material, until inspected, and approved by the Engineer.
- 2. After making up pipe joints, fill space between pipe and sides of trench with backfill material half-way up the pipe. Both sides shall be filled for full width of trench at same time and carefully compacted so as to hold the pipe in its proper position.
- 11. 3. After pipe has been installed, inspected, and approved, place and compact backfill as specified in Section with **Section 10-17 EXCAVATION**, **BEDDING**, **PIPE INSTALLATION**, **AND BACKFILL**.

PAYMENT – The contract price paid per linear foot for "6" CMP Storm Drain Pipe" (Bid Item 120), 8" PVC Storm Drain Pipe" (Bid Item 121), "10" PVC Storm Drain Pipe" (Bid Item 122), "12" PVC Storm Drain Pipe" (Bid Item 123) and "15" PVC Storm Drain Pipe" (Bid Item 124), "24" PVC Storm Drain Pipe" (Bid Item 125) and "12" Trench Drain/Including Grate" (Bid Item 126), "Modified Type "A" Concrete lined Ditch Per UCS DWG. 290" (Bid Item 131) includes full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in saw cutting, pavement removal, excavation, disposal of unsuitable materials, bedding, placing pipe, backfilling, sidewalk replacement and restoring the surface complete and in place as shown as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefor.

10-20 UTILITY STRUCTURES

1.01 SECTION INCLUDES

- A. Specifications for the furnishing and installing of cast-in-place concrete and precast concrete structures for utilities as indicated.
- B. The work includes: Catch basins, manholes, head walls, trench drains, valve boxes, handholes, clean outs, pull boxes, vaults, covers and the related cast iron, aluminum and steel products required for gratings, ADA accessible gates, covers, and manhole steps and ladders, channel inserts, pulling eyes, and electrical grounding. Contractor to provide submittals for all products.

1.02 RELATED SECTIONS

- A. Section 10-3 Earthwork
- B. Section 10-18 De-watering
- C. Section 10-23 Aggregate Base

1.03 REFERENCES

A. American Society for Testing and Materials (ASTM)

ASTM A36/	Specification for Carbon Structural Steel
A36M	
ASTM A48	Specification for Gray Iron Castings
ASTM A108	Specifications for Steel Bars, Carbon, Cold Finished, Standard Quality
ASTM A123	Specifications for Zinc Coated (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A153 Specifications for Zinc Coating (Hot Dip) on Iron and Steel Hardware

ASTM A536	Specifications for Ductile Iron Castings
ASTM A563	Specification for Carbon and Alloy Steel Nuts
ASTM B3	Specification for Soft or Annealed Copper Wire
ASTM B26/	Specification for Aluminum-Alloy Sand Castings
B26M	
ASTM C33	Specification for Concrete Aggregates
ASTM C150	Specification for Portland Cement
ASTM C260	Specification for Air Entraining Admixtures for Concrete
ASTM C270	Specification for Mortar for Unit Masonry
ASTM C478	Specification for Precast Reinforced Concrete Manhole Sections
ASTM C618	Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete
ASTM C789	Specification for Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers
ASTM C850	Specification for Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 2 Feet of Cover Subjected to Highway Loadings
ASTM C858	Specification for Underground Precast Concrete Utility Structures
ASTM C891	Standard Practice for Installation of Underground Precast Concrete Utility Structures
ASTM F 436	Specification for Hardened Steel Washers

B. Underwriters Laboratories Inc. (UL)

UL 467 Grounding and Bonding Equipment

- C. Marin Municipal Water District Standard Specifications Latest Edition
- D. North Marin Water District Standard Specifications Latest Edition
- E. PG&E Standard Specifications Latest Edition

- F. SBC Standard Specifications Latest Edition
- G. Marin County Uniform Construction Standards May 2008
- H. California Uniform Plumbing Code Latest Edition
- I. Caltrans Standard Specifications and Drawings Latest Edition

1.04 SUBMITTALS

A. Shop Drawings

When not indicated on the Contract Drawings in sufficient detail or definition, submit detailed drawings of cast-in-place and precast concrete utility structures and related metal work.

B. Product Data

Submit manufacturer's product data for standard manufactured precast concrete utility boxes and structures and for metal gratings and covers and other related miscellaneous metal items.

C. Certification

Submit certification or other acceptable evidence that covers and grates to be provided for roadways and parking areas meet proof testing requirements for H20 loadings in accordance with Caltrans Bridge Design Specifications Manual, Section 3.

PART 2 - PRODUCTS

2.01 CAST-IN-PLACE CONCRETE STRUCTURES

A. Materials

1. Portland Cement

ASTM C150, Type II, low alkali.

2. Admixtures

- a. Air Entrainment: ASTM C260. Provide six percent air entrainment, plus or minus one percent.
- b. Pozzolan: ASTM C618, Class N. Provide pozzolan of 10 percent by weight of the cement content.

3. Aggregates

ASTM C33, fine aggregate and Size No. 67 (3/4 inch maximum size) coarse aggregate.

B. Mix Design

Incorporate the following requirements:

- 1. Concrete Strength: Class 4000 minimum
- 2. Maximum water-cement plus pozzolan ratio: 0.45.
- 3. Maximum slump: Four inches.

2.02 PRECAST CONCRETE STRUCTURES

A. General

The Contractor may provide precast concrete structures which conform to the general configuration, capacities, and inverts indicated.

B. Materials

Provide fine and coarse aggregates conforming to ASTM C33, in size commensurate with structure and reinforcement clearances.

C. Portland Cement Concrete

Class 4000 minimum Concrete may be polymer or latex modified to achieve higher strengths and denser concrete. Concrete shall not deteriorate from chemical attack of sanitary waste.

D. Precast Covers

Precast covers shall have the utility identification, such as "PG&E Gas Valve," stamped into the cover.

E. Quality Control

- 1. Quality Assurance and Control: The Engineer shall perform such inspections and tests as required to verify compliance with these Specifications.
- 2. Furnish samples of materials and their handling as needed by the Engineer for analyses of materials.

2.03 METAL COVERS, GRATES, AND INLETS

A. Ferrous Castings

1. Metal used in manufacture of castings shall conform to ASTM A48, Class 35B for Gray Iron, or ASTM A536, Grade 65-45-12 for Ductile Iron.

- 2. Castings shall be of uniform quality, free from blowholes, shrinkage, distortion or other defects. Castings shall be smooth and cleaned by shot blasting.
- 3. Minimum tensile strength shall be 35,000 psi.
- 4. Castings shall be manufactured true to pattern; component parts shall fit together in a satisfactory manner. Round frames and covers shall have continuously machined bearing surfaces to prevent rocking and rattling. Covers shall be of a type that overlaps box edges.
- 5. Where castings will be subjected to loads of H20 or greater, as indicated, provide ductile iron castings.

B. Aluminum Castings

Where required to reduce weights of larger covers for ease of handling, such covers may be manufactured of aluminum castings conforming to ASTM B26/B26M, Alloy No. 713.0. Minimum tensile strength shall be 32,000 psi. All covers with an opening four feet or larger shall be Bilco Type JAL-H20 or equivalent and shall have slip resistant surface (course) that meets ADA, NFPA, ASTM D-2047, F-1679 and C-1028. Coatings shall be Traxplate by Jensen or equivalent.

C. Manhole Covers

Provide cast, manufactured manhole covers and frames with heavy duty solid cover (lid) or vented cover (lid) as indicated. Covers shall be embossed or engraved with nonslip diamond or square cross-hatched pattern. Provide covers with embossed or engraved word identification, as indicated or appropriate, for the enclosed or underground utility.

D. Grates

Cast Ferrous Grates: Grates for area drains and catch basins shall be heavy duty, bicycle and high heel safe inlet grates and frames of size and configuration indicated. Grates in roadways and parking areas shall withstand H20 loadings when proof-tested in accordance with Caltrans Bridge Design Specifications Manual, Section 3.

E. Cast Iron Manhole Steps

Provide cast, manufactured manhole steps with cross-hatched treads and with anchor configuration appropriate for cast-in-place concrete or precast concrete as indicated. Provide steps for installation 16 inches on center in vertical alignment.

2.04 MISCELLANEOUS METAL

A. Requirements

Provide channel inserts, pulling eyes, ladders, and electrical grounding rods for electrical manholes and pull boxes as indicated.

B. Steel Materials

Standard structural sections, shapes, plates, bars, and rods, as indicated, conforming with ASTM A36/A36M. Bars conforming with ASTM 108 will be acceptable.

C. Anchors and Bolts

ASTM A 307, A449, A563, and F436, as applicable. Bolts and studs, nuts, and washers shall be hot-dip galvanized in accordance with ASTM A153.

D. Ladders

Provide standard manufactured or custom fabricated steel ladders as required to meet the conditions indicated. Steel ladders shall be hot-dip galvanized after fabrication.

E. Grounding and Bonding Materials

Conform with UL 467 and the following requirements:

- 1. Grounding Rods: Medium carbon steel core, copper-clad by the molten weld casting process, 3/4 inch diameter by 10 feet long size.
- 2. Bare Conductors: ASTM B3, No. 1/0 AWG, Class B stranded, annealed copper conductor.

F. Fabrication

Form and fabricate the work as indicated. Include anchors, fasteners, and accessories to anchor and secure the work in place.

G. Galvanizing

All items shall be galvanized after fabrication by the hot-dip process in accordance with ASTM A123. Weight of the zinc coating shall conform with the requirements specified under "Weight of Coating" in ASTM A123.

2.05 MORTAR

A. Cement mortar for the sealing of openings for pipe penetrations, for cementing of joints of component parts of precast structures, for providing of flow characteristics for the bottoms of drainage structures, and other features as indicated shall conform with the California Building Code, Chapter 21, Type S (without Lime), with a minimum compressive strength at 28 days of 1,800 psi.

- B. Mortar shall comply with applicable requirements of ASTM C270, including measurement, mixing, proportioning and water retention. Ten percent by volume of the cement content of the mortar shall be fly ash or pozzolanic material confirming with ASTM C618.
- C. Use mortar within 90 minutes after mixing. Discard mortar which has been mixed longer or which has begun to set. Retempering of mortar will not be permitted.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Requirements

Construct manholes, junction chambers, catch basins, curb and gutter inlets, trench drains, culverts, headwalls, wingwalls, pull boxes, utility boxes and vaults, and related utility structures in connection with the installation of pipe, conduits, ductbanks, and utility trenches, as indicated.

B. Excavation and Backfill

Provide excavation, prepared subgrade and aggregate base, and backfill as specified in Section 1-0-24 Excavation, Bedding, Pipe Installation, and Backfill.

C. Cast-In-Place Concrete Structures

Provide formwork, steel reinforcement, and concrete in accordance with applicable requirements of Section 10-28 - Cast-In-Place Concrete.

D. Precast Concrete Structures

Install as indicated. Comply with applicable requirements of ASTM C891. Provide such appurtenances and installation accessories, including cement mortar and sealants, as required for a complete installation.

E. Metal Components

Install manhole covers, grates and frames, curb and gutter inlets, metal steps, ladders, channel inserts, pulling eyes, and electrical grounding rods as indicated and in accordance with the respective manufacturer's instructions. Covers and grates in roadways, parking areas, and concrete walks shall be installed flush with adjacent, abutting pavement.

PAYMENT – The contract price paid per each for "48"X48" Storm Drain Inlet W/Side Opening" (Bid Item 128), Type "B" Head Wall Per UCS DWG. 280 (Bid Item 129), "Type "D" Storm Drain Catch Basin" Per UCS DWG. 240 (Bid Item 130) "Turning Structures (18"x18" and 24"x24")" (Bid Item 127) includes full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in installing drainage inlets and clean outs including saw cutting, pavement removal, excavation, disposal of unsuitable

materials, bedding, backfilling, and restoring the surface complete and in place as shown as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefor.

10-21 MINOR CONCRETE (FIELD GYM PAD)

Minor Concrete (Minor Concrete Structures) shall conform to the provisions of Sections 51-1.02 and 90-10, the Amendments to May 2006 Standard Specifications, Section 73, "Concrete Curbs and Sidewalks," Section 52, "Reinforcement," and applicable portions of the Uniform Construction Standards (May 2008) approved and adopted by the County of Marin and these Special Provisions. Removing existing concrete shall conform to Section 15-3, "Removing Concrete" of the Standard Specifications.

Minor concrete structures shall include headwalls, sidewalk, and as shown on the plans. Structure excavation and structure backfill incidental to minor concrete work shall be included in the price paid for minor concrete. Structure excavation and backfill shall comply with Section 19-3 of the Standard Specifications.

Concrete used shall be Class "B" concrete (except where otherwise indicated on the plans), shall contain a minimum of five (5) sacks of Portland Cement per cubic yard and shall have a 28-day compressive strength of at least 2,500 psi. Concrete for gym pad shall be 4000 psi. The aggregate grading shall be the local standard %-inch maximum plant mix as approved by the Engineer.

In lieu of the provisions in Section 73-1.04, "Fixed Forms," of the Standard Specifications, surfaced lumber of nominal dimension may be used for forming the back of the curb and gutter and the front face of the gutter, provided the complete curb and gutter are constructed to the full concrete dimensions shown on the plan.

All concrete shall receive a light broom finish.

New work adjacent to existing shall match the existing as closely as possible, except where shown on the plans.

Any damage caused by the Contractor to existing improvements shall be repaired or replaced by the Contractor at his expense.

Concrete shall be cured in accordance with applicable provisions of Section 90-7 of the Standard Specifications. Minor concrete which will be exposed to vehicular traffic shall be protected from bearing the traffic load for a minimum of seven (7) days after placement, unless stated otherwise herein. Traffic plates shall be of sufficient thickness so as not to deflect to or in any way mar the protected concrete.

Curing compound shall be used on all minor concrete surfaces. Application of curing compound shall be made in accordance with Section 90-7.01B, "Curing Compound Method," of the Standard Specifications. The quality and quantity to be used shall be approved by the Engineer. The liquid compound shall contain a coloring matter which does not permanently alter the natural color of the concrete, but which will color sufficiently at the time of application to indicate readily the areas covered. Where colored concrete is shown on the plans the color shall be determined by the City. The use of any membrane material which would impart a slippery surface to the concrete will not be permitted. The liquid shall be applied under pressure with a spray nozzle at the rate recommended by the manufacturer, unless otherwise directed by the Engineer, and in such manner as to cover the surface thoroughly. Care shall be exercised to avoid damage to the seal before the expiration of the curing period. Seal damage shall be immediately repaired by the application of additional membrane material over the damaged portion.

PAYMENT – The contract unit price per square foot paid for "Minor Concrete (Field Gym Pad, Side Walk)" (Bid Item No. 132), shall include all minor concrete used for the field gym pad and shall include full compensation for all the provisions of this section and for furnishing all labor, materials (including aggregate base rock), tools, equipment, and incidentals necessary to complete the work (including structure excavation and backfill, furnishing and placing and removing formwork and falsework, reinforcing steel, curing, and water testing) as shown on the plans and specified herein, for completing in place all the work involved in constructing these items, as shown on the plans and specified in the Standard Specifications and these Special Provisions, or as directed by the Engineer and no additional compensation will be allowed therefor.

10-22 CONCRETE FORMWORK

SECTION INCLUDES

- A. Forms
 - Metal forms
 - 2. Plywood forms
 - 3. Plywood forms
 - 4. Steel ties and or spreaders
- B. Wall Forms
 - 1. Exposed concrete surfaces
 - 2. Unexposed concrete surfaces
 - Sealant

REFERENCES

- A. ACI 301 Standard Specifications for Structural Concrete
- B. ACI 347 Guide to Formwork for Concrete
- C. APA PS-1 American Plywood Association Standard for Construction and Industrial Plywood

SUBMITTALS

- A. Product Data
- 1. Form release agent.

PRODUCTS

MATERIALS

- A. Except for metal forms, use new materials conforming to ACI 347.
- B. Materials may be reused during progress of work, provided they are completely cleaned and reconditioned, recoated for each use, and capable of producing formwork of required quality.
- C. For footings and foundations us Douglas fir boards or planks secured to wood or steel stakes, substantially constructed to shapes as indicated and to support required loads.
- D. For studs, walers and supports, use standard grade or better Douglas fir, dimensions as required to support loads but not less than two-inches x four-inches.
- E. Exposed Concrete Surfaces

- 1. Use 3/4-inch minimum thickness Douglas fir plywood, grade B/B, Class I or II, exterior, sanded both sides, complying with National Standard PS-1.
- 2. Seal edges and coat both faces with colorless coating that will not affect application of applied finishes.

F. Unexposed Concrete Surfaces

1. Use one-inch x six-inch minimum Douglas fir boards, surfaced one side and two edges, or 3/4-inch minimum thickness Douglas fir plywood, grade B/B plyform Class I or II, sanded both sides.

DESIGN FORMWORK

- A. Design, erect, support, brace and maintain formwork so that it will safely support vertical and lateral loads that might be applied, until such loads can be supported by concrete structure.
- B. Carry vertical and lateral loads to ground by formwork system and in-place construction that has attained strength for that purpose.
- C. Construct formwork so concrete members and structures are of correct size, shape alignment, elevation and position.
- D. Design forms and falsework to include assumed values of load, dead load, weight of moving equipment operated on formwork, concrete mix, height of concrete drop, vibrator frequency, ambient temperature, foundation pressures, stresses, lateral stability, and other factors pertinent to safety of structure during construction.
- E. Provide shores and struts during concrete operations, using wedges or jacks, or a combination thereof.
- F. Support form materials by structural members spaced sufficiently close to prevent objectionable deflection.
- G. Fit forms placed in successive units for continuous surfaces to accurate alignment, free from irregularities, and within allowable tolerances.
- H. Provide formwork, sufficiently tight to prevent leakage of cement paste during concrete placement. Solidly butt joints and provide backup material at joints as required to prevent leakage and prevent fins.

EXECUTION

FORMS

A. Construct forms complying with ACI 347 to exact sizes, shapes, lines and dimensions shown on the drawings, and as required to obtain accurate alignment, location, grades, and level and plumb Work in finished structure.

- B. Provide for offsets, recesses, chamfers, anchorages, inserts and other features as required.
- C. All reinforcing steel, anchor bolts, dowels, and inserts to be accurately placed and securely held in place prior to placing of concrete or grout.

FABRICATION

- A. Fabricate forms for easy removal without hammering or prying against concrete surfaces.
- B. Provide crush plates where stripping my damage cast concrete surfaces.
- C. Hold inner and outer forms for vertical concrete together with combination steel ties and spreaders.
- D. Space ties symmetrically in tiers and rows, each tier plum from top to bottom and each row level.
- E. For exposed concrete surfaces, provide form ties of removable type with she-bolts equipped with permanent plugs.

FORMS FOR EXPOSED CONCRETE

- A. Drill forms to suit ties being used, and to prevent leakage of cement paste around tie holes
- B. Do not splinter forms by driving ties through improperly prepared holes.
- C. Provide sharp, clean corners at intersecting planes, without visible edges or offsets.
- D. Back joints with extra studs or girts to maintain true, square intersections.
- E. Use extra studs, wales and bracing to prevent objectionable bowing of forms between studs, and to avoid bowed appearance in concrete.
- F. Do not use narrow strips of form material which will produce bow.

CORNER TREATMENT

- A. Unless shown otherwise, form chamfers with $\frac{1}{2}$ inch x $\frac{1}{2}$ inch strips, accurately formed and surfaced to produce uniformly straight lines and tight edges.
- B. Extend terminal edges to required limit, and miter chamfer strips at changes in direction.

FORM RELEASE AGENT

A. Coat form contact surfaces with form release agent compound before reinforcement is placed.

- B. Do not allow excess form release agent material to accumulate in forms or to come in contact with surfaces which will bond to fresh concrete.
- C. Apply form release agent material in strict accordance with its manufacturer's recommendations.

FORM REMOVAL

- A. Do not disturb or remove forms until concrete has hardened sufficiently to permit form removal with complete safety.
- B. Do not strip abutment forms in less than seven days.
- C. Do not remove shoring until member has acquired sufficient strength to support its own weight, load upon it, and added load of construction.

FINISHED SURFACES

- A. Exercise care in removing forms from finished concrete surfaces so that surfaces are not marred or gouged.
- B. Release sleeve nuts or clamps, and pull form ties neatly.
- C. Do not permit steel spreaders, form ties, or other metal to project from, or be visible on, any concrete surface except where indicated.
- D. Solidly pack form tie holes, rod holes, and similar holes in the concrete with approved grout.

PAYMENT – Full compensation for conforming to the provisions in this section shall be included in the contract unit price paid per square foot for "**Minor Concrete**" (**Bid Item 132**) which price shall include all labor, materials and equipment necessary to complete the work (including excavation, removal and disposal, subgrade preparation) as shown on the plans and specified herein

10-23 CLASS 2 AGGREGATE BASE

Class 2 Aggregate Base (Class 2 AB) shall conform to Section 26 of the Standard Specifications for ¾" Maximum Class 2 AB.

Spreading and compacting of a minimum 4 inches of Class 2 AB subgrade material shall be performed by methods that will produce a uniform base, firmly compacted, and free from pockets of coarse or fine material. Subgrade material shall be Class 2 AB in accordance with Section 26-1.02A of the Standard Specifications for ¾" maximum gradation (except where otherwise indicated on the plans) and compaction shall be moisture conditioned (if necessary) to above optimum moisture content and compacted to at least 95 percent relative compaction. The subgrade should not be allowed to dry out prior to pavement construction.

PAYMENT - Full compensation for conforming to the provisions in this section shall be included in the contract unit price paid per square foot for "5' Wide Asphalt Concrete Path" (Bid Item 106) and "5' Wide Vehicle Asphalt Concrete Path" (Bid Item 107) which price shall include all labor, materials and equipment necessary

to complete the work (including excavation, removal and disposal, subgrade preparation) as shown on the plans and specified herein.

10-24 4' WIDE X 1' DEEP AND 6' WIDE X 1.5' DEEP GRASS LINED SWALE

Grass lined swales shall be as shown on the plans and conform to Section 10-3 Earthwork, Section 10-10 Hydroseed-Erosion Control. Cobble stone shall be 3"- 4" nominal diameter.

Except as indicated on the Drawings or directed by the Engineer or designated representative, all trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the waterway. The waterway shall be excavated or shaped to line, grade, typical sections, and cross-section indicated on the Drawings and shall be free of bank projections or other irregularities, which could impede normal flow.

PAYMENT - Full compensation for conforming to the provisions in this section shall be included in the contract unit price paid per linear foot for "4' Wide X 1' Deep Grass Lined Swale" (Bid Item 133) and 6' Wide X 1.5' Deep Grass Lined Swale (Bid Item 134) which price shall include cobble stone, all labor, materials and equipment necessary to complete the work (including excavation, removal and disposal, subgrade preparation) as shown on the plans and specified herein.

10-25 CONTROLLED DENSITY FILL

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Portland cement
- B. Fly ash
- C. Air-entraining admixture
- D. Aggregate

1.02 RELATED SECTIONS

- A. Section 10-3 Earthwork.
- B. Section 10-17 Excavation Bedding, Pipe Installation, and Backfill.

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM C33 Specification for Concrete Aggregates

2.	ASTM C94 –	Specification for Read	v-Mixed Concrete
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- 3. ASTM C150 Specification for Portland Cement
- 4. ASTM C231 Test Method for Air Content of Freshly Mixed

Concrete by the Pressure Method

5. ASTM C260 – Specification for Air-Entraining Admixtures for

Concrete

6. ASTM C618 – Specification for Fly Ash and Raw or Calcined

Natural Pozzolan for use as a Mineral Admixture in Portland

Cement Concrete

1.04 **DEFINITION**

A. Controlled density fill (CDF) is a flowable mixture of aggregate and cementitious material containing sufficient Portland cement to develop a 28-day compressive strength of between 50 and 150 psi, that self compacts upon backfill placement.

1.05 SUBMITTALS

- A. Mix Design. Submit controlled density fill mix design in accordance with applicable requirements of Section 10-21 Minor Concrete.
- B. Test Sample. Provide test sample in accordance with applicable requirements of ASTM C231.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Portland Cement: ASTM C150, Type I or Type II.
- B. Fly Ash: ASTM C618, Class F. Fly ash shall not inhibit air entrainment.
- C. Air-Entraining Admixture: ASTM C260.
- D. Aggregate: ASTM C33, graded aggregate, maximum size of 3/8-inch.
- E. Water: Potable

2.02 MIX DESIGN

- A. Requirements. Controlled density fill shall be composed of cementitious materials, aggregate, water, and an air-entraining admixture, as follows:
 - Cementitious materials shall be Portland cement in combination with fly ash.
 - 2. Admixture shall be an air-entraining agent.
- B. Aggregate Content. CDF mixture shall contain no aggregate larger than 3/8-inch. Amount passing a No. 200 sieve shall not exceed 12 percent. No plastic fines shall be present.
- C. Air Content. Total calculated air content of the sample, prepared in accordance with ASTM C231, shall not exceed 30 percent.
- D. Strength. Controlled density fill shall have an unconfined compressive strength at 28 days of 50 psi to a maximum of 150 psi.

PART 3 - EXECUTION

3.01 MIXING AND DELIVERY

A. Controlled density fill shall be batched at a ready mixed plant and shall be mixed and delivered to the work site by transit mixing trucks, in accordance with ASTM C94.

3.02 INSTALLATION

- A. Controlled density fill material shall be placed in the excavations and trenches to be backfilled to the indicated elevations in level layers. Do not perform any vibratory consolidation or compaction.
- B. Equipment and traffic shall not be permitted on the controlled density fill until the surface of the CDF will withstand the weight of the equipment and traffic without displacement or damage.
- C. Provide steel trench plates to span trenches where required to provide passage for vehicles and other equipment.

PAYMENT - Full compensation for conforming to the provisions in this section shall be included in the contract unit price paid per linear foot for "12" PVC Storm Drain Pipe" (Bid Item 123) and "15" PVC Storm Drain Pipe" (Bid Item 124), which price shall include, all labor, materials and equipment necessary to complete the work (including excavation, removal and disposal, subgrade preparation) as shown on the plans and specified herein.

10-26 SOD AND SEED

1.0 General Conditions

1.1 Scope of Work

1.2 Submittals 1.3 Soil Testing 1.4 Workmanship 2.0 Products 2.1 Quality Assurance 2.2 Organic Matter 2.3 Topsoil 2.4 Fertilizer 2.5 Lime 3.0 Soil Preparation 3.1 Subgrade Soil Preparation 3.2 Final Grade Soil Preparation With Compost 3.3 Final Grade Preparation With Topsoil 3.4 Finish Grade 4.0 Sod: Products and Procedures 4.1 Scope of Work 4.2 Products 4.3 Installation Procedures for Sod 4.4 Acceptance 4.5 Maintenance 4.6 Disclaimer

4.7 Guarantee

5.0 Seeding: Products and Procedures

- 5.1 Scope of Work
- 5.2 Products
- 5.3 Installation Procedures for Seed
- 5.4 Cleanup
- 5.5 Acceptance
- 5.6 Maintenance
- 5.7 Guarantee
- 5.8 Disclaimer
- 6.0 Crown Vetch

1.0 General Conditions

1.1 Scope of Work

- A. The landscape contractor shall furnish all labor, material, and equipment required to complete the work described herein in strict accordance with the drawings and/or terms of the contract. All previously established grades shall be in conformance with the drawings and/or other specifications.
- B. It is recommended that the landscape contractor have Landscape Industry Certified Technicians— Exterior on staff and performing the work whenever possible.
- C. The landscape contractor shall be familiar with the project premises and how the existing conditions will affect his/her work.

1.2 Submittals

When requested by the City Representative or City Representative's representative, samples of all materials shall be submitted to the City Representative's designated representative for approval.

1.3 Soil Testing

After rough grading has occurred a soil test shall be made to determine soil texture, pH, magnesium, phosphorus and potassium. Additional tests for soluble salts and organic matter should also be made. Soil tests shall be conducted by a certified laboratory or recognized commercial laboratory. The landscape contractor shall perform one (1) soil test using a representative sample of on-site soils. If existing soil has been undisturbed

and is suitable as determined by soil test, no additional amendments are required. If the City Representative does not accept the soil test results as submitted by the landscape contractor, the City Representative is accepting full responsibility and thereby voids the landscape contractor's guarantee. Adjustments should be made based on soil test results. Acceptable Soil Test Results pH range Bluegrass 6.0–7.0, Fescues 5.5–7.0 Organic matter >1.5% Magnesium - Mg 35 pounds per acre Phosphorus - P2O5 100 pounds per acre Potassium - K2O 85 pounds per acre Soluble salts not to exceed 900 ppm

1.4 Workmanship

- A. During sodding/seeding, all areas shall be kept neat and clean and precautions shall be taken to avoid damage to existing plants, turf and structures.
- B. Upon completion, all debris and waste material resulting from sodding/seeding operations shall be removed from the project and the area cleaned up.
- C. Any damaged areas caused by the landscape contractor shall be restored to their original condition.

2.0 Products

2.1 Quality Assurance

Manufacturers' certified analyses shall accompany packaged standard products.

2.2 Organic Matter

- A. Organic compost: Screened and free of trash.
 - 3. Amount/type of compost shall be based on soil fertility report results.
 - 4. Provide compost sample to City Representative and Landscape Architect

2.3 Topsoil

- A. Topsoil shall meet acceptable soil test levels as specified in the Soils Specification. A certificate of soil test analysis must be submitted to the landscape architect and City Representative for approval before any topsoil is delivered to the project.
- B. Topsoil installed on grade shall attempt to match requirements outlined in the Geotechnical report (by Miller Pacific) under the "Site Preparation and grading" section.
- C. Topsoil shall be free of stones, lumps, plants, roots, and other debris over 11/2". Topsoil must also be free of weeds or plant parts.
- D. Topsoil shall not contain toxic substances harmful to plant growth (e.g., pesticide residues).

2.4 Fertilizer

All fertilizers shall be uniform in composition, free flowing, and suitable for application with approved equipment. Fertilizers shall be delivered to the site fully labeled according to applicable state fertilizer laws and shall bear the name, trade name, or trademark and warranty of the producer. Applications shall be determined by soil test recommendations.

2.5 Lime

Lime material shall be ground or pulverized limestone that contains at least 50% total oxides (i.e., calcium oxide plus magnesium oxide). Limestone shall be ground to a fineness such that at least 50% will pass through a 100-mesh sieve and 98 to 100% will pass through a 20-mesh sieve. Granular or pelletized lime may be used, but it must follow the same specifications as above prior to being granulated or pelletized. Applications shall be determined by soil test recommendations.

3.0 Soil Preparation

3.1 Subgrade Soil Preparation

- A. General conditions: Work shall proceed only after rough grading has been completed and the subgrade is within 2/10 of 1' (i.e., 2.4") from final subgrade. If the graded area develops volunteer weed growth, the growth must be eliminated at the expense of the general contractor or the City Representative.
- B. Grades: Grades that have been previously established in conformance with the drawings and/or other applicable specifications shall be maintained in a true and even grade.
- C. Liming: Limestone shall be spread based on soil test recommendations. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with an expanded tillage operation, as described in paragraph D, which follows.

3.2 Final Grade Soil Preparation With Compost

This specification applies only when compost is used to amend existing subsoil to make it suitable for sod or for sowing seed. The use of compost shall be noted in the contract agreement.

- A. General conditions: The areas to which these specifications apply shall be clearly indicated on the drawings or as otherwise specified. The landscape contractor shall furnish equipment, labor, and materials necessary for preparing the specified areas. Work shall proceed only after the subgrade is within 1" of final grade.
- B. Grades: Grades in the specified area shall conform to the drawings and/or other applicable specifications and shall be maintained true and even.
- C. Applying compost: The compost shall be uniformly applied at a level determined by soils analysis or for the purpose of bidding 5 cubic yards per 1000 square feet,. This level of application will provide adequate nutrients to supply the needs of the plants through the first growing seasons.
- D. Tilling: As soon as the compost has been applied, it shall be incorporated into the top 8" of soil by either roto-tilling or cross disking.

3.3 Final Grade Preparation With Topsoil

- A. General conditions: The areas to which these specifications apply shall be clearly indicated on the drawings or as otherwise specified. The landscape contractor shall furnish equipment, labor, and materials necessary for preparing the specified areas. Work shall proceed upon acceptance of the subgrade by the landscape architect or the City Representative.
- B. Grades: Grades in the specified area shall conform to the drawings and/or other applicable specifications and shall be maintained true and even.
- C. Materials: Topsoil shall be as stated in section 2.3 (Topsoil) in this guideline. Topsoil on the existing site may be used but must meet standards.
- D. Topsoil installation: Topsoil shall be uniformly distributed on the designated areas to meet final grades. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be placed while in a muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or seeding.
- E. Fertilizer: Fertilizer application rates shall be determined by topsoil test recommendations.
- F. Liming: Liming shall be based on topsoil test recommendations.
- G. Tilling: If 3" or less of topsoil is added to the site, it must be incorporated into the subgrade by tilling. All amendments must be incorporated to at least a 8" depth.

3.4 Finish Grade

- A. General conditions: The landscape contractor shall proceed only after the topsoil or subsoil has been prepared uniformly in the designated areas to within 1/4 of 1". Any undulations or irregularities in the surface resulting from fertilizing, liming, tilling, or other causes shall be leveled prior to sodding or seeding.
- B. Prior to sodding or seeding, the surface shall be cleared of all trash, debris, and stones larger than 11/2" in diameter or length, and of all roots, brush, wire, grade stakes and other objects that would interfere with sodding or seeding.

4.0 Sod: Products and Procedures

4.1 Scope of Work

The landscape contractor shall furnish all labor, material, and equipment required to complete the work described herein in strict accordance with the drawings and/or terms of the contract. All previously established grades shall be in conformance with the drawings and/or other specifications.

4.2 Products

A. Classes of California turfgrass sod:

1. State-certified sod (labeled) Certified turfgrass sod is a superior product grown from an approved mixture of certified seed. The mixture is made up of individual varieties that have been evaluated for at least five years at up to eight different locations throughout California and are readily available in certified form. The mixture is evaluated, mixed, tagged and sealed under the supervision of the California Department of Agriculture. One label is required by law on each and every load of sod, regardless of size. The purchaser should require a "certified" label upon delivery.

B. Specifications for sod materials

- 1. Class and composition: Class of turfgrass sod shall be turf-type tall fescue creeping bentgrass, Kentucky bluegrass, or Zoysiagrass.
- 2. Thickness of cut: Sod shall be machine cut at a uniform soil thickness of 1/2", plus or minus 1/4", at the time of cutting. Measurement for thickness shall exclude top growth and thatch.
- 3. Pad size: Individual pieces of sod shall be cut to the supplier's standard width and length. Maximum allowable deviation from standard widths and lengths shall be 5%. Broken pads and torn or uneven ends will not be acceptable.
- 4. Strength of sod sections: Under ideal conditions, standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically from a firm grasp on the upper 10% of the section. NOTE: Younger tall fescue will not be strong enough to pass this test but is still okay to use.
- 5. Sod viability: Sod shall not be harvested or transplanted under drought conditions.
- 6. Time limitations: Under optimal conditions, sod shall be harvested, delivered and installed within a period of 36 hours. Because sod is a perishable commodity, however, if high temperatures and low moisture extremes occur, its viability declines and installation should occur within 24 hours from harvest. Sod not transplanted within this period shall be inspected and approved or rejected by the City Representative, City Representative's representative, or general contractor prior to installation.

4.3 Installation Procedures for Sod

- A. Site approval: The landscape contractor shall inspect the site to approve final grading and preparation prior to installing the sod.
- B. Moistening the soil: During periods of high temperature, lightly irrigate the soil immediately prior to laying the sod.
- C. Starter strip: The first row of sod shall be laid in a straight line, with subsequent rows placed parallel to and tightly against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Care shall be exercised to ensure that the sod is not stretched or overlapped and that all joints are butted tightly in order to prevent voids, which would cause air-drying of the roots.

- D. Sloping terrain: On sloping terrain where erosion may be a problem, sod should be installed perpendicular to the slope when possible, with staggered joints and secured by sod staples driven to ground level. If staples remain above ground level during sod establishment, either remove or drive to ground level once sod is rooted.
- E. Watering and rolling: The landscape contractor shall lightly water sod during installation to prevent excessive drying. As sodding is completed in any one section, the entire area shall be rolled. It shall then be thoroughly irrigated so that the underside of the new sod pad and soil immediately below the sod are thoroughly wet. The general contractor shall be responsible for having adequate water available at the site prior to and during sod installation, unless otherwise stated.

4.4 Acceptance

Acceptance of the installed sod shall be made by the landscape architect, or City Representative within 24 hours of completion of an area or section. After acceptance, the City Representative is responsible for follow-up maintenance.

4.5 Maintenance

A. Upon acceptance, maintenance becomes the responsibility of the City unless otherwise specified in the contract.

B. Watering

- 1. First week: Sod shall be kept moist at all times. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary and in sufficient quantities to maintain moist soil to a depth of at least 2".
- 2. Second and subsequent weeks: Water the sod as required maintaining adequate moisture in the upper 4" of soil to promote deep root growth. Once sod is well rooted, less frequent, deep watering should be maintained to encourage deep root growth. The total should equal the equivalent of at least 1" of water per week. This can be accomplished through a combination of rainfall and irrigation.

C. Mowing

- 1. The first mowing shall be as soon as top growth warrants it. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings.
- 2. Grass height shall be maintained at 2" to 3" for Kentucky bluegrass and 2-1/2" to 31/2/" for tall fescue.

4.6 Disclaimer

The landscape contractor shall not be held liable for damages incurred to sod caused by deicing compounds, fertilizer, pesticides, other unauthorized chemical applications, vandalism, and/or acts of God.

4.7 Guarantee

The landscape contractor shall guarantee that all installed sod shall be approved sod, or sod that exceeds the standards for state certified and state approved sod, as approved by the City Representative. All sod shall be uniform in color and reasonably free of visible imperfections at acceptance. The landscape contractor shall guarantee the establishment of the sod, only if adequate watering by the contractor has been approved by the City Representative.

5.0 Seeding: Products and Procedures

5.1 Scope of Work

The landscape contractor shall furnish all labor, material, and equipment required to complete the work described herein in strict accordance with the drawings and/or terms of the contract. All previously established grades shall be in conformance with the drawings and/or other specifications.

5.2 Products

A. Mulching materials

- 1. Straw shall be free of rot, mildew, and noxious weed seeds and shall be a small grain, such as wheat, barley, or oats.
- 2. Wood cellulose fiber mulch shall consist of specially prepared cellulose processed into a uniform fibrous physical state. The fiber mulch, including dye, shall contain no germination or growth-inhibiting factors. The mulch material shall be manufactured and processed in such a manner that the cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer, and other additives to form a homogeneous slurry. The mulch shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
- 3. Wood fiber hydraulic mulch products shall consist of specially prepared wood that has been processed to a uniform fibrous state, and shall be packaged for sale as a hydraulic mulch for use with hydraulic seeding equipment. The wood fibers of wood fiber hydraulic mulch products shall have a length of approximately 0.5" and a diameter of approximately 0.0625". The wood fibers shall be dyed green, or the wood fiber hydraulic mulch product shall be mixed with a dye in a separate operation that will provide appropriate color to aid visual inspection of the material when it is spread. Wood fiber hydraulic mulch products shall have a pH range of pH 4.0 to 8.5, and an ash content that shall not exceed 7% of the product by weight. It shall contain no materials or chemicals in concentrations that inhibit the germination or growth of grasses, forbs, meadow flowers, or other seedlings when they are applied according to the manufacturer's label directions. It shall be capable of remaining in suspension with water under agitation, so that such products shall readily blend with seed, fertilizer, and limestone to form a uniform slurry.

B. Stabilizing materials

1. A mulch-anchoring tool is a tractor-drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2".

- 2. Cellulose fiber may be used for anchoring straw. The fiber binding shall be applied at a net dry weight of 750 pounds per acre. The cellulose fiber may be mixed with water. The mixture shall contain a maximum of 50 pounds of cellulose fiber per 100 gallons of water, or refer to manufacturer's recommended rates.
- 3. Wood fiber hydraulic mulch products shall consist of specially prepared wood that has been processed to a uniform fibrous state. The wood fibers of wood fiber hydraulic mulch products shall have a length of approximately 0.5" and a diameter of approximately 0.0625". It shall contain no materials or chemicals in concentrations that inhibit the germination or growth of grasses, forbs, meadow flowers, or other seedlings when they are applied according to the manufacturer's label directions. It shall be capable of remaining in suspension with water under agitation so that such products shall readily blend with seed, fertilizer, and limestone to form a uniform slurry.
- 4. Liquid mulch binders should be applied more heavily at the edges, where wind catches the mulch.
- 5. Lightweight plastic netting should be staked over the mulch according to manufacturer's recommendations. It is recommended that stakes be driven to ground level or removed once seed is established.

C. Seed mix

1. Seed mix and seed mix provider shall be presented to City Representative prior to installation.

5.4 Installation Procedures for Seed

One of the two following methods shall be used for seeding after final soil preparation has been completed. The regular seeding seasons are March 1 to May 15 and September 15 to November 15. Establishment is not guaranteed when the seeding is done out of season. No seeding shall be done when the temperature is 32° F or lower. Optimum seeding time is October.

A. Dry application

- 1. Seed installation
- a. Cultipacker seeder: This method applies seed just below soil surface and covers the seed in a single operation. Seed should be applied within the top 1/4" of the soil in two different directions for best results.
- b. Drop-type/broadcast spreader: Apply seed within the top 1/4" of the soil in two directions for best results. To improve soil/seed contact, use a landscape rake to make one pass over the seed bed.
- 2. Mulching: Apply mulching material to retain moisture and minimize erosion. Rate for cellulose fiber: 1,500 pounds per acre. Rate for straw: 1/2" to 1" thick layer or 60 to 80 bales per acre.

- 3. Stabilizing: Stabilize the mulch by using a mulch anchoring tool, cellulose fiber, liquid mulch binders, or mulch netting.
- B. Hydro-seeding: Two methods can be used. The first method gives the best results.
 - 1. Water, seed, and fertilizer method: The mixture shall be sprayed on the previously prepared seedbed in the form of an aqueous mixture. All mixtures shall be constantly agitated from the time they are mixed until they are finally applied to the seedbed. If the fertilizer is mixed into the slurry, no more than 30 minutes should lapse before it is applied to prevent the fertilizer from burning the seed. Care shall be exercised to ensure uniform coverage. Straw shall be applied by hand or with a straw blower and stabilized. The same rates and procedures shall be followed as detailed for dry application in A above.
 - 2. Seed, fertilizer, water, and cellulose fiber method: The application procedure for this method is the same as for the first method above. The rate of cellulose fiber is 50 pounds per 100 gallons of water. Follow manufacturer's recommended rates.

5.5 Cleanup

Excess and waste material shall be removed daily. All pavements shall be left broom cleaned, and all damaged areas in existing turf shall be restored to their original condition. Responsibilities should be based on contractual agreements.

5.6 Acceptance

Acceptance of the seed installation shall be made by the City Representative or landscape architect, or upon completion of an area or section. After acceptance, the City Representative is responsible for follow-up maintenance.

5.7 Maintenance

- A. Upon acceptance, maintenance becomes the responsibility of the City Representative, unless otherwise specified in the contract.
- B. Watering: During the first two to three weeks, the seed shall be kept moist at all times to allow for germination. In the absence of adequate rainfall, light, frequent watering shall be performed to keep the seedbed moist.

PAYMENT - Full compensation for conforming to the provisions in this section shall be included in the contract unit price paid per square foot for "Landscape - Finish Grading Soil Prep" (Bid Item 108), "Install Turf Seed, Topdress" (Bid Item 109), "Bio Swale Planting — Hyrdoseed" (Bid Item 110), "Install Mulch" (Bid Item 111), and the lump Sum price paid for "Baseball Field - Skinned Field, Mound and Bases" (Bid Item 112) which price shall include 90 day planting and maintenance, and all labor, materials, equipment and incidentals necessary to complete the work including soil preparation and amendments, and as shown on the Plans and specified herein. If the Engineer determines the ground cover square footage shall be increased, then work shall be paid at the bid unit price.

10-27 IRRIGATION

1.0 General Conditions

- 1.1 Scope of Work
- 1.2 Standards
- 1.3 Quality Assurance
- 1.4 Submittals
- 1.5 Approvals.
- 1.6 Substitutions
- 1.7 Existing Utilities
- 1.8 Concealed Contingencies
- 1.9 Water Supply
- 1.10 Primary Electrical Supply
- 1.11 Product Handling
- 1.12 Workmanship
- 1.13 Inspection and Acceptance
- 1.14 Guarantee
- 1.15 Maintenance
- 1.16 Record Drawings

2.0 Materials

- 2.1 General Conditions
- 2.2 Copper Pipe and Fittings
- 2.3 Brass Pipe and Fittings
- 2.4 Plastic Pipe, Fittings, and Adhesives
- 2.5 Valves
- 2.6 Sprinkler Heads
- 2.7 Water Conservation Devices
- 2.8 Wire
- 2.9 Controller
- 2.10 Sleeves
- 2.11 Backflow Devices
- 2.12 Drip Components
- 2.13 umps

3.0 Execution

- 3.1 Site Reviews
- 3.2 Utility Services
- 3.3 System Layout
- 3.4 Pipe Installation
- 3.5 Trenching

- 3.6 Backfill
- 3.7 Existing Pavements
- 3.8 Automatic Valves and Valve Boxes
- 3.9 Control Wiring
- 3.10 Sprinkler Heads
- 3.11 Quick-Coupling Valves
- 3.12 Drain Valves
- 3.13 Drip Irrigation
- 3.14 Sleeves
- 3.15 Controller
- 3.16 Sensor Devices
- 3.17 System Flushing
- 3.18 Pressure Tests
- 3.19 Adjustment
- 3.20 Coverage Test
- 3.21 Operating and Maintenance Tools
- 3.22 Cleanup

1.0 General Conditions

1.1 Scope of Work

- A. The intent of this specification is to define contractor/owner responsibilities and specify minimum standards for materials and workmanship.
- B. Irrigation layout/design shall meet the following parameters:
 - 1. Head to head spacing to ensure 100% coverage.
 - 2. Matched precipitation rates within a zone.
 - 3. Pipe sized to stay at or below 5 feet per second.
 - 4. Separation of zones by different types of plant material (e.g., turf, trees and shrubs, annuals).
- C. Furnish all labor and materials, appliances, tools, equipment, facilities, transportation, and services necessary for and incidental to perform all operations in connection with the installation of the irrigation system.
- D. All local, municipal, and state laws, rules, and regulations governing or relating to any portion of this work are hereby incorporated into and made a part of these specifications.
- E. Work noted "N.I.C.," "existing," or "to be supplied and/or installed by others" is not part of this section.

- F. Due to the scale of drawings, it is not possible to indicate all offsets, fittings, sleeves, and other materials that might be required. The drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation system, planting and architectural features. Work called for on the drawings by notes or details shall be furnished and installed whether or not specifically called out in the written specifications.
- G. If discrepancies exist between drawings and specifications, and no specific interpretation is issued prior to bidding, the decision regarding any interpretation will rest with the City's representative. The contractor is to act on this decision as directed. In the event that the installation deviates from the direction given, it shall be corrected at the contractor's expense.

1.2 Standards

- A. The contractor shall obtain and pay for all permits and inspections required by outside agencies.
- B. All materials shall meet minimum industry standards.
- C. The system shall be installed as per manufacturer's recommendations by qualified, trained personnel.

1.3 Quality Assurance

- A. Commercial Projects
 - 1. The company engaged in the project must have three years of experience with projects of similar size and scope.
 - 2. The company must employ at least one full-time individual who maintains a current Certified Irrigation Contractor designation by the Irrigation Association.

1.4 Submittals

- A. For commercial projects, prior to the start of installation, the contractor shall submit for approval to the owner or City's representative a materials list indicating the name of the manufacturer, model numbers, and performance data for the following:
 - 1. Sprinkler heads
 - 2. Valves and valve boxes
 - 3. Controllers and appurtenances
 - 4. Pumps

- 5. Backflow
- 6. Drip equipment
- 7. Wire and electrical connection waterproofing method and materials
- 8. Grounding equipment
- 9. Pipe and fittings
- 10. Water harvesting and storage components (prefilters, post-filters, storage vessels and associated control systems)
- B. At completion of the installation, the contractor shall submit a minimum of four (4) individually bound copies or a PDF file of the irrigation system Operation and Maintenance Instructions, including a materials list, "As-Built" drawing, suggested operating schedule, seasonal shut-down procedures, and the name and phone number of the installing contractor.

1.5 Approvals

All approvals shall be in writing from the owner or City's representative prior to installation.

1.6 Substitutions

It is the contractor's responsibility to make every reasonable effort to use the material specified by the designer. The contractor may offer substitutions to the City's representative for consideration.

1.7 Existing Utilities

- A. Prior to excavation, the contractor shall notify utility companies in accordance with local codes and ordinances (811 Call before you dig).
- B. The contractor shall immediately notify appropriate utility of any inadvertent damage caused by the contractor's operation.
- C. The contractor shall not be responsible for "private utilities" unless accurate as-built drawings are supplied prior to the commencement of work.

1.8 Concealed Contingencies

The contractor shall not be liable for additional excavation expenses resulting from undisclosed subsurface conditions, such as, but not limited to, rock, water, clay pan, soils contaminated with toxic substances, or other obstacles encountered in excavation work that are not apparent at the time of estimating.

1.9 Water Supply

- A. The location and size of the water supply shall be as per the drawing and installed in accordance with all applicable codes and ordinances.
- B. All aboveground piping shall be copper (see section 2.3 in this guideline).
- C. Copper piping shall terminate and transition to PVC with a copper female adapter and a schedule 80 PVC nipple. Copper male threaded connections are not acceptable.

1.10 Primary Electrical Supply

- A. Unless noted on the drawing, the primary electrical source shall be a 120V AC, single-phase circuit.
- B. Electrical circuits required for additional devices shall be noted by the contractor in the drawings and contract documents.

1.11 Product Handling

- A. Materials used in the system shall be new and unused.
- B. Store materials at a location directed by the City's representative. Store materials in an orderly manner and avoid interference with other construction activities.
- C. Protect all materials to prevent the intrusion of dirt and moisture.

1.12 Workmanship

- A. During delivery and installation, the contractor shall perform in a workmanlike, professional manner, coordinating installation activities so as not to interfere unduly with the work of other trades on site.
- B. During installation, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing plants, turf, and structures. The contractor shall notify the owner in writing of potential damage to all trees and other plant material that may be destroyed or damaged beyond repair during construction. Such notice shall relieve the contractor of responsibility for said damage. Failure to notify the owner of potential damage may make the contractor liable for tree and plant replacements. Replacements shall be included in the one-year warranty.
- C. The contractor shall park all employee or company vehicles only in areas designated by the City's representative.

1.13 Inspection and Acceptance

- A. Inspection: There should be a verification of performance for work by contract documents, to be conducted by the architect or City's representative on site and in the presence of the irrigation contractor, for the purpose of acceptance. Inspection shall be made within two (2) weeks of written notification from the irrigation contractor. Failure of the owner to inspect the work shall void the guarantee. During inspection for initial acceptance, the irrigation contractor should have an acceptance form to be signed by the owner or City's representative.
- B. Initial Acceptance: The approval of work inspected. Acceptance can be on partially completed work under the contract, if approved by the landscape architect or City's representative. If, for reasons beyond the irrigation contractor's control, work has stopped, inspection shall be made on partially completed work. The warranty period shall begin after inspection and acceptance. Maintenance after initial inspection and acceptance shall be the responsibility of the owner, unless an optional service contract has been specified.

1.14 Guarantee

- A. The contractor shall guarantee all labor, workmanship, materials, fixtures, and equipment covered by the contract documents to be free of defects for a period of one (1) year from the date of substantial completion and acceptance of the project. The contractor shall replace any part(s) found to be defective within the period of the guarantee at no cost to the owner, except repairs or replacement necessitated by damage by others.
- B. Backfilling of all excavation shall be guaranteed. If, at any time during the one year guarantee period, trenches should settle, the contractor shall repair any settling at no cost to the owner.

1.15 Maintenance

- During the warranty period, the installing contractor must perform all maintenance of the system. Unless called out in the contract, maintenance of the system shall be addressed under a separate contract. Negligence on the City's part to properly maintain the system or service to the system by another contractor may be used as grounds to void all warranties.
- A. Periodic maintenance may be scheduled throughout the season to verify the proper operation of the system and to maintain the warranty within the warranty period. Maintenance shall include inspection and realignment of all heads, operational check/test of each zone for proper operation, and inspection and adjustment of controller and run times. A written report of work completed and/or necessary repairs and recommended modifications shall be provided after each service.

1.16 Record Drawings

- A. The owner shall provide an electronic copy of the landscape plan as a PDF.
- B. The contractor shall, during the progress of work, keep an accurate daily record of all changes and corrections to contract drawings.

- C. "As –Built drawings" shall indicate point of connection; control valve wire routing paths; controller location; electric, isolation, drain, and quick coupling valves; piping; and sleeves. For twowire systems, locations of switches, decoders, and surge arrestors shall be noted.
- D. Accurately locate all dimensions from a minimum of two permanent reference points (buildings, monuments, sidewalks, curbs or pavements). Do not use these prints for any other purpose.
- E. When record drawings have been approved by the City's representative, the contractor shall provide drawings as an electronic PDF. The quality and presentation of the completed reproducible shall be acceptable to the City's representative.
- F. The irrigation legend must be changed to accurately reflect the irrigation equipment installed, if such equipment is not the same as originally specified.

2.0 Materials

2.1 General Conditions

The materials chosen for incorporation in the irrigation system may have been recommended by a specific manufacturer to enable the owner to establish the level of quality and performance desired. Substitution of equipment of another manufacturer may be allowed only after submittal to and approval by, the owner or City's representative. Refer to section 1.7 (Existing Utilities) in this guideline.

2.2 Copper Pipe and Fittings

- A. Pipe: Minimum Type "L".
- B. Fittings: Wrought or cast copper, soldered, flared, or threaded joint type.
- C. Joints shall be soldered in accordance with current NSF (National Sanitation Foundation) standards.

2.3 Brass Pipe and Fittings

- A. Brass pipe shall be 85% red brass, American National Standard Institute (ANSI), schedule 40 threaded pipe.
- B. Fittings shall be medium brass, threaded 125 pound class.

2.4 Plastic Pipe, Fittings, and Adhesives

- A. PVC Pipe and Fittings: Manufactured from virgin polyvinyl chloride compound in accordance with ASTM D 2241 and ASTM D 1784.
 - 1. Identify all pipe with the following indelible markings:

- a. Name of manufacturer.
- b. Nominal pipe size.
- c. Schedule or class.
- d. Pressure ratings psi.
- e. NSF seal of approval.
- f. Date of extrusion.
- 2. Minimum class or schedule
 - a. 1/2", schedule 40.
 - b. 3/4" +, schedule 40.
- 3. Sizing a. Maximum velocity in pipe shall be 5 feet per second.
- 4. Pipe type
 - a. 2½" and smaller shall be bell ended, solvent weld.
 - b. 3" and larger shall be gasket joint.
- 5. Fittings:
 - a. 2½" and smaller PVC pipe—standard weight, schedule 40, injection molded PVC. Comply with ASTM D 1784 and D 2466.
 - b. 3" PVC pipe-PVC or ductile iron gasketed fittings for all applications.
 - c. 4" and larger PVC pipe—ductile iron gasketed fittings at all changes of direction and ends of pipe lines. PVC plastic gasketed fitting for all other applications
- 6. Threaded nipples: ASTM D 2464, schedule 80 with molded thread(s), TOE or TBE.
- 7. Connections
 - a. Solvent weld: Joint cement and primer as recommended by manufacturer of pipe and fittings.
 - b. Gasketed: Gasket material and lubricants as recommended by manufacturer of pipe and fittings. c. Threaded connections: PVC male adapters shall be used in plastic-t to-plastic connections. PVC-to-metal connections shall be metal female adapters and schedule 80 PVC nipples.

2.5 Valves

- A. Remote control valves shall be normally closed, 24volt electric with plastic or bronze body. Valve shall be equipped with a bleeder valve to permit operation in the field.
- B. Isolation valves

- 1. 2" and smaller, shall be domestic bronze gate valves with non-rising stem (bronze cross handles or bronze wheel handles used below grade) meeting MSS SP-80 or PVC ball valves constructed from Type I PVC, ASTM D1784 with EDPM O rings and full bore flow.
- 2. Isolation valves 2½" and larger, unless noted on the drawings, shall be resilient wedge, epoxy coated, 250 psi rated working pressure, cast iron gate valves with non-rising stem and conforming to AWWA C509.

C. Quick-coupling valves

- 1. Valves shall be hinged cover, brass body, 150 lb class, with female threads at the base. Valve design shall permit operation with a special connection device (key) designed for this purpose.
- 2. Swing joints shall match inlet size of quick coupler and be a triple 'O' ring, pre-fabricated triple swing joint, having an integral metal transition fitting and having the ability to be anchored for stability.
- D. Valve boxes shall be provided for all manual valves, electric valves, air relief valves, decoders, two-wire switch devices, drip flush valves, ground rods, and wire splices.

2.6 Sprinkler Heads

- A. Sprinkler heads shall be as shown and/or as required to coincide with the needs of the landscaping. Do not exceed the maximum or minimum spacing indicated by manufacturer.
- B. All heads within a zone operated by the same valve shall have matched precipitation rate.
- C. Sprinkler bodies may be brass or plastic material. Connections to lateral lines shall be as shown in detail on sheet L3. Top of sprinkler head shall be located a minimum of ¼" below finish grade. To prevent vehicle damage.

2.7 Water Conservation Devices

- A. Rain sensors shall be devices adjustable to react to rainfall from 1/8" to 1" by temporarily shutting down the automatic operation of the system.
- B. Moisture sensors shall be adjustable and compatible with the controller installed. The sensor, in conjunction with the controller, shall be capable of automatically stopping and restarting irrigation watering based upon a set moisture level.

2.8 Wire

A. Control wire shall be UL/UF direct burial, sized as indicated or as required by valve and controller manufacturer's recommendations.

- B. Wire splice connectors shall be waterproof, made for direct burial, UL listed and rated for at least 30 volts.
- C. Wire and splices for two wire systems must be as specified by the manufacturer.

2.9 Controller

- A. The controller shall be as indicated, UL-approved for indoor or outdoor installation as required, with low voltage output (i.e., <30 Vac).
- B. The controller shall be fully automatic and have the following minimum features:
 - 1. Capable of operating the number of remote control valves indicated on drawings.
 - 2. Three programs.
 - 3. Rain delay.
 - 4. Multiple schedules to include odd/even, calendar, interval.
 - 5. An integral sensor terminal and circuit.
- C. The controller shall be grounded as per manufacturer's recommendations.

2.10 Sleeves

- A. SDR 21, CL 200, bell ended, solvent weld.
- B. Size of sleeve shall be a minimum of two pipe sizes larger than the pipe.

2.11 Backflow Devices

Backflow prevention devices shall be installed on all irrigation systems at the point of connection to the water source. Device shall include unions unless otherwise dictated by local codes. The device shall conform to all local codes and be installed as per manufacturer's recommendations. All devices shall be approved by UPC, ASSE & AWWA, C-506. Installation must be performed by an individual or company licensed to do such work by the local governing authority.

2.12 Drip Components

Each drip zone shall include an electric valve, pressure regulator and filter.

A. Filter shall be inline model constructed of noncorrosive material. Screen or disc shall be sufficient to eliminate debris and particulate matter as required (120 mesh or 75–600 microns). Size based on manufacturer's recommendations with an operating pressure from 20–140 psi.

- B. Pressure regulators shall be inline type constructed of noncorrosive materials and capable of handling designated flow at discharge pressure indicated on drawings.
- C. Emission devices shall be constructed of noncorrosive materials capable of delivering measured volumes of water to designated areas. An emission device shall be classified as:
 - 1. Single emitter
 - 2. Multi-outlet distribution manifold
 - 3. Polyethylene tubing manufactured with inline pressure emitters
 - 4. Micro-spinner or spray
 - 5. Pressure-compensating, self-flushing, and having an integral check valve
- D. Drip staples shall be minimum 11 gauge with U-shaped top. Square-top staples shall not be used.
- E. Fittings shall be insert or compression type and shall not require clamping below 45 psi.

3.0 Execution

3.1 Site Reviews

- A. Before any work commences, a conference shall be held with the City's representative and contractor to discuss general requirements of the work and coordinate the installation process.
- B. The contractor shall examine surfaces for conditions that could adversely affect execution, permanence, and quality of work. The contractor shall also verify that grading has been completed and that the work of this section can properly proceed.
 - 1. Notify the City's representative in writing, describing unacceptable conditions.
 - 2. Do not proceed with work until unacceptable site conditions are corrected.
 - 3. Locate existing utilities.
- C. The contractor shall notify the City's representative in writing for the following reviews, allowing 48 hours for compliance by the City's representative.
 - 1. Submittal review.
 - 2. Pressure supply line installation and testing.
 - 3. Final review at substantial completion.

- D. The contractor shall provide radio communication, remote control, and/or personnel to maintain communication from the review area to automatic controllers.
- E. The contractor shall provide up to date "as-built" drawings and acceptance forms for authorized signature.

3.2 Utility Services

The contractor shall make connections to the provided power and water sources at locations indicated on drawing(s) and make any minor changes in location as may be necessary due to actual site conditions. As necessary, authorized, licensed trade professionals shall be used to conform to local codes.

3.3 System Layout

- A. All piping and equipment is shown diagrammatically on drawing(s).
- B. Lay out sprinkler heads and make any minor adjustments required due to differences between actual site conditions and the drawings. Minor adjustments shall be maintained within the original design intent.
- C. Lay out each system using staking method, as approved by City's representative.

3.4 Pipe Installation

A. Pipe assembly (PVC)

- 1. Pipe shall be sized so that the water velocity in pipe shall not exceed five (5) feet per second.
- 2. Routing of all irrigation lines as indicated on the drawings is diagrammatic. Install lines (and various assemblies) to conform to details provided on drawing(s).
- 3. Pipe shall be kept free of dirt, rock, shavings, and other debris. Pipe ends shall be cut square and true with either a saw or pipe-cutting tool. When a saw is used, shavings must be removed from pipe ends.
- 4. Use primer and solvent to join pipe and fittings in a manner recommended by the solvent manufacturer regarding pipe size, air temperature and humidity. Allow pipe connections to cure as per solvent manufacturer's recommendations before pressurizing pipe. Wipe all excess glue from pipe after joint is made.
- 5. Service tees and service elbows installed in piping shall be oriented so FIPT outlet is on side of pipe.
- 6. Gasketed connections shall be installed per manufacturer's recommendations.

- 7. Thrust blocks or joint restraints shall be provided for gasket pipes. Thrust blocks or joint restraints shall be provided whenever PVC pipe:
 - a. Changes directions.
 - b. Stops (as at a capped end).
 - c. Joins a valve where thrust may be expected. Thrust blocks shall be made of concrete and are to be installed between the fittings and undisturbed soil of the adjacent trench wall in accordance with current ASAE recommendations. Pipe and fittings shall be protected from concrete by wrapping in polyethylene film or fabric cloth.
- 8. Threaded fittings shall be assembled as follows:
 - a. Using Teflon tape applied to male threads only. No more than two wraps.
 - b. Using metal female adapters with schedule 80 PVC nipples as transitions.
 - c. Do not use schedule 40 female adapters except for swing pipe connections.
- B. Copper pipe shall be installed as required by local plumbing codes. Underground copper lines shall be type "K" soft copper tubing. Depth of bury shall conform to this specification.

 Aboveground copper shall be type "L."
- C. Polyethylene pipe may not be used

3.5 Trenching

- A. Excavate trenches to required depths. Follow approved layout for each system. Maintain bottom of trenches flat to permit all piping to be supported on an even grade for entire length of run, with recesses as required for pipe bells.
- B. The minimum depth of soil cover shall conform to local codes, or shall be as shown or listed in the drawings, details, or specifications. Generally accepted practice is as follows: Pressure Lines
- C. Sleeves under walks shall be at a 12" depth. Sleeves under drives and parking lots shall be at an approximate 18" depth. Sleeves under roadways should be at an approximate 36" depth, or as mandated by governing authorities.
- D. Pipe "plowing" may be permitted by the City's representative in favorable soil conditions. When plowing is permissible, depth of pipe shall be the same as for trenching.

3.6 Backfill

A. The first 6" of backfill material shall be free of rock or foreign matter 2" in diameter or larger and hand tamped. The remainder of backfill shall be laid-up in maximum 6" lifts and tamped to a dry density equal to adjacent, undisturbed soil until the finish grade is reached.

- B. When more than one pipe is installed in the same trench, separate pipes with a minimum 2" of soil.
- C. Disturbed grade shall be restored to be free of dips, depressions, humps, or other irregularities. Compaction by truck or other vehicle is not acceptable.

3.7 Existing Pavements

- A. Piping under existing pavements may be installed by jacking, boring, or hydraulic driving, except as otherwise specified or directed. For minimum depths, install pipe at a depth equal to 12" per inch of diameter of bore below finished grade.
- B. Secure City's permission prior to cutting or breaking existing pavements. Refer to section 3.5 (Trenching) in this guideline for minimum depths.
- C. At locations where cutting is approved, make all cuts clean using power saws. Make cuts at approved locations only.
- D. Replace and restore all disturbed surfaces to match adjacent undisturbed conditions, including grades and landscaping.

3.8 Automatic Valves and Valve Boxes

- A. Automatic valves shall be installed plumb within valve access box with all handles, bolts, connections, and electrical splices accessible through the valve box opening.
- B. Clearance between the highest part of the valve and the bottom of the valve box lid shall be 2" minimum and 18" maximum.
- C. Clearance between the valve body and the sides of the valve box shall be a minimum of 3". Clearance between the valve bodies shall be a minimum of 2". Valves shall not be "stacked" within a valve box.
- D. Valves or valve boxes shall not be installed within 12" of paving or structures.
- E. The valve box shall be supported so that it does not rest directly on any irrigation piping.

3.9 Control Wiring

- A. Control wiring shall be installed as follows:
 - 1. When in common trench with mainline, wiring shall be laid beside or at the same invert as the mainline.
 - 2. Use minimum number of splices, and make all splices in valve or splice boxes. Splice connectors shall be UL approved for direct bury.

- 3. Provide 24" expansion coils at all valves and at 300' intervals between valves and directional changes. Wire shall at no time be installed taut.
- 4. Tape, or cinch with cable cinches, wires at maximum of 25' intervals.
- 5. Aboveground wire is to be installed in conduit and/or in accordance with electrical codes.
- 6. Common, or neutral, wire shall be WHITE on single or multi-conductor wire. If single conductor wire is used, valve wires and spare wires shall be of a different color consistent throughout the system.
- 7. Valve wiring shall be the same color from controller to valve.
- 8. Two wire control systems shall use wire approved by controller manufacturer.
- 9. Grounding wire shall be single-strand, solid, bare copper, at least two wire gauges larger than largest control wire used in the system.

3.10 Sprinkler Heads

- A. Sprinkler heads shall be set perpendicular and flush to grade or at elevations noted on the drawings.
- B. Pop-up heads shall be set 4" from paved surfaces. Rigid risers shall not be permitted adjacent to paved surface or other traffic areas.
- C. All heads shall be tested to verify proper coverage.
- D. Connections to piping:
 - 1. Flex pipe may be used for heads with flows of 6 gallons or less. Pipe length shall be a minimum of 1 foot and a maximum of 4 feet.
 - 2. For flows over 6 gallons per minute and on all sports fields, pre-fabricated triple 'O' ring swing joints shall be used. Swing joint size shall match head inlet. Lay length shall be such as to allow a 30–45 degree angle from pipe to lay nipple.

3.11 Quick-Coupling Valves

- A. Quick-coupling valves: Install downstream from backflow preventer on a swing joint assembly. When installed as a blowout connection, install as close to the point of connection as possible.
- B. Install quick coupler valve in a 10" round valve box at a depth that will allow quick coupler key to turn freely when inserted.

C. A swing joint manufactured for use with quick couplers shall be used to connect valve to piping. A swing joint shall, as an integral brass male threaded nipple matching the inlet size of the valve, have the ability to be stabilized and have the proper lay length to allow for a 30–45 degree angle from the pipe to lay riser.

3.12 Drain Valves Manual:

Install at low points on main and laterals when specified. Provide valve box for access and 2 ft3 gravel sump with soil separator.

3.13 Drip Irrigation

- A. Six-inch (6") soil staples shall be placed every 3' on tubing and at every elbow, tee, and cross if tubing is installed on soil below mulch. Staples not required if tubing is buried.
- B. Tubing shall be installed below mulch layer in plant beds or buried up to a 4" depth. Tubing in turf shall be installed at a uniform depth of 4".
- C. Each zone shall have a supply and exhaust header sized so total flow does not exceed 5 feet per second.
- D. Inline emitter tubing dripper interval and row spacing shall be as recommended by manufacturer, taking into account plant type, soil type, slope, and emitter flow rate.
- E. Inline emitter tubing shall be installed as a looped grid system.

3.14 Sleeves

- A. Sleeves are to be installed beneath all paved surfaces as indicated on the drawing. Installation is to be coordinated with project general contractor.
- B. If sleeves are to be installed by others, an accurate as-built drawing is to be provided to the irrigation contractor prior to the commencement of work. The end of the sleeves shall be indicated with a visible marker.
- C. Wiring shall be installed in an individual sleeve, separate from sleeves designated for piping. A wiring sleeve may be installed within a larger sleeve containing other irrigation pipe.
- D. The size of a sleeve shall be a minimum of two pipe sizes larger than the pipe enclosed.

3.15 Controller

- A. Controller shall be located as generally noted on the plans in an accessible location. Controller should be level and properly anchored to the wall, or in the case of a pedestal, version to a concrete pad.
- B. Zones shall be ordered as directed on the plan or in consecutive geographic order.

- C. Controller shall be grounded per manufacturer's recommendations.
- D. Wiring inside controller shall be neat with external jacket of wire (multi-strand and two-wire) removed.
- E. Control wire shall be installed inside conduit from below grade to controller cabinet.
- F. Zone charts as described in section 3.22 (Coverage Test) in this guideline shall be left at controller location.

3.16 Sensor Devices

- A. A rain sensor shall be installed in an area exposed to direct rainfall but out of sprinkler coverage.
- B. Sensor wires shall not be spliced and shall terminate inside controller at sensor terminals.
- C. All devices shall be installed per manufacturer's recommendations.
- C. Connections to two-wire path shall be made with UL-approved, direct bury splice kits rated for submersion.

3.17 System Flushing

- A. All mainlines shall be flushed prior to testing.
- B. After all pipe and flexible risers have been installed, and prior to the installation of control valves and sprinkler heads, thoroughly flush all lines with a full head of water.

3.18 Pressure Tests

- A. If required by owner, the contractor shall provide all equipment to test the system, including a force pump.
- B. All mainlines under constant pressure shall be filled with water at designated pressure for at least 24 hours and proven tight by visual inspection. The system shall then be tested under hydrostatic pressure of 150 psi for a period of two hours, unless otherwise approved. Leaks shall be repaired and the system shall again be flushed and retested.

3.19 Adjustment

- A. Install sprinkler bodies and nozzles. Adjust radius and arc for optimum performance. Make any necessary adjustments in head locations to achieve 100% coverage of landscaped areas designated to be watered.
- B. Adjust flow controls and pressure-reducing valves to attain the required pressure for optimum performance at the sprinkler head.

3.20 Coverage Test

- A. After sprinkler system is completed, test the system to ensure that all lawn and planting areas are watered completely and uniformly.
- B. Make any necessary adjustments as required by the City's representative to provide proper coverage.

3.21 Operating and Maintenance Tools

- A. The following items shall be delivered to the owner when work is completed and prior to final acceptance of work.
 - 1. Two keys for each automatic controller.
 - 2. Two sets of any specialty adjustment or disassembly tools required for each type of sprinkler head supplied.
- B. The following items shall be delivered to the owner if applicable to the system. 1. 30" valve keys for operation of manual drain valves.
 - 2. Two keys for opening lockable valve boxes.
 - 3. One 72" steel tee wrench for operating gate valves with square nut.
 - 4. One 72" steel tee wrench for operating bar handle stop and waste valve.
 - 5. One (1) quick-coupler key per three (3) quick couplers with matching swivel hose L's.
- C. Provide owner instruction in operating the system. D. Provide zone charts to owner that include:
 - 1. Zone geographic location.
 - 2. Head type.
 - 3. Type of landscape covered.
 - 4. Required run time.

3.22 Cleanup

Upon completion of all work, the contractor shall restore all ground surfaces disturbed during the irrigation installation to their original condition to the satisfaction of the City's representative. Remove all excess irrigation material, waste, debris, and equipment from the site.

PAYMENT - Full compensation for conforming to the provisions in this section shall be included in the contract unit price paid per each for "Baseball Diamond Valve with Lateral Lines and Hunter Head" (Bid Item 113), "Turf Irrigation Valves with Lateral Lines and Hunter Heads" (Bid Item 114), "Shrub Irrigation Valves with Lateral Lines and Drip" (Bid Item 115), "New Quick Coupler" (Bid Item 117), "Master Valve, Flow Sensor and Wiring, Trenching" (Bid Item 119) and the unit price per lineal foot for "New 3", 1" and 1-1/4" Mainline and New Wiring" (Bid Item 116) and the lump sum price paid for "New Wiring, Trenching Sleeving to Controller for Additional Valves" (Bid Item 118) and shall include full compensation for furnishing all labor, materials, equipment and incidentals for the installation of work as shown on the Plans in accordance with Section 20 of the Caltrans Standard Specifications and specified herein.

10-28 24' WIDE FENCE GATE

SECTION INCLUDES

A. Specifications for providing 24' wide 6' high gate in existing chain link fence along Coloma Street, posts, rails, braces, fittings, hardware, anchors, concrete footings as indicated in the contract plans and specifications and shop drawings provided by contractor.

DEFINITIONS

A. Fence Gate Code

Type of gate, dimensions component, and accessories are indicated on the Contract Drawings.

В. **Fence Gate Types**

Chain link fence shall be of the types indicated as follows:

Type CL Fence Fabric

Zinc-coated steel fabric conforming to ASTM A392 with Class 2 coating. Mesh size 1-3/4" inches square fabricated from 9 gauge wire.

C. Fence Gate Fabric Standard Size

No. 9 gauge chain link steel wire woven into 1-3/4 inch diamond mesh.

D. Area Fence Standards

> Materials, dimensions, and components of fencing are indicated on the Contract Drawings by means of a "Fence Code" or a fence height. If no code is indicated, the fence shall be galvanized chain link fabric, posts, and accessories as follows: fabric shall be 84 inches wide, secured at the top and bottom to a rail, for a total height above ground of 6 feet.

REFERENCES

A. American Society for Testing and Materials (ASTM)

ASTM A53	Specifications for Pipe, Steel, Black and Hot Dipped, Zinc Coated, Welded and Seamless
ASTM A121	Specification for Zinc Coated (Galvanized) Coatings on Iron and Steel Products
ASTM A123	Specifications for Zinc Coated (Hot Dip Galvanized) Coatings on Iron and Steel Products

ASTM A153	Specifications for Zinc Coating (Hot Dip) on Iron and Steel Hardware
ASTM A392	Specification for Zinc Coated Steel Chain Link Fence Fabric
ASTM A526/	Specifications for Steel Sheet, Zinc Coated
A526M	(Galvanized) by the Hot-Dip Process Commercial Quality
ASTM A569/	Specification for Steel, Carbon (0.15 Maximum,
A569M	Percent), Hot-Rolled Sheet and Strip Commercial Quality
ASTM A752	Specification for General Requirements for Wire Rods and Coarse Round Wire, Alloy Steel
ASTM A824	Specification foe Metallic Coated Steel Marcelled Tension Wire for Use with Chain Link Fence
ASTM B117	Standard Practice for Operating Salt Spray (Fog) Testing Apparatus
ASTM F567	Standard Practice for Installation of Chain Link Fence
ASTM F626	Specification for Fence Fittings
ASTM F668	Specification for Poly (Vinyl Chloride) (PVC) Coated Steel Chain Link Fence Fabric
ASTM F900	Specification for Industrial and Commercial Swing Gates
ASTM F934	Specification for Standard Colors for Polymer Coated Chain Link Fence Materials
ASTM F1083	Specification for Pipe, Steel, Hot-Dipped Zinc Coated (Galvanized) Welded, for Fence Structures

B. Chain Link Fence Manufacturers Institute (CLFMI)

CLFMI Publication, "Standards for Chain Link Fence Installation"

C. Federal Specifications

FS RR-F-191/2 Fencing, Wire and Post, Metal (Chain Link Fence Gates) (Detail Specification)

FS RR-F-191/4 Fencing, Wire and Post, Metal (Chain Link Fence Accessories) (Detail Specification)

SUBMITTALS

A. Product Data

Manufacturer's product data and specifications of the specified chain link fencing and gates.

B. Shop Drawings

Detailed shop drawings of the gate layout, including installation details of the fencing, rails, posts, hardware, structural calculations and accessories for review are required.

PRODUCTS

MATERIALS

A. General

Fencing shall include, framework, supporting arms, concrete footings, gates, hardware, and all appurtenances and accessories as required for a complete installation. Gate heights shall be 6'.

B. Line Fencing

If no fence code or height is indicated, the fence shall be galvanized chain link 84 inches wide, secured at the top and bottom to a rail for an overall height of approximately 72 inches.

C. Fence Fabric

1. Type CL Fence Fabric

Zinc-coated steel fabric conforming to ASTM A392 with Class 2 coating. Mesh size 1-3/4" inches square fabricated from 9 gauge wire.

2. Selvages

Knuckled at both selvages at both the top and bottom; unless otherwise indicated.

D. Pipe Framework for Type CL Fence

1. Posts and rails shall be standard weight galvanized steel pipe conforming to ASTM F1083. Sizes and weights shall be as follows:

Minimum nominal outside diameter of 2.875 inches, weighing not less than 5.79 pounds per linear foot, for end, corner, and gate posts for gates six feet wide and

smaller. Gate posts for gate leaves from six feet to 13 feet wide shall have minimum nominal outside diameter of 4.00 inches, weighing 9.11 pounds per linear foot.

2. Line Posts

Nominal outside diameter of 2.375 inches, weighing not less than 3.65 pounds per linear foot.

3. Rails and Braces

Nominal outside diameter of 1.660 inches, weighing not less than 2.27 pounds per linear foot. Posts shall include galvanized bolted fittings to properly secure rails and braces to posts.

E. Alternate Pipe Framework for Type CL fence.

Posts and rails, shall be high-strength pipe manufactured from steel conforming to ASTM A569/A529M, cold formed, high frequency or induction welded, and having a minimum yield strength of 50,000 psi. External surface shall be tripled coated with 1.0 ounce plus or minus 0.1 ounce of zinc per square foot, 30 plus or minus 15 micrograms of chromate per square inch, and a high performance polymer. Pipe shall demonstrate the ability to resist 1,000 hours of exposure to salt spray with a maximum of five percent red rust when tested in accordance with ASTM B117. Internal surface of pipe shall be coated, after welding, with a zinc rich based organic coating having a 91 percent zinc powder loading capable of withstanding 650 hours of exposure to salt fog with a maximum of five percent red rust when tested in accordance with ASTM B117. All coatings shall be applied inside and out after welding. Sizes and weights shall be as follows:

1. End and Corner Posts

Minimum nominal outside diameter of 2.875 inches, weighing not less than 4.64 pounds per linear foot, for end, corner, and gate posts for gates six feet and smaller. Gate posts for gate leaves from six feet to 13 feet wide shall have minimum nominal outside diameter of 4.00 inches, weighing 6.56 pounds per linear foot.

2. Line Posts

Nominal outside diameter of 2.375 inches, weighing not less than 3.12 pounds per linear foot.

3. Rails and Braces

Nominal outside diameter of 1.660 inches, weighing not less than 1.84 pounds per linear foot. Posts shall include galvanized bolted fittings to properly secure rails and braces to posts.

F. Post Caps and Fittings

Manufacturer's standard, pressed steel or malleable iron post caps, fittings and accessories, meeting requirements of ASTM F626 and FS RR-F191/4C, galvanized for Type CL and RP fencing, and PVC coating by the thermal-fusion-bond process, in color matching posts, for Type VCL fencing. Post caps shall be designed to fit securely over the posts to exclude water and to carry the top pipe rail and extension arms, where indicated. All other required fittings and hardware shall be provided to fasten to the pipe posts or concrete in the manner indicated.

G. Truss Rods

Alloy steel rods conforming to ASTM A752, with minimum tensile strength of 80,000 psi, and minimum diameter of 5/8 inch. Provide rods with threaded ends and self-tightening galvanized turnbuckles and anchor plates. Secure anchor plates to posts and gate frames by welding.

H. Stretcher Bars

Provide one piece lengths equal to full height of fabric with a minimum cross section of 1/4 inch by 3/4 inch. Provide one stretcher bar for each gate and end post, and two for each corner and pull post.

I. Stretcher Bar Bands

Provide galvanized heavy pressed steel or malleable iron bands with a minimum cross section of 1/8 inch by 3/4 inch, spaced not over 15 inches on center, to secure stretcher bars to end, corner, pull and gate posts.

J. Accessories

Provide miscellaneous materials and accessories, clips, tie wires (9 gauge), anchors, and fasteners as required for a complete installation. All items shall be galvanized in accordance with ASTM A123 or ASTM A153 as applicable.

K. Gates

Gate shall be sliding type as indicated, furnished complete with all hardware and accessories as required for a complete installation.

- Gate Frames: Frames shall be fabricated from zinc coated steel pipe members (to match posts in Type CL fencing) having a minimum outside diameter of 1.900 inches and weighing 2.72 pounds per linear foot.
- 2. Fabrication: Conform to applicable requirements of ASTM F900, FS RR-F-91/2C, and the following:
 - a. Assemble gate frames by welding or with fittings and rivets for rigid connections. Use same fabric as for fence. Install fabric with stretcher bars at vertical edges, and tie wires at top and bottom edges. Attach stretcher bars

to gate frame at not more than 15 inches on center. Attach hardware with rivets or by other means which will provide security against removal or breakage.

- b. Provide additional horizontal and vertical members to ensure proper gate operation and for attachment of fabric, hardware, and accessories.
- c. Provide diagonal cross bracing of minimum 1/2 inch diameter adjustable length truss rods on gates where necessary to provide frame rigidity without sag or twist.

3. Gate Hardware

Sliding Gate: Provide manufacturer's standard rubber tired rollers and roller track for floor supported sliding gates. Include intermediate rollers or casters where required to prevent gate sag or deflection. Provide locking device and padlock eyes as part of latch for locking gate with padlock.

L. Pipe Sleeves

Pipe Sleeves for fence post embedment in concrete curbs, barriers, and walls shall be fabricated from steel pipe conforming to ASTM A53 and galvanized in accordance with ASTM 123, sized to receive and support fence posts.

CONCRETE

Provide concrete footings for fence posts under this Section. Concrete for posts shall have a minimum compressive strength at 28 days of 3,000 psi, using 3/4 inch maximum size aggregate and five sacks of cement minimum per cubic yard, with a maximum slump of 4 inches. Concrete and grout materials, placing, and curbing shall conform to the applicable requirements.

EXECUTION

PREPARATION

- A. Installation of gate shall not be started until final grading has been completed.
- B. Locate gate correctly as indicated.
- C. Where posts are indicated or required to be embedded or set in concrete curbs, traffic barriers, or retaining walls, coordinate the installation of fencing closely with the installation of concrete.
- D. Furnish galvanized steel pipe sleeves for fence posts, as applicable, for installation in formwork at time required. Supervise installation of sleeves during formwork and placing of concrete to maintain exact dimensions according to template.

INSTALLATION

- A. Install gate as indicated, in accordance with approved shop drawings, and applicable requirements of ASTM F567 and CLFMI Standards for Chain Link Fence Installation. Site fabricate as required to complete the fence installation.
- B. Posts shall be plumb and rigid after installation. Rails shall be straight and tight. Chain link fabric shall be smooth and uniformly stretched tight and straight. Tension wires shall be pulled taut. Redwood or vinyl slats in Type RP fence shall be straight and plumb.
- C. Drill holes for post footings in firm, undisturbed or compacted soil. Footing holes shall be not less than 9 inches in diameter and 38 inches in depth. Post embedment in concrete shall be 36 inches. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads.
- D. Where posts are indicated or required to be embedded or set in concrete curbs, traffic barriers, or retaining walls, grout or seal posts in sleeves as indicated.
- E. Gates shall be installed plumb, level, and secure for full opening without interference. Install ground-set items in concrete for anchorage as recommended by the fence manufacturer. Adjust hardware for smooth operation and lubricate. Sliding gates shall operate smoothly and easily under minimum pressure.
- F. Locate and install safety and restriction signs securely as indicated on the Contract Drawings.

CONCRETE

- A. Place concrete around posts in a continuous pour. Check each post for plumb and vertical and top alignment, and hold in position during placement and finishing operations.
- B. Trowel finish tops of footings, and slope or dome to direct water away from posts. Set keepers, stops, sleeves, tracks, eye bolts, and other accessories into concrete as required. Wheel rolling area for sliding gates shall be steel trowel smooth finish concrete.

ELECTRICAL GROUNDING

Where a power line carrying more than 600 volts passes over fence, install ground rod at the nearest point directly below each point of crossing. Ground all fences and gates and perform other electrical grounding as indicated.

PAYMENT -The contract lump sum price paid for "Install 24' Wide Gate" (Bid Item 135) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, complete in place as specified in these Special Provisions, as shown on the Plans and as directed by the Engineer and no additional compensation will be allowed therefore.

10-29 AS-BUILT DRAWINGS

The Contractor shall be responsible for maintaining a set of as built improvement plans with any field changes or deviations made by the contractor or his/her subcontractors. The Contractor shall make annotations with erasable colored pencil conforming to the following color code:

Additions: RedDeletions: GreenComments: BlueDimensions: Graphite

This set of as built drawings shall be submitted to the Engineer at the conclusion of construction. Each sheet in the plan set shall be no less than 24 inches tall by 36 inches wide. All markings shall be legible and the plan set shall be clean and free from tears or other damage.

PAYMENT- Full compensation for as built drawings shall be considered as included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefor.

10-30 SITE CLEAN-UP

On completion of the work, the Contractor shall clean all portions of the project area. This work includes removing all debris, street sweeping, power washing, and removing paint marks within the work zone.

PAYMENT- Full compensation for site clean-up shall be considered as included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefor.

END OF SECTION

APPENDIX A

Standard Conditions for

Encroachment Permit

☐ City of Belvedere☐ City of Larkspur		Town of Ross Town of Fairfax		EP No: A / B
☐ City of Mill Valley		Town of Corte Madera		11 , 2
☐ City of Novato		Town of San Anselmo	DRAFT	MLK EP
☐ City of San Rafael *		Town of Tiburon	9-10-18	
☐ City of Sausalito		County of Marin		
UNIFIED AP	PLICATION 1	FOR ENCROA	CHMENT P	ERMIT
APPLICATION DATE:		APN:	-	-
LOCATION OF WORK OR ENCROACHMENT:	<u></u>	9.	Ci. m. 1:	
CROSS STREET:	No.	Street ESTIMATED	City/Township COST: \$)
STARTING DATE:		COMPLETIO		
PROPERTY OWNER'S NAME AND	ADDRESS (If Different fro	om Applicant):		
THE UNDERSIGNED HEREBY				D WORK AND/OR
		A LOCAL AGENCY RIGHT-O		4 a la) a
Check all that apply to the pro-		ENCROACHMENT (In	clude plans or ske	etcn):
** *	1	_	-	D.1. D
Driveway ApproachCurb & Gutter	☐ Sidewalk	☐ Accessible Ran ☐ New Utilities	•	Debris Box
☐ Curb & Gutter☐ Sewer Improvement	☐ Water Service☐ Excavation	☐ Landscaping		Special Event Other (Describe)
Describe:	L'Acavation	Landscaping	J	Other (Beschoe)
Road Surface Type:	Asphalt	☐ Concrete ☐	J Other:	
Trenching Work:	Yes	Linear Feet:	Surface Thick	ness:
Traffic Control Plan:	Yes			
Applicant agrees that all work of Agency Department of Public Work by the Department of Public Work and employees harmless from a attorney's fees which the Local property damage or inverse corauthorized by this permit. No work agreement to the second sec	forks and any Local Mu orks. Applicant shall ind any and all claims, suit Agency may incur as t ndemnation by reason	nicipal Code. All work sha demnify, defend and hold t s or liability, including, but he result of any and all cla of applicants placement of	all be subject to inspo the Local Agency, its t not limited to, litiga tims and suits for pe	ection and approval officers, agents ation costs and rsonal injury,
APPLICANT'S NAME / COMPANY	(PLEASE PRINT):			
CONTRACTOR'S NAME:		Co	ontractor License No:	
APPLICANT'S MAILING ADDRESS	:			
AGENCY:				
CONTACT NUMBERS:	Daytime Phone	Fax		Email
APPLICANT'S SIGNATURE:	Daytime Filone	1 dA		Email
	For	r Agency Use Only		Fees:
Accepted By:			A	application:
Insurance on file?	☐ No Final I	nsp. Cleared:	Plan Review &	Inspection:
Road Moratorium? Yes	☐ No	Receipt #:		Total:

^{*} Contact City of San Rafael Public Works for Specific Encroachment Permit Application

DRAFT MLK EP 9-10-18

Encroachment Permit Conditions

☐ Construction Standard(s):		
☐ General Conditions:		
☐ Comprehensive General Liability insurance in amounts not less than \$1,000,000 combined single limit applying to bodily injury, personal injury and property damage are required.		
Additional Insured Endorsement: The local agency must be named as an additionally insured on a separate endorsement sheet that modifies the general liability policy.		
☐ Contact local Police Department, Fire Department, and Parking Services prior to start of work.		
The Contractor shall maintain local access and provide emergency vehicle access at all times.		
☐ Compaction test is required and shall be submitted to local Public Works Department.		
Provide a traffic control plan per the Manual on Uniform Traffic Control Devices (MUTCD).		
Provide safe pedestrian and wheelchair access, per ADA and State requirements, during construction. All work shall be performed between the hours of		
☐ Planning review required: YES / NO		
□ Special Conditions:		
Encroachment Permit Approval		
Approved By: Date:		
Inspected By: Date:		

DRAFT 9-10-18	MLK	ΕP
9-10-18		

CITY OF SAUSALITO

STANDARD CONDITIONS FOR ENCROACHMENT PERMIT NO.

DESCRIPTION:

<u>Condition Marked ☑Apply to this Project</u>

THIS E	NCROACHMENT PERMIT IS GOOD FOR 6 MONTHS ONE YEAR 18 MONTHS E.P.APPLICATION
1.7	This permit, or a complete copy, shall be kept at the work site at all times while work is being performed.
□ 2. ì	Notify Engineering Division staff at least 24 hours in advance of beginning work City Engineer at (415) 289-41111, ext. 111 and/or Sewer Systems Coordinator at (415) 289-4192.
□ 3. 0	Contractor is to comply with all requirement of Ordinance No. 1048 (Noise Ordinance) including limiting hours of work in residential areas between 8:00AM and 6PM, Monday through Friday, between 9:00AM and 5:00PM, Saturdays, and between 9:00AM and 7:00PM, on City Holidays. No work is permitted on Sunday, except by owner occupant between 9:00AM and 7:00PM.
7 4. I	Permittee shall comply with all Federal State and local laws regulation and statutes applicable to the work being performed under this permit. This also includes compliance with the requirements and permit conditions of the State of California Division of Industrial Safety.
5.5	The Permittee shall repair or replace at the discretion of the City Engineer, any and all public facilities damaged as a result of Permittee's actions in connection with this permit, and shall guarantee repairs or replacements to all work done under this permit, as deemed necessary by the City Engineer for a period of one year after completion of said work.
6.	All traffic control shall be performed in accordance with the requirements of the current edition of Caltrans publication, "California Manual on Uniform Traffic Devices, Part 6- Temporary Traffic Control" including all specified advance construction signs and channelization devices. Construction warning signs and channelization devices are to be sufficient to adequately inform and protect vehicles, bicycle and pedestrian traffic. Permittee shall have available a copy of the Manual for workers at the construction site at all times during the progress of the work.
7.	Where excavations have been permitted in paved streets, Permittee shall place temporary informational signs at each end of the work in addition to those signs required by the "California Manual on Uniform Traffic Devices, Part 6- Temporary Traffic Control." Such informational signs shall be a minimum of 18 x 24 inches, clearly identify the owner of the facility for which the work is being done, and shall show a telephone number of the owner where the public may obtain information relative to the work being done.
8.	Traffic shall be permitted to pass through the work area at all times unless otherwise permitted in writing by the City Engineer. Any street closures shall be approved in advance by the City Engineer.
9.	If the City Engineer determines that public convenience or safety is being jeopardized by Permittee's actions or inactions, the City Engineer may order the condition remedied by either verbal or written communication to the Permittee. If Permittee fails to remedy the condition within eight hours of such notice, the City Engineer may, at his or her discretion, either remedy the condition or contract to remedy the condition, and the cost thereof, including administrative expenses shall be charged to the Permittee.
10	If any work is performed in the location of an existing pedestrian path of travel, the Contractor shall restore the path of travel compliant with all ADA accessibility standards.
11	. Any pavement marking and/or legends which are damaged or removed shall be replaced in kind by the Contractor at his/her expense. The repainting of any street markings or legends shall be performed using City stencils:
12	. Wherever new work crosses any existing City utilities, the Contractor shall pothole the existing City utilities and determine their actual depth so as to avoid hitting these facilities during excavation.
13	All AC or PCC to be removed is to be sawcut at the edges.
□ 14	All new AC street trench resurfacing is to be placed in maximum lifts of 3 inches and the final surface is to be fog sealed (unless a sand or slurry seal is called for on. the plans).

DRAFT MLK EP **CITY OF SAUSALITO** 9-10-18

STANDARD CONDITIONS FOR ENCROACHMENT PERMIT NO. _

	15.	All sections of curb, gutter and sidewalk to be replaced, shall have 12 inch long dowels (#4 reinforcing bars) inserted 6" into the existing concrete. A minimum of 2 dowels shall be placed into the curb and gutter. A minimum of 2 dowels shall be placed into sidewalk. Sidewalk dowel spacing shall be 24 inches on center.
	16	. Portions of existing sidewalk or curb and gutter to be removed shall be removed to the nearest expansion joint or sawcut at an existing score mark. Sawcuts must be at least 1-1/2 inches deep.
	17	. Concrete curbs, gutters and sidewalk shall consist of five sacks of cement per cubic yard with 3/8" maximum aggregate. Two pounds of lampblack shall be added per cubic yard. Slump shall not exceed 4 inches.
	18	. Special care shall be taken to match the existing finish, color, texture and score joining during replacement of the sidewalk.
	19	. Curb, gutter and sidewalk surfaces shall be broom finished unless otherwise approved by the City Engineer.
	20	. New sidewalk thickness shall be 4 inches minimum and driveway thickness shall be 6" minimum.
	21	. All excavations shall be backfilled and paved either temporarily or permanently at the end of each work day or covered with steel traffic plates held securely in place.
	22	. All backfill placement shall be approved by the City Engineer prior to permanent pavement replacement.
		. Tree roots shall not be cut or in any way damaged by Permittee.
Z	24	. Trench backfill shall be either concrete slurry containing one sack of cement per cubic yard with ¼ inch Maximum
		 aggregate size, or Class 2 Aggregate Base compacted to 95% relative compaction as determined by California Test Method No. 216. All other trench details shall conform with Uniform Standard Drawing No. 330, 340 and 350 except as modified herein. Or per specifications Permittee shall bear the entire cost of restoring the street or other property of the City, to the satisfaction of the City Engineer.
	26	. Excavated materials, equipment, construction materials or other debris shall not be stored or stockpiled on public streets
	27	The top six inches of subgrade shall be compacted to at least 95% relative Compaction in accordance with California Test Method No. 236 and shall be dampened before placing concrete. Or per specifications
	28	. Where unsuitable subgrade material is encountered, the City Engineer may require remedial work to be done, including, bu not limited to, placing a layer of crushed rock under the concrete 'section.
	29	. Undercut subgrade for gutter or sidewalk shall be filled with Class 2 Aggregate Base.
	30	. Where trench excavation is longitudinal with the traffic lane and extends 100 feet or more, a 2" minimum thickness of asphalt concrete paving with pavement reinforcing fabric shall be placed across the entire width of the affected traffic lane upon completion of trench work. Existing surfacing shall be removed as necessary to maintain satisfactory cross slopes.
	31	. One-half inch thick expansion joints shall be placed on both sides of driveway approaches, curb and sidewalk return points and at 4 feet on center. Weakened plane joints in sidewalk shall be at least 1-1/2 inch deep and placed at 16 feet on center.
	32	. All work shall be performed in accordance with the codes and ordinances of the City of Sausalito and the Uniform Construction Standards, Specifications of the Cities of Marin and County of Marin.
	33	. The Contractor is to provide a Storm Water Pollution Prevention Plan to the City for review and approval. City Approval must be obtained prior to commencing any work.
	34	. Underground Service Alert (USA) shall be notified at tel. (800) 642-2444, no later than 48 hours prior to excavation near utilities.
	35	. No new utility boxes or poles will be permitted in the sidewalk area without the written approval of the City Engineer.

City of Sausalito
MLK Park Athletic Field Improvements Project
Draft Encroachment Permit
Special Conditions

- 1. The encroachment permit issued is only applicable to the City of Sausalito right of way, the Contractor is responsible for ensuring that it has made the proper notifications to property owners where its facilities are in easements
- 2. No non-storm water shall be discharged into the public storm water drainage system.
- 3. The public right of way shall be kept clean at all times. Spilled debris shall be cleaned promptly. No visible accumulation of sediment is permitted. No washing of sediment or material into drainage inlet protection is permitted.
- 4. Maintain access to adjacent driveways at all times unless advance arrangements have been made with property owner/resident.
- 5. No Parking signs shall be obtained from City of Sausalito Department of Public Works. No Parking signs shall be posted and verified by the County Dispatch 72 hours prior to becoming effective for enforcement. To verify the No Parking signs, call County Dispatch 415-499-7234.
- 6. Contractor shall save and protect existing monuments. Any damaged monuments shall be reestablished along with the filing of all required documents including but not limited to Corner Record with Marin County Department of Public Works. Prior to start of construction a confirmation walk shall occur to visually confirm that none of the monuments have been damaged. Monuments shall not be covered with microsurface.
- 7. Contractor shall provide constant dust control.
- 8. No open excavations shall be left unattended.
- 9. Project shall not increase emergency response time and shall allow emergency vehicles to pass without delay.
- 10. Contractor shall notify County Dispatch prior to any road closure: 415-499-7234
- 11. Contractor shall provide an emergency contact phone number to County Dispatch. Emergency contact phone shall be monitored at all times during approved road closure.
- 12. Signs stating the date, time, location, contact name and phone number of responsible person in charge of the operation shall be posted, minimum one in each direction, at least 48 hours in advance of approved road closure. Signs shall consist of black letters on white background, shall be at least two feet times four feet in size.
- 13. Roads may only be closed Monday thru Friday, between 8AM and 6PM.
- 14. Contractor shall minimize the amount of time any road is closed and shall allow traffic to pass through the work area with a minimum of delay as soon as safely practical.
- 15. Contractor shall submit traffic control plans for all phases of the work for review and approval by the City.
- 16. If a subcontractor is to be used to perform any part of the work, subcontractor shall name the City of Sausalito as an additionally insured on a separate endorsement sheet that modifies the general liability policy with copy to City of Sausalito.
- 17. Storm water pollution prevention measures shall be in place prior to the start of any work. Measures shall be maintained for the duration of work in given location and removed

City of Sausalito MLK Park Athletic Field Improvements Project Draft Encroachment Permit Special Conditions

immediately upon completion of work in given location, or, as directed by City of Sausalito staff or representative.