DOCUMENT 00001

PUBLIC WORKS DEPARTMENT
10300 TORRE AVENUE
CUPERTINO, CALIFORNIA 95014

PROJECT MANUAL

FOR THE

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATON – RE-BID

Bid Date:

Tuesday, February 25, 2014

Project Number: 2012-9133
File No.: 92,022.09

DOCUMENT 00002

SIGNATURE PAGE

PROJECT MANUAL FOR
MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCTION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

PROJECT NO. 2012-9133

REVIEWED BY:

Carmen Lynaugh
Public Works Project Manager

APPROVED BY:

Timm Borden, P.E.
Director of Public Works

DOCUMENT 00003

PROJECT DIRECTORY

Project Name:

McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation – Re-Bid

Project Number: 2012-9133

Location: 22221McClellan Road. Cupertino, CA

City Representative:	**City of Cupertino** Carmen Lyanugh Public Works Project Manager Public Works Department 10300 Torre Avenue Cupertino, CA 95014 PH: 408-777-3354 FX: 408-777-3333 e-mail: capitalprojects@cupertino.org
Address for Stop Notices/Lien Notices:	**City of Cupertino** Carmen Lynaugh Public Works Project Manager Public Works Department 10300 Torre Avenue Cupertino, CA 95014 e-mail: carmenl@cupertino.org
Architect of Record:	**Siegel & Strain Architects** Henry Siegel 1295 59th Street Emeryville, CA 94608 PH: 510-547-8092
Structural Engineer	**Ware Associates** 130 Webster Street, Suite 105 Oakland, CA 94607 PH: 510-922-9888
Civil Engineer	**Mark Thomas & Company** 1960 Zanker Road San Jose, CA 95112 PH: 408-453-5373
Mechanical & Electrical	**Integral** 427 13th Street Oakland, CA 94612 PH: 510-663-2070
Construction Management	**Gilbane Building Company** 1798 Technology Drive, Suite 120 San Jose, CA 95110 PH: 408-660-4428

DOCUMENT 00007

SEALS PAGE

The Technical Specifications and Plans have been prepared by or under the direction of the following Registered Persons. All other sections have been prepared by the City in conjunction with the Technical Specifications contained herein and the Plans that are a part of the Contract Documents.

Henry I. Siegel
Siegel & Strain ArchitectsIMAGEFRAME
1

Licensed Architect No. C-12403

Expires 11/30/2015

Jimmy W. Sims
Mark Thomas & Company, Inc
Registered Professional Engineer No. 35458
Expires 09/30/2015

John Q. Ware
Ware Associates
Registered Professional Engineer No. C 46323
Expires 12/2014

Tyler Bradshaw
Integral Group
Registered Professional Engineer No. M 33496
Expires 06/30/2014

David Kaneda
Integral Group
Registered Professional Engineer No. E 14003
Expires 06/30/2014

END OF DOCUMENT

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00210	Indemnity and Release Agreement
00320	Geotechnical Data, Hazardous Materials Surveys and Existing Conditions
00400	Bid Form
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00620	Construction Labor and Material Payment Bond
00630	Guaranty
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00660	Substitution Request Form
00680	Escrow Agreement for Security Deposits in Lieu of Retention

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00800	Special Conditions
00820	Special Environmental Conditions
00821	Insurance
00822	Apprenticeship Program
00823	Tree Protection
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TECHNICAL SPECIFICATIONS

Document	Title
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DIVISION 01 - GENERAL REQUIREMENTS

For the location of information traditionally found in the following Division 01 Sections, refer to the City of Cupertino General Conditions (00700) and Special Conditions (00800).

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APPENDICES – FOR INFORMATION ONLY

- Updated Geotechnical Investigation, by Cotton, Shires and Associates, Inc., Dated May 2013
- Arborist Report by Deborah Ellis, MS – Dated December 17, 2012
- Storm Water Pollution Prevention Plan – Dated June 2013
- SCCP Master Plan and Restoration Plan Mitigation Monitoring Measures and Reporting Plan
- City Program Scheduled during Construction
- City Supplied Reclaimed Lumber Information – Grading and Inventory

END OF SECTION

CALTRANS/CITY CROSS-REFERENCE TABLE

Whenever Standard Specifications Section 1 through 9 are referenced, the referenced sections are hereby deleted and the corresponding Document and Section in the following table shall be substituted.

Caltrans Standard Specification - 2006		City Contract Documents		
Section #	**Title**	**Document #**	**Section #**	**Title**
1	**Definition and Terms**	00700		Abbreviations and Definitions
-	-			
2	**Proposal Requirements and Conditions**			
2-1.01	Contents of Proposal	00200		Instruction to Bidders
2-1.02	Approximate Estimate	00200		Instruction to Bidders
2-1.03	Examination of Plans, Specifications, Contract and Site of Work	00200 & 00320		Instruction to Bidders & Geotechnical Data and Exiting Conditions
2-1.04	Blank			
2-1.05	Proposal Forms	200		Instruction to Bidders
2-1.054	Required Listing of Proposed Subcontractors	00200 & 00800		Instruction to Bidders & Advertisement for Bids
2-1.056	State Employees and Design Engineers May Not Bid on Construction Contract	00200		Instruction to Bidders
2-1.06	Rejection of Proposals	00200		Instruction to Bidders
2-1.07	Proposal Guaranty	00200		Instruction to Bidders
2-1.08	Withdrawal of Proposals	00200		Instruction to Bidders
2-1.09	Public Opening of Proposals	00200		Instruction to Bidders
2-1.095	Relief of Bidders			Public Contract Code
2-1.10	Disqualification of Bidders	00481		Non-Collusion Affidavit
2-1.105	Previous Disqualification, Removal or Other Prevention of Bidding	00200 & 00450		Instruction to Bidders & Statement of Qualifications & Public Contract Code
2-1.108	Compliance with Orders of the National Labor Relations Board	00482		Bidder Certifications & Public Contract Code
2-1.11	Ineligibility to Contract	00481		Non-Collusion Affidavit & Public contract Code
2-1.12	Material Guaranty	00630 & 00700	4.9	Guaranty & General Conditions : Warranty and Inspection
3	**Award and Execution of Contract**			
3-1.01	Award of Contract	00200		Instruction to Bidders

CALTRANS/CITY CROSS-REFERENCE TABLE

Caltrans Standard Specification - 2006		City Contract Documents		
Section #	**Title**	**Document #**	**Section #**	**Title**
3-1.02	Contract Bonds	00610 & 00620 & 00700	2.2	Constructions Performance Bond & Construction Labor and Material Payment Pond & General Conditions : Contractor's Bonds
3-1.025	Insurance Policies	00700 & 00821		Insurance & General Conditions : Contractor's Insurance
3-1.03	Execution of Contract	00510		Notice of Award
3-1.04	Failure to Execute Contract	00200		Instruction to Bidders
3-1.05	Return of Proposal Guaranties	00200		Instruction to Bidders
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4-1.01	Intent of Plans and Specifications	00700	1.2 & 1.3	General Conditions : Clarification of Contract & Contract Documents Complementary
4-1.02	Final Cleaning Up	00700	3.2	General Conditions : Cleaning
4-1.03	Changes	00700	3.3	General Conditions : Change In Work
4-1.03A	Procedure and Protest	00700	3.3	General Conditions : Change In Work
4-1.03B	Increased or Decreased Quantity	00700	3.3	General Conditions : Change In Work
4-1.03B(1)	Increases of More Than 25 Percent	00700	3.3	General Conditions : Change In Work
4-1.03B(2)	Decrease of More Than 25 Percent	00700	3.3	General Conditions : Change In Work
4-1.03B(3)	Eliminated Items	00700	3.3	General Conditions : Change In Work
4-1.03C	Changes in Character of Work	00700	3.3	General Conditions : Change In Work
4-1.03D	Extra Work	00700	3.3	General Conditions : Change In Work
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4-1.05	Use of Materials Found on the Work	00700	6.21	General Conditions : Title to Materials Found on the Work
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5-1.01	Authority of Engineer	00700	4.1	General Conditions : Authority of City
5-1.02	Plans and Working Drawing	00700	1.2 & 4.2	General Conditions :Clarification of Contract & Submittals to be Furnished by Contractor
5-1.02A	Trench Excavation Safety Plans	00700	3.9	General Conditions : Excavation Safety Plans
5-1.03	Conformity with Contract Documents and Allowable Deviations	00700	4.3	General Conditions : Conformity with Contract Documents and Allowable Deviations
5-1.04	Coordination and Interpretations of Plans, Standard Specifications, and Special Provisions	00700	1.1	General Conditions : Precedence of Contract

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5-1.05	Order of Work	00700	4.4	General Conditions : Order of Work
5-1.06	Superintendence	00700	4.6	General Conditions : Superintendence
5-1.07	Lines and Grades	00700	4.8	General Conditions : Layout of Work and Surveys
5-1.08	Inspection	00700	5.1 & 5.5	General Conditions: : Source of Supply and Quality of Materials & Plant Inspection
5-1.09	Removal of Rejected and Unauthorized Work	00700	4.10 & 5.4	General Conditions : Defective and Unauthorized Work & Defective Materials
5-1.10	Equipment and Plants	00700	4.11	General Conditions : Construction Equipment and Plant
5-1.11	Alternative Equipment	00700	4.11	General Conditions : Construction Equipment and Plant
5-1.115	Alternative Methods of Construction	00700	3.11	General Conditions : Substitutions
5-1.116	Differing Site Conditions	00700	1.2 & 3.6	General Conditions : Clarification of Contract & Changed Site Conditions
5-1.12	Character of Workers	00700	4.7	General Conditions : Character of Workers
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6-1.03	Storage of Materials	00700	5.3	General Conditions : Storage of Materials
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6-1.08	Foreign Materials	00700	5.1	General Conditions : Source of Supply and Quality of Materials
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6-2.03	Mandatory Local Material Sources			**NOT APPLICABLE**
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CALTRANS/CITY CROSS-REFERENCE TABLE

Caltrans Standard Specification - 2006		City Contract Documents		
Section #	**Title**	**Document #**	**Section #**	**Title**
7	**Legal Relations and Responsibility**			
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7-1.01A	Labor Code Requirements	00700	6.6	General Conditions : Apprentices
7-1.01A(1)	Hours of Labor	00700	6.5	General Conditions : Hours of Labor
7-1.01A(2)	Prevailing Wage	00700	6.4	General Conditions : Prevailing Wages
7-1.01A(2)(a)	Travel and Subsistence Payment	00700	3.4	General Conditions : Change in Contract Price & Labor Code
7-1.01A(3)	Payroll Records	00700	6.4	General Conditions : Prevailing Wages & Labor Code
7-1.01A(4)	Labor Nondiscrimination	00700	6.2	General Conditions : Labor Discrimination & Labor Code
7-1.01A(5)	Apprentices	00700	6.6	General Conditions : Apprentices
7-1.01A(6)	Workers' Compensation	00700 & 00821	2.1	Insurance & General Conditions : Contractor's Insurance
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7-1.01D	Vehicle Code			Vehicle Code
7-1.01E	Trench Safety	00700	3.9	General Conditions : Evacuation Safety
7-1.01F	Air Pollution Control			Government Code
7-1.01G	Water Pollution	00700	3.14	General Conditions : Storm Water Pollution Control
7-1.01H	Use of Pesticides	00700	3.12	General Conditions :Hazardous Material/Waste
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7-1.01J	Assignment of Antitrust Actions			Public Contract Code & Government Code
7-1.02	Load Limitations			Vehicle Code
7-1.03	Payment of Taxes	00700	6.17	General Conditions : Payment of Taxes
7-1.04	Permits and Licenses	00700	6.7	General Conditions : Permits and Licenses
7-1.05	Patents	00700	6.8	General Conditions : Patents and Copyrights
7-1.06	Safety and Health Provisions	00700	6.1	General Conditions : Laws to be Observed
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7-1.08	Public Convenience	00700	6.9	General Conditions : Public Safety and Traffic Control
7-1.09	Public Safety	00700	6.9	General Conditions : Public Safety and Traffic Control
7-1.10	Use of Explosives	00700	6.11	General Conditions : Explosives and Stream Pollution
7-1.11	Preservation of Property	00700	6.14	General Conditions : Preservation of Property
7-1.12	Indemnification and Insurance	00700	2.1 & 6.16	General Conditions : Contractor's Insurance & Indemnification

CALTRANS/CITY CROSS-REFERENCE TABLE

Caltrans Standard Specification - 2006		City Contract Documents		
Section #	**Title**	**Document #**	**Section #**	**Title**
7-1.12A	Indemnification	00700	6.16	General Conditions : Indemnification
7-1.12B	Insurance	00700 & 00821	2	Insurance & General Conditions : Contractor's Insurance
7-1.12B(1)	General	00700 & 00821	2.1	Insurance & General Conditions : Contractor's Insurance
7-1.12B(2)	Casualty Insurance	00700 & 00821	2.1	Insurance & General Conditions : Contractor's Insurance
7-1.12B(3)	Workers' Compensation and Employer's Liability Insurance	00700 & 00821	2.1	Insurance & General Conditions : Contractor's Insurance
7-1.12B(4)	Liability Insurance	00700 & 00821	2.1	Insurance & General Conditions : Contractor's Insurance
7-1.12B(4)(a)	General	00700 & 00821	2.1	Insurance & General Conditions : Contractor's Insurance
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7-1.12B(4)©	Contractor's Insurance Policy is Primary	00821		Insurance
7-1.12B(5)	Automobile Liability Insurance	00821		Insurance
7-1.12B(6)	Policy Forms, Endorsements, and Certificates	00821		Insurance
7-1.12B(7)	Deductibles	00821		Insurance
7-1.12B(8)	Enforcement	00821		Insurance
7-1.12B(9)	Self-Insurance	00821		Insurance
7-1.125	Legal Actions Against the Department			**NOT APPLICABLE**
7-1.13	Disposal of Material Outside the Highway Right of Way	00700	3.13	General Conditions : Inert Solids and Plant Material Recycling
7-1.14	Cooperation	00700	6.18	General Conditions : Cooperation with Others
7-1.15	Relief from Maintenance and Responsibility	00700	4.12	General Conditions : Substantial Completion, Final Completion and Final Acceptance
7-1.16	Contractor's Responsibility for the Work and Materials	00700	6.15	General Conditions : Contractor's Responsibility for Work
7-1.165	Damage by Storm, Flood, Tsunami or Earthquake	00700	3.5	General Conditions : Change in Contract Time
7-1.17	Acceptance of Contract	00700	4.12	General Conditions : Substantial Completion, Final Completion and Final Acceptance
7-1.18	Property Rights in Materials	00700	6.19	General Conditions : Property Right in Materials
7-1.19	Rights in Land and Improvements	00700	6.20	General Conditions : Rights in Land and Improvements

CALTRANS/CITY CROSS-REFERENCE TABLE

Caltrans Standard Specification - 2006		City Contract Documents		
Section #	**Title**	**Document #**	**Section #**	**Title**
7-1.20	Personal Liability	00700	6.29 & 6.30	General Conditions : Interest of Public Officers & Limit of Liability
7-1.21	Repair of Equipment			**NOT APPLICABLE**
7-1.22	Material Plants	00700	6.4	General Conditions : Prevailing Wages
8	**Prosecution and Progress**			
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8-1.02	Assignment	00700	7.1	General Conditions : Assignment
8-1.03	Beginning of Work	00700	7.3	General Conditions : Commencement of Work
8-1.04	Progress Schedule	00700	7.4	General Conditions : Work Progress Schedule
8-1.05	Temporary Suspension of Work	00700	7.5	General Conditions : Temporary Suspension of Work
8-1.06	Time of Completion	00520 & 00700	4.12	Contract & General Conditions : Substantial Completion, Final Completion and Final Acceptance
8-1.07	Liquidated Damages	00520 & 00700	7.6	Contract & General Conditions : Liquidated Damages
8-1.08	Termination of Control	00700	7.7	General Conditions : Termination of Control
8-1.09	Right of Way Delays	00700	7.16	General Conditions : Right of Way Delays
8-1.10	Utility and Non-Highway Facilities	00700	7.11	General Conditions : Coordination with Utilities
8-1.11	Termination of Contact	00700	7.8 & 7.9	General Conditions : Termination of Contract for Cause & Termination of Contract for Convenience
9	**Measurement and Payment**			
9-1.01	Measurement and Quantities	00700	8.1	General Conditions : Measurement of Quantities
9-1.015	Final Pay Items	00700	8.3	General Conditions : Progress Payment
9-1.02	Scope of Payment	00700	3.4	General Conditions : Change in Contract Price
9-1.03	Force Account Payment	00700	3.4	General Conditions : Change in Contract Price
9-1.03A	Work Performed by Contractor	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(1)	Labor	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(1a)	Actual Wage	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(1b)	Labor Surcharge	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(1c)	Subsistence and Travel Allowance	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(2)	Materials	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(2a)		00700	3.4	General Conditions : Change in Contract Price
9-1.03A(2b)		00700	3.4	General Conditions : Change in Contract Price
9-1.03A(2c)		00700	3.4	General Conditions : Change in Contract Price
9-1.03A(2d)		00700	3.4	General Conditions : Change in Contract Price

CALTRANS/CITY CROSS-REFERENCE TABLE

Caltrans Standard Specification - 2006		City Contract Documents		
Section #	**Title**	**Document #**	**Section #**	**Title**
9-1.03A(2e)		00700	3.4	General Conditions : Change in Contract Price
9-1.03A(3)	Equipment Rental	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(3a)	Equipment on the Work	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(3b)	Equipment not on the Work	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(3c)	Owner-Operated Equipment	00700	3.4	General Conditions : Change in Contract Price
9-1.03A(3d)	Dump Truck Rental			**NOT APPLICABLE**
9-1.03B	Work Performed by Special Forces or Other Special Services	00700	3.4	General Conditions : Change in Contract Price
9-1.03C	Records	00700	3.4	General Conditions : Change in Contract Price
9-1.03D	Payment	00700	3.4	General Conditions : Change in Contract Price
9-1.04	Notice of Potential Claim	00700	9	General Conditions : Claims by Contractor
9-1.05	Stop Notices			Civil Code
9-1.06	Partial Payments	00700	8.3	General Conditions : Progress Payment
9-1.065	Payment of Withheld Funds	00700	8.6	General Conditions : Substitution of Securities in Lieu of Retention
9-1.07	Payment after Acceptance	00700	8	General Conditions : Measurement and Payment
9-1.07A	Payment Prior to Proposed Final Estimate	00700	8	General Conditions : Measurement and Payment
9-1.07B	Final Payment and Claims	00700	8.4	General Conditions : Final Payment
9-1.08	Adjustment of Overhead Costs			**NOT APPLICABLE**
9-1.09	Clerical Errors			**NOT APPLICABLE**
9-1.10	Arbitration	00700	9.4	General Conditions : Mediation

DOCUMENT 00100

ADVERTISEMENT FOR BIDS

NOTICE: THE CITY OF CUPERTINO, a Municipal Corporation of the State of California ("City") hereby gives notice that it will accept Bids for construction of the following public work:

CITY PROJECT NUMBER 2012-9133
MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

1. **BID SUBMISSION:** The City uses a two-part Bid process with Bids in **Envelope "A"** and Statements of Qualification in **Envelope "B"**. City will accept **Envelope "A" and Envelope "B"** before **2:00 p.m.** on **Tuesday, February 25, 2014 in the City Clerk's Office.** Bids will be publicly read at 2:10 p.m. in the City Community Hall at 10350 Torre Avenue (adjacent to City Hall). City's representative will call out the designated time in the Office of the City Clerk, 10300 Torre Avenue, stating that the period for accepting Bids is closed. The Bid opening will be in accordance with procedures set forth in Document 00200 (Instructions to Bidders).

2. **CONTACT INFORMATION:**
Public Works Department
408 777 3354 general
408 777 3333 fax
capitalprojects@cupertino.org
City Hall, 10300 Torre Avenue
Cupertino, CA 95014

3. **STATEMENT OF QUALIFICATIONS:** Each Bidder shall be required to submit a "Statement of Qualifications" in accordance with Document 00200 (Instructions to Bidders) and Document 00450 (Statement of Qualifications for Construction Work).

4. **DESCRIPTION OF THE WORK:** Work generally consists of constructing a building that will be approx. 2,100 square feet; the building will also include approx. 1,100 square feet of covered outdoor area. The building will contain three (3) meeting rooms of various sizes, two restrooms and office space with other space for storage and operational area. The project also includes the relocation of the existing Blacksmith Shop and the accessible upgrade to the existing park restrooms. There will also be some site work for accessibility improvements and access. Work includes but is not limited to demolition; clearing; earthwork; grading; installing utility lines; construction of concrete foundations; building construction; solar PV system, relocation of existing building; interior upgrades to an existing building; concrete and asphalt flat work. The work site contains habitat areas and protected wildlife species and is in a preserve that will remain open to the public during construction.

5. **CONTRACT TIME:** Work shall be finally completed within 270 Calendar Days from the date when Contract Time commences to run.

6. **Expected Expenditure:** The City's expected expenditure is $ 1,820,000 (This price is expected – not guaranteed)

7. **REQUIRED CONTRACTOR'S LICENSE:** A California **"B" General Building,** contractor's license is required to Bid this Contract. Joint ventures must secure a joint venture license prior to award of this Contract. Removal, handling, and/or disposal of hazardous materials may, by law, require hazardous substance removal certification by the Contractor's State License Board.

8. **PREVAILING WAGE LAWS:** The successful Bidder must comply with all prevailing wage laws applicable to the Project, and related requirements contained in the Contract Documents.

9. **INSTRUCTIONS:** Bidders shall refer to Document 00200 (Instructions to Bidders) for required documents and items to be submitted in sealed envelopes to City Clerk's office, as well as applicable times for submission.

10. **SUBSTITUTION OF SECURITIES:** City will permit successful Bidder to substitute securities for retention monies withheld to ensure performance of Contract, as set forth in Document 00680 (Escrow Agreement for Security Deposits in Lieu of Retention), in accordance with California Public Contract Code, Section 22300. By this reference, Document 00680 (Escrow Agreement for Security Deposits in Lieu of Retention) is incorporated in full in this Document 00100.

11. **NON-MANDATORY PRE-BID CONFERENCE:** City will conduct a Non-Mandatory Pre-Bid Conference **at 2:00 p.m. on Tuesday, February 11, 2014** at the site, McClellan Ranch Preserve at 22221 McClellan Road, Cupertino, CA 95014. The meeting will begin in front of the existing restroom building. This is not a mandatory pre-bid conference. At this meeting Bidders will be able to view the inside of the Blacksmith Shop and view the reclaimed wood. Any Bidder wishing to investigate subsurface conditions at the site must schedule such a visit with the City in accordance with Document 00200 (Instructions to Bidders).

12. **PROCUREMENT OF BIDDING DOCUMENTS:** Bidders may examine a complete hard-copy set of bid documents at the City's Public Works Department, City Hall, 10300 Torre Avenue in Cupertino.

    To obtain a copy of the bid documents, Bidders must download a set of bid documents from the City of Cupertino Web site at: http://www.cupertino.org/index.aspx?page=119, or from a plan room or trade journal site that carries them. The City will post all addendums to the project on the City web site and it is the Contractor's sole responsibility to download the addendums for the project. If a Contractor wishes to be on the plan holders list for the project the Contractor must send an e-mail to: carmenl@Cupertino.org containing the following information: Contractor's name, address, phone and fax number, and e-mail address for future communications. The plan holders list will be updated daily. Bidder is responsible for printing all of the bidding documents.

13. **BID PREPARATION COST:** Bidders are solely responsible for the cost of plan and specification printing and preparing their Bids.

14. **RESERVATION OF RIGHTS:** City specifically reserves the right, in its sole discretion, to reject any or all Bids, or re-bid, or to waive inconsequential deviations from Bid requirements not involving time, price, or quality of the Work.

15. **PORTION OF WORK PERFORMED BY THE CONTRACTOR:** The Contractor shall perform no less than 10% of the Work, excluding Specialty Items, with its own organization. Specialty Items will be identified on the Bid Form.

CITY OF CUPERTINO

By. Grace Schmidt
City Clerk

To be published in Cupertino Courier on January 24, 2014

END OF DOCUMENT

DOCUMENT 00200

INSTRUCTIONS TO BIDDERS

Bids are requested for a general construction contract, or work described in general, as follows:

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATON – RE-BID

1. **RECEIPT OF BIDS.** Sealed Bids will be received by the City at City's office (see paragraph 2 below) on **the date shown in the Advertisement for Bids.** City will receive Bids in two separate opaque sealed 10" x 13" envelopes, labeled **Envelope "A"** and **Envelope "B"** each containing the respective items described in paragraphs 4 and 5 below. All Bid envelopes will be time stamped to reflect their submittal time. **Envelope "A" and Envelope "B" shall be due before 2:00 p.m. on the days specified in the Advertisement for Bids** as determined by the clock on the wall of the office of the City Clerk. Bids will be publicly read at 2:10 p.m. in the City Community Hall at 10350 Torre Avenue (adjacent to City Hall). City will reject all Bids received after the specified time and will return such Bids to Bidders unopened. Bidders must submit Bids in accordance with this Document 00200.

2. **CONTACT INFORMATION.**

   Mailing address:
   City of Cupertino
   City Hall
   10300 Torre Avenue
   Cupertino, CA 95014

   City's Authorized Representative:
   Carmen Lynaugh
   Public Works Project Manager

   Telephone:
   (408) 777-3354

   Emails:
   carmenl@cupertino.org

   Fax:
   (408) 777-3333

3. **BID SUBMISSION.** Bidder should mark its Bid envelopes as **BID FOR THE CITY, PROJECT NUMBER 2012-9133, MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID** Envelope "A" or "Envelope "B," as appropriate. Bids shall be deemed to include the written responses of the Bidder to any questions or requests for information of City made as part of Bid evaluation process after submission of Bid. Bidder's failure to submit all required documents strictly as required entitles City to reject the Bid as non-responsive.

4. **CONTENTS OF ENVELOPE "A" - BID PRICE.** Envelope "A" shall include:
   a. Document 00400 (Bid Form) completed in accordance with paragraph 6 of this Document 00200.
   b. Bid security supplied and completed in accordance with paragraph 7 of this Document 00200.
   c. Document 00430 (Subcontractors List) in accordance with paragraph 8 of this Document 00200.
   d. Document 00460 (Schedule of Major Equipment and Material Suppliers). Bidder must complete this form as indicated. If included in Documents.
   e. Document 00481 (Non-Collusion Affidavit).

5. **CONTENTS OF ENVELOPE "B" – BIDDER STATEMENT OF QUALIFICATIONS.** Envelope "B" shall include:
   a. Document 00450 (Statement of Qualifications for Construction Work) submitted in accordance with paragraph 9 of this Document 00200.
   b. Document 00482 (Bidder Certifications). Bidder must complete this form as indicated.

6. **REQUIRED BID FORMS.** All Bidders must submit Bids using, where applicable, documents supplied in this Project Manual, including without limitation Document 00400 (Bid Form), Document 00430 (Subcontractors List), Document 00450 (Statement of Qualifications for Construction Work), Document 00460 (Schedule of Major Equipment and Material Suppliers), Document 00481 (Non-Collusion Affidavit), and Document 00482 (Bidders Certifications). City will reject as non-responsive any Bid not submitted on the required forms. Bids must be full and complete. Bidders must complete all Bid items and supply all information required by Bidding Documents. Bidder must completely fill our all forms required for the bid. City reserves the right in its sole discretion to reject any Bid as non-responsive as a result of any error or omission in the Bid. Bidders may not modify the Bid Form or qualify their Bids. Bidders must submit clearly and distinctly written Bids. Bidders must clearly make any changes in their Bids by crossing out original entries, entering new entries, and initialing new entries. City reserves the right to reject any Bid not clearly written.

7. **REQUIRED BID SECURITY.** Bidders must submit with their Bids either cash, a cashier's check, or certified check from a responsible bank in the United States, or corporate surety bond furnished by a surety authorized to do business in the State of California, of not less than ten percent of amount of Base Bid, payable to City. All Bidders choosing to submit a surety bond must submit it on the required form, Document 00411 (Bond Accompanying Bid). City will reject as non-responsive any Bid submitted without the necessary Bid security.

   City may retain Bid securities and Bid bonds of other than the Apparent Low Bidder for a period of 90 Days after award or full execution of the Contract, whichever first occurs. Upon full execution of the Contract, and upon request by Bidder, City will return to the respective unsuccessful Bidders their Bid securities and Bid bonds.

8. **REQUIRED SUBCONTRACTORS LIST.** All Bidders must submit with their Bids the required information on all Subcontractors in Document 00430 (Subcontractors List) for those Subcontractors who will perform any portion of Work, including labor, rendering of service, or specially fabricating and installing a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in excess of one half of one percent of total Bid or ten thousand dollars ($10,000), whichever is greater. Violation of this requirement may result in Bid being deemed non-responsive and being rejected.

9. **REQUIRED STATEMENT OF QUALIFICATIONS.** In order for a Bidder to be eligible to Bid on this Contract, it must submit a Statement of Qualifications responsive to the requirements identified in Document 00450 (Statement of Qualification for Construction Work) ("SOQ"), including without limitation qualification information for Subcontractors and schedulers, if required. Except as otherwise provided in paragraphs 20 and 21 of this Document 00200 or in Document 00450 (Statement of Qualification for Construction Work), City will make final determinations regarding Bidder responsibility based solely upon the SOQ submitted as part of Envelope "B" on Bid day. Information in the SOQ shall be current.

   No engineering or architectural firm which has provided design services for a project shall be eligible to submit a proposal for the contract to construct the project nor to subcontract for any portion of the work. The ineligible firms include the prime contractor for design, subcontractors of portions of the design and affiliates of either. An affiliate is a firm which is subject to the control of the same persons, through joint ownership or otherwise.

10. **PRE-BID CONFERENCE:** City will conduct a Pre-Bid Conference at the time, date and location listed in the Document 00100, Advertisement for Bids.

    Any Bidder wishing to investigate subsurface conditions or otherwise conduct invasive investigations, explorations, tests, or studies at this Site, must schedule the visit with the City by giving the City at least seven (7) days written notice. Additionally, any such Bidder must deliver an executed Document 00210 (Indemnity and Release Agreement) and provide an insurance certificate as described therein by noon of the Day prior to the examination.

    Bidders who intend only to observe existing Site conditions and not conduct subsurface examinations are not required to provide an executed Document 00210 (Indemnity and Release Agreement) or an insurance certificate, but are requested to contact the Public Works Department to arrange for access to the fenced site.

Bidders are encouraged to submit written questions in connection with the Site Visit. City will transmit to all parties recorded, as having received Bidding Documents such Addenda, as City, in its discretion, considers necessary in response to written questions. Bidders shall not rely on oral statements. Oral statements will not be binding or legally effective. Other Pre-Bid Meetings may be scheduled at City's sole discretion, depending on staff availability.

11. OTHER REQUIREMENTS PRIOR TO BIDDING. Submission of Bid signifies Bidder's careful examination of Bidding Documents and complete understanding of the nature, extent, and location of Work to be performed. As a condition to Bidding, Bidder must complete tasks listed in Document 00520 (Contract), Article 5. Submission of Bid shall constitute Bidder's express representation to the City that Bidder has fully completed these tasks.

12. EXISTING DRAWINGS AND GEOTECHNICAL DATA. Bidders may examine any available existing conditions information (e.g., record documents, specifications, studies, drawings of previous work) by giving City reasonable advance notice, as well as applicable environmental assessment information (if any) regarding the Project. Document 00320 (Geotechnical Data and Existing Conditions) applies to all supplied existing conditions information and geotechnical reports and all other information supplied regarding existing conditions either above ground or below ground. Some information is included in the Appendix for Information Only.

13. ADDENDA. Bidders must direct all questions about the meaning or intent of Bidding Documents to City (Attention: City's Authorized Representative**) in writing**. Letters, Faxes or emails are acceptable forms of written questions. Interpretations or clarifications considered necessary by City in response to such questions will be issued by Addenda posted on the City's Web page at Cupertino.org. It is the Contractor's sole responsibility to down load addenda for the project from the City's web site. City may not answer questions received less than ten Days prior to the date for opening Bids. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

a. Addenda may be issued to modify the Bidding Documents as deemed advisable by City.
b. Addenda shall be acknowledged by number with signature in Document 00400 (Bid Form) and shall be part of the Contract Documents.
c. It is the Contractors sole responsibility to verify if there are addenda issued on the project.

14. SUBSTITUTIONS. Bidders must base their Bids on products and systems specified in Contract Documents or Addenda.

a. Except as provided in paragraph 14.c below, City will consider substitution requests only for "or equal items." Bidders wanting to use "or equal" item(s) may submit Document 00660 (Substitution Request Form) no later than 35 Calendar Days after the due date for City receiving Bids. To assess "or equal" acceptability of product or system, substitution requests shall contain the information required in Document 00660 (Substitution Request Form) and set forth in Document 00700 (General Conditions). Insufficient information will be grounds for rejection of substitution. City shall, within a reasonable period of time after having received a request for substitution, issue in writing its decision as to whether the proposed substitute item is an "equal" item. City's decision shall be conclusive on all Bidders.
b. Approved substitutions shall be listed in Addenda and become part of the Contract Documents.
c. Substitutions may be requested after submitting Bids and the Award of Contract only in accordance with requirements specified in Document 00700 (General Conditions).
d. As further limitation on Bidder's privilege to substitute items, City has found that certain items are designed as City standards and certain items are designed to match existing items in use on a particular public improvement, either completed or in the course of completion. As to such items, City will not permit substitution. City will not permit substitutions for the following items: **NONE IN THIS PROJECT**

15. WAGE RATES. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are on file at City's Public Works office or may be obtained of the State of California web site http://www.dir.ca.gov/DLSR/PWD/Northern.html and are deemed included in the Bidding Documents. Upon request, City will make available copies to any interested party. Also, Contractor shall post the applicable prevailing wage rates at the Site.

16. EQUAL EMPLOYMENT OPPORTUNITY. Contractor shall comply with all applicable federal, state, and local laws, rules, and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, marital status, age, medical conditions, disability, or any other reason.

17. BID OPENING. City will open all Bidders' Envelopes "A," at the time and on the date specified in paragraph 1 above, initially evaluate them for responsiveness, and determine an Apparent Low Bidder as specified herein. City will not open Envelopes "B" publicly, and except for the Apparent Low Bidder's Envelope "B" (or as otherwise provided in this Document 00200), they will remain unopened.

18. DETERMINATION OF APPARENT LOW BIDDER (Envelope "A"). Pursuant to Public Contract code Section 20103.8, the following methods shall be used to determine the apparent low bid. Apparent Low Bid will be based solely on the total amount of all Bid items in the Base Bid, if there are not Alternate bid items. If there are Alternate bid items, the apparent low bidder will be determined by adding each of the Alternate bid items to the Base Bid in ascending numerical sequence, until a total is reached to which no further Alternate Bids may be added without exceeding the expected expenditure amount of $ 1,820,000 The low bidder will be the bidder whose total amount calculated under the preceding sentence (1) includes the greatest number of Alternates, or (2) offers an equal number of Alternates for the lowest price. If the addition of the first Alternative Bid to the Base Bid results in a figure greater than the above-stated dollar amount in the case of every responsive bidder, the lowest bid will be determined by the Base Bid alone. Once the lowest bidder has been identified in the preceding manner, the City may elect to award the Base Bid item alone or any or all Alternate items in any sequence to the low bidder, even if the resulting contract amount no longer represent the lowest total price for the particular items chosen. All Bidders are required to submit Bids on all Bid items including any and all Alternates items.

19. EVALUATION OF BIDDER RESPONSIBILITY (Envelope "B").

a. City will open Apparent Low Bidder's Envelope "B" and check its contents for compliance with paragraph 5 above and this paragraph 20. City will notify Apparent Low Bidder in writing of any deficiencies found and will provide Bidder the opportunity to respond in writing with reasonable clarifications but will not allow any changes in the nature of Bidder as a business entity.

b. If any Apparent Low Bidder is determined to be non-responsive or non-responsible, City may open the next Apparent Low Bidder's Envelope "B" pursuant to any procedures determined in its reasonable discretion, and proceed for all purposes as if this Apparent Low Bidder were the original Apparent Low Bidder. City shall use reasonable efforts to make the responsive responsible Apparent Low Bidder's Envelope "B" public on the fifth Day following opening of the Bidders' Envelope "A"s, subject to paragraph 27 below.

c. Document 00450 sets forth certain minimum criteria for a Bidder to be found responsible. Bidder's attention is called to the following minimum requirements for a Bidder to be found responsible to perform the Work:

1) Sufficient financial strength, stability and resources as measured by Bidder's equity, debt-to-assets ratio, and capability to finance the Work to be performed.

2) Ability to secure, in accordance with the Contract Documents, the required forms of Construction Performance Bond and Construction Labor and Material Payment Bond. Ability to obtain required insurance with coverage values that meet minimum requirements.

3) Subcontracting Prior Experience. Satisfactory experience on public works, including without limitation no history of default termination, excessively delayed completion or excessive defective work.

4) Projects Public Experience. Evidence that Bidder and its team, including without limitation its Subcontractors (hereafter, including Bidder if Bidder performs such Work itself, "designated Subcontractor(s)"), have the human and physical resources of sufficient quantity and quality to perform the Work under Contract Documents in a timely and Specification-compliant manner, to include:

i. Construction and management organizations with sufficient personnel and requisite disciplines, licenses, skills, experience, and equipment for the Project.

ii. Minimum licensing requirements including evidence of a valid California contractor's license as specified for the Bidder and evidence of requisite licenses for Key Personnel of Bidder or any designated Subcontractor(s).

iii. Sufficiency of proposed quality assurance plan to meet the requirements of the Contract Documents.

iv. Bidder's safety record.

v. Minimum experience requirements of the prime contractor including the completion of a suitable number of projects of similar nature and complexity for contract dollar amounts equal to what is specified in Document 00450 (Statement of Qualification).

vi. A field organization with skills, experience, and equipment sufficient to perform all on-Site work and necessary scheduling.

vii. Expertise of Key Personnel to accomplish the duties and responsibilities required to perform the Work under the Contract Documents. Minimum experience requirements of Key Personnel including the completion of projects of similar nature and complexity and having the number of years of experience on projects of similar nature and complexity as specified in Document 00450 (Statement of Qualifications).

Bidder shall expressly indicate which, if any, of the designated Subcontractor(s)' functions it will perform itself.

5) The following are general requirements for the designated Subcontractor(s) to be found responsible to perform the Work. (Unless the designated Subcontractor(s) is found responsible, Bidder will be found non-responsible.) See specific requirements in Document 00450.

i. Evidence that Bidder's named Subcontractor has the human and physical resources of sufficient quantity and quality to perform those aspects of the Contract in a timely and Specification-compliant manner.

ii. Construction and management organizations with sufficient personnel and requisite disciplines, licenses, skills, experience, and equipment for the Project.

iii. A field organization with skills, experience, and equipment sufficient to perform all on-Site work and necessary scheduling.

iv. Installation of a minimum number of projects over a period of several years for projects similar in nature and complexity to this Project.

v. The installation supervisor shall have worked in a similar capacity on a number of projects similar in nature and complexity to this Project.

20. BID EVALUATION. City may reject any or all Bids and waive any informalities or minor irregularities in the Bids. City also reserves the right, in its discretion, to reject any or all Bids and to re-Bid the Project. City reserves the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional Bids, and to reject the Bid of any Bidder if City believes that it would not be in the best interest of Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by City. For purposes of this paragraph, an "unbalanced Bid" is one having nominal prices for some work items and enhanced prices for other work items.

a. In evaluating Bids, City will consider Bidders' qualifications, whether or not the Bids comply with the prescribed requirements, unit prices and other data, as may be requested in Document 00400 (Bid Form) or prior to the Notice of Award.

b. City may conduct reasonable investigations and reference checks of Bidder, proposed Subcontractors, suppliers and other persons and organizations as City deems necessary to assist in the evaluation of any Bid and to establish Bidder's responsibility, qualifications, financial ability, proposed Subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to City's satisfaction within the prescribed time. Submission of a Bid constitutes Bidder's consent to the foregoing. City shall have the right to consider information provided by sources other than Bidder. City shall also have the right to communicate directly with Bidder's surety regarding Bidder's bonds.

c. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. 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 written words and figures will be resolved in favor of the words.

d. Quantities stated in the Bidding Documents are approximate only and are subject to correction upon final measurement of the Work, and are subject further to the rights reserved by the City to increase or diminish the amount of work under any classification as advantages to design or construction needs require.

e. City may determine whether a Bidder is qualified in its sole discretionary judgment.

f. If identical apparent lowest bids are received the City may award the contract in accordance with Section 20166 of the Public Contract code.

21. AWARD. If the Contract is to be awarded, it will be awarded to the lowest responsible responsive Bidder. Following completion of all required City procedures and receipt of all City approvals, City will issue Document 00510 (Notice of Award) to successful Bidder. If two (2) or more bids are the same and found to be the lowest responsible responsive bidder, the City may accept either bid it chooses in its sole discretion.

22. BID PROTEST. Any Bid protest must be submitted in writing to the City's offices (Attention: City's Authorized Representative), before 3:30 p.m. of the third Calendar Day following opening of Bidders' Envelope "A"s.

a. The initial protest document must contain a complete statement of the basis for the protest.

b. The protest must refer to the specific portion of the document that forms the basis for the protest.

c. The protest must include the name, address, and telephone number of the person representing the protesting party.

d. Only Bidders who the City otherwise determines are responsive and responsible are eligible to protest a Bid; protests from any other Bidder will not be considered. In order to determine whether a protesting Bidder is responsive and responsible, City will open and evaluate information contained in any protesting Bidder's Envelope "B", and conduct the same investigation and evaluation as City is entitled to take regarding an Apparent Low Bidder. Any such opened Envelope "B" shall also be subject to all provisions of paragraph 27.

e. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

f. The procedure and time limits set forth in this paragraph are mandatory and are Bidder's sole and exclusive remedy in the event of Bid protest. Bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder, but must timely pursue its own protest.

23. POST-NOTICE OF AWARD REQUIREMENTS. After Notice of Award, the successful Bidder must execute and submit the following documents as indicated below.

a. Submit the following documents to City by 5:00 p.m. of the 10th Calendar Day following Notice of Award. Execution of Contract by City depends upon approval of these documents:

1) Document 00520 (Contract): To be executed by successful Bidder. Submit four originals, each bearing an original signature.

2) Document 00610 (Construction Performance Bond): To be executed by successful Bidder and surety, in the amount set forth in Document 00610 (Construction Performance Bond). Submit one original.

3) Document 00620 (Construction Labor and Material Payment Bond): To be executed by successful Bidder and surety, in the amount set forth in Document 00620 (Construction Labor and Material Payment Bond). Submit one original.

4) Insurance certificates and endorsements required by Document 00700 (General Conditions). Submit one original set.

5) The Guaranty in the form set forth in Document 00630 (Guaranty). Submit four originals, each bearing an original signature.

b. City shall have the right to communicate directly with Apparent Low Bidder's proposed performance bond surety, to confirm the performance bond. City may elect to extend the time to receive faithful performance and labor and material payment bonds.

c. Successful Bidder's failure to submit the documents required herein, in a proper and timely manner, entitles City to rescind its award, and to cause Bidder's Bid security to be forfeited as provided herein.

24. FAILURE TO EXECUTE AND DELIVER DOCUMENTS. If Bidder, to whom Contract is awarded shall, within the period described in paragraph 23a of this Document 00200, fail or neglect to execute and deliver all required Contract Documents and file all required bonds, insurance certificates, and other documents, City may, in its sole discretion, foreclose on Bidder's deposit surety bond, or deposit Bidder's cashier's check or certified check for collection, and retain the proceeds thereof as liquidated damages for Bidder's failure to enter into the Contract Documents. Bidder agrees that calculating the damages City may suffer as a result of Bidder's failure to execute and deliver all required Contract Documents would be extremely difficult and impractical and that the

amount of Bidder's required Bid security shall be the agreed and presumed amount of City's damages. In addition, upon such failure City may determine the next Apparent Low Bidder and proceed accordingly.

25. MODIFICATION OF COMMENCEMENT OF WORK. City expressly reserves the right to modify the date for the Commencement of Work under the Contract and to independently perform and complete work related to the Project. City accepts no responsibility to Contractor for any delays attributed to its need to complete independent work at the Site.

26. WITHDRAWAL OF BIDS. Bidders may withdraw their Bids at any time prior to the Bid opening time fixed in this Document 00200, only by written request for the withdrawal of Bid filed with the City at the City's office. Bidder or its duly authorized representative shall execute request to withdraw Bid. The submission of a Bid does not commit the City to award a contract for the Project, to pay costs incurred in the preparation of a Bid, or to procure or contract for any goods or services.

27. PUBLIC RECORDS ACT REQUESTS.

a. Per the Public Records Act, City will make available to the public, Bidder's SOQ (if Bidder's Envelope "B" is opened), all correspondence and written questions submitted during the Bid period, all Bid submissions opened in accordance with the procedures of this Document 00200, and all subsequent Bid evaluation information. All submissions not opened will remain sealed and will eventually be returned to the submitter.

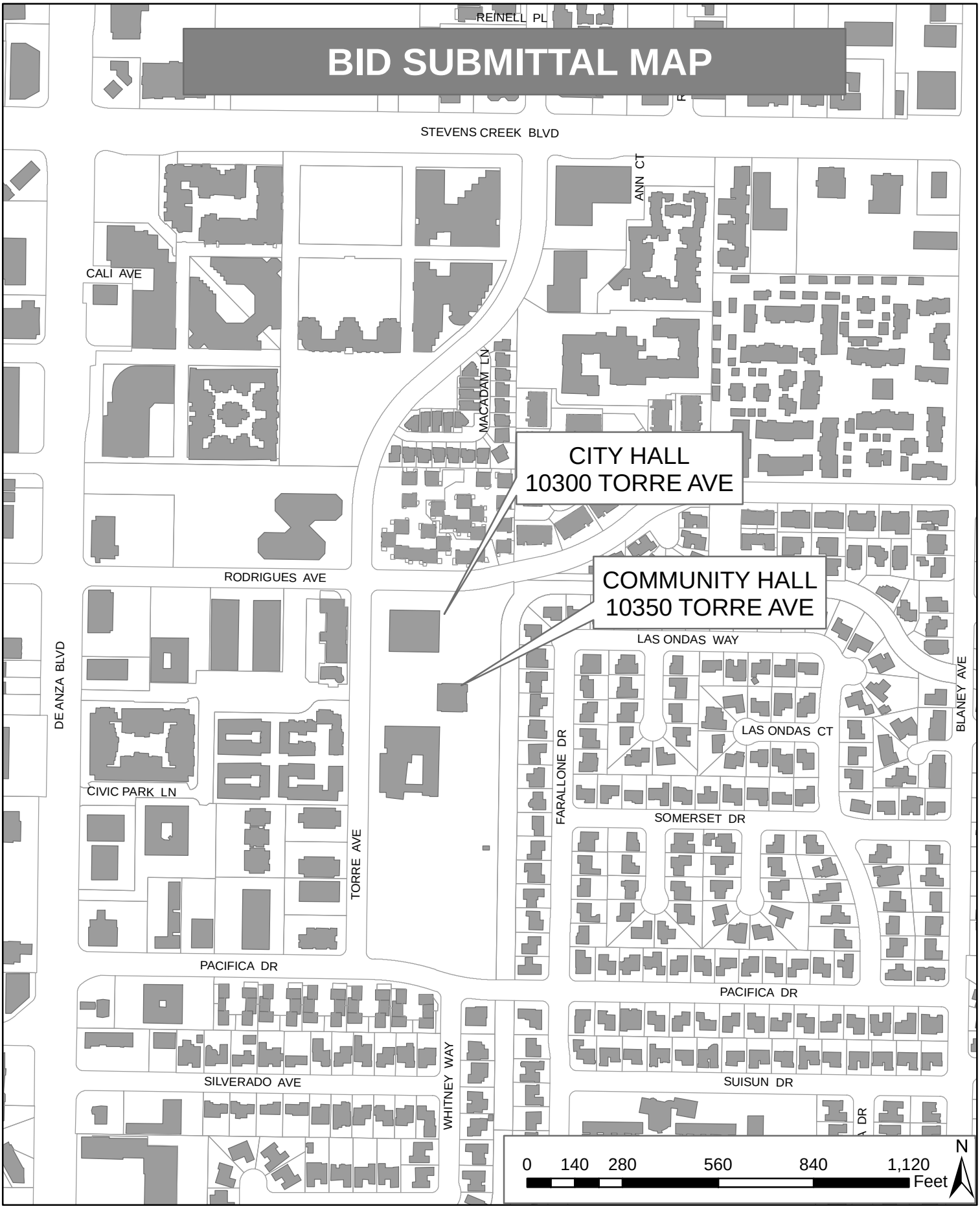
b. Upon a request for records regarding this Bid, City will notify Bidder involved within ten Days from receipt of the request of a specific time when the records will be made available for inspection. City will make such information available to the extent required by applicable law, without restriction.

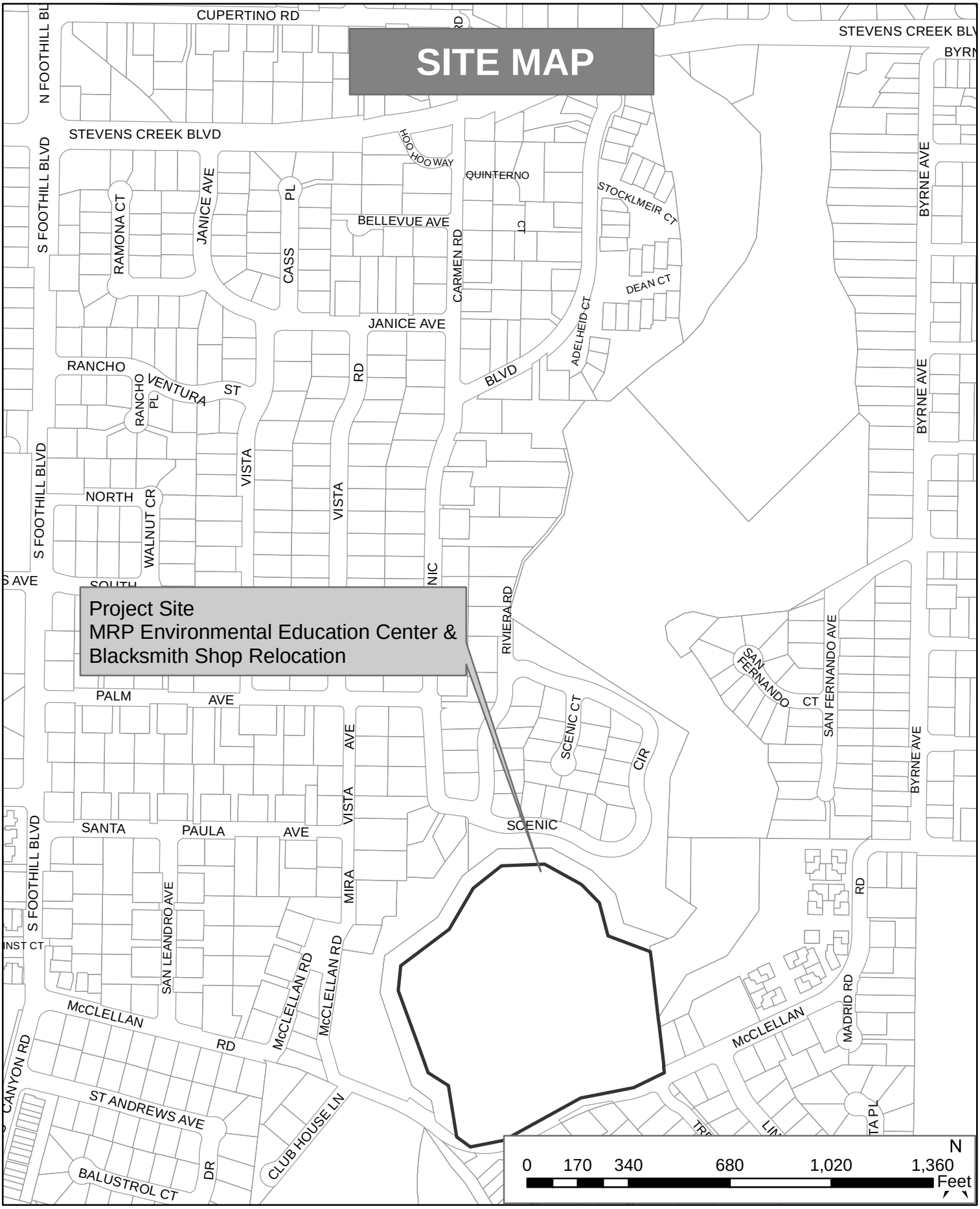
c. Information disclosed in the SOQ (if Envelope "B" is opened) and the attendant submissions are the property of City.

28. CONFORMED CONSTRUCTION DOCUMENTS. Following Award of Contract, City may prepare a conformed set of Contract Documents reflecting Addenda issued during bidding, which will, failing objection, constitute the approved set of Contract Documents.

29. DEFINITIONS. All abbreviations and definitions of terms used in this Document 00200 are set forth in Section 00700.

END OF DOCUMENT


BID SUBMITTAL MAP
REINELL PL
STEVENS CREEK BLVD
ANN CT
CALI AVE
MACADAM LN
CITY HALL
10300 TORRE AVE
RODRIGUES AVE
COMMUNITY HALL
10350 TORRE AVE
LAS ONDAS WAY
DE ANZA BLVD
BLANEY AVE
LAS ONDAS CT
FARALLONE DR
CIVIC PARK LN
SOMERSET DR
TORRE AVE
PACIFICA DR
PACIFICA DR
SILVERADO AVE
WHITNEY WAY
SUISUN DR
0 140 280 560 840 1,120
Feet
N


SITE MAP
Project Site
MRP Environmental Education Center &
Blacksmith Shop Relocation
CUPERTINO RD
STEVENS CREEK BLVD
N FOOTHILL BL
S FOOTHILL BLVD
HOO HOO WAY
QUINTERNO
STOCKLMEIR CT
BELLEVUE AVE
RAMONA CT
JANICE AVE
CASS
PL
CARMEN RD
CT
DEAN CT
ADELHEID CT
BLVD
RANCHO
VENTURA
ST
RANCHO PL
RD
VISTA
NORTH
WALNUT CR
NIC
RIVIERA RD
BYRNE AVE
SAN FERNANDO AVE
SAN FERNANDO CT
SCENIC CT
CIR
SCENIC
PALM
AVE
SANTA
PAULA
MIRA
SAN LEANDRO AVE
McCLELLAN RD
McCLELLAN
MADRID RD
CANYON RD
ST ANDREWS AVE
CLUB HOUSE LN
BALUSTROL CT
DR
N
0
170
340
680
1,020
1,360
Feet

DOCUMENT 00210

INDEMNITY AND RELEASE AGREEMENT

Dated _____

POTENTIAL BIDDER: _____

CITY: THE CITY OF CUPERTINO

SITE: 22221 McClellan Road, Cupertino, CA

PROJECT: **MCCLELLAN RANCH PRESEVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID**

In consideration of the above-referenced City's permitting the undersigned potential bidder ("Bidder") to have access to, and to conduct investigations, tests and/or inspections on, the Site, Bidder hereby agrees as follows:

1. To the greatest extent permitted by law, Bidder hereby releases, and shall defend, indemnify and hold harmless City, and its officers, employees, consultants (including without limitation Consulting Engineer), representatives, and agents, and all other parties having any other interest in the Site, against any claim or liability, including attorney's fees, arising from or relating to any Site-related access, investigation, test, inspection and/or other activity conducted by Bidder or any of Bidder's officers, employees, consultants, representatives, and/or agents, regardless of whether claim or liability is caused in part by the negligence of City or by any released and indemnified party.

2. Bidder hereby waives the provisions of California Civil Code Section 1542 which provides as follows:

   A general release does not extend to claims that the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him, must have materially affected his settlement with the debtor.

3. Bidder shall repair any damage to the Site or adjacent property resulting from activities authorized hereunder, and comply with and be subject to all other requirements and obligations described or referenced in Document 00320 (Geotechnical Data and Existing Conditions).

4. Attached hereto (or to be delivered separately before Bidder's visit to the Site) is a certificate for comprehensive general liability insurance satisfying the requirements of Document 00700 (General Conditions).

5. Although this Indemnity and Release Agreement is not a Contract Document (see Document 00520 Contract), it shall be fully effective and binding regardless of whether Bidder submits a Bid for the subject Project, is awarded a contract for the Project, or otherwise.

_____
Name of Bidder

By: _____ By: _____
Signature Signature

Its: _____ Its: _____
Title (If Corporation: Chairman, President or Vice President) Title (If Corporation: Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer)

DOCUMENT 00320

GEOTECHNICAL DATA, HAZARDOUS MATERIALS SURVEYS AND EXISTING CONDITIONS

1. SUMMARY

This Document 00320 sets forth the terms and conditions under which Bidder may review, study, use, or rely upon geotechnical data at or contiguous to the Site, and existing conditions information concerning existing conditions at or contiguous to the Site. This Document 00320, the available geotechnical, soil and asbestos data, and the supplied existing conditions information are not Contract Documents.

2. REPORTS AND INFORMATION

A. City, its consultants, and prior contractors may have collected documents providing a general description of the Site and conditions of the Work. These documents may consist of geotechnical reports for and around the Site, contracts, contract specifications, as-built drawings, utility drawings, and information regarding Underground Facilities. These reports, documents and other information are not part of the Contract Documents. They are provided in Appendix and are "**For Information Only**".

Existing Condition surveys and reports consist of the following information in Appendix

1. Updated Geotechnical Investigation, Cotton, Shires & Associates, Inc., Dated May 2013

3. USE OF INFORMATION ON EXISTING CONDITIONS

A. Aboveground Existing Conditions. Under no circumstances shall City be deemed to make a warranty or representation of existing aboveground conditions, as-built conditions, or other aboveground actual conditions verifiable by reasonable independent investigation. These conditions are verifiable by Bidder by the performance of its own independent investigation that Bidder must perform prior to bidding and Bidder must not rely on the information supplied by City regarding existing conditions. Bidder represents and agrees that in submitting its Bid, it is not relying on any information regarding existing conditions supplied by City.

B. Underground Facilities. Information supplied regarding existing Underground Facilities at or contiguous to the Site is based on information furnished to City by others (e.g., the owners or builders of such Underground Facilities or others). Except as expressly set forth in this Document 00320, City does not assume responsibility for the accuracy, completeness or thoroughness of this information, and Bidder is solely responsible for any interpretation or conclusion drawn from this information. Except as expressly set forth in this Document 00320, City will be responsible only for the general accuracy of information regarding Underground Facilities, and only for those Underground Facilities that are owned by City. This express assumption of responsibility applies only if Bidder has conducted the independent investigation required of it and discrepancies were not apparent.

4. LIMITED RELIANCE PERMITTED ON CERTAIN INFORMATION

A. Geotechnical Data. ***For informational purpose only***. Except as expressly set forth in this Document 00320, City does not warrant, and makes no representation regarding, the accuracy or thoroughness of any geotechnical data. Bidder represents and agrees that in submitting its Bid, it is not relying on any geotechnical data supplied by City, except as specifically set forth herein.

B. Bidder may rely upon the general accuracy of the "technical data" contained in the geotechnical reports and drawings identified above, but only insofar as it relates to subsurface conditions, provided Bidder has conducted the independent investigation required of it and discrepancies were not apparent. The term "technical data" in the referenced reports and drawings shall be limited as follows:

1. The term "technical data" shall include actual reported depths, reported quantities, reported soil types, reported soil conditions, and reported material, equipment, or structures that were encountered during subsurface exploration.

2. The term "technical data" does not include, and Bidder may not rely upon, any other data, interpretations, opinions or information shown or indicated in such drawings or reports that otherwise relate to subsurface conditions or described structures.

3. The term "technical data" shall not include the location of Underground Facilities.

4. Bidder may not rely on the completeness of reports and drawings for the purposes of bidding or construction. Bidder may rely upon the general accuracy of the "technical data" contained in such reports or drawings.

5. Bidder is solely responsible for any interpretation or conclusion drawn from any "technical data" or any other data, interpretations, opinions, or information contained in supplied geotechnical data.

5. INVESTIGATIONS

A. Before submitting a Bid, each Bidder shall be responsible to obtain such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise, which may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of Contract Documents. Bidders shall advise City in writing during the Bid period of any questions, suppositions, inferences or deductions Bidders may have for City's review and response.

B. City has provided time in the period prior to bidding for Bidder to perform these investigations.

6. ACCESS TO SITE FOR INVESTIGATIONS

Subject to reasonable scheduling, City will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies, as each Bidder deems necessary for submission of a Bid. Bidders must fill all holes and clean up and restore the Site to its former conditions upon completion of such explorations, investigations, tests, and studies. Such investigations may be performed only under the provisions of Document 00200 (Instructions to Bidders) and Document 00700 (General Conditions) including, but not limited to, proof of insurance and obligation to indemnify against claims arising from such investigation work. Each Bidder shall supply all equipment required to perform any investigations as each Bidder deems necessary. City has the right to limit the number of pieces of machinery operating at one time due to safety concerns.

END OF DOCUMENT

DOCUMENT 00400

BID FORM

To be submitted as part of Envelope "A" by the time and date specified in Document 00200 (Instructions to Bidders).

TO THE HONORABLE CITY COUNCIL OF THE CITY OF CUPERTINO

THIS BID IS SUBMITTED BY:

_____

(Firm/Company Name)

Re: PROJECT NUMBER 2012-9133
MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a contract with the City of Cupertino ("City") in the form included in the Contract Documents, Document 00520 (Contract), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Bid and in accordance with all other terms and conditions of the Contract Documents. All portions of this Bid Form must be completed and signed before the bid is submitted. Failure to do so will result in the bid being rejected as non-responsive.

2. Bidder accepts all of the terms and conditions of the Contract Documents, Document 00100 (Advertisement for Bids), and Document 00200 (Instructions to Bidders), including, without limitation, those dealing with the disposition of Bid Security. **This Bid will remain subject to acceptance for 90 Days after the day of Bid opening.**

3. Bidder has visited the Site and performed all tasks, research, investigation, reviews, examinations, and analysis and given notices, regarding the Project and the Site, as set forth in Document 00520 (Contract), Article 5.

4. Bidder has given City prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by City is acceptable to Contractor.

5. Bidder attended the non-mandatory Pre-Bid Conference.

   YES ____ NO ____

6. Subcontractors for work included in all Bid items, in accordance with the criteria in the Public Contract Code, are listed on the attached Document 00430 (Subcontractors List).

7. The undersigned Bidder understands that City reserves the right to reject this Bid.

8. If written notice of the acceptance of this Bid, hereinafter referred to as Notice of Award, is mailed or delivered to the undersigned Bidder within the time described in paragraph 2 of this Document 00400 or at any other time thereafter before it is withdrawn, the undersigned Bidder will execute and deliver the documents required by Document 00200 (Instructions to Bidders) within the times specified therein. These documents include, but are not limited to, Document 00520 (Contract), Document 00610 (Construction Performance Bond), and Document 00620 (Construction Labor and Material Payment Bond).

9. Notice of Award or request for additional information may be addressed to the undersigned Bidder at the address set forth below on the signature page.

10. The undersigned Bidder herewith encloses cash, a cashier's check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form specified in Document 00200 (Instructions to Bidders), in the amount of ten percent (10%) of the total of Base Bid and made payable to the "City of Cupertino".

11. The undersigned Bidder agrees to commence Work under the Contract Documents on the date established in Document 00700 (General Conditions) and to complete all work within the time specified in Document 00520 (Contract). The undersigned Bidder acknowledges that City has reserved the right to delay or modify the commencement date. The undersigned Bidder further acknowledges City has reserved the right to perform independent work at the Site, the extent of such work may not be determined until after the opening of the Bids, and that the undersigned Bidder will be required to cooperate with such other work in accordance with the requirements of the Contract Documents.

12. The undersigned Bidder agrees that, in accordance with Document 00700 (General Conditions), liquidated damages for failure to complete all Work in the Contract within the time specified in Document 00520 (Contract) shall be as set forth in Document 00520 (Contract).

SCHEDULE OF BID PRICES

All Bid items, including lump sums and unit prices, must be filled in completely. Quote in figures only, unless words are specifically requested.

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT PRICE	TOTAL
1	CONSTRUCT ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION PROJECT COMPLETE	LS	1		
	TOTAL BASE BID PRICE				

TOTAL BASE BID PRICE: _____
(words)

Unit Legend

LS = Lump Sum
EA = Each
LF = Linear Feet
TON = Ton or 2,000 Pounds
( ) = Deductive amount

AL = Allowance
SF = Square Feet
CY = Cubic Yards
LB = Pounds

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUMS
Bidder herby acknowledges receipt and examination of all Contract Documents and the following Addenda:

Addendum No.	Addendum Date

Bidder proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the sums of money listed in this Bid Form.

NAME OF BIDDER: _____

licensed in accordance with an act for the registration of Contractors, and with license number: _____
Expiration Date: _____.

_____ _____
Where incorporated, if applicable

_____

_____
Principals

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

_____
Signature of Bidder

NOTE: If Bidder is a corporation, set forth the legal name of the corporation, state where incorporated, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address: _____
_____
_____

Officers authorized to sign contracts: _____
_____
_____
Typed Full Name:

Telephone Number(s): _____

Fax Number(s): _____

E-Mail Address: _____

END OF DOCUMENT

DOCUMENT 00411

BOND ACCOMPANYING BID

KNOW ALL BY THESE PRESENTS:

That the undersigned _____ as Principal, and the undersigned as Surety, are held and firmly bound unto the CITY OF CUPERTINO, a Municipal Corporation of the State of California ("City"), as obligee, in the penal sum of _____ Dollars **($_____)** lawful money of the United States of America being at least ten percent (10%) of the aggregate amount of said Principal _____'s Base Bid, for the payment of which, well and truly to be made, we bind ourselves, our successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal is submitting a Bid for City **Project No. 2012-9133**, **MCCLELLAN RANCH ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID**

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Bid submitted by the said Principal be accepted and the Contract be awarded to said Principal and said Principal shall within the required periods enter into the Contract so awarded and provide the required Construction Performance Bond, Construction Labor and Material Payment Bond, insurance certificates, and all other endorsements, forms, and documents required under Document 00200 (Instructions to Bidders), then this obligation shall be void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument this _____ day of _____, 20 ___.

(Corporate Seal)

By

_____
Principal

_____
Surety

(Corporate Seal)

By

_____
Attorney in Fact

END OF DOCUMENT

DOCUMENT 00430

REQUIRED SUBCONTRACTORS LIST

Bidder must provide the following Listed Subcontractor information in conformance with the California Public Contract Code where the value of the Subcontractor's work is or exceeds ½ of one percent (.05%) of the Base Bid or ten thousand dollars ($10,000), whichever is greater, on Document 00400. Failure to do so will render Bid Non Responsive.

Bidder is reminded that Listed Subcontractors cannot be substituted by the Apparent Low Bidder after Bid has been submitted and opened, without City's formal approval.

Subcontractor Name	Address & Phone No.	License No.	Trade	$ Value $

Attach additional sheets if necessary

VOLUNTARY SUBCONTRACTOR LIST

Bidder is requested to voluntarily provide Subcontractor information listed below for subcontract work whose value is less than ½ of one percent of the Base Bid or ten thousand dollars ($10,000), whichever is greater, on Document 00400. Failure to do so will have no impact on Bid.

Bidder is requested not to substitute Subcontractors after Bid has been submitted and opened, without City's informal approval.

Subcontractor Name	Address & Phone No.	License No.	Trade	$ Value $

Attach additional sheets if necessary

END OF DOCUMENT

DOCUMENT 00450

STATEMENT OF QUALIFICATIONS

FOR

MCCLELLAN RANCH PRESERVE ENVIRONMENAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

Bidder's Full Corporate Name: _____

Bidder's Legal Structure

- _____ Sole Proprietor
- _____ Partnership
- _____ Non-Profit 501 C3
- _____ Corporation
- _____Other, please explain_____

Bidder's Federal I.D. Number_____

Bidder's Mailing Address_____

Bidder's Street Address_____

Owner of Bidder's Company _____

Bidder's Contact Person _____

Bidder's Address _____

Bidder's Phone _____, Fax _____, Email_____

(Bidder shall identify each partner and / or member of the Joint Venture, and their roles and responsibilities, if a Joint Venture is proposed.)

INSTRUCTIONS FOR THE SUBMITTAL OF THE STATEMENT OF QUALIFICATIONS

- Place the Statement of Qualifications Document, with all required materials, in a separate envelope labeled "**Envelope B", "STATEMENT OF QUALIFICATIONS" (SOQ)** with the project title and Contractors name and address. **<u>Do Not</u> place the SOQ in the same envelope as the Bid Proposal.**
- Submittal of the Statement of Qualifications envelope is required at the date and time specified in the Advertisement for Bid, Document 00100. The Bid Proposal, Envelope "A", be rejected if and Envelope "B" is not received as specified to complete the bidding requirements.
- The City will open only Bid Proposals, Envelope "A", at the public bid opening. The Statement of Qualifications, Envelope "B", of the apparent low bidder, will be opened by the City to check its contents for compliance with the requirements. City will notify Apparent Low Bidder of any deficiencies found and will provide Bidder the opportunity to respond in writing with reasonable clarifications but will not allow any changes in the nature of Bidder as a business entity.
- If the Apparent Low Bidder is determined to be non-responsive or non-responsible, City may open the next Apparent Low Bidder's Statement of Qualification, Envelope B, pursuant to any procedures determined in its reasonable discretion, and proceed for all intents and purposes, as if the next Apparent Low Bidder were the original Apparent Low Bidder. City shall use reasonable efforts to make the responsive responsible Apparent Low Bidder's Statement of Qualifications public by the fifth work day following opening of the Bid Proposals.

GENERAL BIDDER EXPERIENCE

Any explanation requested by a Bidder regarding the meaning or interpretation of this Document must be requested in writing and with sufficient time allowed for a reply to reach Bidder before the submission of its SOQ. Oral explanations or instructions will not be binding. Any information provided to any prospective Bidder concerning this Document will be furnished to all prospective Bidders as an Addendum to the Bidding Documents.

Except as set forth herein, all abbreviations and definitions of terms used in this Document 00450 are as set forth in Document 00700 (General Conditions).

Bidders shall complete the entire Statement of Qualification. Failure to complete the questionnaire or the inclusion of any false statement(s) shall be grounds for immediate disqualification.

The SOQ shall be clear and concise to enable management-oriented personnel to make a thorough evaluation and arrive at a sound determination as to whether the SOQ meets City's requirements. To this end, the SOQ should be so specific, detailed and complete as to demonstrate clearly and fully that the Bidder has a thorough understanding of and has demonstrated knowledge of the requirements to perform the Work (or applicable portion thereof).

Bidder's compliance with the minimum qualification requirements of this Document, will also be measured by the experience of the supervisory personnel who will have responsible charge of the various major components of the Work.

If Bidder subcontracts portions of the Work, City, in its determination of whether the minimum qualification requirements have been met, will also consider the qualifications of the Subcontractor's supervisory personnel.

The Contract will require Bidder to construct the Project, all in accordance with the scope of Work set forth in the Contract. City will accept Bids only from Bidders duly licensed in accordance with the California Business & Professions Code. Additionally, Bidder must meet the following general requirements, at a minimum, in order to be considered by City to be qualified for award of the Contract:

Per the Public Records Act, City will make available to the public, Bidder's Statement of Qualifications and all correspondence and written questions submitted with the Bid. All submissions not opened will remain sealed and eventually be returned to the submitter.

Upon receipt of a request for copies of records regarding this Bid, City will notify Bidder involved within ten calendar Days from receipt of the request of a specific time when the records will be made available for inspection. City will make such information available to the extent required by applicable law, without restriction.

Information disclosed in the Statement of Qualifications and the attendant submissions are the property of City.

PART A
BIDDER'S GENERAL QUALIFICATIONS

1. Does Bidder have at least five years of experience as a continuously operating entity engaged in the performance of similar work? Yes_____ No_____

2. Has Bidder, within the past seven years, completed three projects, of similar nature and complexity, with a contract amount of at least $ 1,000,000 each? Yes_____ No_____

3. Does Bidder possess a valid and current California Class "B" General Building Contractor's License for the work proposed? Yes_____ No_____

4. Does Bidder have a minimum of $4,000,000 in the aggregate liability insurance coverage? Yes_____ No_____

5. Has Bidder's Contractor's license been revoked at any time in the last five years? Yes_____ No_____

6. Has Bidder been "default terminated" by an owner (i.e. not for convenience), or has a Surety completed a contract for Bidder within the last five years? Yes_____ No_____

7. Has Bidder had, within the last four years prior to the date of bid opening, any outstanding convictions or enforcement agency findings for failure to pay prevailing wages in the State of California? Yes_____ No_____

8. Has Bidder been determined to have violated any environmental or safety laws giving rise to civil or criminal penalties in excess of $50,000 for each violation during the last four years while performing contracting duties of the type specified for the contract within the State of California? Or has bidder had more than four civil penalties of $50,000 or less during the last four years while performing contracting duties of the type specified for the contract within the State of California? Yes_____ No_____

9. Has Bidder been convicted of violating a state or federal law respecting the employment of undocumented aliens within the preceding five years from the date of bid opening? Yes_____ No_____

Bidder will be immediately disqualified if any answer to questions 1, 2, 3, or 4 is No.
Bidder will be immediately disqualified if any answer to questions 5, 6, 7, 8,or 9 is Yes.

PART B
BIDDER'S SAFETY, PREVAILING WAGE, LICENSES, DISPUTES, BONDS AND INSURANCE

SAFETY

The following statements as to safety experience of Bidder are submitted with Bid, as part thereof, and Bidder guarantees the truthfulness and accuracy of the information.

1. Has Cal/OSHA, Federal OSHA, the EPA or any Air Quality Management District cited Bidder in the past five years? Yes _____No _____ If yes, attach description of each citation.

2. How often does Bidder require documented safety meetings be held for:

• Field Supervisor	Weekly ____	Biweekly ____	Monthly ____	Less than monthly ____
• Employees	Weekly ____	Bi-weekly ____	Monthly ____	Less than monthly ____
• New Hires	Weekly ____	Bi-weekly ____	Monthly ____	Less than monthly ____
• Subcontractors	Weekly ____	Bi-weekly ____	Monthly ____	Less than monthly ____

3. How often does Bidder conduct documented safety inspections? Quarterly ____, Semi-annually _____, Annually____, Other_____

4. Does Bidder have home office safety representatives who visit/audit the job site? Quarterly____, Semi-annually____, Annually _____, Other_____

5. What is Bidder's Interstate Experience Modification Rate? _____. (A rating in excess of 1 may constitute grounds for disqualification as non-responsible.)

6. List Bidder's Interstate Experience Modification Rate for the three calendar years listed below.
   - 2011:_____
   - 2012:_____
   - 2013:_____

7. Use Bidder's last year's Cal/OSHA log to fill in the following:
   - Number of lost workday cases _____
   - Number of medical treatment cases _____
   - Number of fatalities _____
   - Employee hours worked last year _____

8. State the name of Bidder's safety engineer/manager or Site Safety Officer:

   _____

PREVAILING WAGE PROVISIONS

Has Bidder been fined, penalized or otherwise found to have violated any prevailing wage or labor code provision? If yes, attach description of each occurrence.

Yes_____ No_____
Description:_____
_____

LICENSE PROVISIONS

Has Bidder changed names or license numbers in the past seven years? If so, please state reason for change.

Yes_____No_____Reason:_____

_____

_____

DISPUTES

Has Bidder had any claims, litigation, or disputes ending in mediation or arbitration, or termination for cause associated with any project in the past seven years? If yes, attach description of each such instance including details of total claim amount, settlement amount, and owner's name and phone number.

Yes_____ No_____

BONDS

Provide information regarding the required Performance and Payment Bonds from a surety duly licensed to do business in the State of California, having a financial rating from A. M. Best Company of **B+, Class 7** or better or that is otherwise acceptable to the City. The surety will agreed to provide Bidder with the required performance and payment bonds in accordance with the requirements set forth in Documents 00610 (Construction Performance Bond) and 00620 (Construction Labor and Material Payment Bond). Such performance and payment bonds shall be in the minimum penal sums provided therein.

Bonding Capacity – provide the following required information: **Fill out this form completely**

Name of bonding company/surety: _____

Name of Surety Agent: _____

Surety Agent address: _____

Surety Agent phone number: _____

Is surety a California-admitted surety? Yes _____ No _____

Is surety listed in the current edition of the California Department of the Treasury's Listing of approved sureties?
Yes _____ No _____

List surety's A.M. Best Rating: _____

What is Bidder's total bonding capacity? _____

What percentage rate does Bidder pay for bonds? _____

INSURANCE

Provide information regarding the required Insurance. having a financial rating from A. M. Best Company of **A, Class 7** or better or that is otherwise acceptable to the City, confirming that the insurer will provide Bidder the required coverages and amounts specified in Document 00700 (General Conditions).

Insurance verification – provide the following required information: **Fill out this form completely**.

Workers' Compensation:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: $ _____

Coverage Amount: Per Occurrence: $_____ A.M. Best Rating: _____

General Liability:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: $ _____

A.M. Best Rating: _____

Coverage Amount: Per Occurrence: _____ Per Aggregate: _____

Excess Liability: If Contractor has any

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: $ _____

A.M. Best Rating: _____

Coverage Amount: Per Occurrence: _____ Per Aggregate: _____

Automotive Liability:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: $ _____

A.M. Best Rating: _____

Coverage Amount Per Occurrence: _____

If Bidder has had the general liability carrier identified in this Document (Bidder Registration and Safety Experience Form) for less than 5 years, please provide additional information below for balance of the past 5 years

Agency Name: _____

Contact Name: _____

Phone Number: _____

Carrier: _____ A.M. Best Rating _____

Carrier: _____ A.M. Best Rating _____

Carrier: _____ A.M. Best Rating _____

Has Bidder ever had insurance terminated by a carrier? Yes _____ No _____

If yes, explain on separate signed sheet marked with correlating cross-reference to this paragraph of the questionnaire.

PART C
DETAILED BIDDER EXPERIENCE

The nature of this Project requires prior similar experience by the firm and the Key Personnel assigned. **Contractor must have completed, within the last seven years, at least three contracts with a value of $1,000,000 or more.**

Similar prior project experience must contain the following elements, but not all are necessary on any single project. All projects must have a value at or above $ 1,000,000 for the construction cost.

- construction of a building that is similar in size
- construction of a building for use as a public facility
- construction of a building with similar type of construction
- construction at a facility while facility continues to operate
- construction of a building with similar site constraints (access, hours of construction, etc.)

Summarize similar project experience below and provide the detailed project information requested: **Be very specific with description of work performed and how it relates to the required elements above. Fill out this form completely**.

Bidder is precluded from self-performing any of the specific work listed in the technical provisions that requires special skill and experience, unless Bidder can conclusively demonstrate the necessary skill and experience for the work. Bidder shall provide the project experience information to support meeting the experience requirements as specified in Document 00800 Special Conditions and in the technical provisions.

Project No. 1, of similar nature and complexity, at or above $ 1,000,000 in construction cost.

Project name	Construction Cost ($)	Year completed

Location:_____

Owner name and phone no:_____

Engineer of Record name and phone no:_____

Owner's Const. Mgr. or Project Mgr. (name and phone number):_____

Work Performed Similar to Project:_____

_____

_____

_____

_____

Project No. 2, of similar nature and complexity, at or above $ 1,000,000 in construction cost.

Project name	Construction Cost ($)	Year completed

Location:_____

Owner name and phone no:_____

Engineer of Record name and phone no:_____

Owner's Const. Mgr. or Project Mgr. (name and phone number):_____

Work Performed Similar to Project:_____

_____

_____

_____

_____

Project No. 3, of similar nature and complexity, at or above $ 1,000,000 in construction cost.

Project name	Construction Cost ($)	Year completed

Location:_____

Owner name and phone no:_____

Engineer of Record name and phone no:_____

Owner's Const. Mgr. or Project Mgr. (name and phone number):_____

Work Performed Similar to Project:_____

_____

_____

_____

_____

BIDDER'S PROPOSED KEY PERSONNEL

Bidder shall provide specific information, as listed below, for each named Key Personnel of Bidder.

Project Manager: _____

Years of Employment with Bidder's Firm: _____

Years of experience _____

Education – degrees obtained, schools and years _____

Professional registration_____

Two client reference names and phone nos:_____

Project Superintendent: _____

Years of Employment with Bidder's Firm: _____

Years of experience_____

Education – degrees obtained, schools and years_____

Professional registration_____

Two client reference names and phone nos:_____

PART D
BIDDER REGISTRATION

BIDDER CERTIFIES, UNDER PENALTY OF PERJURY, THAT THE FOREGOING INFORMATION IN THIS DOCUMENT 00450 IS CURRENT AND ACCURATE AND AUTHORIZES THE CITY OF CUPERTINO AND ITS AGENTS AND REPRESENTATIVES TO OBTAIN A CREDIT REPORT AND/OR VERIFY ANY OF THE ABOVE INFORMATION.

_____
printed name

_____
signature

_____
date

END OF DOCUMENT

DOCUMENT 00481

NON-COLLUSION AFFIDAVIT
PUBLIC CONTRACT CODE §7106

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

STATE OF CALIFORNIA)
) ss.
COUNTY OF _____)

_____, being first duly sworn, deposes and says that he or she is _____ **[Office of Affiant]** of _____ **[Name of Bidder]**, the party making the foregoing Bid, that the Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the Bid is genuine and not collusive or sham; that Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham Bid, and has not directly or indirectly colluded, conspired, connived or agreed with any bidder or anyone else to put in a sham Bid, or that anyone shall refrain from bidding, and that the Bidder has not in any manner, directly or indirectly, sought by contract, communication or conference with anyone to fix the Bid price of Bidder or any other bidder, or to fix any overhead, profit or cost element of the Bid price, or of that of any other bidder, or to secure any advantage against the City of Cupertino, or anyone interested in the proposed contract; that all statements contained in the Bid are true; and further, that Bidder has not, directly or indirectly, submitted its Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, Bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid.

Executed under penalty of perjury under the laws of the State of California:

_____
(Name of Bidder)

_____
(Signature of Principal)

Subscribed and sworn before me _____

This _____ day of _____, 20___

Notary Public of the State of _____
In and for the County of_____
My Commission expires_____ (Seal)

(If Bidder is a partnership or a joint venture, this affidavit must be signed and sworn to by every member of the partnership or venture.)

(If Bidder [including any partner or venturer of a partnership or joint venture] is a corporation, this affidavit must be signed by the Chairman, President, or Vice President and by the Secretary, Assistant Secretary, Chief Financial Officer, or Assistant Treasurer.)

(If Bidder's affidavit on this form is made outside the State of California, the official position of the person taking such affidavit shall be certified according to law.)

END OF DOCUMENT

66DOCUMENT 00482

BIDDER CERTIFICATIONS

CITY OF CUPERTINO

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

The undersigned Bidder certifies to the City of Cupertino as set forth in sections 1 through 7 below.

1. STATEMENT OF CONVICTIONS

By my signature hereunder, I hereby swear, under penalty of perjury, that no more than one final, unappealable finding of contempt of court by a Federal Court has been issued against Bidder within the past two years because of failure to comply with an order of a Federal Court or to comply with an order of the National Labor Relations Board.

2. CERTIFICATION OF WORKER'S COMPENSATION INSURANCE

By my signature hereunder, as the Bidder, I certify that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's 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.

3. CERTIFICATION OF PREVAILING WAGE RATES AND RECORDS

By my signature hereunder, as the Bidder, I certify that I am aware of the provisions of Section 1773 of the California Labor Code, which requires the payment of prevailing wage on public projects. Also, that the Bidder and any sub bidders under the Bidder shall comply with California Labor Code §1776, regarding wage records, and with California Labor Code §1777.5, regarding the employment and training of apprentices. It is the Bidder's responsibility to ensure compliance by any and all subcontractors performing work under this Contract.

4. CERTIFICATION OF COMPLIANCE WITH PUBLIC WORKS CHAPTER OF LABOR CODE

By my signature hereunder, as the Bidder, I certify that I am aware of Sections 1777.1 and 1777.7 of the California Labor Code and Bidder and Subcontractors are eligible to bid and work on public works projects.

5. CERTIFICATE OF NON-DISCRIMINATION

By my signature hereunder, on behalf of the Bidder making this Bid, the undersigned certifies that there will be no discrimination in employment with regard to race, color, religion, gender, sexual orientation, age or national origin; that all federal, state, and local directives and executive orders regarding non-discrimination in employment will be complied with; and that the principle of equal opportunity in employment will be demonstrated positively and aggressively.

6. CERTIFICATION REGARDING PREVIOUS DISQUALIFICATIONS

By my signature hereunder, I hereby swear, under penalty of perjury, that the below indicated Bidder, any officer of such Bidder, or any employee of such Bidder who has a proprietary interest in such Bidder, has never been disqualified, removed or otherwise prevented from bidding on, or completing a Federal, State, or local government project because of a violation of law or a safety regulation except as indicated on the separate sheet attached hereto entitled "Previous Disqualifications." If such exceptions are attached, please explain the circumstances.

7. CERTIFICATION OF ADEQUACY OF CONTRACT AMOUNT

By my signature hereunder, as the Contractor, pursuant to Labor Code Section 2810(a), I certify that, if awarded the Contract based on the undersigned's Bid, the Contract will include funds sufficient to allow the Contractor to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided. I understand that the City will be relying on this certification if it awards the Contract to the undersigned.

BIDDER: _____
(Name of Bidder)

Date: _____, 20

By:_____
(Signature)

Name:_____
(Print Name)

Its:_____
(Title)

END OF DOCUMENT

DOCUMENT 00510

NOTICE OF AWARD

Dated _____

TO: _____

ADDRESS: _____

CONTRACT NO.: _____

CONTRACT FOR:

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

The Contract Sum of your contract is _____

_____ Dollars ($_____).

1. Two copies of each of the proposed Contract Documents (except Specifications and Drawings) accompany this Notice of Award.
2. You must comply with the following conditions precedent by 5:00 p.m. of the 10th Calendar Day following the date of this Notice of Award, that is, by _____ , _____.

    a. Deliver to City two fully executed counterparts of Document 00520 (Contract). Each of the Contract Documents must bear your signature on the cover page.
    b. Deliver to City two original Document 00610 (Construction Performance Bond), executed by you and your surety.
    c. Deliver to City two original Document 00620 (Construction Labor and Material Payment Bond), executed by you and your surety.
    d. Deliver to City two original set of the insurance certificates from Document 00530 (Insurance Forms) with endorsements required under Document 00700 (General Conditions).
    e. Deliver to City two original copies of Document 00630 (Guaranty), each executed by you.

3. Failure to comply with these conditions within the time specified will entitle City to consider your Bid abandoned, to annul this Notice of Award, and to declare your Bid security forfeited.

4. Within 21 Days after you comply with the conditions in paragraph 2 of this Document 00510, City will return to you one fully signed counterpart of Document 00520 (Contract) with the Contract Documents.

5. Upon commencement of the Work, you and each of your Subcontractors shall certify and make available for inspection payroll records on forms provided by the Division of Labor Standards Enforcement, in accordance with Section 1776 of the California Labor Code.

THE CITY OF CUPERTINO, a Municipal Corporation of the State of California ("City")

BY: _____
_____

ITS: _____
_____

AWARDED _____

by City Council of the City of Cupertino.

END OF DOCUMENT

DOCUMENT 00520

CONTRACT

THIS CONTRACT, dated this ____ day of _____, 20 ___ , by and between _____ **[Name of Contractor]** whose place of business is located at _____, _____ **[Address of Contractor]** ("Contractor"), and the CITY OF CUPERTINO, a Municipal Corporation of the State of California ("City") acting under and by virtue of the authority vested in the City by the laws of the State of California.

WHEREAS, City, on the _____ day of _____, 20___ awarded to Contractor the following Project:

PROJECT NUMBER 2012-9133
MCCLELLAN RANCH ENVIRONMENAL EDUCTION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, Contractor and City agree as follows:

Article 1. Work

1.1 Contractor shall complete all Work specified in the Contract Documents, in accordance with the Specifications, Drawings, and all other terms and conditions of the Contract Documents.

Article 2. Agency and Notices to City

2.1 City has designated Carmen Lynaugh, Public Works Project Manager, to act as City's Authorized Representative(s), who will represent City in performing City's duties and responsibilities and exercising City's rights and authorities in Contract Documents. City may change the individual(s) acting as City's Authorized Representative(s), or delegate one or more specific functions to one or more specific City's Representatives, including without limitation engineering, architectural, inspection and general administrative functions, at any time with notice and without liability to Contractor. Each City's Representative is the beneficiary of all Contractor obligations to City, including without limitation, all releases and indemnities.

2.2 City has designated Siegel & Strain Architect as the project Consultant. City may change the identity of the project Consultant at any time with notice and without liability to Contractor.

2.3 City has designated Gilbane Building Company to act as Construction Managers. City may change the identity of the Construction Manager at any time with notice and without liability to Contractor.

2.4 All notices or demands to City under the Contract Documents shall be to City's Authorized Representative at: 10300 Torre Avenue, Cupertino, California 95014 or to such other person(s) and address(es) as City shall provide to Contractor.

Article 3. Contract Time and Liquidated Damages

3.1 Contract Time.

The Contract Time will commence to run on the date indicated in the Notice to Proceed. City may give a Notice to Proceed at any time within 30 Days after the Notice of Award. Contractor shall not do any Work at the Site prior to the date on which the Contract Time commences to run.

Contractor shall achieve **Final Completion** of the entire Work and be ready for Final Payment in accordance with Section 00700 (General Conditions) within 270 Calendar Days from the date when Contract Time commences to run.

3.2 Liquidated Damages.

City and Contractor recognize that time is of the essence of this Contract and that City will suffer financial loss in the form of contract administration expenses (such as project management and consultant expenses), if all or any part of the Work is not completed within the times specified above, plus any extensions thereof allowed in accordance with the Contract Documents. Consistent with Document 00700 (General Conditions), Contractor and City agree that because of the nature of the Project, it would be impractical or extremely difficult to fix the amount of actual damages incurred by City because of a delay in completion of all or any part of the Work. Accordingly, City and Contractor agree that as liquidated damages for delay Contractor shall pay City:

3.2.1 **$2,000** for each Calendar Day that expires after the time specified herein for Contractor to achieve **Final Completion** of the entire Work as specified above.

3.2.2 **$3,000** for each occurrence of a violation of Document 00800, Section 1.7 **WORK DAYS AND HOURS AND NOISE DISTURBANCES**.

3.2.3 Three Months Salary for each Key Personnel named in Contractor's SOQ pursuant to Article 2.G of Document 00450 (Statement of Qualifications for Construction Work) who leaves the Project and/or Contractor replaces at any point before Final Completion, for any reason whatsoever, that Contractor can demonstrate to City's satisfaction is beyond Contractor's control.

Liquidated damages shall apply cumulatively and, except as provided below, shall be presumed to be the damages suffered by City resulting from delay in completion of the Work.

Contractor should be aware that California Department of Fish and Game, and other State and Federal agencies, may also levy fines and penalties for the harming, harassing or killing of protected wildlife and endangered species. Contractor hereby agrees to become familiar with and adhere to wildlife and endangered species protection requirements.

3.3 Liquidated damages for delay shall only cover administrative, overhead, interest on bonds, and general loss of public use damages suffered by City as a result of delay. Liquidated damages shall not cover the cost of completion of the Work, damages resulting from defective Work, lost revenues or costs of substitute facilities, or damages suffered by others who then seek to recover their damages from City (for example, delay claims of other contractors, subcontractors, tenants, or other third-parties), and defense costs thereof.

Article 4. Contract Sum

4.1 City shall pay Contractor the Contract Sum for completion of Work in accordance with Contract Documents as set forth in Contractor's Bid, attached hereto: See Exhibit "A" attached

Article 5. Contractor's Representations

In order to induce City to enter into this Contract, Contractor makes the following representations and warranties:

5.1 Contractor has visited the Site and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions, and federal, state and local laws and regulations that in any manner may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.

5.2 Contractor has examined thoroughly and understood all reports of exploration and tests of subsurface conditions, as-built drawings, drawings, products specifications or reports, available for Bidding purposes, of physical conditions, including Underground Facilities, which are identified in Document 00320 (Geotechnical Data, Hazardous Materials Surveys and Existing Conditions), or which may appear in the Drawings. Contractor accepts the determination set forth in these Documents and Document 00700 (General Conditions) of the limited extent of the information contained in such materials upon which Contractor may be entitled to rely. Contractor agrees that except for the information so identified, Contractor does not and shall not rely on any other information contained in such reports and drawings.

5.3 Contractor has conducted or obtained and has understood all such examinations, investigations, explorations, tests, reports and studies (in addition to or to supplement those referred to in Section 5.2 of this Document 00520) that pertain to the subsurface conditions, as-built conditions, underground facilities, and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance or furnishing of Work, as Contractor considers necessary for the performance or furnishing of Work at the Contract Sum, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Document 00700 (General Conditions); and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by Contractor for such purposes.

5.4 Contractor has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

5.5 Contractor has given City prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by City is acceptable to Contractor.

5.6 Contractor is duly organized, existing and in good standing under applicable state law, and is duly qualified to conduct business in the State of California.

5.7 Contractor has duly authorized the execution, delivery and performance of this Contract, the other Contract Documents and the Work to be performed herein. The Contract Documents do not violate or create a default under any instrument, contract, order or decree binding on Contractor.

5.8 Contractor has listed Subcontractors pursuant to the Subcontractor Listing Law, California Public Contracting Code §4100 *et seq*. in document 00340 (Subcontractors List)

Article 6. Contract Documents

6.1 Contract Documents consist of the following documents, including all changes, addenda, and modifications thereto:

Document 00400 Bid Form
Document 00430 Subcontractors List
Document 00450 Statement of Qualifications
Document 00481 Non-Collusion Affidavit
Document 00482 Bidder Certifications

Document 00510 Notice of Award
Document 00520 Contract
Document 00530 Insurance Forms
Document 00550 Notice to Proceed
Document 00610 Construction Performance Bond
Document 00620 Construction Labor and Material Payment Bond
Document 00630 Guaranty
Document 00650 Agreement and Release of Any and All Claims
Document 00660 Substitution Request Form
Document 00680 Escrow Agreement for Security Deposit in Lieu of Retention
Document 00700 General Conditions
Document 00800 Special Conditions
Document 00820 Special Environmental Conditions
Document 00821 Insurance
Document 00822 Apprenticeship Program
Document 00823 Tree Protection
Technical Specification/Special Provisions
Addenda(s)
Drawings/Plans

6.2 There are no Contract Documents other than those listed in this Document 00520, Article 6. Document 00320 (Geotechnical Data, Hazardous Material Surveys and Existing Conditions), and the information supplied therein, are not Contract Documents. The Contract Documents may only be amended, modified or supplemented as provided in Document 00700 (General Conditions).

Article 7. Miscellaneous

7.1 Terms used in this Contract are defined in Document 00700 (General Conditions) and will have the meaning indicated therein.

7.2 It is understood and agreed that in no instance are the persons signing this Contract for or on behalf of City or acting as an employee, agent, or representative of City, liable on this Contract or any of the Contract Documents, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of the City is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.

7.3 Contractor shall not assign any portion of the Contract Documents, and may subcontract portions of the Contract Documents only in compliance with the Subcontractor Listing Law, California Public Contracting Code §4100 *et seq*.

7.4 The Contract Sum includes all allowances (if any).

7.5 In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. §15) or under the Cartwright Act (Chapter 2 (commencing with 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 public works contract or the subcontract. This assignment shall be made and become effective at the time City tenders final payment to Contractor, without further acknowledgment by the parties.

7.6 Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are deemed included in the Contract Documents and on file at City's office, or may be obtained of the State of California web site http://www.dir.ca.gov/DLSR/PWD/Northern.html and shall be made available to any interested party on request. Pursuant to Section 1861 of the Labor Code, Contractor represents that it is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability

for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor shall comply with such provisions before commencing the performance of the Work of the Contract Documents.

7.7 Should any part, term or provision of this Contract or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Contract and the Contract Documents may be deemed valid and binding contracts, enforceable in accordance with their terms to the greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference(or, if such provision is required to be included in any particular portion of the Contract Documents, that provision is deemed included in that portion).

7.8 This Contract and the Contract Documents shall be deemed to have been entered into in the County of Santa Clara, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in Santa Clara County. Both parties hereby waive their rights under California Code of Civil Procedure Section 394 to file a motion to transfer any action or proceeding arising out of the Contract Documents to another venue. Contractor accepts the Claims Procedure in Document 00700, Article 12, established under the California Government Code, Title 1, Division 3.6, Part 3, Chapter 5.

IN WITNESS WHEREOF the parties have executed this Contract in quadruplicate the day and year first above written.

MCCLELLAN RANCH PRESERVE ENVIRONMENTATL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATON – RE-BID

CITY:
CITY OF CUPERTINO, a Municipal Corporation of the State of California

Attest:

_____
City Clerk: Grace Schmidt

Approved as to form by City Attorney:

_____
City Attorney: Carol Korade

I hereby certify, under penalty of perjury, that David Brandt, City Manager of the City of Cupertino was duly authorized to execute this document on behalf of the City of Cupertino.

Dated:_____

_____
David Brandt, City Manager of the City of Cupertino, a Municipal Corporation of the State of California

Designated Representative:

Name: Timm Borden

Title: Director of Public Works

Address: 10300 Torre Ave., Cupertino, CA 95014

Phone: 408-777-3354

Facsimile: 408-777-3333

AMOUNT: $
ACCOUNT NUMBER:420-9133-9300
FILE NO.: 92,022.09

CONTRACTOR:
[_Contractor's name_]

By: _____
[Signature]

_____
[Please print name here]

Title: _____
[If Corporation: Chairman , President, or Vice President]

By: _____
[Signature]

_____
[Please print name here]

Title: _____
[If Corporation: Secretary, Assistant Secretary, Chief Financial Officer, or Assistant Treasurer]

_____
State Contractor's License No. Classification

_____
Expiration Date

Taxpayer ID No._____

Name: _____

Title: _____

Address: _____

Phone: _____

Facsimile: _____

NOTARY ACKNOLEDGEMENT IS REQUIRED. IF A CORPORATION, CORPORATE SEAL AND CORPORATE NOTARY ACKNOWLEDEMENT AND FEDERAL TAX ID ARE REQUIRED. IF NOT A CORPORATION SOCIAL SECURITY NO. IS REQUIRED

END OF DOCUMENT

DOCUMENT 00530

INSURANCE FORMS

INSURANCE FORMS INSTRUCTIONS

FOR ITEMS 3, 4 AND 5, THE FORMS PROVIDED BY THE CITY OF CUPERTINO MUST BE USED. FORMS OTHER THAN THESE WILL NOT BE ACCEPTED.

ALL DOCUMENTS MUST BE ORIGINALS - SUBMIT IN TRIPLICATE

1. Insurance Agreement - **Must** be signed by Contractor.

2. Certificate of Insurance to the City of Cupertino - **must** be completed by the insurance agent **or** **must** provide a certificate on the company's form. They **must** contain the same information.

3. Endorsement of Additional Insured and Primary Insurance and Notice of Cancellation - **must** be signed by the insurance agent for general liability and automobile liability only.

4. Comprehensive general liability/commercial general liability endorsement of aggregate limits of insurance per project - **must** be signed by the insurance agent for general liability only.

5. Waiver of subrogation endorsement worker's compensation insurance - **must** be signed by the insurance agent for worker's compensation only.

INSURANCE AGREEMENT

A. Contractor is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for worker's compensation or undertake self-insurance in accordance with the provisions of that Code, and will comply with such provisions before commencing the performance of the work of this Contract.

B. Contractor and all subcontractors will carry worker's compensation insurance for the protection of its employees during the progress of the work. The insurer shall waive its rights of subrogation against the City, the City's officers, agents and employees and shall issue an endorsement to the policy evidencing same.

C. Contractor shall carry at all times, on all operations hereunder, commercial general liability insurance, automobile liability insurance and builder's all risk insurance. All insurance coverage shall be in amounts required by the City and shall be evidenced by the issuance of a certificate in a form prescribed by the City and shall be underwritten by insurance companies satisfactory to the City for all operations, sub-contract work, contractual obligations, product or completed operations, all owned vehicles and non-owned vehicles. Said insurance coverage obtained by the Contractor, excepting worker's compensation coverage, shall name Gilbane Building Company and the City, its engineer, and each of its directors, officers, agents and employees, as determined by the City, as additional insureds on said policies. Insurers must be licensed to do business in the State of California. The Insurers must also have an "A" policyholder's rating and a financial rating of at least Class VII in accordance with the current Best's Guide Rating or that is otherwise acceptable to the City.

D. Before Contractor performs any work at, or prepares or delivers materials to, the site of construction, Contractor shall furnish certificates of insurance evidencing the foregoing insurance coverages and such certificates shall provide the name and policy number of each carrier and policy and that the insurance is in force and will not be canceled or modified without thirty (30) days written notice to the City. Contractor shall maintain all of the foregoing insurance coverages in force until the work under this Contract is fully completed. The requirement for carrying the foregoing insurance shall not derogate from the provisions for indemnification of the City by Contractor under this Contract and for the duration of the warranty period. Notwithstanding nor diminishing the obligations of Contractor with respect to the foregoing, Contractor shall maintain in full force and effect during the life of this Contract, the following insurance in amounts not less than the amounts specified and having a Best's Guide Rating of A, Class VII or better or that is otherwise acceptable to the City.

LIMITS

Worker's Compensation & Employers' Liability	In accordance with the Worker's Compensation Act of the State of California – Worker's comp "statutory" per CA Law; Employers' Liability $1,000,000 per occurrence.
General Liability - commercial general liability; including provisions for contractual liability, personal injury, independent contractors and products – completed operations hazard.	Combined single limit of $2.0 million per occurrence; $4.0 million in the aggregate
Automobile Liability - comprehensive covering owned, non-owned and hired automobiles.	Combined single limit of $1.0 million per occurrence.

_____ By:_____

(Contractor's Name)

Dated:_____20___

CERTIFICATE OF INSURANCE TO THE CITY OF CUPERTINO

This certifies to the City of Cupertino that the following described policies have been issued to the insured named below and are in force at this time.

Insured: _____

Address: _____

_____

Description of operations/locations/products insured (show contract name and/or number, if any):

_____

_____

==========

WORKER'S COMPENSATION

_____
(name of insurer)

* Statutory Min.		
* Employer's Liability	$ _____	$ _____	$ _____

Insurance Company's State License No. _____

==========

Check Policy Type:	Each Occurrence	$_____
COMPREHENSIVE GENERAL LIABILITY		
[ ] Premises/Operations	General Aggregate (if applicable)	$_____
[ ] Owners & Contractors Protective	Aggregate	$_____
[ ] Contractual for Specific Contract $_____	Personal Injury	
[ ] Products Liability		
[ ] XCU Hazards		
[ ] Broad Form P.D.	Fire Damage (any one fire)	$_____
[ ] Severability of Interest Clause		
[ ] Personal Injury with Employee Exclusion Removed	Medical Expense (any one person)	$_____
or	Self-Insured	
COMMERCIAL GENERAL LIABILITY	Retention	$_____

_____
(name of insurer)

Policy No. _____ Expiration Date_____

==========

AUTOMOTIVE/VEHICLE LIABILITY Commercial Form Liability Coverage	BODILY INJURY Each Person	PROPERTY DAMAGE Each Accident
_____ (name of insurer)	$_____ Each Accident	$_____
	$_____	or
	Combined Single Limit	$_____

Policy No. _____ Expiration Date _____

==========

BUILDER'S RISK "ALL RISK"
This is to certify that the following policy has been issued by the below-stated company in conformance with the requirements of the project documents and is in force at this time.

_____**N/A**_____
(Name of insurer)
Policy No. _____ Expiration Date_____
Limits of Liability: _____ Deductible: _____
==========
_____ A copy of all Endorsements to the policy(ies) which in any way
(agent's initial) limit the above-listed types of coverage are attached to this

Certificate of Insurance.

This Certificate of Insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or any other document with respect to which this Certificate of Insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

IT IS HEREBY CERTIFIED that the above policy(ies) provide liability insurance as required by the Agreement between the City and the insured.

By:_____ Dated:_____20____

Attach Certificate of Insurance and Additional Insured Endorsement on company forms.

ADDITIONAL INSURED ENDORSEMENT
and
ENDORSEMENT OF PRIMARY INSURANCE
and
NOTICE OF POLICY
CANCELLATION ENDORSEMENT

Project Title and Number:_____

In consideration of the policy premium and notwithstanding any inconsistent statement in the policy to which this Endorsement is attached or any other Endorsement attached thereto, it is agreed as follows:

The City of Cupertino ("City") and its directors, officers, engineers, agents and employees, and Gilbane Building Company and all public agencies from whom permits will be obtained and their directors, officers, engineers, agents and employees, are hereby declared to be additional insureds under the terms of this policy, but only with respect to the operations of the Contractor at or upon any of the premises of the City in connection with the Contract with the City, or acts or omissions of the additional insureds in connection with, but limited to its general supervision or inspection of said operations.

The insurance afforded by this policy is primary insurance, and no additional insurance held or owned by the designated additional insured(s) shall be called upon to cover a loss under said additional policy.

Cancellation Notice. The insurance afforded by this policy shall not be suspended, voided, canceled, reduced in coverage or in limits, or materially altered, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City of Cupertino ("City"). Such notice shall be addressed to the City as indicated below.

POLICY INFORMATION

1. Insurance Company:_____

2. Insurance Policy Number:_____

3. Effective Date of this Endorsement:_____20____

4. Insured:_____

All notices herein provided to be given by the Insurance Company to the City in connection with this policy and these Endorsements, shall be mailed to or delivered to the City at 10300 Torre Avenue; Cupertino, California 95014.

I, _____(print/type name) warrant that I have authority to bind the below listed Insurance Company and by my signature hereon do so bind this Company.

Signature of Authorized Representative:_____
(Original signature required on all Endorsements furnished to the District)

Names of
Agent/Agency:_____ Title:_____

Address:_____ Telephone: _____ _____ _____

_____ Facsimile: _____ _____ _____

COMPREHENSIVE GENERAL LIABILITY
COMMERCIAL GENERAL LIABILITY
ENDORSEMENT OF AGGREGATE LIMITS OF INSURANCE PER PROJECT

Project Title and Number:_____

In consideration of the policy premium and notwithstanding any inconsistent statement in the policy to which this Endorsement is attached or any other Endorsement attached thereto, it is as follows:

This Endorsement modifies the insurance provided under the General Liability Coverage part of the below-referenced policy of insurance.

The general aggregate limit under LIMITS OF INSURANCE applies separately to the project described as _____

POLICY INFORMATION

1. Insurance Company:_____

2. Insurance Policy Number:_____

3. Effective Date of this Endorsement:_____20____

4. Insured:_____

5. Additional Insured: City of Cupertino, its directors, officers, agents and employees.

All notices herein provided to be given by the Insurance Company to the City in connection with this policy and this Endorsement, shall be mailed to or delivered to the City at 10300 Torre Avenue; Cupertino, California 95014.

I, _____(print/type name) warrant that I have authority to bind the below listed Insurance Company and by my signature hereon do so bind this Company.

Signature of Authorized Representative:_____
(Original signature required on all Endorsements furnished to the District)

Names of
Agent/Agency:_____ Title:_____
Address:_____ Telephone: _____ _____ _____
_____ Facsimile: _____ _____ _____

WAIVER OF SUBROGATION ENDORSEMENT
WORKER'S COMPENSATION INSURANCE

Project Title and Number:_____

In consideration of the policy premium and notwithstanding any inconsistent statement in the policy to which this Endorsement is attached or any other Endorsement attached thereto, it is agreed as follows:

It is agreed that with respect to such insurance as is afforded by the policy, the Insurance Company waives any right of subrogation against the City of Cupertino, and each of its directors, officers, agents, consultants and employees by reason of any payment made on account of injury, including death resulting therefrom, sustained by any employee of the insured, arising out of the performance of the above-referenced Contract.

POLICY INFORMATION

1. Insurance Company:_____

2. Insurance Policy Number:_____

3. Effective Date of this Endorsement:_____20____

4. Insured:_____

All notices herein provided to be given by the Insurance Company to the City in connection with this policy and this Endorsement, shall be mailed to or delivered to the City at 10300 Torre Avenue; Cupertino, California 95014.

I, _____(print/type name) warrant that I have authority to bind the below listed Insurance Company and by my signature hereon do so bind this Company.

Signature of Authorized Representative:_____
(Original signature required on all Endorsements furnished to the District)

Names of
Agent/Agency:_____ Title:_____

Address:_____ Telephone: _____ _____ _____

_____ Facsimile: _____ _____ _____

END OF DOCUMENT

DOCUMENT 00550

NOTICE TO PROCEED

Dated: _____

To: _____
(Contractor)

Address: _____

_____

CONTRACT FOR:

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

You are notified that the Contract Time under the above Contract will commence to run on _____ 20___. On that date, you are to start performing your obligations with respect to Work at the Site under the Contract Documents. In accordance with Article 3 of Document 00520 (Contract), the dates of Substantial Completion and Final Completion for the entire Work are _____, 20 , and _____, 20 , respectively.

Before you may start any Work at the Site, you must:

1. Submit certified Safety Program and related information, and comply with all requests of the City's safety officer.
2. Submit copies of applicable permits
3. Submit approved fire protection plan, if applicable
4. Attend preconstruction conference. The preconstruction conference may be arranged through [_____].

_____

CITY OF CUPERTINO, a Municipal Corporation of the State of California

By : _____

Its: _____

END OF DOCUMENT

DOCUMENT 00610

CONSTRUCTION PERFORMANCE BOND

THIS CONSTRUCTION PERFORMANCE BOND ("Bond") is dated _____, is in the penal sum of _____ _____ [which is one hundred percent of the Contract Price], and is entered into by and between the parties listed below to ensure the faithful performance of the Construction Contract listed below. This Bond consists of this page and the Bond Terms and Conditions, paragraphs 1 through 12, attached to this page. Any singular reference to _____ ("Contractor"), _____ ("Surety"), the City of Cupertino, a Municipal Corporation of the State of California ("City") or other party shall be considered plural where applicable.

CONTRACTOR:	SURETY:
_____	_____
Name	Name
_____	_____
Address	Principal Place of Business
_____	_____
City/State/Zip	City/State/Zip

CONSTRUCTION CONTRACT:

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

PROJECT NUMBER 2012-9133

at Cupertino, California.

DATED _____, 20____ in the Amount of $_____ (the "Penal Sum")

CONTRACTOR AS PRINCIPAL	SURETY
Company: (Corp. Seal)	Company: (Corp. Seal)
Signature:_____	Signature: _____
Name and Title: _____	Name and Title:_____
_____	_____

BOND TERMS AND CONDITIONS

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to City for the complete and proper performance of the Construction Contract, which is incorporated herein by reference.

2. If Contractor completely and properly performs all of its obligations under the Construction Contract, Surety and Contractor shall have no obligation under this Bond.

3. If there is no City Default, Surety's obligation under this Bond shall arise after:

   3.1 City has declared a Contractor Default under the Construction Contract pursuant to the terms of the Construction Contract; and

   3.2 City has agreed to pay the Balance of the Contract Sum:

      3.2.1 To Surety in accordance with the terms of this Bond and the Construction Contract; or

3.2.2 To a contractor selected to perform the Construction Contract in accordance with the terms of this Bond and the Construction Contract.

4. When City has satisfied the conditions of paragraph 3, Surety shall promptly (within 30 days) and at Surety's expense elect to take one of the following actions:

4.1 Arrange for Contractor, with consent of City, to perform and complete the Construction Contract (but City may withhold consent, in which case the Surety must elect an option described in paragraphs 4.2, 4.3 or 4.4, below); or

4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; provided, that Surety may not select Contractor as its agent or independent contractor without City's consent; or

4.3 Undertake to perform and complete the Construction Contract by obtaining bids from qualified contractors acceptable to City for a contract for performance and completion of the Construction Contract, and, upon determination by City of the lowest responsible bidder, arrange for a contract to be prepared for execution by City and the contractor selected with City's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract; and, if Surety's obligations defined in paragraph 6, below, exceed the Balance of the Contract Sum, then Surety shall pay to City the amount of such excess; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances, and, after investigation and consultation with City, determine in good faith its monetary obligation to City under paragraph 6, below, for the performance and completion of the Construction Contract and, as soon as practicable after the amount is determined, tender payment therefor to City with full explanation of the payment's calculation. If City accepts Surety's tender under this paragraph 4.4, City may still hold Surety liable for future damages then unknown or unliquidated resulting from the Contractor Default. If City disputes the amount of Surety's tender under this paragraph 4.4, City may exercise all remedies available to it at law to enforce Surety's liability under paragraph 6, below.

5. If Surety does not proceed as provided in paragraph 4, above, then Surety shall be deemed to be in default on this Bond ten days after receipt of an additional written notice from City to Surety demanding that Surety perform its obligations under this Bond. At all times City shall be entitled to enforce any remedy available to City at law or under the Construction Contract including, without limitation, and by way of example only, rights to perform work, protect work, mitigate damages, advance critical work to mitigate schedule delay, or coordinate work with other consultants or contractors.

6. Surety's monetary obligation under this Bond is limited by the Amount of this Bond identified herein as the Penal Sum. This monetary obligation shall augment the Balance of the Contract Sum. Subject to these limits, Surety's obligations under this Bond are commensurate with the obligations of Contractor under the Construction Contract. Surety's obligations shall include, but are not limited to:

6.1 The responsibilities of Contractor under the Construction Contract for completion of the Construction Contract and correction of defective work;

6.2 The responsibilities of Contractor under the Construction Contract to pay liquidated damages, and for damages for which no liquidated damages are specified in the Construction Contract, actual damages caused by non-performance of the Construction Contract including, but not limited to, all valid and proper backcharges, offsets, payments, indemnities, or other damages;

6.3 Additional legal, design professional and delay costs resulting from Contractor Default or resulting from the actions or failure to act of the Surety under paragraph 4, above (but excluding attorney's fees incurred to enforce this Bond).

7. No right of action shall accrue on this Bond to any person or entity other than City or its successors or assigns.

8. Surety hereby waives notice of any change, alteration or addition to the Construction Contract or to related subcontracts, purchase orders and other obligations, including changes of time. Surety consents to all terms of the Construction Contract, including provisions on changes to the Contract. No extension of time, change, alteration, modification, deletion, or addition to the Contract Documents, or of the work required thereunder, shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond.

9. Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between City and Contractor regarding the Construction Contract, or in the courts of the County of Santa Clara, or in a court of competent jurisdiction in the location in which the work is located. Communications from City to Surety under paragraph 3.1 of this Bond shall be deemed to include the necessary contracts under paragraph 3.2 of this Bond unless expressly stated otherwise.

10. All notices to Surety or Contractor shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to City shall be mailed or delivered as provided in Document 00520 (Contract). Actual receipt of notice by Surety, City or Contractor, however accomplished, shall be sufficient compliance as of the date received at the foregoing addresses.

11. Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.

12. Definitions.

    12.1 Balance of the Contract Sum: The total amount payable by City to Contractor pursuant to the terms of the Construction Contract after all proper adjustments have been made under the Construction Contract, for example, deductions for progress payments made, and increases/decreases for approved modifications to the Construction Contract.

    12.2 Construction Contract: The contract between City and Contractor identified on the signature page of this Bond, including all Contract Documents and changes thereto.

    12.3 Contractor Default: Material failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract including, but not limited to, “default” or any other condition allowing a termination for cause as provided in Document 00700 (General Conditions).

    12.4 City Default: Material failure of City, which has neither been remedied nor waived, to pay Contractor progress payments due under the Construction Contract or to perform other material terms of the Construction Contract, if such failure is the cause of the asserted Contractor Default and is sufficient to justify Contractor termination of the Construction Contract.

END OF DOCUMENT

DOCUMENT 00620

CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND

THIS CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND ("Bond") is dated _____, is in the penal sum _____ [one hundred percent of the Contract Price], and is entered into by and between the parties listed below to ensure the payment of claimants under the Construction Contract listed below. This Bond consists of this page and the Bond Terms and Conditions, paragraphs 1 through 14, attached to this page. Any singular reference to _____ ("Contractor"), _____ ("Surety"), the City of Cupertino, a Municipal Corporation of the State of California ("City") or other party shall be considered plural where applicable.

CONTRACTOR:	SURETY:
_____	_____
Name	Name
_____	_____
Address	Principal Place of Business
_____	_____
City/State/Zip	City/State/Zip

CONSTRUCTION CONTRACT:

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

PROJECT NUMBER 2012-9133

at Cupertino, California.

DATED _____, 20____ in the Amount of $_____(the "Penal Sum")

CONTRACTOR AS PRINCIPAL	SURETY
Company: (Corp. Seal)	Company: (Corp. Seal)
Signature:_____	Signature: _____
Name and Title: _____	Name and Title:_____
_____	_____

BOND TERMS AND CONDITIONS

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to City and to Claimants, to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated 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 harmless City from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contact, provided City has promptly notified Contractor and Surety (at the address set forth on the signature page of this Bond) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to Contractor and Surety, and provided there is no City Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly through its Subcontractors, for all sums due Claimants. If Contractor or its Subcontractors, however, fail to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to Work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Contractor or Subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such Work and labor, then Surety shall pay for the same, and also, in case suit is brought upon this Bond, a reasonable attorney's fee, to be fixed by the court.

4. Consistent with the California Mechanic's Lien Law, Civil Code §3082, *et seq*., Surety shall have no obligation to Claimants under this Bond unless the Claimant has satisfied all applicable notice requirements.

5. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety under this Bond.

6. Amounts due Contractor under the Construction Contract shall be applied first to satisfy claims, if any, under any Construction Performance Bond and second, to satisfy obligations of Contractor and Surety under this Bond.

7. City shall not be liable for payment of any costs, expenses, or attorney's fees of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

8. Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations. Surety further hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Construction Contract, or to the Work to be performed thereunder, or materials or equipment to be furnished thereunder or the Specifications accompanying the same, shall in any way affect its obligations under this Bond, and it does hereby waive any requirement of notice or any such change, extension of time, alteration or addition to the terms of the Construction Contract or to the Work or to the Specifications or any other changes.

9. Suit against Surety on this Bond may be brought by any Claimant, or its assigns, at any time after the Claimant has furnished the last of the labor or materials, or both, but, per Civil Code §3249, must be commenced before the expiration of six months after the period in which stop notices may be filed as provided in Civil Code §3184.

10. All notices to Surety or Contractor shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to City shall be mailed or delivered as provided in Document 00520 (Contract). Actual receipt of notice by Surety, City or Contractor, however accomplished, shall be sufficient compliance as of the date received at the foregoing addresses.

11. This Bond has been furnished to comply with the California Mechanic's Lien Law including, but not limited to, Civil Code §§3247, 3248, *et seq*. Any provision in this Bond conflicting with said statutory requirements shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

13. Contractor shall pay to persons performing labor in and about Work provided for in the Contract Documents an amount equal to or more than the general prevailing rate of per diem wages for (1) work of a similar character in the locality in which the Work is performed and (2) legal holiday and overtime work in said locality. The per diem wages shall be an amount equal to or more than the stipulated rates contained in a schedule that has been ascertained and determined by the Director of the State Department of Industrial Relations and City to be the general prevailing rate of per diem wages for each craft or type of workman or mechanic needed to execute this

Contract. Contractor shall also cause a copy of this determination of the prevailing rate of per diem wages to be posted at each Site.

14. Definitions.

14.1 Claimant: An individual or entity having a direct contract with Contractor or with a Subcontractor of Contractor to furnish labor, materials or equipment for use in the performance of the Contract, as further defined in California Civil Code §3181. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a stop notice might be asserted. The term Claimant shall also include the Unemployment Development Department as referred to in Civil Code §3248(b).

14.2 Construction Contract: The contract between City and Contractor identified on the signature page of this Bond, including all Contract Documents and changes thereto.

14.3 City Default: Material failure of City, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract, provided that failure is the cause of the failure of Contractor to pay the Claimants and is sufficient to justify termination of the Construction Contract.

END OF DOCUMENT

DOCUMENT 00630

GUARANTY

TO THE CITY OF CUPERTINO, a Municipal Corporation of the State of California ("City"), for construction of

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

PROJECT NUMBER 2012-9133

CUPERTINO, CALIFORNIA

The undersigned guarantees all construction performed on this Project and also guarantees all material and equipment incorporated therein.

Contractor hereby grants to City for a period of one year following the date of Final Acceptance, or such longer period specified in the Contract Documents, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all labor, materials and equipment provided by Contractor and its Subcontractors of all tiers in connection with the Work.

Neither final payment nor use or occupancy of the Work performed by the Contractor shall constitute an acceptance of Work not done in accordance with this Guaranty or relieve Contractor of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. Contractor shall remedy any defects in the Work and pay for any damage resulting therefrom, which shall appear within one year, or longer if specified, from the date of Final Acceptance.

If within one year after the date of Final Acceptance, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be defective, Contractor shall promptly, without cost to City and in accordance with City's written instructions, correct such defective Work. Contractor shall remove any defective Work rejected by City and replace it with Work that is not defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Contractor fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, City may have the defective Work corrected or the rejected Work removed and replaced. Contractor shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Contractor fails to correct defective Work, or defects are discovered outside the correction period, City shall have all rights and remedies granted by law.

Inspection of the Work shall not relieve Contractor of any of its obligations under the Contract Documents. Even though equipment, materials, or Work required to be provided under the Contract Documents have been inspected, accepted, and estimated for payment, Contractor shall, at its own expense, replace or repair any such equipment, material, or Work found to be defective or otherwise not to comply with the requirements of the Contract Documents up to the end of the guaranty period.

All abbreviations and definitions of terms used in this Agreement shall have the meanings set forth in the Contract Documents, including, without means of limitation, Section 00700 (General Conditions).

The foregoing Guaranty is in addition to any other warranties of Contractor contained in the Contract Documents, and not in lieu of, any and all other liability imposed on Contractor under the Contract Documents and at law with respect to Contractor's duties, obligations, and performance under the Contract Documents. In the event of any conflict or inconsistency between the terms of this Guaranty and any warranty or obligation of the Contractor under the Contract Documents or at law, such inconsistency or conflict shall be resolved in favor of the higher level of obligation of the Contractor.

_____

Contractor's Name

_____

Address

_____ _____

City/State/Zip Date

END OF DOCUMENT

DOCUMENT 00650

AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID

PROJECT NUMBER 2012-9133

THIS AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS ("Agreement and Release"), made and entered into this [_____] day of [_____], 20___, by and between the _____("City"), and _____ ("Contractor"), whose place of business is at _____.

RECITALS

A. City and Contractor entered into Contract Number _____ (the "Contract").

B. The Work under the Contract has been completed.

Now, therefore, it is mutually agreed between City and Contractor as follows:

AGREEMENT

1. Contractor will not be assessed liquidated damages except as detailed below:

Original Contract Sum	$ _____
Modified Contract Sum	$ _____
Payment to Date	$ _____
Liquidated Damages	$ _____
Payment Due Contractor	$ _____

2. Subject to the provisions of this Agreement and Release, City will forthwith pay to Contractor the sum of $_____ Dollars and _____ Cents ($_____) under the Contract, less any amounts withheld under the Contract or represented by any Notice to Withhold Funds on file with City as of the date of such payment.

3. Contractor acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against City arising from the Contract, except for the claims described in paragraph 4 of this Document 00650. It is the intention of the parties in executing this Agreement and Release that this Agreement and Release shall be effective as a full, final and general release of all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities of Contractor against City, and all if its agents, employees, consultants (including without limitation Consulting Cupertino), inspectors, representatives, assignees and

transferees except for the Disputed Claims set forth in paragraph 4 of this Document 00650. Nothing in this Agreement and Release shall limit or modify Contractor's continuing obligations described in paragraph 6 of this Document 00650.

4. The following claims are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release:

Claim No.	Date Submitted	Description of Claim	Amount of Claim

[Insert information, including attachment if necessary]

5. Consistent with California Public Contract Code Section 7100, Contractor hereby agrees that, in consideration of the payment set forth in paragraph 2 of this Document 00650, Contractor hereby releases and forever discharges City, and all of its agents, employees, consultants, inspectors, assignees and transferees from any and all liability, claims, demands, actions or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract

6. Guarantees and warranties for the Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.

7. Contractor shall immediately defend, indemnify and hold harmless the City of Cupertino, Santa Clara County, its Architect, any of their Representatives, and all of their agents, employees, consultants, inspectors, assignees and transferees, from any and all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities that may be asserted against them by any of Contractor's suppliers and/or Subcontractors of any tier and/or any suppliers to them for any and all labor, materials, supplies and equipment used, or contemplated to be used in the performance of the Contract, except for the Disputed Claims set forth in paragraph 4 of this Document 00650.

8. Contractor hereby waives the provisions of California Civil Code Section 1542, which provides as follows:

> **A general release does not extend to claims that the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him, must have materially affected his settlement with the debtor.**

9. The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable, and if any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal or other law, ruling, or regulation, then such provision, or part thereof shall remain in force and effect only to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.

10. Contractor represents and warrants that it is the true and lawful owner of all claims and other matters released pursuant to this Agreement and Release, and that it has full right, title and authority to enter into this instrument. Each party represents and warrants that it has been represented by counsel of its own choosing in connection with this Agreement and Release.

11. All rights of City shall survive completion of the Work or termination of the Contract, and execution of this Agreement and Release.

* * * CAUTION: THIS IS A RELEASE - READ BEFORE EXECUTING * * *

THE CITY OF CUPERTINO,
a Municipal Corporation of the State of California

By: _____

Its: _____

ATTEST:

_____
City Clerk

[CONTRACTOR]

By: _____

Name: _____

Its: _____

By: _____

Name: _____

Its: _____

REVIEWED AS TO FORM:

_____
City Attorney

_____, 20 _____

END OF DOCUMENT

DOCUMENT 00660

SUBSTITUTION REQUEST FORM

To: The City of Cupertino,
A Municipal Corporation of the State of California ("City")

Project: **MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID**

Contractor:_____

Subcontractor/Supplier:_____

Drawing Sheet Reference/Detail No:_____

The undersigned Bidder submits for consideration the following equipment instead of the specified item for the above project:

Section	Paragraph	Specified Item
_____	_____	_____
_____	_____	_____

Proposed Substitution:_____

_____

The undersigned encloses the information required herein. If this Document 00660 is being submitted by a Bidder wishing to use "or equal" item(s) as provided in Document 00200 (Instructions to Bidders), the undersigned Bidder must also enclose the technical information (other than cost) otherwise required for a post-Award of Contract Request for Substitution ("RFS") under Section 00700 (General Conditions). However, If this Document 00660 is being submitted under provisions of Contract Documents after Award of Contract, the undersigned Contractor must include all information required under Section 00700 (General Conditions).

The undersigned has (a) attached manufacturer's literature, including complete technical data and laboratory test results, if applicable, (b) attached an explanation of why proposed substitution is a true equivalent to specified item, (c) included complete information on changes to Drawings and Specifications that the proposed substitution will require for its proper installation, and (d) filled in the blanks below:

A. Does the substitution affect dimensions shown on Drawings?

_____

B. Are the manufacturer's guarantees and warranties on the proposed substitution items identical to those on the specified items? If there are differences, please specify each and every difference in detail.

_____

C. What effect does the substitution have on other contractors, trades, or suppliers?

_____

D. What are the differences between the proposed substitution and the specified item? If proposed substitution has a color or pattern, provide a color board showing proposed substitution in relation to the other adjacent colors and patterns.

_____

E. Will granting the requested substitution cause any schedule delay? (If yes, please explain)

_____

The undersigned Bidder certifies that the function, appearance, and quality of the proposed substitution are equivalent or superior to those of the specified item.

Submitted by:

_____
Bidder/Contractor
[note applicable]

_____
Signature

_____
Name

_____
Address

_____
City/State/Zip

Telephone: _____

Date: _____

For Use by City:

_____ Accepted _____Accepted as Noted

_____ Not Accepted _____Received Too Late

By: _____
City's Representative

Date: _____

Remarks: _____

_____

_____

_____

END OF DOCUMENT

DOCUMENT 00680

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION
P.C.C. §22300

THIS ESCROW AGREEMENT ("Escrow Agreement") is made and entered into this _____ day of _____, 20__, by and between the CITY OF CUPERTINO, a Municipal Corporation of the State of California (hereinafter "City"), whose address is 10300 Torre Avenue, Cupertino, California 95014; _____ ("Contractor"), whose place of business is located at _____; and **[City, as escrow agent …OR… [_____]**, a state or federally chartered bank in the State of California, whose place of business is located at _____] ("Escrow Agent").

For the consideration hereinafter set forth, City, Contractor and Escrow Agent agree as follows: its

1. Pursuant to Section 22300 of Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by City pursuant to **Project Number 2012-9133** entered into between City and Contractor for **MCCLELLAN RANCH PRESERVE ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP RELOCATION – RE-BID** in the amount of _____ dated _____ (the "Contract"). Alternatively, on written request of Contractor, City shall make payments of the retention earnings directly to Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify City within ten Days of the deposit. The market value of the securities at the time of substitution shall be at least equal to the cash amount then required to be withheld as retention under terms of Contract between City and Contractor. Securities shall be held in name of _____, and shall designate Contractor as the beneficial owner.

2. City shall make progress payments to Contractor for those funds which otherwise would be withheld from progress payments pursuant to Contract provisions, provided that Escrow Agent holds securities in form and amount specified in paragraph 1 of this Document 00680.

3. When City makes payment(s) of retention earned directly to Escrow Agent, Escrow Agent shall hold said payment(s) for the benefit of Contractor until the time that the escrow created under this Escrow Agreement is terminated. Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when City pays 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 City. Such expenses and payment terms shall be determined by City, Contractor, and Escrow Agent.

5. Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to 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 City to Escrow Agent that City consents to withdrawal of amount sought to be withdrawn by Contractor.

7. City shall have the right to draw upon the securities in event of default by Contractor. Upon seven Days written notice to Escrow Agent from City of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by City.

8. Upon receipt of written notification from City certifying that the Contract is final and complete, and that 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 written notifications from City and Contractor pursuant to paragraphs 5 through 8, inclusive, of this Document 00680 and City and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth.

10. Names of persons who are authorized to give written notice or to receive written notice on behalf of City and on behalf of Contractor in connection with the foregoing, and exemplars of their respective are as follows:

On behalf of City:

_____
Title

_____
Name

_____
Signature

_____
Address

_____
City/State/Zip

On behalf of Contractor:

_____
Title

_____
Name

_____
Signature

_____
Address

_____
City/State/Zip

On behalf of Escrow Agent:

_____
Title

_____
Name

_____
Signature

_____
Address

_____
City/State/Zip

At the time the Escrow Account is opened, City and Contractor shall deliver to Escrow Agent a fully executed counterpart of this Document 00680.

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

City

_____

_____
Title

_____
Name

_____
Signature

Contractor

_____

_____
Title

_____
Name

_____
Signature

Escrow Agent

_____

_____
Title

_____
Name

_____
Signature

REVIEWED AS TO FORM:

_____
City Attorney

_____
Date

END OF DOCUMENT

DOCUMENT 00700

GENERAL CONDITIONS

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ABBREVIATIONS AND DEFINITIONS

Whenever in these Specifications and other Contract Documents the following abbreviations and terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

ABBREVIATIONS--General

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association
AAN	American Association of Nurserymen
AAP	Affirmative Action Program
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
ACS	Acoustical Society of America
AFPA	American Forest and Paper Assoc.
AGA	American Gas Association
AHA	American Hardboard Association
AI	Asphalt Institute
AIA	American Institute of Architects
A.I.A.	American Insurance Association
AIHA	American Industrial Hygiene Association
AISI	American Iron and Steel Institute
AIEE	American Institute of Electrical Engineers
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALSC	American Lumber Standards Committee
AMCA	Air Movement and Control Association
ANSI	American National Standards Institute
APA	American Plywood Association
APHA	American Public Health Association
API	American Petroleum Institute
AREA	American Railway Engineering Association
ARI	Air Conditioning and Refrigeration Institute
ARMA	Asphalt Roofing Manufactures Association
ASC	Adhesive and Sealant Council
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASPE	American Society of Plumbing Engineers
ASTM	American Society of Testing and Materials
AWG	American Wire Gage
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
BAAQMD	Bay Area Air Quality Management District
BHMA	Builders' Hardware Manufacturers Association
CAEPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	State of California, Department of Transportation
CBC	California Building Code
CCC	Carpet Cushion Council
CCD	Construction Change Directive

CCR	California Code of Regulations
CE	Corps of Engineers
CEC	California Electric Code
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
CISPI	Cast Iron Soil Pipe Institute
CLMFI	Chain Link Fence Manufacturers Institute
CO	Change Order
CPM	Critical Path Method
CPSC	Consumer Product Safety Commission
CPUC	California Public Utilities Commission
CRI	Carpet and Rug Institute
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standards, U.S. Department of Commerce
CTI	Ceramic Tile Institute
DHI	Door and Hardware Institute
DHS	California Department of Health Services
DIPRA	Ductile Iron Pipe Research Assoc.
DLPS	Decorative Laminate Products Assoc.
DOC	Department of Commerce
DOT	Department of Transportation
DSA	Division of State Architect (formerly known as the Office of the State Architect)
EIA	Electronic Industries Association
EPA	Environmental Protection Agency
FS	Federal Specifications
GA	Gypsum Assoc.
HMA	Hardwood Manufacturers Assoc.
HSC	California Health and Safety Code
I.D.	Identification
IEEE	Institute of Electrical and Electronics Engineers
IES	Illuminating Engineering Society
IESNA	Illuminating Engineering Society of North America
IILP	International Institute for Lath & Plaster
JATC	Joint Apprenticeship Training Committee
JV	Joint Venture
LBE	Local Business Enterprise
M.I.	Middle Initial
M/WBE	Minority and/or Woman-Owned Business Enterprise
MBE	Minority Business Enterprise
MBMA	Metal Building Manufacturer's Assoc.
MCAA	Mechanical Contractors Assoc. of America
MFMA	Maple Flooring Manufacturers Assoc.
MIA	Masonry Institute of America
ML/SFA	Metal Lath/Steel Framing Assoc.
MSDS	Material Safety Data Sheet
NAAMM	National Assoc. of Architectural
NBHA	National Builders Hardware Assoc.
NBS	National Bureau of Standards
NEC	National Electric Code
NEII	National Elevator Industry, Inc.
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
NFPA	National Fire Protection Assoc.
N.F.P.A.	National Forest Products Association
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Science and Technology (formerly the National Bureau of Standards)
NFPA	National Fire Protection Association

NRCA	National Roofing Contractors Assoc.
NSF	National Sanitation Foundation
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Department
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PG&E	Pacific Gas and Electric Company
PM	Preventive Maintenance
PR	Proposal Request
PS	Product Standard, U. S. Department of Commerce
RFCI	Resilient Floor Covering Institute
RFI	Request for Information
RFIR	Request for Information Reply
RFP	Request for Proposals
RFS	Request for Substitution
RIS	Redwood Inspection Service
RMA	Rubber Manufacturers Assoc.
RWQCB	California Regional Water Quality Control Council
SAE	Society of Automotive Engineers
S.D.I.	Steel Door Institute
SFM	State of California, Office of State Fire Marshal
SJI	Steel Joint Institute
SMACNA	Sheet Metal & Air Conditioning
SSPC	Steel Structures Painting Council
SWI	Steel Window Institute
SWRCB	California State Water Resources Control Council
TCA	Tile Council of America
TIE	Time Impact Evaluation
UBC	Uniform Building Code
UFC	Uniform Fire Code
UL	Underwriters Laboratories
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
USA	Underground Service Alert
USC	United States Code
USDA	U.S. Department of Agriculture
USPS	U.S. Postal Service
USEPA	United States Environmental Protection Agency
WA	Wallcovering Assoc.
WCLB	West Coast Lumber Inspection Bureau
WCLIB	West Coast Lumber Inspection Bureau
WIC	Woodwork Institute of California
WLPDIA	West Coast Lumber Inspection Bureau
WRI	Wire Reinforcement Institiute
WWPA	Western Wood Products Association

ABBREVIATIONS—in Specifications

AWG	American Wire Gauge
Accord	Accordance
Co.	Company
Corp.	Corporation
cm.	centimeter (centimeters)
cu.	Cubic
Div.	Division
dia.	Diameter
EA	each

ft.	foot (feet)
g./gr.	gram (grams)
gal.	gallon (gallons)
gpd	gallons per day
gpm	gallons per minute
hr.	hour
kg.	kilogram (kilograms)
in.	inch (inches)
Inc.	Incorporated
km.	kilometer (kilometers)
Kw	Kilowatt
LS	lump sum
l.	liter (liters)
lbs.	pounds
M/m	meter (meters)
Mfg.	manufacturing
Mg.	milligram (milligrams)
ml./mls.	milliliter (milliliters)
mm.	millimeter (millimeters)
m^2	square meter
m^3	cubic meter
No.	number
o.c.	on centers
O.D.	outside diameter
Psi	pounds per square inch
Psf	pounds per square foot
sq.	square
T & G	tongue and groove
tonne	metric ton (1000 kg.)
U.S.	United States
yd.	yard (yards)

SYMBOLS in Specifications

[for consideration]

:	“shall be” or “shall” - where used within sentences or paragraphs
#1	Number
1#	Pound
&	And
%	Percent
C	Centigrade
F	Fahrenheit
°	Degree
/	per, except where used to combine words; example: power/fuel, and in that case it means and
“	inch (inches)
‘	foot (feet)
@	At

SYMBOLS in Drawings

As indicated therein.

DEFINITIONS

Acceptance: The formal written acceptance by City of a contract which has been completed in all respects in accordance with the Drawings and Specifications and any modifications thereof previously approved.

Addendum or Letter of Clarification: A change in the Specifications or Drawings issued prior to the opening of Bids.

Agency: City.

Alternate: Work added to or deducted from the Base Bid, if accepted by City.

Application for Payment: Written application for monthly or periodic progress or final payment made by Contractor complying with the Contract Documents.

Approved, Directed, Ordered, or Required: Whenever these words or their derivatives are used, it is the intent, unless otherwise clearly stated, that approval or direction by City is indicated.

Approved Equal: Approved in writing by City as being of equivalent quality, utility and appearance.

Asbestos: Any material that contains more than one percent asbestosis and is friable or is releasing asbestos fibers into the air above current action levels established by OSHA or Cal/OSHA.

Attorney or Attorney General: The attorney selected by City.

Bid: The offer or proposal of the Bidder submitted on the proscribed forms setting forth the prices for the Work to be performed.

Bidder: Any individual, firm, partnership, corporation or combination thereof, submitting a proposal for the Work contemplated, acting directly or through a duly authorized representative.

Bidding Documents: All documents comprising the Project Manual (including all documents and specification sections listed on Document 00010 [Table of Contents]), including documents supplied for bidding purposes only and Contract Documents.

Board or Council: City's governing body, its City Council.

Business Day: Any Day other than Saturday, Sunday, and the following days that have been designated as holidays or City Closure by City. If a holiday falls on a Saturday, the preceding Friday will be the holiday. If a holiday falls on a Sunday, the following Monday will be the holiday.

a. New Year's Day, January 1;

b. Martin Luther King Jr.'s Birthday, third Monday in January;

c. Lincoln's Birthday, February 12;

d. Presidents' Day, third Monday in February;

e. Memorial Day, last Monday in May;

f. Independence Day, July 4;

g. Labor Day, first Monday in September;

h. Veterans' Day, November 11;

i. Thanksgiving Day, as designated by the President;

j. The Day following Thanksgiving Day;

k. Christmas Day, December 25;

l. City Closure, December 24, 26, 27, 28, 29, 30 and 31; and

m. Each day appointed by the Governor of California and formally recognized by the Santa Clara County Board of Supervisors as a day of mourning, thanksgiving, or special observance.

By City: Work that will be performed by City or its agents at the City's expense.

By Others: Work that is outside scope of Work to be performed by Contractor under this Contract, which will be performed by City, other contractors, or other means.

Calendar Day: Any Day of the year, with the only exception of City Closure between December 24 thru January 1

Change Order: A written instrument prepared by City and signed by City and Contractor, stating their agreement upon all of the following:

a. a change in the Work;

b. the amount of the adjustment in the Contract Sum, if any; and

c. the amount of the adjustment in the Contract Time, if any.

Certified Hazardous Materials Testing Laboratory: A laboratory certified by the California Department of Health Services to perform specific chemical and physical analysis for hazardous materials.

Certified Industrial Hygienist: A professional who is certified by the American Council of Industrial Hygienists as trained to evaluate safety and health hazards and determine safety measures necessary for personnel working under hazardous conditions.

Chief Engineer: The Program Manager selected by City.

City: City of Cupertino, , a Municipal Corporation of the State of California.

City-Furnished, Contractor-Installed: Items furnished by City at its cost for installation by Contractor at its cost under Contract Documents.

City's Representative(s): See Document 00520 (Contract).

Claim: As defined in Section 9 of this Document 00700.

Code: Codes of the State of California, including but not limited to, Government Code, Labor Code, etc.

Concealed: Work not exposed to view in the finished Work, including within or behind various construction elements.

Contract: (Document 00520): Contract is the basic agreement document that binds the parties to construction Work. Contract defines relationships and obligations between City and Contractor and by reference incorporates Standard Provisions, Special Provisions, Drawings and Specifications and contains Addenda and all Modifications subsequent to execution of Contract Documents.

Construction Change Directive (CCD): A letter, signed by the City's Director of Public Works, or his designated representative, directing the Contractor to proceed with additive or deductive changes to the contract when that Work or its value is contested by the Contractor. The Work, as directed by a Construction Change Directive, will be completed under the terms of Force Account as explained in Document 00700, General Conditions.

Construction Equipment: Equipment used for the performance of Work but not incorporated into the project.

Construction Manager: See Document 00520 (Contract) (if this term is used).

Consulting Engineer: See Document 00520 (Contract) (if this term is used).

Contract or Contract Documents: The written agreement between Contractor and City consisting of the Contract Documents as defined in the Document 00520 (Contract).

Contract Modification: Either:

a. a written amendment to Contract signed by Contractor and City; or

b. a Change Order.

Contract Prices: The prices for the Work set forth in the Contract. Contract Price (or Contract Sum) shall mean the aggregate price for all Work set forth in the Contract.

Contract Sum: The sum stated in the Contract and, including authorized adjustments, the total amount payable by City to Contractor for performance of the Work and the Contract Documents. The Contract Sum is also sometimes referred to as the Contract Price or the Contract Amount.

Contract Time: The number of days for Substantial Completion and/or Final Completion the Work including any milestones specifically identified in the Contract.

Contractor: The entity or person entering a contract with City.

Contractor's Employees: Persons engaged in execution of Work under Contract as direct employees of Contractor, as Subcontractors, or as employees of Subcontractors.

Controlling Item of Work: Any feature or combination of features of the Work, which if delayed, will delay the time of completion of a contract. Also known as critical work or critical path work.

County: The County of Santa Clara, State of California.

Day: One calendar day of 24 hours measured from midnight to the next midnight, unless the word "day" is specifically modified to the contrary.

Defective: An adjective which, when modifying the word "Work," refers to Work that is unsatisfactory or unsuited for the use intended, faulty, or deficient, that does not conform to the Contract Documents, or does not meet the

requirements of any inspection, reference standard, test or approval referred to in the Contract Documents (including but not limited to approval of samples and "or equal" items), or has been damaged prior to final payment (unless responsibility for the protection thereof has been assumed by City). City is the judge of whether Work is defective.

Department: City.

Director or Director of the Department of Transportation: City's City Public Works Director.

District: City.

Division: City.

Drawings: The official drawings, Working drawings, detail drawings, and supplemental drawings, or reproductions thereof, which show the location, character, dimensions, and details of the Work to be done, and which are to be considered as part of the Contract.

Engineer or Engineer of the Department of Transportation: City of Cupertino and any designated person or entity by City

Equal: Equal in opinion of City. Burden of proof of equality is responsibility of Contractor.

Equipment: Equipment incorporated or to be incorporated into the project.

Exposed: Work exposed to view in the finished Work, including behind louvers, grilles, registers and various other construction elements.

Field Authorization (FA): An authorization issued by City to Contractor to allow additive or deductive work to proceed when Change Order process time may delay the Work.

Final Acceptance: City's acceptance of the Work as satisfactorily completed in accordance with Contract Documents.

Final Completion: Shall be achieved when the entire work is complete, except for minor punch list items, as determined by City.

Fixed Costs: Any necessary labor, material, and equipment costs directly expended on the item or items under consideration which remain constant regardless of the quantity of Work done.

Force Account: Work directed to be performed without prior agreement as to lump sum or unit price cost thereof, and which is to be billed at cost for labor, materials, equipment, taxes, and other costs, plus a specified percentage for overhead and profit.

Furnish: Supply only, do not install.

Hazardous Material: (A) Any substance, product, waste or other material of any nature whatsoever which is or becomes listed, regulated, or addressed pursuant to any federal, state or local statute, law, ordinance, resolution, code, rule, regulation, order or decree regulating, relating to, or imposing liability (including, but not limited to response, removal, and remediation costs) or standards of conduct or performance concerning any hazardous, toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic or as otherwise dangerous waste, substance or material; (B) any substance, product, waste, or other material of any nature whatsoever whose presence in and of itself may give rise to liability under any of the above statutes or under any statutory or common law theory based on negligence, trespass, intentional tort, nuisance, strict or absolute liability or under any reported decisions of a state or federal court; (C) any substance without limitation, which contains petroleum or crude oil, including but not limited to, petroleum and petroleum products.

Hazardous Waste: Any substance or material, as defined in the California Hazardous Waste Control Act, Health and Safety Code Section 25, or the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq.

Indicated: Shown or noted on the Drawings.

Install: Install or apply only, do not furnish.

Laboratory: The independent testing organization or organizations selected by City.

Latent: Not apparent by reasonable inspection, including but not limited to, the inspections and research required as a condition to bidding under the General Provisions.

Law: Unless otherwise limited, all applicable laws including without limitation all federal, state, and local laws, statutes, standards, rules, regulations, ordinances, and judicial and administrative decisions

Liquidated Damages: The amount stated in Document 00520 (Contract), to be paid to City or to be deducted from any payments due or to become due Contractor as provided in the Contract Documents.

Material: This word shall be construed to embrace machinery, manufactured articles, materials of construction (fabricated or otherwise), and any other classes of material to be furnished in connection with Contract, except where a more limited meaning is indicated by context.

Milestone: A principal event specified in Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all Work.

Modification: Same as Contract Modification.

Not in Contract: Work that is outside the scope of Work to be performed by Contractor under Contract Documents – shown as NIC.

Notice of Completion: Shall have the meaning provided in California Civil Code Section 3093, and any successor statute.

Off Site: Outside geographical location of the Project.

Northern Region: City.

Office of Materials and Foundations: Laboratory.

Office of Structure Design: When specifications require working drawings to be submitted to the Office of Structure Design, the drawings shall be submitted to the Resident Engineer.

***Owner*:** City.

Partial Utilization: Use by City of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all of the Work.

PCBs: Polyclorinated byphenyls.

Personnel Protection: Equipment and procedures which minimize human exposure to regulated materials, hazardous materials, hazardous wastes, or unsafe situations.

Phase: A specified portion of the Work (if any) specifically identified as a Phase in Document 00520 (Contract).

Plans, Construction Plans: The Drawings.

Product Data: That information (including brochures, catalogue cuts, MSDS, etc.) supplied by the vendor describing the technical and commercial characteristics of the supplier equipment or materials, and accompanying commercial terms such as warranties, instructions and manuals.

Progress Report: A periodic report submitted by Contractor to City with progress payment invoices accompanying actual work accomplished to the Progress Schedule. See Document 00700 (General Conditions).

Project: The erection, construction, alteration, repair, or improvement to be accomplished under the Contract and performing the Work.

Project Float: Neither City nor Contractor owns float. The Project owns the float. As such, liability for delay of any Substantial Completion or Final Completion date rests with the party whose actions, last in time, actually cause delay to a Substantial Completion or Final Completion date.

A. For example, in the event of unexcused delay by Party A and Party B, and if Party A uses some, but not all of the float and Party B later uses remainder of the float as well as additional time beyond the float, Party B shall be liable for the time that represents a delay to the Substantial Completion date.

B. Under this scenario, Party A would not be responsible for the time since it did not consume all of the float and additional float remained; therefore, the Substantial Completion Date was unaffected.

Project Manual: Project Manual consists of Bidding Requirements, Contract, Bonds, Certificates, Standard Provisions and Special Provisions, and Specifications.

Project Record Documents: All Project deliverables required under Section 00700, including without limitation, as-built drawings, operations and maintenance manuals Installation, Operation, and Maintenance Manuals, and Machine Inventory Sheets.

Provide: Furnish and install.

Reasonable Accuracy: Within the tolerances as shown on the Drawings or indicated in the Specifications.

Regulated Material: Any substance or combination of substances for which federal, state, or local regulations require special management, storage, disposal or handling practices. This shall include, but not be limited to, materials defined

as: Hazardous Materials and Waste; Designated Wastes (CCR, Title 23, Section 23-2522); and Special Waste (CCR, Title 22, Section 22-66195).

Request for Information ("RFI"): A document prepared by Contractor requesting information regarding the Project or Contract Documents. The RFI system is also a means for City to submit Contract Document clarifications or supplements to Contractor.

Request for Proposals ("RFP"): A document issued by City to Contractor whereby City may initiate changes in the Work or Contract Time as provided in Contract Documents.

Request for Substitution ("RFS"): A document prepared by Contractor requesting substitution of materials as permitted and to the extent permitted in Contract Documents.

RFI-Reply: A document consisting of supplementary details, instructions, or information issued by City that clarifies or supplements Contract Documents, and with which Contractor shall comply. RFI-Replies do not constitute changes in Contract Sum or Contract Time except as otherwise agreed in writing by City. RFI-Replies will be issued through the RFI administrative system.

Remediation: Restoration of the contaminated soil, groundwater, or other materials to its pre-contaminated level or to a level acceptable to City and local, state and federal agencies.

***Resident Engineer*:** Authorized representative for the City. Also identified as Engineer.

Responsible Bidder: A bidder who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the Work.

Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

Section: A numbered portion of a title section of the Specifications.

Shop Drawings: All drawings, diagrams, illustrations, schedules and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

Shown: As indicated on Drawings.

Site: The particular geographical location of Work performed pursuant to Contract Documents.

Specifications: The directions, provisions and requirements contained in the Contract Documents, including but not limited to, the State Specifications, Special Provisions, and Technical Provisions.

Standard Plans: The Standard Plans, Metric, of the State of California Department of Transportation, July 2004.

State: City.

***State Furnished Materials*:** Materials furnished by City.

State of California: City except where in the context of the Contract Documents it is clear the reference is to the State of California.

State Specifications (or Standard Specifications): See Section 1.05 in this Document 00700.

Special Conditions or Special Provisions: Document 00800 (Supplemental General Conditions) and Document 00805 (Supplemental Conditions – Hazardous Materials) (if included).

Standard Provisions: Document 00700 (General Conditions)

Subcontractor: An entity or person contracting with Contractor or another subcontractor to perform any portion of Work.

Substantial Completion: The Work (or a specified part thereof) has progressed to the point where, in the opinion of City as evidenced by a Certificate of Substantial Completion and can be utilized for the purpose for which it is intended.

Supplemental Instruction: A written directive from City to Contractor ordering alterations or modifications that do not result in change in Contract Sum or Contract Time, and do not substantially change Drawings or Specifications.

Supplier/Vendor: A person or entity that has a direct contract with the Contractor or a Subcontractor to provide, fabricate, deliver or install materials, products or assemblies.

Technical Provisions: Provisions and or clauses specific to the Work of the Project, generally found in Sections 10 thru 95 of the State Specifications.

Testing and Special Inspection Agency: An independent entity engaged by City to inspect and/or test the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents and applicable codes.

Ton: 2,000 pounds avoirdupois.

Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground to furnish any of the following services or materials: Electricity, gases, chemicals, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Unit Price Work: Shall be the portions of the Work for which a unit price is provided in Document 00520 (Contract).

Work: The entire completed construction of the Work or of the various separately identifiable parts thereof required to be furnished under the Contract Documents within the Contract Time. Work includes and is the result of performing or furnishing administrative services, labor and professional services, furnishing and incorporating materials and equipment into the construction, and performing or furnishing construction services and furnishing documents, all as required by the Contract Documents including the Plans and Specifications. Wherever the word "work" is used, rather than the word "Work", it shall be understood to have its ordinary and customary meaning.

Work Day: All Days, other than Saturdays, Sundays, public holidays, and City Closures, unless specifically modified to the contrary.

Wherever words "as directed," "as required," "as permitted," or words of like effect are used, it shall be understood that direction, requirements, or permission of City is intended. Words "sufficient," "necessary," "proper," and the like shall mean sufficient, necessary, or proper in judgment of City. Words "approved," "acceptable," "satisfactory," "favorably reviewed," or words of like import, shall mean approved by, or acceptable to, or satisfactory to, or favorably reviewed by City.

Wherever the word "may" or "ought" is used, the action to which it refers is discretionary. Wherever the word "shall" or "will" is used, the action to which it refers is mandatory.

SECTION 1. INTERPRETATION OF CONTRACT

1.1 Precedence of Contract

In resolving conflicting requirements between the Contract Documents order of precedence shall be as follows:

A Change orders
B Addenda or Letters of Clarification
C Document 00520 (Contract)
D Special Conditions
E Technical Specifications/Special Provisions
F Drawings
G General Conditions
H State Specifications
I State Standard Plans

With reference to the Drawings:

A Figures govern over scaled dimensions
B Detail drawings govern over general drawings

1.2 Clarification of Contract

Should it appear that the work to be done or any of the matters relative thereto is not sufficiently detailed or explained in the Specifications or on the Drawings, or if Contractor discovers during the course of the Work any discrepancies between the Contract Drawings and conditions in the field, or any errors or omissions in the Contract or in the layout given by stakes, points, or instructions, the bidder or Contractor shall apply in writing

to City for such further explanations as may be necessary and shall conform to them as part of the Contract. Any work done after such discovery until authorized by City, will be done at Contractor's risk.

All corrections of readily apparent errors or omissions in the Contract may be made by City when such corrections are necessary for the proper fulfillment of their intention as construed by City. The misplacement, addition, or omission of any word, letter, figure, or punctuation mark which has no substantive legal effect will in no way change the due spirit, intent, or meaning of Contract.

1.3 Contract Documents Complementary

Any part of the Work not shown on the Drawings or described in these Specifications but which is reasonably or ordinarily implied by either, shall be furnished and installed by Contractor as if fully described in these Specifications and shown upon the Drawings. All disputes shall be administered under Section 9 herein.

1.4 Contract Interpretation

In the event of any doubt or questions arising respecting the true meaning of the Contract, reference shall be made in writing to City, whose decision thereon shall be final.

1.5 State Specifications

The Work set forth in these Specifications shall be accomplished in accordance with appropriate provisions of construction details, Section 10 to Section 95, inclusive, of the Standard Specifications of the State of California, Business, Transportation And Housing Agency, Department of Transportation, May, 2006. These Specifications are herein referred to as the State Specifications (or Standard Specifications) and are by reference made a part of these Specifications the same as though set out in full.

1.6 Conflicts Involving State Specifications

In the event of conflict between the State Specifications and the Standard, Special, or Technical Provisions of these Specifications or the Drawings or any Contract Document other than the State Specifications, then such non-State Specification shall have precedence.

SECTION 2. BONDS AND INSURANCE

2.1 Contractor's Insurance

A General

Contractor shall not perform Work under this Contract unless all insurance required by this Section has been obtained; and such insurance and insurers have been approved by City; and such insurance remains in full force and effect. Approval of insurance by City shall neither relieve nor decrease the liability of Contractor hereunder. Any delay in performing Work caused by Contractor's failure to comply with the insurance requirements specified in these Specifications, is the responsibility of Contractor. Failure by Contractor to maintain all required insurance at all times during the performance of this Contract, and until Final Acceptance by City, shall constitute a material breach of this Contract and shall not be a basis for a time extension.

For insurance requirements and forms see Document 00821 and 00530.

B Workers' Compensation and Liability Insurance

Without limiting any of the other obligations or liabilities of Contractor, Contractor shall, at Contractor's sole cost and expense, keep in force at all times during the performance of this Contract, and until Acceptance by City, the following minimum insurance coverages, unless otherwise specified in the Special Provisions:

For insurance requirements and forms see Document 00821 and 00530.

C Insurance on Work and Materials

Contractor shall secure and maintain such direct damage insurance against such perils as Contractor may deem necessary to protect the Work called for in this Contract including Work completed, material in place or to be used in the performance of this Contract and such other miscellaneous items as may be necessary to the performance of this Contract.

For insurance requirements and forms see Document 00821 and 00530.

D Certificates of Insurance

Contractor shall furnish certificates of insurance to City for all required insurance coverages.

For insurance requirements and forms see Document 00821 and 00530.

2.2 Contractor's Bonds

A Filing of Bonds

At or before the date indicated in Document 00200 (Instructions to Bidders), Contractor shall file with City the following bonds:

1. Corporate surety bond, in the form of Document 00610 (Construction Performance Bond), in the penal sum of 100% of Contractor's Bid as accepted, to guarantee faithful performance of the Work; and

2. Corporate surety bond, in the form of Document 00620 (Construction Labor and Material Payment Bond), in the penal sum of 100% of Contractor's Bid as accepted, to guarantee payment of wages for services engaged and of bills contracted for materials, supplies, and equipment used in performance of Contract Documents.

3. The Payment bond will be released six (6) months after the recording of the Notice of Completion, and the Faithful Performance shall be reduced by ninety percent (90%) at the recording of the Notice of Completion. The remaining ten percent (10%) will be released at the end of one (1) year from acceptance of the project provided any deficiencies in the work have been corrected.

B Surety Qualifications

Sureties shall be satisfactory to City. Corporate sureties on these bonds and on bonds accompanying Bids shall be duly licensed to do business in the State of California and shall have an A.M. Best Company financial rating of B+,VII or better.

SECTION 3. SCOPE OF WORK

3.1 Work to be Done

The Work to be done consists of furnishing all labor, methods or processes, implements, tools, machinery, construction equipment, materials of any kind, and installed manufactured equipment, except as otherwise specified herein, to be furnished by City or from sources provided by City, which are required to construct in a good and worker-like manner all the work herein specified. The intent of the plans and specifications is to describe the details for the construction and completion of the work which 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 first class quality are to be used.

Bidder should take particular notice that any and all items of Work, called for in the Construction Documents, but not included in a description of any specific bid item, shall be considered as included in one (1) or more of the bid items and that no additional compensation for those items of Work, beyond the Base Bid, will be allowed. Work of this nature includes, but is not limited to, such items as flagmen, water, all safety requirements, or work and materials required to provide public convenience and safety, barricades, lights, vehicular detours, and pedestrian walkways.

See Document 00800 for more detail of work and requirements.

3.2 Cleaning

Before final inspection Contractor shall clean the premises, and unless otherwise specified remove all rubbish, excess materials, false work, temporary structures, and equipment. All parts of the Work shall be left in a neat and presentable condition to the satisfaction of City. Contractor shall perform final cleanup in phases whenever the work is completed in phases, and/or turned over to City in phases, and/or where the Work is exposed. Additionally, all areas of the work may in any manner interface with the public shall be maintained in a neat, orderly, sanitary, and safe condition, and contractor shall at all times maintain the work area in a neat and orderly condition.

Nothing herein, however, shall require Contractor to remove warning, regulatory, and guide signs prior to Final Acceptance by City.

A Progress Cleaning

Contractor shall perform periodic cleaning to ensure that any streets and other City and public properties are maintained free from accumulation of waste materials, dust, mud, and debris.

Where required, Contractor shall wet down surfaces to lay dust and prevent the blowing of dust to nearby residences or public properties.

Contractor shall keep all streets clean and free of dust, mud, and debris resulting from Contractor's operations. Daily cleanup throughout the job will be necessary as Contractor progresses with its Work, but extra attention to cleanup shall be made prior to weekends and holidays. Without limiting the foregoing, Contractor shall remove trench spoil along traveled ways daily; grade and vacuum broom surfaces initially where applicable and later water flush with high-pressure sprays, being careful to avoid downstream contamination.

All dust, mud, spoils, and construction debris shall be removed daily from all roadways, ditches, shoulders, and private property (fills or spoils placed on private property at private property owner's written request excepted).

Disposal of Materials:

1. As part of the scope of Work included within the Contract Sum, Contractor shall be fully responsible for disposing of all construction debris, dirt and spoils resulting from the Work.
2. All waste materials, debris, dirt and rubbish shall be disposed of at sites to be chosen by Contractor in accordance with applicable local, state, and federal regulations.
3. Contractor is cautioned that the County of Santa Clara and cities within the county have regulations governing the disposal of rubble, broken pavement, and similar materials.
4. Contractor shall become familiarized with the requirements of the agency having jurisdiction over any contemplated disposal site and shall comply with all such requirements.

All excess soil from performance of Work shall be disposed at sites to be chosen by Contractor in accordance with applicable local, state, and federal regulations. If Contractor elects to dispose of soil on any private property, prior to any dumping, a letter allowing such dumping shall be obtained from the property owner and presented to City. Contractor is advised that the property owner is required to obtain a fill permit from the applicable government agency(ies). In addition, placement of fill in wetland areas is subject to permit procedures of the US Army Corps of Engineers. At the completion of Work, a letter from each affected property owner will be required releasing Contractor**,** Santa Clara County, City and any City consultant from future liability.

If Contractor does not properly clean the Site, in the opinion of City, then City shall have the option of using outside equipment to perform the cleanup and such cost will be withheld from the Contract Sum.

B Final Cleaning

Contractor shall execute final cleaning prior to final inspection, using only properly skilled workers.
Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from exposed finished surfaces.
Repair, patch, and touch up marred surfaces to match adjacent finishes.
Clean Site; mechanically sweep paved areas.
Remove waste and surplus materials, rubbish, and construction facilities from Site.

3.3 Change in Work

A General

City may, at any time or from time to time, order additions, deletions, or revisions in the Work, any portion of the Work, unit price item, or the Contract Time. These changes will be set forth in a contract change order which will specify, in addition to the work to be done in connection with the change made, the adjustment of Contract Time, if any, and the basis of compensation for that work. A contract change order will not become effective until approved by City. Upon receipt of an approved contract change order, Contractor shall proceed with the ordered work. If ordered in writing by the City, Contractor shall proceed with the work so ordered prior to actual receipt of an approved contract change order therefore. In those cases, City will, as soon as practicable, issue an approved contract change order for the ordered work and, if the parties cannot agree, then the contract claims procedure in Section 9 shall apply. When the compensation for an item of work is subject to adjustment, Contractor shall, furnish City with adequate detailed cost data for that item of work showing actual costs incurred with direct costs, indirect costs, and any overhead claims. If Contractor requests an adjustment in compensation for an item of work as provided herein, the cost data shall be submitted with the request.

Any change in scope of Work or deviation from Contract Documents including, without limitation, extra work, or alterations or additions to or deductions from the original Work, shall not invalidate the original Contract, and shall be performed under the terms of the Contract Documents.

Only Contractor or City may initiate changes in scope of Work or deviation from Contract Documents.

Contractor may only initiate changes by submitting RFIs, Notice of Concealed or Unknown Conditions, or Notice of Hazardous Waste Conditions.

RFIs shall be submitted to seek clarification of or request changes in the Contract Documents.
Notices of Concealed or Unknown Conditions shall be submitted in accordance with Document 00700 (General Conditions).
Notices of Hazardous Waste Conditions shall be submitted in accordance with Document 00700 (General Conditions).

Contractor shall be responsible for its costs to implement and administer RFIs throughout the Contract duration. Regardless of the number of RFIs submitted, Contractor shall not be entitled to additional compensation. Contractor shall be responsible for both City and it's Engineer's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract Documents, as determined by City; at City's discretion, such costs may be deducted from progress payments or final payment.

City may initiate changes by issuing a Supplemental Instruction, which may revise, add to or subtract from the Work.

City may initiate changes in the Work or Contract Time by issuing RFPs to Contractor. Such RFPs will detail all proposed changes in the Work and request a quotation of changes in Contract Sum and Contract Time from Contractor.

City may also, by Construction Change Directive ("CCD"), order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly. A CCD shall be used in the absence of total agreement

on the terms of a Change Order and may, upon notice, consist of a Change Order executed by City only.

B Procedures

1 Cost Proposal and Procedures:

Whenever Contractor is required to prepare a Cost Proposal, and whenever Contractor is entitled to submit a Cost Proposal and elects to do so, Contractor shall prepare and submit to City for consideration a Cost Proposal using the forms approved by the City. All Cost Proposals must contain a complete breakdown of costs of credits, deducts and extras; itemizing materials, labor, taxes, overhead and profit. All Subcontractor Work shall be so indicated. Individual entries on the Cost Proposal form shall be determined as provided in this section. After receipt of a Cost Proposal with a detailed breakdown, City will act promptly thereon.

If City accepts a Cost Proposal, City will prepare Change Order for City and Contractor signatures.

If Cost Proposal is not acceptable to City because it does not agree with cost and/or time included in Cost Proposal, City will submit in a response what it believes to be a reasonable cost and/or adjustment, if any. Except as otherwise provided in this Document, Contractor shall have seven Days in which to respond to City with a revised Cost Proposal.

When necessity to proceed with a change does not allow the City sufficient time to conduct a proper check of a Cost Proposal (or revised Cost Proposal), City may order Contractor to proceed on basis to be determined at earliest practical date. In this event, value of change, with corresponding equitable adjustment to Contract, shall not be more than increase or less than decrease proposed.

2 Request for Information (RFI):

Whenever Contractor requires information regarding the Project or Contract Documents, or receives a request for information from a Subcontractor, Contractor may prepare and deliver an RFI to City. Contractor shall use RFI format provided by City.

a. Contractor must submit time critical RFIs at least 30 days before scheduled start date of the affected Work activity. Contractor shall reference each RFI to an activity of Progress Schedule and shall note time criticality of the RFI, indicating time within which a response is required. Contractor's failure to reference RFI to an activity on the Progress Schedule and note time criticality on the RFI shall constitute Contractor's waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the RFI.

b. City will respond within seven Days from receipt of RFI with a written response to Contractor. Contractor shall distribute response to all appropriate Subcontractors. RFI received after 12:00 pm will be considered as received the following day, for Fridays, the following day will be considered to be Monday.

c. If Contractor is satisfied with the response and does not request change in Contract Sum or Contract Time, then the response shall be executed without a change.

d. If Contractor believes the response is incomplete, Contractor shall issue another RFI (with the same RFI number with the letter "A" indicating if it is a follow-up RFI) to City

clarifying original RFI. Additionally, City may return RFI requesting additional information should original RFI be inadequate in describing condition.

e. If Contractor believes that the response results in a change in Contract Sum or Contract Time, Contractor shall notify City in writing within seven Days after receiving the response.

1. If City disagrees with Contractor, then Contractor may give notice of intent to submit a Claim as described in this Document and submit its Claim within 30 days.

2. If City agrees with Contractor, then Contractor must submit a Cost Proposal within 21 Days of receiving the response to the RFI.

Contractor's failure to deliver either the foregoing notice and Claim or Cost Proposal by the respective deadlines stated in the foregoing sentences shall result in waiver of the right to file a Claim or Cost Proposal.

3 Field Authorization (FA):

A letter issued and signed by the City's Director of Public Works, or his designated representative, authorizing the Contractor to proceed with additive or deductive changes to the contract, exclusive of time extensions, which value does not exceed $50,000, which will become a part of a subsequent Contract Change Order. The Field Authorization is issued during the course of construction when it is known or believed that the changes in the Work being requested cannot be processed in a timely way as a Contract Change Order without risk of causing a delay to the project. The contractor cannot include work performed under a Field Authorization in an Application for Payment until the Field Authorization is fully incorporated into an approved Contract Change Order.

4 Supplemental Instruction:

City may issue Supplemental Instruction to Contractor.

If Contractor is satisfied with Supplemental Instruction and does not request change in Contract Sum or Contract Time, then Supplemental Instruction shall be executed without a Change Order.

If Contractor believes that Supplemental Instruction results in change in Contract Sum or Contract Time, then Contractor must submit a Cost Proposal to City within 21 Days of receiving the Supplemental Instruction.

5 Construction Change Directives (CCD):

If at any time City believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, City may issue a CCD with its recommended cost and/or time adjustment. Upon receipt of CCD, Contractor shall promptly proceed with the change of Work involved and concurrently respond to City's CCD within 10 Days.

a. Contractor's response must be any one of following:

1. Return CCD signed, thereby accepting City's response, time and cost.

2. Submit a (revised if applicable) Cost Proposal with supporting documentation (if applicable, reference original Cost Proposal number followed by letter A, B, etc. for each revision), if City so requests.

3. Give notice of intent to submit a Claim as described in this Document and submit its Claim with 30 days.

b. CCD signed by Contractor indicates the agreement of Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

c. If the CCD provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

1. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.

2. Unit prices stated in the Contract Documents or subsequently agreed upon.

3. Cost to be determined in a manner agreed.

4. Cost to be determined by the City if Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum., The method and the adjustment shall be on the basis of reasonable expenditures and savings of those performing the Work attributable to the change including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit.

5. If the parties still do not agree on the price for a CCD, Contractor may file a Claim. Contractor shall keep and present, in such form as City may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this paragraph shall be limited to those provided in this Section.

d. Pending final determination of cost to City, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by Contractor to City for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by City. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

6 City Requested RFP:

Contractor shall furnish a Cost Proposal within 21 Business Days of City's RFP. Upon approval of RFP, City will issue a Change Order directing Contractor to proceed with extra Work. If the parties do not agree on the price for an RFP, City may either issue a CCD or decide the issue per the claims section of this Document. Contractor shall perform the changed Work notwithstanding any claims or disagreements of any nature.

7 Differing Site Conditions:

Contractor shall submit Notices of Differing Site Conditions to resolve problems regarding differing underground Site conditions encountered in the execution of the Work pursuant to Section 3 of this Document, which shall govern. If City determines that a change in Contract Sum or Contract Time is justified, City will issue RFP or CCD.

8 Hazardous Waste Conditions:

Contractor shall submit Notices of Hazardous Waste Conditions to resolve problems regarding hazardous materials encountered in the execution of the Work pursuant to this Document, which shall govern. If City determines that a change in Contract Sum or Contract Time is justified, City will issue RFP or CCD or CCO..

9 All Changes:

Documentation of Change in Contract Sum and Contract Time:

Contractor shall maintain detailed records of Work performed on a time-and-material basis. Contractor shall document each proposal for a change in cost or time with sufficient data to allow evaluation of the proposal.

Contractor shall, on request, provide additional data to support computations for:

a. Quantities of products, materials, labor and equipment.

b. Taxes, insurance, and bonds.

c Overhead and profit.

d Justification for any change in Contract Time and new Progress Schedule showing revision due, if any.

e. Credit for deletions from Contract, similarly documented.

f. Contractor shall support each claim for additional costs, and for Work performed on a cost-and-percentage basis, with additional information including:

(1) Credit for deletions from Contract, similarly documented.

(2) Origin and date of claim.

(3) Dates and times Work was performed and by whom.

(4) Time records and wage rates paid.

(5) Invoices and receipts for products, materials, equipment and subcontracts, similarly documented.

10 Correlation of Other Items:

Contractor shall revise Schedule of Values and Application for Payment forms to record each authorized Change Order or CCD as a separate line item and adjust the Contract Sum as shown thereon prior to the next monthly pay period.

Contractor shall revise the Progress Schedules prior to the next monthly pay period.

Contractor shall enter changes in Project Record Documents prior to the next monthly pay period.

11 Responses:

For all responses for which the Contract Documents, including without limitation this Document, do not provide a specific time period, recipients shall respond within a reasonable time.

C Allowable Quantity Variations

Increases or decreases in the quantity of a Contract item of Work for unit price items will be determined by comparing the actual pay quantity of an item of Work with the approximate quantity in the listing of the bid items contained in the Bid.

If the actual pay quantity of an item of Work varies from the approximate quantity by 25 percent or less, payment will be made for the actual quantity of Work performed at the Contract unit price listed in the Bid.

If the actual pay quantity of an item of Work varies from the approximate quantity by more than 25 percent, in the absence of an executed Contract Change Order specifying the compensation to be paid, the compensation payable to Contractor will be determined in accordance with this Section.

1. **Increases of More Than 25 Percent**: If the actual pay quantity of an item of Work exceeds the approximate quantity by more than 25 percent, the amount of Work in excess of 125 percent of the approximate quantity will be paid for by adjusting the Contract unit price. Such adjustment of the Contract unit price will be the positive or negative difference between the Contract unit price and the actual unit cost of the total pay quantity of the item. At the sole option of City, the actual unit cost of the Work involved in such excess will be determined in accordance with Section 3.4 (by mutual acceptance of a lump sum amount) or Section 3.4 (cost of Work, based on time and materials).

If the cost of an item of Work includes fixed costs or overhead, the fixed costs will be deemed to have been recovered by Contractor by the payments made for 125 percent of the approximate quantity at the Contract unit price for the item and in computing the actual unit cost, the fixed costs will be excluded.

When the compensation payable for the quantity of Work performed in excess of 125 percent of the approximate quantity is less than $5,000 at the Contract unit price, no adjustment in the Contract unit price will be made unless requested in writing by Contractor within 14 days from the date Contractor became aware, or should have reasonably become aware, of the increase in quantity.

2. **Decreases of More Than 25 Percent**: If the actual pay quantity of an item of Work is less than 75 percent of the approximate quantity, an adjustment in compensation will not be made unless Contractor makes a request in writing within 14 days from the date Contractor became aware, or should have reasonably become aware, of the decrease in quantity. If Contractor makes a request, the actual pay quantity of said item of Work performed will be paid for by adjusting the Contract unit price. Such adjustment of the Contract unit price will be the positive or negative difference between the Contract unit price and the actual unit cost of the total pay quantity of the item, including fixed costs. At the sole option of City, payment for the actual quantity of Work will be made by mutual acceptance of a lump sum amount or cost of Work based on time and materials in accordance with Section 3.4.

3. Payment for the actual pay quantity of such item of Work will in no case exceed the payment which would have been made for the performance of 75 percent of the approximate quantity of such item at the Contract unit price.

B Eliminated Items:

If any Contract item of the Work is eliminated in its entirety, payment will be made to Contractor for the actual cost incurred in connection with the eliminated Contract item if incurred prior to the date of notification in writing by City of such elimination.

If acceptable material is ordered by Contractor for an eliminated Contract item prior to the date of notification of such elimination by City, and if orders for such material cannot be canceled, payment for such material will be made at the actual cost to Contractor. In such case, the material shall become the property of City. If the materials can be returned to the vendor and if City so directs, the material shall be returned and Contractor will be paid for the actual cost for returning the material.

The actual costs to be paid by City to Contractor in accordance with this Section will be computed based on Time and Materials in accordance with Section 3.4.

C. Alternative Contract Items

Items identified as Alternative in the Bid may be deleted entirely or in part at the sole discretion of City. The unit price of an Alternative contract item shall not be subject to adjustment due to any increase or decrease in actual quantity.

See Document 00800 for more detail.

D. Change in Character of Work

If an ordered change in the plans or specifications materially changes the character of the work of a contract item from that on which the Contractor based the bid price, and if the change increases or decreases the actual unit cost of the changed item as compared to the actual or estimated actual unit cost of performing the work of that item in accordance with the plans and specifications originally applicable thereto, in the absence of an executed contract change order specifying the compensation payable, an adjustment in compensation therefore will be made in accordance with the following.

The basis of the adjustment in compensation will be the difference between the actual unit cost to perform the work of that item or portion thereof involved in the change as originally planned and the

actual unit cost of performing the work of the item or portion thereof involved in the change, as changed. Actual unit costs will be determined by the Engineer in the same manner as if the work were to be paid for on a force account basis as provided in Section 3.4; or the adjustment will be as agreed to by the Contractor and the Engineer. The adjustment will apply only to the portion of the work of the item actually changed in character. At the option of the Engineer, the work of the item or portion of item which is changed in character will be paid for by force account as provided in Section 3.4.

If the compensation for an item of work is adjusted under this Section, the costs recognized in determining that adjustment shall be excluded from consideration in making an adjustment for that item of work under the provisions in Section 3.3.

Failure of the Engineer to recognize a change in character of the work at the time the approved contract change order is issued shall in nowise be construed as relieving the Contractor of the duty and responsibility of filing a written protest within the limit as provided in Doc. 00700.

3.4 Change in Contract Price

A General

The Contract Price constitutes the total compensation payable to Contractor for performing the Work. All duties, responsibilities. and obligations assigned to or undertaken by Contractor to perform the Work shall be at Contractor's expense without change in the Contract Price.

The Contract Price may only be changed by a change order. Any request for an increase in the Contract Price shall be based on written notice delivered by Contractor to City promptly, but in no event later than 10 days after the date of the occurrence of the event giving rise to the request and stating the general nature of the request. Notice of the amount of the request with supporting data shall be delivered within 45 days after the date of the occurrence, unless City allows an additional period of time to ascertain more accurate data in support of the request, and shall be accompanied by Contractor's written statement that the amount requested covers all amounts (direct, indirect, and consequential) to which Contractor is entitled as a result of the occurrence of the event. No request for an adjustment in the Contract Price will be valid if not submitted in accordance with this Section.

The value of any Work covered by a change order or of any request for an increase or decrease in the Contract Price shall be determined in one of the following ways:

- Where the Work involved is covered by unit prices contained in the Contract documents, by application of unit prices to the quantities of the items involved; or
- By mutual acceptance of a lump sum, which may include an allowance for overhead and profit not necessarily in accordance with Section 3.4, provided Contractor submits documentation supporting the direct, indirect, overhead and profit components that compromise the lump sum amounts.
- On the basis of the cost of Work based on Time and Materials plus a Contractor's fee for overhead and profit, in accordance with this Section.

B Cost of Work (Based on Time and Materials)

The term "cost of Work" means the sum of all costs necessarily incurred and paid by Contractor for labor, materials, and equipment in the proper performance of Work. Except as otherwise may be agreed to in writing by City, such costs shall be in amounts no higher than those prevailing in the locality of the project.

1 Labor:

The cost of labor used in performing Work by Contractor, a Subcontractor, or other forces, will be the sum of the following:

The actual wages paid plus any employer payments to or on behalf of workers for fringe benefits, including health and welfare, pension, vacation, and similar purposes, not

overlapping with the labor surcharge described below. The cost of labor may include the wages paid to foremen when it is determined by City that the services of foremen do not constitute a part of the overhead allowance.

There will be added to the actual wages as defined above, a percentage set forth in the latest "Labor Surcharge and Equipment Rental Rates" in use by the California State Department of Transportation which is in effect on the date upon which the work is accomplished. This percentage shall constitute full compensation for all payments imposed by State and Federal laws including, but not limited to, workers' compensation insurance and Social Security payments.

The amount paid for subsistence and travel required by collective bargaining agreements.

For equipment operators, payment for the actual cost of labor and subsistence or travel allowance will be made at the rates paid by Contractor to other workers operating similar equipment already on the work, or in the absence of such labor, established by collective bargaining agreements for the type of workers and location of the extra work, whether or not the operator is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein, in accordance with the provisions of this Section, which surcharge shall constitute full compensation for payments imposed by State and Federal laws, and all other payments made to on behalf of workers other than actual wages.

2 Materials:

The cost of materials used in performing Work will be the cost to the purchaser, whether Contractor or subcontractor, from the supplier thereof, except as the following are applicable:

Trade discounts available to the purchaser shall be credited to City notwithstanding the fact that such discounts may not have been taken by Contractor.

For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by City. Markup, except for actual costs incurred in the handling of such materials, will not be allowed.

Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on extra work items or the current wholesale price for such materials delivered to the Work Site, whichever price is lower.

If, in the opinion of City, the cost of material is excessive, or Contractor does not furnish satisfactory evidence of the cost of such material, then the cost shall be deemed to be the lowest current wholesale price for the quantity concerned delivered to the work Site, less trade discount. City reserves the right to furnish materials for the extra work and no claim shall be made by Contractor for costs and profit on such materials.

3 Equipment:

Contractor will be paid for the use of equipment at the rental rate listed for such equipment specified in the current edition of the Department of Transportation publication entitled, "Labor Surcharge and Equipment Rental Rates," which is in effect on the date upon which the work is accomplished. Such rental rates will be used to compute payments for equipment whether the equipment is under Contractor's control through direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment shall be the rate resulting in the least total cost to City for the total period of use. If it is deemed necessary by Contractor to use equipment not listed in the foregoing publication, an equitable rental rate for the equipment will be established by City. Contractor may furnish cost data which might assist City in the establishment of the rental rate.

The rental rates paid, as above provided, shall include the cost of fuel, oil, lubrication supplies, small tools, necessary attachments, repairs and maintenance of all kinds, depreciation, storage, insurance,

and all incidentals. Operators of equipment will be separately paid for as provided in this Section 3.4, "Labor".

All equipment shall be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer-approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools having a replacement value of $500 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.

4 Owner-Operated Equipment:

When owner-operated equipment is used to perform Work and is to be paid for as extra work, Contractor will be paid for the equipment and operator as follows:

Payment for the equipment will be made in accordance with the provisions of Section 3.4, "Equipment."

Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by Contractor to other workers operating similar equipment already on the project, or, in the absence of such other workers, at the rates for such labor established by collective bargaining agreement for type of worker and location of the work, whether or not the owner-operator is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein, in accordance with the provisions in Section 3.4, "Labor."

To the direct cost of equipment rental and labor, computed as provided herein, will be added the markup for equipment rental and labor as provided in Section 3.4, "Contractor's Fee."

5 Equipment Time:

The rental time to be paid for equipment on the Work shall be the time the equipment is in productive operation on the Work being performed and shall include the time required to move the equipment to the new location and return it to the original location or to another location requiring no more time than that required to return it to its original location; except that moving time will not be paid if the equipment is used on other than the extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power. No payment will be made for loading and transporting costs when the equipment is used at the Site of the extra work on other than the extra work. The following shall be used in computing the rental time of equipment on the work:

A. When hourly rates are listed, any part of an hour less than 30 minutes of operation shall be considered to be ½ -hour of operation, and any part of an hour in excess of 30 minutes will be considered 1-hour of operation.

B. When daily rates are listed, operation for any part of a day less than 4 hours shall be considered to be half-day of operation.

C. Rental time will not be allowed while equipment is inoperative due to breakdowns, Contractor sequencing of Work, or Contractor caused delays.

6 Cost of Work Documentation:

Contractor shall furnish City Daily Extra Work Reports on a daily basis covering the direct costs of labor and materials and charges for equipment whether furnished by Contractor, subcontractor, or other forces. Contractor will provide the Daily Extra Work Report forms to City for review and

acceptance of form prior to use. Contractor or an authorized agent shall sign each Daily Extra Work Report. The Daily Extra Work Report shall provide names and classifications of workers and hours worked; size, type, and identification number of equipment; and the hours operated. Copies of certified payrolls and statement of fringe benefit shall substantiate labor charges. Valid copies of vendor's invoices shall substantiate material charges.

City will make any necessary adjustments. When these reports are agreed upon and signed by both parties, they shall become the basis of payment for the Work performed, but shall not preclude subsequent adjustment based on a later audit.

Contractor shall inform City when extra work will begin so that City inspector can concur with the Daily Extra Work Reports. Failure to conform to these requirements may impact Contractor's ability to receive proper compensation.

7 Detours:

Contractor shall construct and remove detours and detour bridges for the use of public traffic as provided in the Special Provisions, or as shown on the plans, or as directed by City. Payment for this work will be made as set forth in the Special Provisions or at the Contract Prices for the items of work involved if the work being performed is covered by contract items of work and no other method of payment therefore is provided in the Special Provisions, otherwise the work will be paid for as extra work as provided herein. The costs of repairing damaged detours caused by public traffic will be paid for as extra work as provided herein. When public traffic is routed through the work, provision for a passageway through construction operations will not be considered as detour construction or detour maintenance and this work shall conform to and be paid as basic scope of work, unless otherwise specified in the Special Provisions. Detours used exclusively by Contractor for hauling materials and equipment shall be constructed and maintained by Contractor at Contractor's expense. The failure or refusal of Contractor to construct and maintain detours at the proper time shall be sufficient cause for closing down the work until the detours are in satisfactory condition for use by public traffic. Where Contractor hauling is causing such damage to the detour that its maintenance in a condition satisfactory for public traffic is made difficult and unusually expensive, City shall have authority to regulate Contractor's hauling over the detour.

8 Special Services

Special services are defined as that work characterized by extraordinary complexity, sophistication, or innovations, or a combination of the foregoing attributes which are unique to the construction industry. The following may be considered by City in making estimates for payment for special services:

A. When City and Contractor, by agreement, determine that a special service is required which cannot be performed by the forces of Contractor or those of any of its subcontractors, the special service may be performed by an entity especially skilled in the work to be performed. After validation of invoices and determination of market values by City, invoices for special services based upon the current fair market value thereof may be accepted without complete itemization of labor, material, and equipment rental costs.

B. When Contractor is required to perform work necessitating special fabrication or machining process in a fabrication or a machine shop facility away from the job-Site, the charges for that portion of the work performed at the off Site facility may, by agreement, be accepted as a special service and accordingly, the invoices for the work may be accepted without detailed itemization.

C. All invoices for special services will be adjusted by deducting all trade discounts offered or available, whether the discounts were taken or not. In lieu of the allowances for overhead and profit on labor, materials, and equipment specified in Section 3.4 "Contractor's Fee", herein, a single allowance of ten (10) percent will be added to invoices for special services.

9 Contractor's Fee

A. Work ordered on the basis of time and materials will be paid for at the actual and necessary cost as determined by City, plus allowances for overhead and profit which allowances shall constitute the "Contractor's Fee". For extra work involving a combination of increases and decreases in the work, the actual necessary cost will be the arithmetic sum of the additive and deductive costs. The allowance for overhead and profit shall include compensation for superintendence, bond and insurance premiums, taxes, all field and home office expenses, and all other items of expense or cost not included in the cost of labor, materials, or equipment provided for under Sections 3.4, "Cost of Work", herein. The allowance for overhead and profit will be made in accordance with the following schedule:

Actual and Necessary Cost	**Overhead and Profit Allowance**
Labor	33 percent
Materials	15 percent
Equipment	15 percent

B. Labor, materials, and equipment may be furnished by Contractor or by the subcontractor on behalf of Contractor: When all or any part of the extra work is performed by a subcontractor, the allowance specified in "Contractor's Fee" shall only be applied to the labor, materials, and equipment costs of the subcontractors to which Contractor may add 5 percent of the subcontractor's total cost for the extra work. Regardless of the number of hierarchical tiers of subcontractors, the 5 percent increase above the subcontractor's total cost, which includes the allowances for overhead and profit specified herein, may be applied one time only for each separate work transaction.

10 Compensation for Time Extensions

Adjustments in compensation for time extension will be allowed only for causes identified in Section 3.5, Changes in Contract Time. No adjustments in compensation will be allowed when City-caused delays to a controlling item of work and Contractor-caused delays to a controlling item of work occur concurrently, or for causes identified in Section 3.5 Changes in Contract Time.

Compensation for idle time of equipment will be determined in accordance with the provisions in Section 3.4, Owner –Operated Equipment.

11 Force-Account Work

If it is impracticable because of nature of Work, or for any other reason, to fix an increase or decrease in price definitely in advance, the Contractor may be directed to proceed at a not-to-exceed (NTE) maximum price which shall not under any circumstances be exceeded. Subject to such limitation, such extra Work shall be paid for at actual necessary cost for Force-Account Work or at the negotiated cost, as determined by City. The cost for Force-Account Work shall be determined pursuant this Section.

Force-Account Work shall be used when it is not possible or practical to price out the changed Work prior to the start of that Work. In these cases, Force-Account Work will be utilized during the pricing and negotiation phase of the change. Once negotiations have been concluded and a bilateral agreement has been reached, the tracking of the Work under Force-Account is no longer necessary. Force-Account Work shall also be used when negotiations between City and Contractor have broken apart and a bilateral agreement on the value of the changed Work cannot be reached. City may approve other uses of Force-Account Work.

Whenever any Force-Account Work is in progress, definite price for which has not been agreed on in advance, Contractor shall report to City each Business Day in writing in detail amount and cost of labor and material used, and any other expense incurred in Force-Account Work on preceding Day, by using the Cost Proposal form attached hereto. No claim for compensation for Force-Account Work will be allowed unless report shall have been made.

Whenever Force-Account Work is in progress, definite price for which has not been agreed on in advance, Contractor shall report to City when 75 percent of the NTE amount has been expended.

Force-Account Work shall be paid as extra Work under this Section. Methods of determining payment for Work and materials provided in this Section shall not apply to performance of Work or furnishings of material that, in judgment of City, may properly be classified under items for which prices are otherwise established in Contract Documents.

12 Overhead Defined

The following constitutes charges that are deemed included in overhead for all Contract Modifications, including Force-Account Work or CCD Work, whether incurred by Contractor, Subcontractors, or suppliers, and Contractor shall not invoice or receive payment for these costs separately:

A. Drawings: field drawings, Shop Drawings, etc., including submissions of drawings

B. Routine field inspection of Work proposed

C. General Superintendence

D. General administration and preparation of cost proposals, schedule analysis, change orders and other supporting documentation as necessary

E. Computer services

F. Reproduction services

G. Salaries of project engineer, superintendent, timekeeper, storekeeper and secretaries

H. Janitorial services

I. Temporary on-Site facilities:

- Offices
- Telephones
- Plumbing
- Electrical: Power, lighting
- Platforms
- Fencing, etc.
- water

J. Home office expenses

K. Insurance and Bond premiums

L. Procurement and use of vehicles and fuel used coincidentally in Work otherwise included in the Contract Documents

M. Surveying

N. Estimating

O. Protection of Work

P. Handling and disposal fees

Q. Final cleanup

R. Other incidental Work

13 Records and Certifications

Force-Account (cost reimbursement) charges shall be recorded daily and summarized in Cost Proposal form attached hereto. Contractor or authorized representative shall complete and sign form each day. Contractor shall also provide with the form: the names and classifications of workers and hours worked by each; an itemization of all materials used; a list by size type and identification number of equipment and hours operated; and an indication of all Work performed by specialists.

No payment for Force-Account Work shall be made until Contractor submits original invoices substantiating materials and specialists charges.

City shall have the right to audit all records in possession of Contractor relating to activities covered by Contractor's claims for modification of Contract, including Force-Account Work and CCD Work.

Further, City will have right to audit, inspect, or copy all records maintained in connection with this Contract, including financial records, in possession of Contractor relating to any transaction or activity

occurring or arising out of, or by virtue of, the Contract. If Contractor is a joint venture, right of City shall apply collaterally to same extent to records of joint venture sponsor, and of each individual joint venture member. This right shall be specifically enforceable, and any failure of Contractor to voluntarily comply shall be deemed an irrevocable waiver and release of all claims then pending that were or could have been subject to this Document.

3.5 Change of Contract Time

A General

The Contract time may only be changed by a change order. Any request for an extension of the Contract time shall be based on written notice delivered by Contractor to City promptly, but in no event later than 10 days after the date of the occurrence of the event giving rise to the request. Such written notice shall identify the controlling item of work that justifies the time extension, and shall state in reasonable detail the general nature of the request. Notice of the full extent of the request with a supporting time impact evaluation shall be delivered within 25 days after the date of such occurrence, unless City allows an additional period of time to ascertain more accurate data in support of the request, and shall be accompanied by Contractor's written statement that the adjustment requested is the entire adjustment to which Contractor has reason to believe it is entitled as a result of the occurrence of said event. No request for an adjustment in the Contract time will be valid if not submitted in accordance with the requirements of this Section, and Contractor waives any rights not pursued under this Section.

The Contract time will only be extended when a delay occurs which impacts a controlling item of work as shown on the progress schedule required herein. Time extensions will be allowed only if the cause is beyond the control and without the fault or negligence of Contractor. Time extensions (without compensation of any sort) will also be allowed when City-caused delays to a controlling item of work and Contractor-caused delays to a controlling item of work occur concurrently or for adverse weather caused delays discussed below. Contractor will be notified if City determines that a time extension is not justified.

The Contract time will be extended in an amount equal to time lost due to delays beyond the control of Contractor if a request is made therefore as provided in this Section. An extension of Contract time will only be granted for days on which (i) Contractor is prevented from proceeding with at least 75 percent of the normal labor and equipment force actually engaged on the said work, and (ii) by excusable occurrences or conditions resulting immediately therefrom which impact a controlling item of work as determined by City. Excusable delays shall include:

- Changes.
- Failure of City to furnish access, right of way, completed facilities of related projects, Drawings, materials, equipment, or services for which City is responsible.
- Survey error by City.
- Suspension of work pursuant to Section 7, Prosecution and Progress of Work.
- Occurrences of a severe and unusual nature, including, acts of God, fires, and excusable inclement weather. An "act of God" means an earthquake, flood, cloudburst, cyclone or other cataclysmic phenomena of nature beyond the power of Contractor to foresee or to make preparation in defense against, but does not include ordinary inclement weather. Excusable inclement weather is any weather condition, the duration of which varies in excess of the average conditions expected, which is unusual for the particular time and place where the work is to be performed, or which could not have been reasonably anticipated by Contractor, as determined from National Oceanic and Atmospheric Administration ("NOAA") records for the proceeding 3-year period.

- Act of the public enemy, act of another governmental entity, public utility, epidemic, quarantine restriction, freight embargo, strike, or labor dispute. A delay to a subcontractor or supplier due to the above circumstances will be taken into consideration for extensions to the time of completion.

B Extensions of Time for Delay Due to Excusable Inclement Weather

The Contractor shall have no right to an adjustment in the time of completion due to weather conditions or industrial conditions which are normal for the locality of the site. The time period for the contract has been calculated with the consideration given to the average climate range and usual industrial conditions prevailing in the locality of the site.

Time extensions due to inclement weather will be allowed only for weather conditions that affect the progress of activities that are on the critical path. The Contractor shall exercise due diligence in protecting the work area from weather as well as take corrective action after the weather has passed. Time extensions will not be allowed until the average number of days for which precipitation exceeds 0.10 inch and the corresponding average precipitation in a given month or months has been exceeded. Delay due to inclement weather are not compensable.

Contractor shall give written notice of intent to claim an adverse weather day within one Day of the adverse weather day occurring.

Abnormal weather conditions are those that exceed the averages indicated in the following table:

Month	Days (1)	and	Precipitation (2)
January	6		3.06
February	6		2.49
March	6		2.31
April	3		1.06
May	1		0.40
June	0		0.09
July	0		0.04
August	0		0.09
September	1		0.21
October	2		0.73
November	4		1.73
December	5		2.28
Total	33		14.49

(1) The average number of days in which the precipitation exceeds 0.10 inches in the 24 hour period between midnight of one day and midnight of the next day.
(2) The mean precipitation, in inches, for the month indicated, recorded at San Jose station #047821 of the period from 1948 to 2000.

The Contract time will be extended for as many days in excess of the average number of days of excusable inclement weather, as defined above, as Contractor is specifically required under the Special Provisions to suspend construction operations, provided that on such days Contractor is prevented by such excusable inclement weather, or conditions resulting immediately therefrom, from proceeding with at least 75 percent of the normal labor and equipment force engaged on critical items of work as shown on the schedule.

Should Contractor prepare to begin work at the regular starting time at the beginning of any regular work shift on any day on which excusable inclement weather, or the conditions resulting from the weather prevents work from beginning at the usual starting time and the crew is dismissed as a result thereof, Contractor will be entitled to a 1-day credit for advance weather whether or not conditions change thereafter during said day and the major portion of the day could be considered to be suitable for such construction operations. If Contractor starts work and then suspends work due to excusable

inclement weather, then Contractor shall be entitled to a prorate credit based upon the number of work hours lost.

Contractor shall base the construction schedule upon the inclusion of the number of days of excusable inclement weather (for rain, in excess of 0.1 inch) specified by NOAA for the locality of the Project. Notwithstanding the foregoing, extension of the Contract time due to excusable inclement weather will be granted until after the said aggregate total number of days of excusable inclement weather has been reached; however, no reduction in Contract time will be made if said number of days of excusable inclement weather is not reached.

3.6 Changed Site Conditions

If any work involves digging trenches or other excavations below the surface, Contractor shall promptly and before the following conditions are disturbed, notify City in writing of any:

A. Material that Contractor believes may be a regulated material that is required to be removed to a Class I, Class II, or Class III disposal Site in accordance with provisions of existing law.

B. Subsurface or latent physical conditions at the Site differing from those indicated in this Contract.

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

City will promptly investigate the condition and if it finds that the conditions do materially so differ, or do involve regulated material, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of the work, City will issue a change order under the procedures described in this Contract. For regulated materials, City reserves the right to use other forces for exploratory work to identify and determine the extent of such material and for removing regulated material from such areas.

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

3.7 Cost Reduction Incentive

The Contractor may submit to the Engineer, in writing, proposals for modifying the plans, specifications or other requirements of the contract for the sole purpose of reducing the total cost of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, or design and safety standards.

Cost reduction proposals shall contain the following information:

A. A description of both the existing contract requirements for performing the work and the proposed changes.

B. An itemization of the contract requirements that must be changed if the proposal is adopted.

C. A detailed estimate of the cost of performing the work under the existing contract and under the proposed change. The estimates of cost shall be determined in the same manner as if the work were to be paid for on a force account basis as provided in Section 3.4, "Cost of Work."

D. A statement of the time within which the Engineer must make a decision thereon.

E. The contract items of work affected by the proposed changes, including any quantity variation attributable thereto.

The provisions of this Section 3.7 shall not be construed to require the Engineer to consider any cost reduction proposal which may be submitted hereunder; proposed changes in basic design of a bridge or of a pavement

type will not be considered as an acceptable cost reduction proposal; and the City will not be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted pursuant to this section nor for any delays to the work attributable to any cost reduction proposal. If a cost reduction proposal is similar to a change in the plans or specifications, under consideration by the City for the project, at the time the proposal is submitted or if the proposal is based upon or similar to Standard Specifications, standard special provisions or Standard Plans adopted by the City after the advertisement for the contract, the Engineer will not accept the proposal, and the City reserves the right to make the changes without compensation to the Contractor under the provisions of this section

The Contractor shall continue to perform the work in accordance with the requirements of the contract until an executed change order, incorporating the cost reduction proposal has been issued. If an executed change order has not been issued by the date upon which the Contractor's cost reduction proposal specifies that a decision thereon should be made, or such other date as the Contractor may subsequently have specified in writing, the cost reduction proposal shall be deemed rejected.

The Engineer shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings in construction costs from the adoption of all or any part of the proposal. In determining the estimated net savings, the right is reserved to disregard the contract bid prices if in the judgment of the Engineer, those prices do not represent a fair measure of the value of work to be performed or to be deleted.

The City reserves the right where it deems such action appropriate, to require the Contractor to share in the City's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering the proposal. Where this condition is imposed, the Contractor shall indicate acceptance thereof in writing, and that acceptance shall constitute full authority for the City to deduct amounts payable to the City from any moneys due or that may become due to the Contractor under the contract.

If the Contractor's cost reduction proposal is accepted in whole or in part the acceptance will be by a contract change order. The change order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or that part of it as has been accepted to be put into effect, and shall include any conditions upon which the City's approval thereof is based if the approval of the City is conditional. The change order shall also set forth the estimated net savings in construction costs attributable to the cost reduction proposal effectuated by the change order, and shall further provide that the Contractor be paid 50 percent of that estimated net savings amount. The Contractor's cost of preparing the cost reduction incentive proposal and the City's costs of investigating a cost reduction incentive proposal, including any portion thereof paid by the Contractor, shall be excluded from consideration in determining the estimated net savings in construction costs.

Acceptance of the cost reduction proposal and performance of the work thereunder shall not extend the time of completion of the contract unless specifically provided for in the contract change order authorizing the use of the cost reduction proposal.

The amount specified to be paid to the Contractor in the change order which effectuates a cost reduction proposal shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work thereof pursuant to the change order.

The City expressly reserves the right to adopt a cost reduction proposal for general use on contracts administered by the City when it determines that the proposal is suitable for application to other contracts. When an accepted cost reduction proposal is adopted for general use, only the Contractor who first submitted that proposal will be eligible for compensation pursuant to this section, and in that case, only as to those contracts awarded to that Contractor prior to submission of the accepted cost reduction proposal and as to which the cost reduction proposal is also submitted and accepted. Cost reduction proposals identical or similar to previously submitted proposals will be eligible for consideration and compensation under the provisions of this Section 3.7 if the identical or similar previously submitted proposals were not adopted for general application to other contracts administered by the City. Subject to the provisions contained herein, the City or any other public agency shall have the right to use all or any part of any submitted cost reduction proposal without obligation or compensation of any kind to the Contractor.

Contractor may submit to City, in writing, proposals for modifying the Drawings, Specifications, or other requirements of the Contract for the sole purpose of reducing the total cost of construction.

Prior to preparing a written cost reduction proposal, Contractor shall request a meeting with City to discuss the proposal in concept. Items of discussion will also include permit issues, impact on other projects, impact on the project schedule, peer reviews, overall merit of the proposal, and review times required by City and other agencies.

If a cost reduction proposal submitted by Contractor, and subsequently approved by City, provides for a reduction in contract time, 50 percent of that contract time reduction shall be credited to City by reducing the contract working days, not including plant establishment.

If a cost reduction proposal submitted by Contractor, and subsequently approved by City, provides for a reduction in traffic congestion or avoids traffic congestion during construction, 60 percent of the estimated net savings in construction costs attributable to the cost reduction proposal will be paid to Contractor. Contractor shall provide detailed comparisons of the traffic handling between the existing contract and the proposed change, and estimates of the traffic volumes and congestion.

3.8 Dust Control

During the performance of all work under this Contract, Contractor shall assume all responsibility for dust control and shall furnish all labor, equipment, and means required to carry out proper and efficient measures wherever and whenever dust control is necessary to prevent operations from producing dust damage and nuisance to persons and property. Any claims resulting therefrom shall be borne solely by Contractor.

3.9 Excavation Safety Plans

Attention is directed to Section 6705 of the Labor Code concerning trench excavation safety plans. Excavations five (5) feet or more in depth shall not begin until Contractor has submitted and City has returned indicating "In Receipt Of'" Contractor's detailed plan for worker protection from the hazards of caving ground during such excavations. The plan may be reviewed by City for completeness in accordance with federal, state and local regulations. City will not be responsible for reviewing the accuracy of assumptions, data and information used, and procedures contained in the plan or the adequacy thereof. Such plans shall show the details of the design of shoring, bracing, sloping, or other provisions to be made for worker protection during such excavation. The plan shall not allow the use of shoring, sloping, or a protective system less effective than that required by the Construction Safety Orders; and if such plan varies from the shoring system standards established by the Construction Safety Orders, the plan (including calculations) shall be prepared, signed and stamped by an engineer registered as a Civil or Structural engineer and an engineer registered as a Geotechnical Engineer, in the State of California pursuant to Sections 6700 et seq. of the Business & Professions Code.

Such plans shall be accompanied by a copy of the Permit to Excavate that has been issued by the Division of Occupational Safety and Health as required by Labor Code Section 6500 and following.

To the extent applicable, the Construction Safety Orders of the Division of Occupational Safety and Health shall apply to all excavations.

This Section shall be applicable regardless of Contract Price.

3.10 Asbestos-Related Work

Contractor's attention is directed to Section 7058.5 of the Business and Professions Code which states that from and after January 1, 1987, no Contractor shall engage in asbestos-related work, as defined, who is not certified by Contractor's State License Council to do so.

Contractor's attention is also directed to Section 6501.5, and following, of the Labor Code relative to asbestos-related work and to provisions of the General Industry Safety Orders of Title 8 of the Code of Regulations and to the BAAQMD's Rule.

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and Contractor encounters materials which Contractor reasonably believes to be asbestos or a

hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, Contractor may continue work in unaffected areas reasonably believed to be safe. Contractor shall immediately cease work in the affected area and report the condition to City in writing.

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area delays the current controlling operation, Contractor may be entitled to a time extension (without additional compensation) as provided in Section 3.5, Change in Contract Time.

3.11 Substitutions

This paragraph describes procedures for selecting products and requesting substitutions of unlisted materials in lieu of materials named in the Specifications or approved for use in Addenda that were not already the subject of a Document 00660 (Substitution Request Form) submittal as provided in Document 00200 (Instructions to Bidders).

Contractor's Options:

For products specified only by reference standard Contractor may select any product meeting that standard.

For products specified by naming one or more products or manufacturers, Contractor may select products of any named manufacturer meeting the Specifications.

If product becomes unavailable due to no fault of Contractor, submit Request for Substitution (RFS), including all information contained in this Document and a fully executed Document 00660 (Request for Substitution), but using the term "Contractor" each place the term "Bidder" appears in that form.

Substitutions:

Except as provided in Document 00200 (Instructions to Bidders) with respect to "or equal" items, City will consider Contractor's substitution requests only when product becomes unavailable due to no fault of Contractor. Requests for review of proposed substitute items will not be accepted from anyone other than Contractor. The RFS shall state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice Contractor's achievement of Substantial Completion on time, and whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with City for work on the Project).

Submit separate RFS (and FOUR copies) for each product and support each request with:

A. Product identification.
B. Manufacturer's literature.
C. Samples, as applicable.
D. Name and address of similar projects on which product has been used, and dates of installation.
E. Name, address, and telephone number of manufacturer's representative or sales engineer.
F. For construction methods: Detailed description of proposed method; drawings illustrating methods.

Where required, itemize a comparison of the proposed substitution with product specified and list significant variations including, but not limited to dimensions, weights, service requirements, and functional differences. If variation from product specified is not pointed out in submittal, variation will be rejected even though submittal was favorably reviewed. Identify all variations of the proposed substitute from that specified in the RFS and indicate available maintenance, repair, and replacement service.

State whether the substitute will require a change in any of the Contract Documents (or provisions of any other direct contract with City for work on the Project) to adapt the design of the proposed substitute, and whether or not incorporation or use of the substitute in connection with Work is subject to payment of any license fee or royalty. Submit data relating to changes in construction schedule.

Include accurate cost data comparing proposed substitution with product and amount of net change in Contract Sum including, but not limited to, an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by City in evaluating the proposed substitute. City may require Contractor to furnish additional data about the proposed substitute.

City will not consider substitutions for acceptance (or, in City's sole discretion, City may make Contractor solely responsible for all resulting costs, expenses and other consequences) when a substitution:

A. Results in delay meeting construction Milestones or completion dates.

B. Is indicated or implied on submittals without formal request from Contractor.

C. Is requested directly by Subcontractor or supplier.

D. Acceptance will require substantial revision of Contract Documents.

E. Disrupts Contractor's job rhythm or ability to perform efficiently.

Substitute products shall not be ordered without written acceptance of City.

City will determine acceptability of proposed substitutions and reserve right to reject proposals due to insufficient information.

Accepted substitutions will be evidenced by written acceptance or by a Change Order. A Change Orders for accepted substitutions shall be issued when the substitution makes a change in the contract costs. The CCO shall be issued under the procedures described in this document. All Contract Documents requirements apply to Work involving substitutions.

Contractor's RFS constitutes a representation and warranty that Contractor:

A. Has investigated proposed product and determined that it meets or exceeds, in all respects, specified product.

B. Will provide the same warranty for substitution as for specified product.

C. Will coordinate installation and make other changes that may be required for Work to be complete in all respects.

D. Waives claims for additional costs which may subsequently become apparent.

E. Will compensate City for additional redesign costs associated with substitution.

F. Will be responsible for Construction Schedule slippage due to substitution.

G. Will be responsible for Construction Schedule delay due to late ordering of available specified products caused by requests for substitution that are subsequently rejected by City.

H. Will compensate City for all costs; including extra costs of performing Work under Contract Documents, extra cost to other contractors, and any claims brought against City, caused by late requests for substitutions or late ordering of products.

City will review Contractor's RFS with reasonable promptness and notify Contractor in writing of decision to accept or reject requested substitution

Specified products, materials, or systems for Project may include engineering or on-file standards required by the regulatory agency. Contractor's substitution of products, materials or systems may require additional engineering, testing, reviews, approvals, assurances, or other information for compliance with regulatory agency requirements or both. Provide all agency approvals or other additional information required and pay additional costs for required City services made necessary by the substitution at no increase in Contract Sum or Contract Time, and as a part of substitution proposal

3.12 Hazardous Materials / Waste

Comply with Sections 5163 through 5167 of the *General Industry Safety Orders (California Code of Regulations, Title 8)* to protect the Site from being contaminated by the accidental release of any hazardous materials and/or waste.

If Contractor encounters subsurface contamination, the following provisions and precautionary measures shall be implemented during construction:

Contractor's personnel shall be alert for and immediately report to City any detectable chemical odors, unusual debris, or discolored soil, in accordance with California Public Contract Code Section 7104.

Should the discovery of contaminants cause delay to Contractor's operations, extension of Contract Time will be granted by City in accordance with Document 00700 (General Conditions). Contractor will not be entitled to damages or additional payment due to such delay.

If hazardous materials are encountered, they shall be handled in accordance with applicable local, state, and federal regulations which may include: (1) CCR Title 8, Division 4, Chapter 4, Section 5192 (Hazardous Waste Operations and Emergency Response); (2) CCR, Title 22, Division 4.5, Chapters 10 through 13 and 18 (Environmental Health Standards for Management of Hazardous Waste); and (3) CCR Title 23, Division 3, Chapter 15 (Discharges of Waste to Land).

Disposal requirements: Soils containing hazardous materials shall be disposed by Contractor at permitted treatment, recycling, or disposal facilities in accordance with CCR Title 23, Division 3, Chapter 15 (Discharges of Waste to Land). Contractor shall determine to which permitted treatment, recycling, or disposal facilities the soil will be delivered.

Fees: Contractor shall pay for any fees associated with the treatment, recycling, or disposal of these soils. Any additional soil sampling and chemical analyses required for acceptance of the soil at facilities other than those described above shall be the responsibility of Contractor.

Transport: Contractor shall coordinate the transport of these soils to the selected facilities under approved manifests and submit copies of these manifests and the facility weight tickets to City.

Dewatering: Construct, operate and maintain as required to complete the Work all necessary cofferdams, channels, pipes, flumes, drains, sumps, well points and protective works; and furnish, install, operate and maintain all necessary pumping and other equipment for dewatering the areas of Work suspected of containing hazardous materials; and control all surface flow and groundwater as may be encountered while performing the Work. Remove all water that may accumulate in the excavation while the Work progresses so that all Work can be performed in dry conditions. All contaminated water shall be removed from the excavation before it is backfilled. The excavation shall be kept free from water until backfilling has progressed to a height above the water source. Storage tank: Provide a minimum 2,500-gallon double-walled water storage tank on Site for the duration of the Work. If more storage capacity is needed, provide additional storage tanks on Site.

Water sampling and chemical analysis: Water samples shall be collected from the holding tanks and submitted to a State-Certified chemical analysis laboratory. Chemical analyses required for the samples shall at a minimum include: TPHg following EPA Test Methods 5030/8015 (modified); benzene, toluene, ethylbenzene, and total xylenes (BTEX) following EPA Test Method 8020; and chlorinated solvents following EPA Test Method 8010. Perform additional chemical analyses that may be required for disposal or recycling of the water. Laboratory chemical analysis reports associated with the water samples shall be provided to City.

Removal of dewatering equipment: After having served their purpose, all protective works, including the temporary water storage tank(s) and dewatering pumps, shall be decontaminated and removed from the Site. Contractor is responsible for permanent disposal of all equipment that cannot be decontaminated or recycled in accordance with all applicable laws and regulations.

3.13 Inert Solids and Plant Materials Recycling

The Contractor shall have all asphalt concrete, Portland cement concrete, aggregate base material, inert solids and any plant material removed from the project site and deposited at a recognized acceptable recycling facility. Inert solids and plant materials shall not be disposed of at landfills.

It is the Contractor's responsibility to conform the above material to an acceptable size and composition in order to enable the acceptance of this material at a recognized inert solid or other acceptable recycling facility. All recycling facilities may be subject to the approval of the Engineer.

Recycling shall include the transportation and disposal of the material as specified in these specifications and as directed by the Engineer.

Documentation shall be submitted to the City Inspector for each load of inert solid and plant material removed from the project site. Contractor may be required to submit its documentation on a daily basis or at the end of the project as determined by the City. Failure to submit this documentation on a timely basis may delay progress payments. This documentation shall include the following:

A. Project title
B. Date and time
C. Truck number
D. Type of material
E. Weight of material
F. Name and address of recycling facility
G. Certification by recycling facility

Also contractor must report the total amount in tons of material disposed of at a landfill. Provide information the following information: Project name, date and time, truck number, type of material, weight of material, name of landfill facility and address.

Collection of Debris:

Debris from a project in Cupertino can be collected and disposed of in either a:

A. Los Altos Garbage Co. bin (call 725-4020 to order), OR
B. bin owned by the project's general contractor or demolition contractor, and hauled by a vehicle owned and registered to that contractor; (contractor should be prepared to prove ownership) OR
C. private truck with a bed, but no bin

The Los Altos Garbage Company is the only debris bin service provider franchised to do business in Cupertino. Bins from other leasing companies may not be used in Cupertino.

Recyclable Materials

Recyclable materials may be collected in private debris bins or containers leased from ANY company, as long as the materials are both:

A. separated by type of material into separate containers, AND
B. are not contaminated by garbage.

Separated recyclable materials are materials that are separated into individual containers, each containing just one type of recyclable material. Typical examples of recyclable materials include: metal, wood, concrete, steel-reinforced concrete, asphalt, tree trimmings, white goods, toilets, rocks and clean fill dirt. Separated recyclables must ultimately be recycled or otherwise reused, and not disposed of in a landfill.

Contractor should be prepared to provide the name and phone number of any recycling companies being used on the project. A list of some local recycling companies that can accept separated recyclable materials is available in the literature display rack in the downstairs Planning/Building Department lobby in City Hall.

3.14 Storm Water Pollution Control

In compliance with the State and Federal regulations regarding storm water management during construction, no waste materials or pollutants will be allowed to enter the storm drainage system. In addition to reducing downstream erosion and sedimentation, keeping pollutants and other debris out of storm drains reduces the direct discharge of materials and wastes to local creeks and San Francisco Bay.

The Contractor shall contain and remove any waste generated by the Contractor's construction operation using the appropriate Best Management Practices (BMPs) and shall properly dispose of the waste or pollutants off-site. If solid or liquid waste materials or pollutants originating from the Contractor's operation enter the storm drain system, the Contractor will be required to thoroughly clean up the affected catch basins, storm sewer and storm manholes to the satisfaction of the Engineer. If the Contractor fails to meet the requirements of this section, the City will issue a stop-work notice and take necessary action to require the Contractor to set up the preventive measures or clean up the storm drainage system as the case may be. All costs related to the stop-work action and corrective work shall be solely borne by the Contractor.

The following requirements shall be implemented to prevent the pollution of storm water runoff from construction projects.

General Requirements

Water pollution control work shall conform to the provisions in this Document, the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity No. CAS000002 (NPDES Construction General Permit) and these provisions. For additional information regarding the requirements of the NPDES Construction General Permit, refer to the State Water Resources Control Board web site at *http://www.swrcb.ca.gov/stormwtr/construction.html*.

The Contractor shall be responsible for the costs and liabilities imposed by law as a result of the Contractor's failure or negligence in complying with the provisions set forth in this section and in the technical specifications for this project. For the purposes of this section, costs and liabilities include, but are not limited to, fines, penalties and damages whether assessed against the City or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act.

In addition to the remedies authorized by law, partial payments due the Contractor under the contract may be retained by the City until financial and legal disposition has been made of the costs and liabilities.

The retention of money due the Contractor shall be subject to the following:

A. The Engineer will give the Contractor thirty (30) days notice of the City's intention to retain funds from partial payments that may become due to the Contractor prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to the Contractor.

B. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Provisions.

C. If the City has retained funds and it is subsequently determined that the City is not subject to the costs and liabilities in connection with the matter for which the retention was made, the City shall be liable for interest on the amount retained at the legal rate of interest for the period of the retention.

Conformance with the provisions of this section and the technical specifications for this project shall not relieve the Contractor from the Contractor's responsibilities, as provided in Section 7, "Legal Relations and Responsibilities," of the Standard Specifications.

Storm Water Pollution Prevention Plan Preparation
The Contractor shall incorporate the following Best Management Practices (BMPs), as applicable, into the site-specific Storm Water Pollution Prevention Plan (SWPPP) required for this project.

The following requirements shall be met on all projects within the City of Cupertino.

Non Hazardous Material/Waste Management

A. CONTRACTOR shall propose designated areas of the project site, for approval by the CITY ENGINEER, suitable for material delivery, storage, and waste collection that, to the maximum extent practicable, are near construction entrances and away from catch basins, gutters, drainage courses, and creeks.

B. CONTRACTOR shall store granular material at least ten feet away from catch basin and curb returns.

C. CONTRACTOR shall not allow granular material to enter the storm drains or creeks.

D. When rain is forecast within 24 hours or during wet weather, the CITY ENGINEER may require the CONTRACTOR to cover granular material with a tarpaulin and to surround the material with sand bags.

E. CONTRACTOR shall use minimal amounts of water to control dust on a daily basis or as directed by the CITY ENGINEER.

F. At the end of each working day or as directed by the CITY ENGINEER, the CONTRACTOR shall clean and sweep roadways and on-site paved areas of all materials attributed to or involved in the work.

G. CONTRACTOR shall not use water to flush down streets in place of street sweeping.

H. CONTRACTOR shall recycle aggregate base material, asphalt concrete, and Portland cement concrete as described in Section 3.13, ***Inert Solids and Plant Materials Recycling,*** of these General Conditions.

I. In addition, to the maximum extent practicable, the CONTRACTOR shall reuse or recycle any useful construction materials generated during the project.

J. At the end of each working day, the CONTRACTOR shall collect all scrap, debris, and waste material, and dispose of such materials properly.

K. CONTRACTOR shall inspect dumpsters for leaks and contact trash hauling contractors to replace or repair dumpsters that leak.

L. CONTRACTOR shall not discharge water on-site from cleaning dumpsters.

M. CONTRACTOR shall arrange for regular waste collection before dumpsters overflow.

Hazardous Material/Waste Management

A. The CONTRACTOR shall label and store all hazardous materials, such as pesticides, paints, thinners, solvents, and fuels; and all hazardous wastes, such as waste oil and antifreeze; in accordance with the City of Cupertino Hazardous Materials Storage Ordinance and all applicable State and Federal regulations.

B. CONTRACTOR shall store all hazardous materials and all hazardous wastes in accordance with secondary containment regulations, and it is recommended that these materials and wastes be covered, as needed, to avoid potential management of collected rain water as a hazardous waste.

C. CONTRACTOR shall keep an accurate, up-to-date inventory, including Materials Safety Data Sheets (MSDSs), of hazardous materials and hazardous wastes stored on-site, to assist emergency response personnel in the event of a hazardous materials incident.

D. When rain is forecast within 24 hours or during wet weather, the CITY ENGINEER may prevent the CONTRACTOR from applying chemicals in outside areas.

E. CONTRACTOR shall not over-apply pesticides or fertilizers and shall follow materials manufacturer's instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals. Over-application of a pesticide constitutes a "label violation" subject to an enforcement action by the Santa Clara County Agriculture Department.

F. The CONTRACTOR shall arrange for regular hazardous waste collection to comply with time limits on storage of hazardous wastes.

G. The CONTRACTOR shall dispose of hazardous waste only at authorized and permitted treatment, storage and disposal facilities, and use only licensed hazardous waste haulers to remove the waste off-site, unless quantities to be transported are below applicable threshold limits for transportation specified in Sate and Federal regulations.

H. If the CONTRACTOR'S business office is located in Santa Clara County then the CONTRACTOR may dispose of this waste through the Countywide Household Hazardous Waste Program. Information on this program may be requested by calling (408) 299-7300.

Spill Prevention and Control

A. The CONTRACTOR shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on-site.

B. The CONTRACTOR shall immediately contain and prevent leaks and spills from entering storm drains, and properly clean up and dispose of the waste and cleanup materials. If the waste is hazardous, the CONTRACTOR shall handle the waste as described in section above.

C. The CONTRACTOR shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials.

D. The CONTRACTOR shall report any hazardous materials spill by calling 911.

Vehicle/Equipment Cleaning

A. The CONTRACTOR shall not perform vehicle or equipment cleaning on-site or in the street using soaps, solvents, degreasers, steam cleaning equipment, or equivalent methods.

B. The CONTRACTOR shall perform vehicle or equipment cleaning, with water only, in a designated, bermed area that will not allow rinse water to run off-site or into streets, gutters, storm drains, or creeks.

Vehicle/Equipment Maintenance and Fueling

A. CONTRACTOR shall perform maintenance and fueling of vehicles or equipment in a designated, bermed area or over a drip pan that will not allow run-on of storm water or runoff of spills.

B. CONTRACTOR shall use secondary containment, such as a drip pan, to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured.

C. CONTRACTOR shall keep a stockpile of spill cleanup materials, such as rags or absorbents, readily accessible on-site.

D. CONTRACTOR shall clean up leaks and spills of vehicle or equipment fluids immediately and dispose of the waste and cleanup materials as hazardous waste, as described above.

E. CONTRACTOR shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials.

F. CONTRACTOR shall report any hazardous materials spill by calling 911.

G. CONTRACTOR shall inspect vehicles and equipment arriving on-site for leaking fluids and shall promptly repair leaking vehicles and equipment. Drip pans shall be used to catch leaks until repairs are made. Shut-off valves on equipment must be working properly.

H. CONTRACTOR shall comply with Federal, State and City requirements for aboveground storage tanks.

Contractor Training and Awareness

A. CONTRACTOR shall train all employees/subcontractors on the storm water pollution prevention requirements contained in these Specifications.

B. CONTRACTOR shall inform subcontractors of the storm water pollution prevention contract requirements and include appropriate subcontract provisions to ensure that these requirements are met.

C. CONTRACTOR shall post warning signs in areas treated with chemicals.

D. CONTRACTOR shall paint new catch basins, constructed as part of the project, with the "No Dumping" stencil available from Cupertino Public Works Department at City Hall (408) 777-3354.

Activity-Specific Requirements

The following requirements shall be met on all projects within the City of Cupertino that include the listed activities.

Dewatering Operations

A. CONTRACTOR shall route water through a control measure, such as a sediment trap, sediment basin, or Baker tank, to remove settleable solids prior to discharge to the storm drain system. Refer to ***California Storm Water Management Practice Handbook*** for these control measures.

B. Approval of the control measure shall be obtained in advance from the CITY ENGINEER.

C. Filtration of the water following the control measure may be required on a case-by-case basis.

D. If the CITY ENGINEER determines that the dewatering operation would not generate an appreciable amount of settleable solids, the control measure requirement in 1) above may be waived.

E. CONTRACTOR shall reuse water for other needs, such as dust control or irrigation, to the maximum extent practicable.

Paving Operations

A. When rain is forecast within 24 hours or during wet weather, the CITY ENGINEER may prevent the CONTRACTOR from paving.

B. The CITY ENGINEER may direct the CONTRACTOR to protect drainage courses by using control measures, such as earth dike, straw bale, and sand bag, to divert runoff or trap and filter sediment. Refer to ***California Storm Water Best Management Practice Handbook*** for these control measures.

C. The CONTRACTOR shall place drip pans or absorbent material under paving equipment when not in use.

D. The CONTRACTOR shall cover catch basins and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.

E. If the paving operation includes an on-site mixing plant, the CONTRACTOR shall comply with Santa Clara County General Industrial Activities Storm Water Permit requirements.

F. The CONTRACTOR shall preheat, transfer or load hot bituminous material away from drainage systems or watercourses.

G. The CONTRACTOR shall not sweep or wash down excess sand (placed as part of a sand seal or to absorb excess oil) into streets, gutters, storm drains, or creeks. Instead, the CONTRACTOR shall either collect the sand and return it to the stockpile, or dispose of it in a trash container. The CONTRACTOR shall not use water to wash down fresh asphalt concrete pavement.

Saw Cutting

A. During saw cutting and grinding operations, use as little water as possible.

B. During saw cutting, the CONTRACTOR shall cover or barricade catch basins using control measures, such as filter fabric, straw bales, sand bags, and fine gravel dams, to keep slurry out of the storm drain system. When protecting a catch basin, the CONTRACTOR shall ensure that the entire opening is

covered. Refer to ***California Storm Water Best Management Practice Handbook*** for these control measures.

C. The CONTRACTOR shall shovel, absorb or vacuum saw cut slurry and pick up the waste prior to moving to the next location or at the end of each working day, whichever is sooner.

D. If saw cut slurry enters catch basins, the CONTRACTOR shall remove the slurry from the storm drain system immediately.

Traffic Detector Loop Installation and Repair

A. Protect nearby storm drain inlets prior to cutting or flushing slot for traffic detector loops. Block or berm around nearby storm drain inlets using sand bags or an equivalent barrier or use absorbent materials such as pads, pillows and socks to contain slurry.

B. Clean up residues by sweeping up as much material as possible and dispose of material properly.

Concrete, Grout and Mortar Waste Management

A. The CONTRACTOR shall avoid mixing excess amounts of fresh concrete or cement mortar on-site.

B. The CONTRACTOR shall store concrete, grout and mortar away from drainage areas and ensure that these materials do not enter the storm drain system.

C. The CONTRACTOR shall not wash out concrete trucks or equipment into streets, gutters, storm drains, or creeks.

D. The CONTRACTOR shall perform washout of concrete trucks or equipment off-site or in a designated area on-site where the water will flow onto dirt or into a temporary pit in a dirt area. The CONTRACTOR shall let the water percolate into the soil and dispose of the hardened concrete in a trash container. If a suitable dirt area is not available, the CONTRACTOR shall collect the wash water and remove it off-site.

E. The CONTRACTOR shall avoid creating runoff by draining water from washing of exposed aggregate concrete to a dirt area. If a suitable dirt area is not available, then the CONTRACTOR shall filter the wash water through straw bales or equivalent material before discharging to the storm drain.

F. The CONTRACTOR shall collect and return sweepings from exposed aggregate concrete to a stockpile or dispose of the waste in a trash container.

Painting

A. CONTRACTOR shall conduct cleaning of painting equipment and tools in a designated area that will not allow run-on of storm water or runoff of spills.

B. CONTRACTOR shall not allow wash water from cleaning of painting equipment and tools into streets, gutters, storm drains or creeks.

C. CONTRACTOR shall remove as much excess paint as possible from brushes, rollers and equipment before starting cleanup.

D. To the maximum extent practicable, the CONTRACTOR shall dispose of wash water from aqueous cleaning of equipment and tools to the sanitary sewer.

E. Otherwise, the CONTRACTOR shall direct wash water onto dirt area and spade in.

F. CONTRACTOR shall remove as much excess paint as possible from brushes, rollers and equipment before starting cleanup.

G. To the maximum extent practicable, the CONTRACTOR shall filter paint thinner and solvents for reuse.

H. CONTRACTOR shall dispose of waste thinner and solvent and sludge from cleaning of equipment and tools as hazardous waste, as described above.

I. CONTRACTOR shall store paint, solvents, chemicals, and waste materials in compliance with the City of Cupertino Hazardous Materials Storage Ordinance and all applicable State and Federal regulations.

The CONTRACTOR shall store these materials in a designated area that will not allow run-on of storm water or runoff of spills.

J. CONTRACTOR shall dispose of excess thinners, solvents, oil and water-based paint as hazardous waste.

K. CONTRACTOR shall dispose of dry, empty paint cans/buckets, old brushes, rollers, rags, and drop cloths in the trash.

Earthwork

CONTRACTOR shall maximize the control of erosion and sediment by using the Best Management Practices for erosion and sedimentation in the *California Storm Water Best Management Practice Handbook - Construction Activity* or *ABAG Manual of Standards for Erosion and Sediment Control Measures.*

Thermoplastic

A. The CONTRACTOR shall transfer and load hot thermoplastic away from drainage systems or watercourses.

B. The CONTRACTOR shall sweep thermoplastic grindings into plastic bags. Yellow thermoplastic grindings may require special handling as they may contain paint.

Pesticide Usage and Pest Management

A. Follow all federal, state, and local policies (including the City's Integrated Pest Management Policy), law and regulations governing the use, storage, and disposal of pesticides and training of pest control advisors and applicators.

B. Consider employing integrated pest management methods, including:
   1. No controls;
   2. Physical and/ or mechanical methods;
   3. Environmental controls (mulching, pest-resistant vegetation)
   4. Biological controls (predators, parasites, etc.);
   5. Less toxic controls (soaps and oils etc.) and;
   6. Hot water.

C. Use the least toxic pesticides that will do the job, provided there is a choice. The agency will take into consideration the LD50, overall risk to the applicator, and impact to the environment.

D. Apply pesticides at the appropriate time to maximize their effectiveness and minimize the likelihood of discharging non-degraded pesticides in stormwater runoff. Avoid application of pesticides if rain is expected.

E. Mix and apply only as much material as is necessary for treatment. Calibrate application equipment prior to and during use to ensure desired application rate.

F. Do not mix or load pesticides in application equipment adjacent to a storm drain inlet culvert or watercourse.

G. Use of Clopyralid, Diazinon, Chlorpyrifos, Chloradane, DDT, Dieldrin or other organophosphates is prohibited.

Prior to application of any pesticides, Contractor must receive approval for application from the City's licensed pest control advisor, Diane Mahan (777-3343). Contractor must provide the pest control advisor with monthly summaries of pesticide use (City to provide forms for the summary).

SWPPP Implementation

The Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting and maintaining the BMPs included in the SWPPP or an erosion control plan and any amendments thereto and for removing and disposing of temporary control measures. Unless otherwise directed by the Engineer or specified in these special provisions, the Contractor's responsibility for SWPPP or the erosion control plan implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 7 of this Document.

Throughout the rainy season, the Contractor shall demonstrate the ability and preparedness to fully deploy soil stabilization and sediment control BMPs to protect soil-disturbed areas on the project site before the onset of rain. A quantity of soil stabilization and sediment control materials shall be maintained on site equal to 125 percent of that sufficient to protect unprotected, soil-disturbed areas on the project site. A current inventory of control measure materials and a plan to use them shall be included in the SWPPP or on the erosion control plan.

Throughout the rainy season, active soil-disturbed areas of the site shall be fully protected at the end of each day with soil stabilization and sediment control BMPs unless fair weather is predicted the next day. The Contractor shall monitor the weather forecast on a daily basis. The National Weather Service forecast shall be used. If precipitation is predicted prior to the end of the following workday, construction scheduling shall be modified, as required, and functioning BMPs shall be deployed prior to the onset of rain.

BMP Maintenance

To ensure proper implementation and function of BMPs, the Contractor shall regularly inspect and maintain the construction site for the BMPs included in the SWPPP or on an erosion control plan. The Contractor shall identify corrective actions and the time needed to address any deficient BMPs or reinitiate any BMPs that have been discontinued. The Contractor shall keep written records of all BMP inspections, maintenance activities and corrective actions.

The Contractor shall inspect the construction site as follows:

A. Prior to a forecast storm;

B. After any precipitation causes runoff;

C. At 24-hour intervals during extended rain events; and

D. Routinely, at a minimum of once every week

If the Contractor or the Engineer identifies a deficiency in the deployment or functioning of an identified BMP, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and approved by the Engineer in writing, but not later than the onset of the subsequent rain event. The correction of deficiencies shall be at no additional cost to the City.

SECTION 4. CONTROL OF WORK

4.1 Authority of City

City shall decide all questions which may arise as to the quality or acceptability of materials furnished and Work performed and rate of progress of the Work, all questions which may arise as to the interpretation of the Drawings and Specifications, and all questions as to the acceptable fulfillment of the Contract on the part of Contractor. City's decision shall be final. City shall have authority to enforce and make effective such decisions and orders which Contractor fails to carry out promptly.

4.2 Submittals

Submit, at Contractor's expense, in digital format, the following items ("Submittals") required by the Contract :

A. Schedule of Shop Drawing and Sample Submittals
B. Safety Plans
C. Progress Schedules
D. Product Data Shop Drawings
E. Samples
F. Coordination Drawings
G. Quality Assurance Control Data
H. Machine Inventory Sheets
I. Installation, Operation, and Maintenance Manuals
J. Computer Programs
K. Project Record Documents
L. Seismic Submittal Review Forms, where specified.

All submittals shall be digitally submitted unless prior exception is granted by the City.

Submit the preliminary Schedule of Shop Drawing and Samples Submittal within 21 Days of the receipt of Notice of Award from City.Submit these Submittals to City for review and approval in accordance with accepted Schedule of Shop Drawings and Samples Submittals in these General Conditions. If no such schedule is agreed upon, then all Shop Drawing, Samples, and product data Submittals shall be submitted within 21 Days after receipt of Notice of Award from City.

Transmit each item with a City approved Submittal transmittal form. Identify Project, Contractor, Subcontractor, major supplier, pertinent Drawing sheet and detail number, and Specification Section number as appropriate. Where manufacturer's standard drawings or data sheets are used, they shall be marked clearly to show those portions of the data that are applicable to this Project. Inapplicable portions shall be marked out. Submittals shall be submitted based on each Specification Section. Submittals containing information about more than one Specification Document will be returned for resubmittal. Submittals shall include all information requested by each Specification Section. (No partial Submittals.) Incomplete Submittals will be returned not reviewed by City.

The data shown on the Submittals shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to show City the materials and equipment Contractor proposes to provide and to enable City to review the information for the limited purposes specified in this Document. Submittals shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which it is intended and otherwise as City may require to enable City to review the Submittal. The quantity of each Submittal to be submitted will be as required by individual Specification Documents or this Document.

At the time of each submission, give City specific notice of all variations, if any, that the submitted Submittal may have from the requirements of the Contract Documents, and the reasons therefore. This notice shall be in a a communication attached to the Submittal transmittal form. In addition, cause a specific notation to be made on each Submittal submitted to City, for review and approval of each such variation. If City accepts deviation, City will note its acceptance on the returned Submittal transmittal form and, if necessary, issue appropriate Contract Modification.

Submittal coordination and verification is responsibility of Contractor; this responsibility shall not be delegated in whole or in part to Subcontractors or suppliers. Before submitting each Submittal, review and coordinate each Submittal with other Submittals and with the requirements of the Work and the Contract Documents, and determine and verify:

A. All field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto;

B. All materials with respect to intended use, fabrication, shipping, handling, storage, assembly and installation pertaining to the performance of the Work; and

C. All information relative to Contractor's sole responsibilities and of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.

Contractor's submission to City of a Submittal shall constitute Contractor's representation that it has satisfied its obligations under the Contract Documents, and as set forth immediately above in this paragraph, with respect to Contractor's review and approval of that Submittal.

Designation of work "by others," if shown in Submittals, shall mean that work will be responsibility of Contractor rather than Subcontractor or supplier who has prepared Submittals.

After review by City of each of Contractor's Submittals, the City will be returned to Contractor with actions defined as follows unless indicated otherwise in these General Conditions :

A. NO EXCEPTIONS TAKEN - Accepted subject to its compatibility with future Submittals and additional partial Submittals for portions of the Work not covered in this Submittal. Does not constitute approval or deletion of specified or required items not shown on the Submittal.

B. MAKE CORRECTIONS NOTED (NO RESUBMISSIONS REQUIRED) - Same as item 1 above, except that minor corrections as noted shall be made by Contractor.

C. REVISE AS NOTED AND RESUBMIT - Rejected because of major inconsistencies or errors that shall be resolved or corrected by Contractor prior to subsequent review by City.

D. REJECTED - RESUBMIT - Submitted material does not conform to Drawings and/or Specifications in major respect, i.e.: wrong size, model, capacity, or material.

Make a complete and acceptable Submittal at least by second submission. City reserves the right to deduct monies from payments due Contractor to cover additional costs of review beyond the second submission. Illegible Submittals will be rejected and returned to Contractor for resubmission. Contractor shall be in breach of the Contract if Contractor's first resubmittal, following a Submittal which City determines falls within categories C or D above, does not fall within categories A or B above.

Favorable review will not constitute acceptance by City of any responsibility for the accuracy, coordination and completeness of the Submittals. Accuracy, coordination, and completeness of Submittals shall be sole responsibility of Contractor, including responsibility to back-check comments, corrections, and modifications from City's review before fabrication. Contractor, Subcontractors, or suppliers may prepare Submittals, but Contractor shall ascertain that Submittals meet requirements of Contract Documents, while conforming to structural space and access conditions at point of installation. City's review will be only to assess if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as indicated by the Contract Documents. Favorable review of Submittal, method of work, or information regarding materials and equipment Contractor proposes to furnish shall not relieve Contractor of responsibility for errors therein and shall not be regarded as assumption of risks or liability by City, or any officer or employee thereof, and Contractor shall have no claim under Contract Documents on account of failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Favorable review shall be considered to mean merely that City has no objection to Contractor using, upon Contractor's own full responsibility, plan or method of work proposed, or furnishing materials and equipment proposed.

City's review will not extend the means, methods, techniques, sequences or procedures of construction or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

Submit complete initial Submittal for those items where required by individual Specification Sections. Complete Submittal shall contain sufficient data to demonstrate that items comply with Specifications, shall meet minimum requirements for submissions cited in Specification Sections, shall include motor data and seismic anchorage certifications, where required, and shall include necessary revisions required for equipment other than first named. If Contractor submits incomplete initial Submittal when complete Submittal is required, Submittal may be returned to Contractor without review.

Copy, conform, and distribute reviewed Submittals in sufficient numbers for Contractor's files, Subcontractors, and vendors.

After City's review of Submittal, revise as noted and resubmit as required. Identify changes made since previous Submittal.

Begin no fabrication or work that requires Submittals until return of Submittals not requiring resubmittal. Do not extrapolate from Submittals covering similar work.

Normally, Submittals will be processed and returned to Contractor within 21 Days of receipt. Submittals received after 12:00 pm will be considered as received on the following Day. For Fridays, the following day will be considered to be Monday.

Distribute copies of reviewed Submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.

All Submittals shall be number-identified by Contractor, prior to submission to City, in accordance with the following:

A. Sequentially number each Submittal (i.e., “1”, “2”, “3”, etc.) as the basis for number identification of Submittals.

B. Affix the Submittal number under which each Submittal is made on every copy of each Shop Drawing, product data, sample, certification, etc.

C. Number Installation, Operation, and Maintenance Manuals with original root number of the approved Submittal for the item.

D. If the Submittal is a resubmittal (including without limitation after an initial Submittal is rejected, returned without review or marked ‘Revise as Noted and Resubmit’), add the suffix designation “A” (i.e., a resubmittal of Submittal 1 would be numbered 1A). Subsequent re-submittals would be identified by the Submittal number and sequential letters (i.e., “B”, “C”, “D”, etc.).

E. All Submittals shall include all information requested by each Specification Section. No partial Submittals will be accepted unless previously authorized by City. In the event a partial Submittal is authorized, each subsequent different Submittal (as opposed to resubmittal) is given a new number.

F. Deliver Submittals to City at least 30 Days before dates reviewed Submittals will be needed. Contractor’s failure to deliver Submittals within the identified time frame shall constitute Contractor’s waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the Submittal.

G. Initial Submittal of Installation, Operation, and Maintenance Manuals shall be **45** Days after the date Submittals that pertain to the applicable portion of the Installation, Operation, and Maintenance Manual is satisfactorily reviewed.

The following table lists the number of initial Submittals required from Contractor for each type of submission, to whom Contractor shall distribute the information, and City’s distribution of reviewed submissions. If Contractor needs more copies of reviewed Submittals returned to it, then either submit additional copies or make copies from the returned transparency Submittal. Submittals requiring resubmission will require the same quantity and distribution as an initial Submittal.

	Contractor Initial Submittal	**City Submittal Return**
SUBMITTAL	# of Copies/ Prints/ Samples	# of Copies/ Prints/ Samples
Shop Drawings	6	1
Product Data	6	1
Samples	4	1
Materials Safety Data Sheets	3	1
Installation, Operation, and Maintenance Manuals	4	1
Other Documents	6	1

Submittal transmittal form, in duplicate, shall contain the following:

A. Date, revision date, and Submittal log number.
B. Project name and City’s Project number.
C. Contractor’s name, address, and job number.
D. Specification Section number clearly identified.
E. The quantity of Shop Drawings, Product Data, or Samples submitted.
F. Notification of deviations from Contract Documents.
G. Materials Safety Data Sheet (MSDS) for each item complying with OSHA’s Hazard Communication Standard 29 CFR 1910.1200.
H. Other pertinent data.

Submittal shall contain the following:

A. Date and revision dates.
B. Revisions, if any, identified.
C. Project Name and Project number.
D. The names of:
E. Contractor, Subcontractor, Supplier, Manufacturer, and separate detailer, when pertinent.
F. Identification of product material by location within the Project.
G. Relation to adjacent structure or materials.
H. Field dimensions, clearly identified as such.
I. Specification Section number and applicable detail reference number on the Drawings.
J. Applicable reference standards.
K. A blank space, on each Drawing or data sheet, 5" x 4" for the City's stamp.
L. Identification of deviations from Contract Documents.
M. Contractor's stamp, initialed or signed, with language certifying the review of Submittals, verification of field measurements, construction criteria and technical standards in compliance with Contract Documents.

Resubmission requirements:

A. Revise initial Shop Drawings as required and resubmit as specified for initial Submittals.
B. Indicate on Shop Drawings any changes that have been made other than those requested by City.
C. Submit new Product Data and Samples as required for initial Submittals.
D. Revise initial Installation, Operation, and Maintenance Manual(s) as required and resubmit as specified for initial Submittals.

Number of resubmissions:

One (1) reexamination of Contractor's Submittals that have been returned for correction or replacement will be included in City's budget. Any additional reexamination of Contractor's Submittals will be considered additional scope services to be paid by Contractor through City. Contractor shall pay City (or City may deduct from any progress or final payment), for engineering personnel, on an hourly basis at 2.5 times direct payroll expenses, and for consultant personnel time at 1.25 times the amount billed City.

Schedule of Shop Drawing and Sample Submittals

A. Submit preliminary Schedule of Shop Drawing and Sample Submittals as required by Document 00700 (General Conditions). Submit two copies of final Schedule of Shop Drawings and Sample Submittals as required in this Document.

1. Preliminary and final Schedule of Shop Drawing and Sample Submittals will be used by City to schedule its activities relating to review of Submittals. Schedule of Submittals shall indicate a spreading out of Submittals and early Submittals of long-lead-time items and of items that require extensive review.
2. Preliminary Schedule of Shop Drawing and Sample Submittals will be reviewed by City and shall be revised and resubmitted within 7 days of receipt from City until City indicates resubmissions are not required. Once City makes this indication, Contractor shall submit the final Schedule of Shop Drawing and Sample Submittals as indicated above.
3. Unless otherwise specified, make Submittals in groups containing all associated items to assure that information is available for checking each item when it is received. Identify on the Submittal which Submittals should be reviewed together.

Safety Program

Submit three (3) copies of Safety Program specific to these Contract Documents to City within 15 days after the Notice to Proceed is issued. The City may provide comments to the Contractor on the Contractor's Safety Program; however, the Contractor remains solely responsible for its Safety Program. The City will acknowledge Safety Program submission by stamping "In Receipt Of" or similar on the submittal.

Progress Schedule

A. Submit three (3) print copies of schedule at each of the following times:
   1. Initial Progress Schedule at the Preconstruction Conference.
   2. Original Schedule within 20 Days of the Notice to Proceed date.
   3. Adjustments to the Schedule as required.
   4. Schedule updates monthly, seven (7) Days prior to monthly progress meeting.

B. Submit four (4) copies of the reports listed in this document with:
   1. Initial Schedule
   2. Original Schedule
   3. Each monthly Schedule update

C. Progress Schedules and Reports shall be submitted on a CD, DVD, USB, or other electronic storage device acceptable to the City, using software described in this Document, in addition to hard copies specified in this paragraph. Electronic files shall be complete copies, including all programs and electronic coding

Product Data

Within ten (10) Days after Start Date of the Contract Time, submit two (2) copies of complete list of major products proposed for use, with name of manufacturer, telephone number, trade name, and model number of each product. Tabulate product data by Specification Section.
For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

Product or Catalog Data:

A. Manufacturer's standard drawings shall be modified to delete non-applicable data or include applicable data.

B. Manufacturer's catalog sheets, brochures, diagrams, schedules, charts, illustrations and other standard descriptive data:
   1. Mark each copy to identify pertinent materials, products, or models.
   2. Show dimensions and clearances required, performance characteristics and capacities, wiring diagrams and controls.
   3. Include applicable MSDS.

Supplemental Data:
   1. Submit number of copies that Contractor requires, plus two (2) copies that will be retained by City.
   2. **MARK EACH COPY TO IDENTIFY APPLICABLE PRODUCTS, MODELS, OPTIONS, AND OTHER DATA. SUPPLEMENT MANUFACTURER'S STANDARD DATA TO PROVIDE INFORMATION UNIQUE TO PROJECT.**
   3. Provide copies for project record documents described in this document.

Shop Drawings

A. Minimum Sheet Size: 8½ inches by 11 inches. All others: Multiples of 8½ inches by 11 inches, 34 inches by 44 inches maximum.

B. Original sheet or reproducible transparency will be marked with City's review comments and returned to Contractor.

C. Mark each copy to identify applicable products, models, options, and other data; supplement manufacturers' standard data to provide information unique to Work.

D. Include manufacturers' installation instructions when required by Specification Section.

E. If Contractor submits Shop Drawings for items that Shop Drawings are not specified, City will not be obliged to review them.

F. Contractor is responsible for procuring copies of Shop Drawings for its own use as it may require for the progress of the Work.

G. Shop Drawings shall be drawn to scale and completely dimensioned, giving plan view together with such sectional views as are necessary to clearly show construction detail and methods.

H. After Shop Drawings are approved contractor shall provide an electronic copy of them to the City when requested.

Samples

A. Submit full range of manufacturers' standard colors, textures, and patterns for City's selection.

B. Submit samples to illustrate functional and aesthetic characteristics of product, with integral parts and attachment devices. Coordinate Submittal of different categories for interfacing work.

C. Include identification on each sample, giving full information.

D. Sizes: Unless otherwise specified, provide the following:

1. Paint Chips: Manufacturers' standard
2. Flat or Sheet Products: Minimum 6 inches square, maximum 12 inches square
3. Linear Products: Minimum 6 inches, maximum 12 inches long
4. Bulk Products: Minimum 1 pint, maximum 1 gallon

E. Full size samples may be used in Work upon approval by City.

F. Field Samples and Mock-ups (if applicable):

1. Erect field samples and mock-ups at Site in accordance with requirements of Specification Sections. If testing is conducted, record and certify results and full Contract compliance.
2. Modify or make additional field samples and mock-ups as required to provide appearance and finishes approved by City.
3. Approved field samples and mock-ups may be used in Work upon approval by City.
4. Construct or prepare as many additional Samples as may be required, as directed by the City, until desired textures, finishes, and/or colors are obtained.
5. Accepted Samples and mock-up shall serve as the standard of quality for the various units of work.

G. No review of a Sample shall be taken in itself to change or modify the requirements in the Contract Documents.

H. Finishes, materials, and workmanship in the completed Work shall match accepted Samples

Quality Assurance Control Submittals

A. Test Reports:

Submit three (3) copies; One copy will be marked with City's review comments and returned to Contractor.

Indicate that material or product conforms to or exceeds specified requirements.

Reports may be from recent or previous tests on material or product, but shall be acceptable to City.

Comply with requirements of each individual Specification Section.

B Certificates:

Submit five (5) copies; One copy will be marked with City's review comments and returned to Contractor.

Indicate that material or product conforms to or exceeds specified requirements.

Submit supporting reference data, affidavits, and certifications as appropriate.

Certificates may be recent or from previous test results on material or product, but shall be acceptable to City.

C. Manufacturers' Instructions:

Submit three (3) copies; One copy will be marked with City's review comments and returned to Contractor.

Include manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing.

Identify conflicts between manufacturers' instructions and Contract Documents.

D. Material Safety Data Sheets:

In addition to Material Safety Data Sheets (MSDS) otherwise required by the Contract Documents, submit five (5) copies for any paints, solvents, thinners, varnish, lacquer, glues and adhesives, mastics, or other materials needed for the Project as required by the individual Specification Sections or as otherwise specified in the Contract Documents.

MSDS required for a Submittal shall be submitted with product data in order for the Submittal to be reviewed.

E. Installation, Operations and Maintenance Manuals

Sheet Size: 8½ x 11 inch

Drawing Size: Reduce drawings or diagrams to an 8½ x 11 inch or 11 x 17 inch size. However, where reduction is not practical to ensure readability, fold larger drawings separately and place in vinyl envelopes bound into the binder. Identify vinyl envelopes with drawing numbers.

Binding: Bind in stiff, metal-hinged, three-ring binder(s) with standard three-hole punching.
Multiple Items: Multiple items may be combined into one (1) binder; tab each section with plastic-coated dividers.

Page Protectors: Provide plastic sheet lifters prior to first page and following last page.

Binder title: Include the following title on front and spine of binder:

PROJECT TITLE
INSTALLATION, OPERATION, AND MAINTENANCE MANUAL, 201__

Contents:

1. Introductory Information:

    a. Title page providing the same information as paragraph 0 above
    b. Contractor's name, address, and telephone number
    c. Table of Contents

2. Include, at a minimum, the following detailed information for each item as applicable and as required by individual Specification Sections:

   a. Equipment function, normal operating characteristics, limiting operations.
   b. Assembly, disassembly, installation, alignment, adjustment, and checking instructions.
   c. Operating instructions for startup, routine and normal operation, regulation and control, shutdown, and emergency conditions.
   d. Lubrication and maintenance instructions including specific type and amount of lubricant and recommended lubrication interval.
   e. Guide to "troubleshooting."
   f. Parts list and predicted life of parts subject to wear.
   g. Outline, cross-section, and assembly drawings; engineering data; and electrical diagrams, including elementary diagrams, labeled wiring diagrams, connection diagrams, word description of wiring diagrams and interconnection diagrams.
   h. Test data and performance curves.
   i. A list of recommended spare parts with a price list and a list of spare parts provided under this Contract.
   j. Copies of parts lists or other documents packed with equipment when delivered.
   k. Instrumentation or tag numbers relating the equipment back to the Contract Documents.
   l. Index

3. Final Submittal: Upon favorable review of Installation, Operation, and Maintenance Manual(s) by City, deliver nine (9) additional hard copies and one (1) electronic media format copy of the final approved Installation, Operation, and Maintenance Manual(s). Electronic media format copy shall include all tables, charts, drawings, codes and all other matters reflected in hard copies. The City utilizes various media for records-keeping and facilitating maintenance functions.

4. Electronic Media Format: Compatible with City's current software. All files shall be delivered on a unique CD, DVD, USB or other electronic storage device acceptable to the City.

5. Draft Submittal: The Draft Submittal of Installation, Operation and Maintenance Manuals shall be submitted to City prior to equipment startup.

F. Project Record Documents

Submit one copy of each of the Project Record Documents listed in these Documents.

G. Delay of Submittals

Delay of Submittals by Contractor is considered avoidable delay. Liquidated damages incurred because of late Submittals will be assessed to Contractor.

H. Optional Review Meeting

At the Contractor's request, in order to facilitate the timeliness of the review process, the City may schedule a meeting to review the materials submitted. If this option is exercised, the following requirements apply:

Request a meeting date with the City at least ten (10) Business Days in advance.

Provide the complete package of Submittal information at least five (5) Business Days in advance of the meeting.

The meeting shall take place at City's office. City will provide the authorized staff to review and respond on the Submittal information during the meeting.

Make available for this meeting the job superintendent and/or foreman, Contractor's safety officer, and someone knowledgeable of all the items submitted and authorized to make substitutions or changes.

4.3 Conformity with Contract Documents and Allowable Deviations

Work and materials shall conform to the lines, grades, typical cross sections, dimensions and materials requirements, including tolerances, shown on the plans or indicated in the specifications. Although measurements, sampling, and testing may be considered evidence as to conformity, City shall be the sole judge as to whether the work or materials deviate from the plans and specifications, and City's decision as to any allowable deviations therefrom shall be final.

4.4 Order of Work

When required by the Contract Documents, Contractor shall follow the sequence of operations as set forth therein. Full compensation for conforming to those requirements will be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

4.5 Drawings and Data to be Furnished by City

City may issue supplemental Drawings for the construction work under the Contract. These Drawings will show additional details as required for construction purposes. Installation instructions for City-furnished materials will be furnished if required.

4.6 Superintendence

Contractor shall designate, in writing before starting Work, an authorized representative who shall have complete authority to represent and act for Contractor. Said authorized representative of Contractor shall normally be present at the Site of the Work at all times while Work is actually in progress on the Contract. During any period when Work is suspended, arrangements acceptable to City shall be made for any emergency work which may be required.

Whenever Contractor or an authorized representative is not present on any part of the Work where it may be desired to give direction, orders will be given by City, which shall be received and obeyed by the superintendent who may have charge of the particular work in reference to which the orders are given. Any order given by City, not otherwise required by the Specifications to be in writing, will, on request of Contractor, be given or confirmed by City in writing.

Contractor shall designate, in writing, the names and telephone numbers of at least three representatives who could be contacted at any time in the event that an emergency occurs.

See Document 00520 Liquidated Damages due to change in Key Personnel on the project.

4.7 Character of Workers

Any subcontractor, or person employed by Contractor or subcontractor, who fails or refuses to carry out the directions of City, or appears to City to be incompetent or to act in a disorderly or improper manner, shall be removed from the Work immediately on the written request of City, and such person shall not again be employed on the Work.

4.8 Layout of Work and Surveys

All Work shall be done to the lines, grades, and elevations indicated on the Drawings.

City shall provide basic horizontal and vertical control points to be used as datums for the Work. All additional survey, layout, and measurement work shall be performed by Contractor as a part of the Work.

Contractor shall provide at its cost an experienced instrument person, competent assistants, and such instruments, tools, stakes and other materials required to complete the survey, layout, and measurement work. In addition, Contractor shall furnish at its cost competent persons and such tools, stakes, and other materials as City (and/or any Engineer) may require in establishing or designating control points, or in checking survey, layout, and measurement work performed by Contractor.

Contractor shall keep City informed, a reasonable time in advance, of the times and places at which it wishes to do Work, so that any checking deemed necessary by City may be done with minimum inconvenience to City and minimum delay to Contractor.

Contractor shall remove and reconstruct Work which is improperly located.

4.9 Warranty and Inspection

General Representations and Warranties: Contractor represents and warrants that it is and will be at all times fully qualified and capable of performing every Phase of the Work and to complete Work in accordance with the terms of Contract Documents. Contractor warrants that all construction services shall be performed in accordance with generally accepted professional standards of good and sound construction practices and all requirements of Contract Documents. Contractor warrants that Work, including but not limited to each item of materials and equipment incorporated therein, shall be new, of suitable grade of its respective kind for its intended use, and free from defects in design, engineering, materials, construction and workmanship. Contractor warrants that Work shall conform in all respects with all applicable requirements of federal, state and local laws, applicable construction codes and standards, licenses, and permits, Drawings and Specifications and all descriptions set forth therein, and all other requirements of Contract Documents. Contractor shall not be responsible, however, for the negligence of others in the specification of specific equipment, materials, design parameters and means or methods of construction where that is specifically shown and expressly required by Contract Documents.

Extended Guarantees: Any guarantee exceeding one year provided by the supplier or manufacturer of any equipment or materials used in the Project shall be extended for such term. Contractor expressly agrees to act as co-guarantor of such equipment and materials and shall supply City with all warranty and guarantee documents relative to equipment and materials incorporated in the Project and guaranteed by their suppliers or manufacturers.

Inspection. City shall at all times have access to the Work during its construction, and shall be furnished with every reasonable facility for ascertaining that the materials and the quality of performance are in accordance with the requirements and intentions of the Drawings and Specifications. All Work done and all materials furnished shall be subject to City's inspection and approval.

The day-to-day inspection performed by the various inspectors employed by City shall not constitute approval or ratification of Work improperly done by Contractor. City is the only person authorized to recommend acceptance or rejection of Work and materials.

The presence or absence of an inspector during performance of the Work shall not relieve Contractor of any obligation to fulfill the Contract. It shall be the duty of Contractor to see that all provisions are complied with in detail, irrespective of the inspection given the Work during its progress by City or representatives of City. Any plan or method suggested to Contractor by City or an inspector, but not specified or required, if adopted or followed in whole or in part, shall be used at the risk and responsibility of Contractor; and City and City will assume no responsibility therefore.

Should it be considered necessary or advisable by City at any time before Acceptance of the entire Work to make an examination of Work already completed by removing or tearing out same, Contractor shall, on request, promptly furnish all necessary facilities, labor, and material. If such Work is found to be defective or nonconforming in any material respect, due to the fault of Contractor or subcontractors, Contractor shall pay all the expenses of such examination and of satisfactory reconstruction. If, however, such Work is found to meet the requirements of the Contract, an equitable adjustment shall be made in the Contract Price to compensate Contractor for the additional services involved in such examination and reconstruction and, if completion of the Work has been delayed thereby, Contractor shall, in addition, be granted an appropriate extension of time.

Projects financed in whole or part with federal or state funds shall be subject to inspection at all times by the federal or state agency involved.

Any inspection, evaluation, or test performed by or on behalf of City relating to the Work is solely for the benefit of City, and shall not be relied upon by Contractor. Contractor shall not be relieved of its absolute obligation to perform Work in accordance with the Contract Documents, nor relieved of any guaranty, warranty, or other obligation, as a result of any inspections, evaluations, or tests performed by City, whether or not such inspections, evaluations, or tests are permitted or required under the Contract Documents. Contractor shall be

solely responsible for testing and inspecting Work already performed to determine whether such Work is in proper condition to receive later Work.

A. Execute Contractor's submittals and assemble warranty documents, and installation, operations and maintenance manuals, executed or supplied by Subcontractors, suppliers, and manufacturers.

- Provide table of contents and assemble in 8½ inches by 11 inches three-ring binder with durable plastic cover, appropriately separated and organized.
- Include contact names and phone numbers for City personnel to call during warranty period.
- Assemble in Specification Section order.

B. Submit material prior to final application for payment.

- For equipment put into use with City's permission during construction, submit within 14 Days after first operation.
- For items of Work delayed materially beyond Date of Substantial Completion, provide updated submittal within 14 Days after acceptance, listing date of acceptance as start of warranty period.
- Warranties are intended to protect City against failure of Work and against deficient, defective and faulty materials and workmanship, regardless of sources.

C. Limitations: Warranties are not intended to cover failures that result from the following:

- Unusual or abnormal phenomena of the elements
- Vandalism after Substantial Completion
- Insurrection or acts of aggression including war

D. Related Damages and Losses: Remove and replace Work which is damaged as result of defective Work, or which must be removed and replaced to provide access for correction of warranted Work.

E. Warranty Reinstatement: After correction of warranted Work, reinstate warranty for corrected Work to date of original warranty expiration or to a date not less than one year after corrected Work was done, whichever is later.

F. Replacement Cost: Replace or restore failing warranted items without regard to anticipated useful service lives.

G. Warranty Forms: Submit drafts to City for approval prior to execution. Forms shall not detract from or confuse requirements or interpretations of Contract Documents.

- Warranty shall be countersigned by manufacturers.
- Where specified, warranty shall be countersigned by Subcontractors and installers.
- Rejection of Warranties: City reserves right to reject unsolicited and coincidental product warranties that detract from or confuse requirements or interpretations of Contract Documents.

H. Term of Warranties: For materials, equipment, systems, and workmanship, warranty period shall be one year minimum from date of Final Completion of entire Work except where:

- Detailed specifications for certain materials, equipment or systems require longer warranty periods.
- Materials, equipment or systems are put into beneficial use of City prior to Final Completion as agreed to in writing by City.

I. Warranty of Title: No material, supplies, or equipment for Work under 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 seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with improvements and appurtenances

constructed or placed thereon by Contractor, to City free from any claim, liens, security interest, or charges, and further agrees that neither Contractor nor any person, firm, or corporation furnishing any materials or labor for any Work covered by Contract shall have right to lien upon premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair right of persons furnishing materials or labor under bond given by Contractor for their protection or any rights under law permitting persons to look to funds due Contractor in hands of City.

4.10 Defective and Unauthorized Work

All Work which has been rejected shall be remedied promptly (no later than five days) or removed and replaced by Contractor in an acceptable manner at no additional cost to City.

Payment will not be made for any Work done beyond the lines and grades shown on the Drawings or established by City, or any extra Work done without written authority, and such Work will be -considered as unauthorized. Work so done may be ordered remedied, removed, or replaced.

If Contractor should fail to comply promptly with any order of City made under the provisions of this, City may cause rejected or unauthorized Work to be remedied, removed, or replaced, and the costs thereof to be deducted from any moneys due or to become due Contractor.

4.11 Construction Equipment and Plant

Contractor shall provide and use construction equipment and plant capable of producing the quality and quantity of Work required. Construction equipment shall be identified by readily visible numbers. If ordered, Contractor shall remove unsatisfactory construction equipment and discontinue the operation of unsatisfactory plants.

4.12 Substantial Completion, Final Completion and Final Acceptance

A. Substantial Completion

The Work (or a specified part thereof) has progressed to the point where, in the opinion of City as evidenced by a Certificate of Substantial Completion, the Work is sufficiently complete, in accordance with Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if no such certificate is issued, when the Work (or specified part) is complete and ready for final acceptance as evidenced by written recommendation of City for final acceptance. The terms “Substantially Complete” and “Substantially Completed” as applied to all or part of the Work refer to Substantial Completion thereof.

1. When Contractor considers Work or designated portion of the Work as Substantially Complete, submit written notice to City, with list of items remaining to be completed or corrected.
2. Within reasonable time, City will inspect to determine status of completion.
3. Should City determine that Work is not Substantially Complete, City will promptly notify Contractor in writing, listing all defects and omissions.
4. Remedy deficiencies and send a second written notice of Substantial Completion. City will reinspect the Work. If deficiencies previously noted are not corrected on reinspection, then Contractor shall pay City’s cost of the reinspection.
5. When City concurs that Work is Substantially Complete, City will issue a Certificate of Substantial Completion, accompanied by Contractor’s list of items to be completed or corrected as verified by City.
6. A punch list examination will be performed upon Substantial Completion. One follow-up review of punch list items for each discipline will be provided.

B. **Final Completion**

When the Work authorized by the Contract has been completed, City will make the final inspection. If City determines that the Work has been completed, in accordance with the Contract, City will recommend that the Work be accepted. Contractor will be relieved of the responsibility imposed by Section 6.15, Contractor’s Responsibility for Work, on the date of Acceptance.

Final Completion occurs when Work meets requirements for City's Final Completion. When Contractor considers Work is Finally Complete, submit written certification that:

1. Contractor has inspected Work for compliance with Contract Documents, and all requirements for Final Acceptance have been met.
2. Except for Contractor maintenance after Final Acceptance, Work has been completed in accordance with Contract Documents and deficiencies listed with Certificate of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of City, and are operative.
3. Work is complete and ready for final inspection.
4. All systems having been tested and accepted as having met requirements of Contract Documents.
5. All required instructions and training sessions having been given by Contractor.
6. All closeout documents having been submitted by Contractor, reviewed by City and accepted by City.
7. All punch list work, as directed by City, having been completed by Contractor.
8. All final cleanup and completion activities having been completed by Contractor.

In addition to submittals required by Contract Documents, provide submittals required by governing authorities and submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.

When City finds Work is acceptable and final closeout submittals are complete, City will issue final Change Order reflecting approved adjustments to Contract Sum not previously made by Change Order. Should City determine that Work is incomplete or defective:

1. City promptly will so notify Contractor, in writing, listing the incomplete or defective items.
2. Promptly remedy the deficiencies and notify the City when it is ready for reinspection.
3. When City determines that the Work is acceptable under the Contract Documents, City will request Contractor to make closeout submittals.

Final adjustments of accounts:

1. Submit a final statement of accounting to City, showing all adjustments to the Contract Sum and complete and execute Document 00650 (Contract and Release of Any and All Claims).
2. If so required, City shall prepare a final Change Order for submittal to Contractor, showing adjustments to the Contract Sum that were not previously made into a Contract Modification.

C. **Final Acceptance**

The City will record a "Notice of Completion" after the City Council accepts the project as complete. The final payment including without limitation on retentions will be made 35 days after the Notice of Completion has been recorded by the County, provide there are no outstanding punchlist items or deficiencies in the project. The final payment will be fewer sums as may be lawfully retained under any provisions of the contract documents or by law.

D. **Project Guarantee**

Requirements for Contractor's guarantee of completed Work are included in this Document. Guarantee Work done under Contract against failures, leaks, or breaks or other unsatisfactory conditions due to defective equipment, materials, or workmanship, and perform repair work or replacement required, at Contractor's sole expense, for period of one year from date of Final Acceptance.

Neither recordation of Final Acceptance nor final certificate for payment nor provision of the Contract nor partial or entire use or occupancy of premises by City shall constitute acceptance of Work not done in accordance with Contract Documents nor relieve Contractor of liability in respect to express warranties or responsibility for faulty materials or workmanship.

City may make repairs to defective Work as set forth in this Document.

If, after installation, operation, or use of materials or equipment to be provided under Contract proves to be unsatisfactory to City, City shall have right to operate and use materials or equipment until said materials and equipment can, without damage to City, be taken out of service for correction or replacement. Period of use of defective materials or equipment pending correction or replacement shall in no way decrease guarantee period required for acceptable corrected or replaced items of materials or equipment.

Nothing in this Document shall be construed to limit, relieve, or release Contractor's, Subcontractors', and equipment suppliers' liability to City for damages sustained as result of latent defects in equipment caused by negligence of suppliers' agents, employees, or Subcontractors. Stated in another manner, warranty contained in the Contract Documents shall not amount to, nor shall it be deemed to be, waiver by City of any rights or remedies (or time limits in which to enforce such rights or remedies) it may have for defective workmanship or defective materials under laws of this State pertaining to acts of negligence.

4.13 Use Prior to Final Acceptance

City may take possession of, and use, all or part of the Project prior to Final Acceptance.

SECTION 5. CONTROL OF MATERIALS

5.1 Source of Supply and Quality of Materials.

Contractor shall furnish all materials required to complete the work, except materials that are designated in the specifications to be furnished by City.

Only materials conforming to the requirements of the specifications shall be incorporated in the work.

The materials furnished and used shall be new, except as may be provided elsewhere in these specifications, on the plans or in the Special Provisions. The materials shall be manufactured, handled, and use in a workmanlike manner to ensure completed work in accordance with the plans and specifications. Materials to be used in the work will be subject to inspection and tests by City or City's designated representative. Contractor shall furnish without charge such samples as may be required.

Contractor shall furnish City a list of Contractor's sources of materials and the locations at which those materials will be available for inspection. The list shall be submitted on a City approved form and shall be furnished to City in sufficient time to permit inspection and testing of materials to be furnished from the listed sources in advance of their use. City may inspect, sample or test materials at the source of supply or other locations, but the inspection, sampling or testing will not be undertaken until City is assured by Contractor of the cooperation and assistance of both Contractor and the supplier of the material. Contractor shall assure that City or City's authorized representative has free access at all times to the material to be inspected, sampled or tested. It is understood that the inspections and tests if made at any point other than the point of incorporation in the work in no way shall be considered a s guaranty of acceptance of the material nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by the State shall not relieve Contractor or Contractor's suppliers of responsibility for quality control.

Manufacturers' warranties, guaranties, instruction sheets and parts lists, which are furnished with certain Sections or materials incorporated in the work, shall be delivered to City before acceptance of the contract.

Reports and records of inspections made and tests performed, when available at the site of the work, may be examined by Contractor.

5.2 City-Furnished Materials.

Materials which are listed as City-furnished materials in the Special Provisions will be available to Contractor free of charge.

Contractor shall submit a written request to City for the delivery of City-furnished materials at least 15 days in advance of the date of its intended use, except that the written request for the delivery of City-furnished sign panels for roadside signs and overhead sign structures shall be submitted at least 30 days in advance of their intended installation. The request shall state the quantity and the type of each material.

The locations at which City-furnished materials will be available to Contractor free of charge will be designated in the Special Provisions. In those cases said materials shall be hauled to the site of the work by Contractor at Contractor's expense, including any necessary loading and unloading that may be involved. If the locations are not designated in the Special Provisions, City-furnished materials will be furnished to Contractor free of charge at the site of the project. In either case, all costs of handling and placing City-furnished material shall be considered as included in the price paid for the contract item involving the State-furnished material.

Contractor shall be responsible for all City-furnished materials furnished to Contractor, and shall pay all demurrage and storage charges. City-furnished materials lost or damaged from any cause whatsoever shall be replaced by Contractor at Contractor's expense. Contractor shall be liable to City for the cost of replacing City-furnished material and those costs may be deducted from any moneys due or to become due Contractor. All City-furnished material that is not used on the work shall remain the property of the State and shall be delivered to City.

City reserves right to furnish materials as it deems advisable, and Contractor shall have no claims for costs and overhead and profit on such materials.

5.3 Storage of Materials

Sections or materials to be incorporated in the work shall be stored in such a manner as to ensure the preservation of their quality and fitness for the work, and to facilitate inspection.

5.4 Defective Materials

All materials which City has determined to not conform to the requirements of the plans and specifications will be rejected whether in place or not. They shall be removed immediately from the site of the work, unless otherwise permitted by City. No rejected material, the defects of which have been subsequently corrected, shall be used in the work unless approval in writing has been given by City. Upon failure of Contractor to comply promptly with any order of City made under the provisions in this Section 5, City shall have authority to cause the removal and replacement of rejected material and to deduct the cost thereof from any moneys due or to become due Contractor.

5.5 Plant Inspection

City may inspect the production of material, or the manufacture of products at the source of supply.

Plant inspection, however, will not be undertaken until City is assured of the cooperation and assistance of both Contractor and the material producer. City or City's authorized representative shall have free entry at all times to those parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. City assumes no obligation to inspect materials at the source of supply.

5.6 Certificates of Compliance

A Certificate of Compliance shall be furnished prior to the use of any materials for which these specifications or the Special Provisions require that a certificate be furnished. In addition, when so authorized in these specifications or in the Special Provisions, City may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials

involved comply in all respects with the requirements of the specifications. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.

All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve Contractor of the requirements of the plans and specifications and any material not conforming to the requirements will be subject to rejection whether in place or not.

City reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.

The form of the Certificate of Compliance and its disposition shall be as directed by City.

5.7 State Specification Numbers

The State Specification number of material furnished on the contract shall conform to the number specified in these specifications or the Special Provisions for the material involve, except that material conforming to a later specification issue will be acceptable.

5.8 Testing

Unless otherwise specified, all tests shall be performed in accordance with the methods used by the Department of Transportation and shall be made by the Engineer or the Engineer's designated representative.

The Department has developed methods for testing the quality of materials and work. These methods are identified by number and are referred to in the specifications as California Test. Copies of individual California Tests are available at the Transportation Laboratory, Sacramento, California, and will be furnished to interested persons upon request.

Whenever the specifications require compliance with specified values for the following properties, tests will be made by the California Test indicated unless otherwise specified:

Properties	California Test
Relative Compaction	216 or 231
Sand Equivalent	217
Resistance (R-value)	301
Grading (Sieve Analysis)	202
Durability Index	229

Whenever a reference is made in the specifications to a California Test by number, it shall mean the California Test in effect on the day the Notice to Contractors for the work is dated.

Whenever the specifications provide an option between 2 or more tests, the Engineer will determine the test to be used.

Whenever a reference is made in the specifications to a specification, manual or test designation either of the American Society for Testing and Materials, the American Association of State Highway and Transportation Officials, Federal Specifications or any other recognized national organization, and the number or other identification representing the year of adoption or latest revision is omitted, it shall mean the specification, manual or test designation in effect on the day the Notice to Contractors for the work is dated. Whenever the specification, manual or test designation provides for test reports (such as certified mill test reports) from the manufacturer, copies of those reports, identified as to the lot of material, shall be furnished to the Engineer. The manufacturer's test reports shall supplement the inspection, sampling and testing provisions in Section 5, "Control of Materials," and shall not constitute a waiver of the City's right to inspect. When material which cannot be identified with specific test reports is proposed for use, the Engineer may, at the Engineer's discretion, select random samples from the lot for testing. Test specimens from the random samples, including those required for retest, shall be prepared in accordance with the referenced specification and furnished by the Contractor at the Contractor's expense. The number of the samples and test specimens shall be entirely at the

discretion of the Engineer. Unidentified metal products, such as sheet, plate and hardware shall be subject to the requirements of Section 55-2.07, "Unidentified Stock Material."

When requested by the Engineer, the Contractor shall furnish, without charge, samples of all materials entering into the work, and no material shall be used prior to approval by the Engineer, except as provided in Section 5.6, "Certificates of Compliance." Samples of material from local sources shall be taken by or in the presence of the Engineer; otherwise, the samples will not be considered for testing.

Whenever the provisions of this Section refer to tests or testing, it shall mean tests to assure the quality and to determine the acceptability of the materials and work.

A. City will select an independent testing and inspection agency or agencies to conduct tests and inspections as indicated on Drawings, in Specifications and as required by governing authorities having jurisdiction.
   1. Responsibility for time and costs shall be as indicated in schedule below. All time and costs for Contractor’s service related to such tests and inspections shall be included in Contract Time and Contract Sum.
   2. Notify City in writing (and, if provided, on inspection request form provided by City) and, if directed by City, testing and inspection agency, when Work is ready for specified tests and inspections. Deliver this written notification at least two (2) working days before the requested inspection date.

B. Contractor pays for all additional charges by testing and inspection agencies and governing authorities having jurisdiction due to the following: The amount deducted will be determined by City and deducted from moneys due or to become due to Contractor.
   1. Contractor’s failure to properly schedule or notify testing and inspection agency or authorities having jurisdiction.
   2. Costs for testing of materials and work found to be unacceptable, as determined by the test performed by City.
   3. Changes in sources, lots, or suppliers of products after original tests or inspections.
   4. Changes in means, methods, techniques, sequences, and procedures of construction that necessitate additional testing, inspection, and related services.
   5. Changes in mix designs for concrete and mortar after review and acceptance of submitted mix design.
   6. Contractor submitted requests to change materials or products, which are accepted, but require testing and/or reinspection beyond original design.

C. If initial tests or inspections made by the testing and inspection agency reveal that materials do not comply with Contract Documents, or if City has reasonable doubt that materials do not comply with Contract Documents, additional tests and inspections shall be made as directed.
   1. If additional tests and inspections establish that materials comply with Contract Documents, City shall pay all costs for such tests and inspections.
   2. If additional tests and inspections establish that materials do not comply with Contract Documents, all costs of such tests and inspections shall be deducted from Contract Sum.

If Work requiring inspection is covered by follow-on or follow-up Work before it is inspected, uncover Work so proper inspections can be performed. All costs of such tests and inspections shall be deducted from Contract Sum.

The Contractor shall be responsible for controlling the quality of the material entering the work and of the work performed, and shall perform testing as necessary to ensure control. The test methods used for quality control testing shall be as determined by the Contractor. The results of the testing shall be made available to the Engineer upon request. These tests are for the Contractor's use in controlling the work and will not be accepted for use as acceptance tests.

Full compensation for performing quality control tests and making the results available to the Engineer shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

SECTION 6. LEGAL RELATIONS AND RESPONSIBILITY

6.1 Laws to be Observed

Contractor shall remain informed of and in compliance with all applicable existing and future federal, state, county, and municipal laws, codes, ordinances, rules and regulations, including but not limited to, those cited herein.

6.2 Labor Discrimination

In the performance of the Contract, Contractor shall not discriminate against an employee or applicant for employment because of race, color, religious creed, ancestry, sex, age, national origin, physical handicap, medical condition, or marital status. Section 1735 of the Labor Code and Sections 12990 et seq. of the Government Code are incorporated herein in full by this reference.

Contractor and each subcontractor shall submit monthly an employee utilization report, substantially conforming to U.S. Department of Labor Form CC-257 (Rev. 9/78 or successor).

6.3 Employment of Labor

In the employment of labor in the performance of the Contract, City desires that Contractor and all subcontractors shall, wherever possible, give first consideration to residents of the County.

6.4 Prevailing Wages

In accordance with provisions of Section 1773 of the Labor Code, the Director of the Department of Industrial Relations has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes available to the particular craft, classification, or type of workers employed on the work. These rates are set forth in the latest determination obtained from the Director, which is on file in the office of the Director of Public Works and incorporated herein by reference the same as though set out in full. Post copy of general prevailing rates at site.

Contractor shall forfeit as a penalty to City, $50 for each day, or portion thereof, for each worker paid less than the stipulated prevailing rates for any public work done under the Contract by Contractor or by any subcontractor in violation of the provisions of the Labor Code, particularly Sections 1770 through 1780, inclusive.

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 by him or her in connection with the public work. The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of Contractor in accordance with the provisions of Section 1776 of the Labor Code.

Contractor shall inform City of the location of the payroll records, including the street address, city, and county, and shall, within 5 working days, provide a notice of a change in location and address. The responsibility for compliance with payroll record requirements imposed by said Section 1776 of the Labor Code is on the prime Contractor.

A copy of all payrolls shall be submitted weekly to City. Payrolls shall contain the full name, address, and Social Security number of each employee, his or her correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made, and actual wages paid. They shall also indicate apprentices and ratio of apprentices to journeymen. The employee's address and Social Security number need only appear on the first payroll on which his or her name appears. The payroll shall be accompanied by a "Statement of Compliance" signed by the employer or agent indicating that the payrolls are correct and complete and that the wage rates contained therein are not less than those required by the Contract. The "Statement of Compliance"

shall be on forms furnished by City or on any form with identical wording. Contractor shall be responsible for the submission of copies of payrolls of all subcontractors.

If, by the 15th of the month, Contractor has not submitted satisfactory payrolls for all work performed during the monthly period ending on or before the first of that month, City will retain an amount equal to 10 percent of the estimated value of the work performed (exclusive of mobilization) during the month from the next monthly estimate, except that such retention shall not exceed $10,000 nor be less than $1,000. Retentions for failure to submit satisfactory payrolls shall be additional to all other retentions provided for in the Contract. The retention for failure to submit satisfactory payrolls for any monthly period will be released for payment when the monthly estimate for partial payments next following the date that all such payrolls for which the retention was made are submitted.

Contractor and each subcontractor shall preserve their respective payroll records for a period of 4 years from the date of fling a Notice of Completion and Acceptance under the Contract.

The work of installing, assembling, repairing or reconditioning, or other work of any nature on machinery, equipment, or tools used in or upon the work, shall be considered a part of the work to be performed under the Contract and any laborers. workers, or mechanics working on such machinery, equipment, or tools, shall be subject to all of the requirements relating to labor set forth in the Contract.

The construction, erection, and operation of material production, proportioning, or mixing plants from which material is used wholly on the Contract or on contracts under the supervision of City, shall be considered a part of the work to be performed under the Contract and any laborers, workers, or mechanics working on such plants shall be subject to all of the requirements relating to labor set forth in the Contract.

6.5 Hours of Labor and Work

Eight hours' labor constitutes a legal day's work. Contractor shall forfeit as a penalty to City, $25 for each worker employed in the execution of the Contract by Contractor or by any subcontractor for each day during which such worker is required or permitted to labor more than 8 hours in violation of Labor Code Sections 1810 to 1815, inclusive, except as provided for under Labor Code Section 1815.

Work hours are **7:00 A.M**. to **8:00 P.M**., Monday through Friday. No weekend, holiday or night work will be allowed without written approval from the City.

6.6 Apprentices

Contractor's attention is directed to the provisions in Sections 1777.5, 1777.6 and 1777.7 of the Labor Code concerning the employment of apprentices by Contractor or any subcontractor.

Section 1777.5 requires Contractor or subcontractor employing persons, as defined, in any apprenticeable occupation to apply to the joint apprenticeship committee which is nearest the Site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the Contract. The ratio of work performed by apprentices to journeymen in such cases shall not be less than 1 hour to 5 hours, except when the committee finds that any one of the following conditions is met:

A. In the event unemployment for the previous 3-month period in the project Site area exceeds an average of 15 percent, or

B. In the event the number of apprentices in training in such area exceeds a ratio of 1 to 5, or

C. If there is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either (1) on a statewide basis, or (2) on a local basis, or

D. If assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize his/her life or the life, safety, or property of fellow employees or the

public at large, or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman.

Contractor is required to make contributions to funds established for the administration of apprenticeship programs if Contractor employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works Site are making such contributions.

Contractor and any subcontractor shall comply with the requirements of Section 1777.5 and 1777.6 in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

6.7 Permits and Licenses

Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the prosecution of the work, except as provided in the Special Provisions.

6.8 Patents and Copyrights

Contractor shall assume all costs including any costs of defense arising from the use of any copyrighted composition, secret process, patented or unpatented invention, Section, equipment, device, or appliance manufactured, furnished, or used in the performance of the Contract, including their use by City, unless otherwise specifically stipulated in the Specifications.

6.9 Public Safety and Traffic Control

Contractor shall furnish, erect, and maintain such fences, barriers, lights, and signs and provide such flagging and guards as are necessary in the opinion of City or public agency having jurisdiction, to give adequate warning to the public of the construction and of any dangerous condition to be encountered as a result thereof.

Without limiting the foregoing, signs, lights, flags, and other warning and safety devices and their use shall conform to the requirements set forth in Part 6 of the MUTCD and of the MUTCD California Supplement. Signs or other protective devices furnished and erected by Contractor, at Contractor's expense, as above provided, shall not obscure the visibility of, nor conflict in intent, meaning and function of either existing signs, lights and traffic control devices or any construction area signs and traffic control devices for which furnishing of, or payment for, is provided elsewhere in the specifications. Signs furnished and erected by Contractor, at Contractor's expense, shall be approved by City as to size, wording and location.

The Contractor shall so conduct operations as to offer the least possible obstruction and inconvenience to the public and shall have under construction no greater length or amount of work than can be prosecuted properly with due regard to the rights of the public.

Unless otherwise provided in the special provisions, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible. Where possible, public traffic shall be routed on new or existing paved surfaces.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately by the Contractor at the Contractor's expense.

Existing traffic signals and highway lighting shall be kept in operation for the benefit of the traveling public during progress of the work, and other forces will continue routine maintenance of existing systems. Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners.

Convenient access to driveways, houses, and buildings along the line of the work shall be maintained and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition. When the abutting property owner's access across the right of way line is to be eliminated, or to be replaced

under the contract by other access facilities, the existing access shall not be closed until the replacement access facilities are usable.

The Contractor may be required to cover certain signs which regulate or direct public traffic to roadways that are not open to traffic. The Engineer will determine which signs shall be covered. Except as otherwise provided for construction area signs in Section 12, "Construction Area Traffic Control Devices," furnishing, installing and removing covers will be paid for as extra work as provided in Section 3.3.

No lane closure shall be permitted before 7:00 A.M. or after 5:00 P.M. Mondays through Fridays. Only under special conditions shall the City have the right to permit lane closure before 7:00 A.M. and after 5:00 P.M.

All costs of the above shall be included in the price bid for the various bid items and no special compensation will be allowed.

The Contractor shall maintain a minimum of two (2) travel lanes for traffic use, one in each direction at all times.

6.10 Accident Prevention

Contractor shall comply with the California Occupational Safety and Health Act (Labor Code Section 6300 et seq.) and Title 8 of the Code of Regulations, and will also take, or cause to be taken, such additional measures as may be necessary for the prevention of accidents.

Designate one of Contractor's staff as "Site Safety Officer" whose duties shall include the responsibility for enforcing the environmental protection provisions of the Contract Documents including safety and health, the requirements of the Occupational Safety and Health Act, and other applicable federal, state and local standards. Submit for review by City Contractor's intended traffic flow plan, security plan, program for temporary structures, housecleaning plan, demolition program, and environmental safety and health plan. After review by City, the implementation and enforcement of these plans shall become the responsibility of the Site Safety Officer. Any changes in the plans shall be requested by Contractor through the Site Safety Officer for written concurrence by City.

Prior to commencement of Work Contractor shall (1) submit proposals in writing for effectuating provisions for accident prevention, and (2) meet in conference with City to discuss and develop mutual understandings relative to administration of an overall safety program.

During the performance of Work under the Contract, Contractor shall institute controls and procedures for the control and safety of persons visiting the job-Site.

Contractor shall maintain an accurate record of, and shall report to City in writing, exposure data and all accidents resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment incident to Work performed under the Contract.

City will notify Contractor of any noncompliance with the foregoing provisions. Contractor shall, after receipt of such notice, immediately take corrective action. If Contractor fails or refuses to comply immediately, the matter will be referred to the proper authority. No part of the time lost due to any stop order issued by proper authority shall be made the subject or claim for extension of time or for extra costs or damages by Contractor.

Compliance with the provisions of this Section by Subcontractors will be the responsibility of Contractor.

6.11 Explosives and Stream Pollution

This section not applicable to City projects.

6.12 Fire Protection Plan

Within 15 days after Notice of Proceed submit one copy of a fire protection plan that has been reviewed and approved by the Santa Clara County Fire Department. It is recommended that the plan include, but not be limited to, a discussion of the following items:

A Equipment spark arresters

B Fire-extinguishing equipment on hand

C Method of operation in case of fire

D Notification to authorities of any fire

E Access available during performance of Work

F Educating workers of fire protection plan

G Storage protection for flammable materials

H Ventilation and illumination equipment

6.13 Interference with Fire Hydrants, Highways, and Fences

Contractor shall conduct operations as not too close or obstruct any portion of any highway, road, or street, or prevent in any way free access to fire hydrants until permits have been obtained therefor from the proper authorities. If any highway required to be kept open shall be rendered unsafe by Contractor's operations, Contractor shall make such repairs or provide such temporary guards as shall be acceptable to the authorities having jurisdiction and to City. Any highway or street maintenance or repair work required by local authorities in connection with necessary operations under the Contract shall be performed by Contractor at Contractor's own cost and expense. Fences subject to interference shall be maintained as effective barriers consistent with the original intent but, upon approval of City, they may be moved or rearranged to facilitate prosecution of the Work until the Work is finished, after which they shall be restored to their original location in an equal or better condition that existed prior to rearrangement.

6.14 Preservation of Property

Contractor shall not damage existing improvements, utility facilities, and adjacent property, real and personal. The fact that any existing underground improvement or facility is not shown on the Drawings shall not relieve Contractor of responsibility to ascertain the existence of any underground improvement or facility which may be subject to damage by reason of Contractor's operations.

Any damage to improvements or property, whether above or below the ground, private or public, within or adjacent to the project limits, arising from, or in consequence of, the performance of the Contract shall be repaired at once by Contractor. If City requires such repair to be made prior to the execution or continued performance of any part of the Work included in this Contract, City will so notify Contractor who shall delay or discontinue the performance of that part of the Work until the necessary repair has been made. Such delay shall not be considered unavoidable, and no extension of time for completion of the Contract will be allowed therefor.

When ordered by City to make any such repair, Contractor shall start work thereon within four (4) hours and shall prosecute the same with diligence to completion. Upon failure of Contractor to so comply with such order, or upon Contractor's failure to make immediate emergency repairs reasonably determined by City to be necessary in the best interests of the public, City shall have authority to cause such repair to be made and to deduct the costs thereof from any money due, or which may become due, Contractor.

In an emergency affecting the safety of life or property including adjoining property, Contractor shall act to prevent, to the extent possible, such threatened loss or injury, whether or not instructed to do so by City.

6.15 Contractor's Responsibility for Work

Until Final Acceptance of the Work, 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 by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work. The materials to be used in the Work include both those furnished by City and those furnished by Contractor, including materials for which Contractor has received partial payment as provided in Section 8.3, Progress Payment.

6.16 Indemnification and Hold Harmless

Contractor shall, to the fullest extent allowed by law, indemnify, and when the City requests with respect to a claim provide a deposit for the defense of, defend, and hold harmless the City and its officers, officials, agents, employees and volunteers against any and all liability, claims, stop notices, actions, causes of action or demands whatsoever from and against any of them, including any injury to or death of any person or damage to property or other liability of any nature, arising out of, pertaining to, or related to the performance of this Agreement by Contractor or Contractor's employees, officers, officials, agents or independent contractors. Contractor shall not be obligated under this Agreement to indemnify City to the extent that the damage is caused by the sole or active negligence or willful misconduct of City, its agents or employees. Such costs and expenses shall include reasonable attorneys' fees of counsel of City's choice, expert fees and all other costs and fees of litigation.

Contractor agrees to obtain executed indemnity agreements with provisions identical to those set forth here in these sections from each and every subcontractor or any other person or entity involved by, for, with, or on behalf of Contractor in the performance of this agreement. If Contractor fails to obtain such indemnity obligations from others as required here, Contractor agrees to be fully responsible according to the terms of this section.

With respect to third party claims against Contractor, Contractor waives any and all rights to any type of express or implied indemnity against City, and each of their officers, employees, consultants and agents, including, but not limited to, the Council, City representative.

Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of Contractor, its Subcontractors of any tier, or the officers or agents of any of them.

To the furthest extent permitted by law (including, without limitation, Civil Code Section 2782), the indemnities, releases of liability and limitations of liability, and limitations of remedy expressed throughout the Contract Documents shall apply even in the event of breach of contract, negligence (active or passive), fault or strict liability of the party[s] indemnified, released, or limited in liability, and shall survive the termination, rescission, breach, or completion of the Contract Documents. If Contractor fails to perform any of these defense or indemnity obligations, City may in its discretion back charge Contractor for its costs and damages resulting there from and withhold such sums from progress payments or other contract monies which may become due.

6.17 Payment of Taxes

Except as otherwise specifically provided in the Special Provisions, the Contract Prices shall include full compensation for all current and future taxes of any type which Contractor is required to pay, whether imposed by federal, state, or local government, and no tax exemption certificate or any other document designed to exempt Contractor from payment of tax will be furnished to Contractor by City.

6.18 Cooperation with Others

City reserves the right to do other work on or near the Project. Contractor shall cooperate with others and conduct Work so as to facilitate work by City or others and prevent delay, additional expense, or hindrance thereto. Contractor shall request from, and exchange with others, Drawings, data, and information as necessary to insure proper completion of the project and work of others. Contractor shall furnish copies of correspondence and Drawings exchanged with other contractors to City.

Contractor shall conduct, adjust, correct, and coordinate Work with work of others so that the Project shall be free of defects.

6.19 Property Rights in Materials

Nothing in the Contract shall be construed as vesting in Contractor any right of property in the materials used after they have been attached or affixed to the Work or the soil, or after payment has been made for 90 percent of the value of materials delivered to the Site of the work, whether or not they have been so attached or affixed. All such materials shall become the property of City upon being so attached or affixed or upon payment of such 90 percent of the value of materials delivered by Contractor on the ground and not used.

6.20 Rights in Land and Improvements

Nothing in these Specifications shall be construed as allowing Contractor to make any arrangements with any person to permit occupancy or use of any land, structure, or building within the limits of the Contract for any purpose whatsoever, either with or without compensation, in conflict with any agreement between City and any owner, former owner, or tenant of such land, structure, or building.

6.21 Title to Materials Found on the Work

The title to all water and to the right to the use of all water, to all soil, stone, gravel, sand, minerals, and all other materials developed or obtained in the excavation or other operations by Contractor or any subcontractor, or any of their employees, and the right to use or dispose of the same, are hereby expressly reserved by City, and neither Contractor, nor any subcontractor, nor any of their employees shall have any right, title, or interest in or to any part thereof; neither shall they, nor any of them, assert or make any claim thereto. Contractor may be permitted to use in the Work, without charge, any such materials which meet the requirements of these Specifications.

6.22 Trespass

Contractor shall be responsible for all damage or injury which may be caused on any property by trespass by Contractor, any subcontractor, or their employees in the course of their employment, whether the said trespass was committed with or without the consent or knowledge of Contractor.

6.23 Subcontracting

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

No subcontractor will be recognized as such, and all persons engaged in the work of construction will be considered as employees of the Contractor and the Contractor will be held responsible for their work, which shall be subject to the provisions of the contract and specifications.

The Contractor shall perform, with the Contractor's own organization, contract work amounting to not less than the percentage listed in Document 00100 Advertisement for Bid, of the original total contract price, except that any designated "Specialty Items" may be performed by subcontract and the amount of any designated "Specialty Items" performed by subcontract may be deducted from the original total contract price before computing the amount of work required to be performed by the Contractor with the Contractor's own organization. When items of work in the Bid Form, (Document 00400) are preceded by the letters (S), those items are designated as "Specialty Items." Where an entire item is subcontracted, the value of work subcontracted will be based on the contract item bid price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the contract item bid price, determined from information submitted by the Contractor, subject to approval by the Engineer.

Subcontracts shall include provisions that the contract between the City and the Contractor is part of the subcontract, and that all terms and provisions of the contract are incorporated in the subcontract. Subcontracts shall also contain certification by the subcontractor that the subcontractor is experienced in and qualified to do, and knowledgeable about, the subcontracted work. Copies of subcontracts shall be available to the Engineer upon written request, and shall be provided to the Engineer at the time any litigation against the City concerning the project is filed.

Before work is started on a subcontract, the Contractor shall file with the Engineer a written statement showing the work to be subcontracted, the names of the subcontractors and the description of each portion of the work to be subcontracted.

Pursuant to the provisions of Section 6109 of the Public Contract Code, the Contractor shall not perform work on a public works project with a subcontractor who is ineligible to perform work on the public works project pursuant to Section 1777.1 or 1777.7 of the Labor Code.

When a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the City, the subcontractor shall be removed immediately on the requisition of the Engineer and shall not again be employed on the work.

Contractor shall comply with Subletting and Subcontracting Fair Practices Act commencing with Section 4100 of the Public Contract Code Violations shall subject Contractor to penalties described in the Act.

In accordance with Section 4107 of the Public Contract Code, City Council or its designated authorized officer is the awarding authority for the purpose of consenting to a substitute subcontractor.

6.24 Tunnel Construction Safety

Attention is directed to Labor Code Sections 7950 and following, concerning tunnel safety. Contractor shall notify the Division of Occupational Safety and Health and City before any initial construction may be started at any tunnels. A pre-job safety conference, to be arranged for by Contractor, shall be held for all underground operations. City shall be notified of the time and place of such conference. The tunnel classification prepared by the Division of Occupational Safety and Health shall be prominently posted at the Site by Contractor. City will obtain this classification prior to the request for bids, whenever possible, and make it available to Contractor.

6.25 Cultural Resources

If cultural resources are encountered during construction of the Project, Contractor shall avoid any further disturbance of the materials and immediately discontinue earthwork within 100 feet of the find. Contractor shall notify City immediately upon encountering cultural resources. Contractor shall be prepared to move on to another location or phase of work, allowing sufficient time for City to evaluate the nature and significance of the find, and implement appropriate management procedures.

In the event that prehistoric human remains are encountered, ground-disturbing activities at that location shall cease immediately. Contractor shall notify City immediately upon encountering human remains. Contractor shall be prepared to move on to another location or phase of Work to allow the City to notify the proper authorities and assess management of the situation.

Contractor is advised that if burials or archaeological artifacts are encountered, it may be necessary to suspend Work on the project in order to comply with the above requirements. Payment for a delay of more than 1 working day for each occurrence will be made in accordance with Section 3.

6.26 Sound Control

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, used for any purpose on the job or 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 the muffler.

Grading, construction and demolition activities shall be allowed to exceed the noise limits of Section 10.48.040 of the Cupertino Municipal Code during the daytime hours; provided that the equipment utilized has high quality noise muffler and abatement devices installed and in good condition and the activity meets one of the following criteria:

A No individual device produces a noise level more than 87 dBA at a distance of twenty-five feet (25’) (7.5 meters).

B A noise level on any nearby property does not exceed 80 dBA. It is a violation of the Cupertino Municipal Code to engage in any grading, street construction or underground utility work within seven hundred fifty feet (750’) of a residential area on Saturdays, Sundays, holidays, and during the nighttime period except as provided in Section 10.48.030 of the Cupertino Municipal Code.

C Grading, construction, or demolition occurring during nighttime period shall not be allowed unless they meet the nighttime standards of Section 10.48.040 of the Cupertino Municipal Code.

6.27 Site Security

Contractor shall take and be fully responsible for all reasonably required measures to protect and maintain the security of persons, existing facilities and property at the Site, including without limitation preventing theft, loss, vandalism and improper concealment of personal property of the City and all persons lawfully present on the Site, and including times where workers are not present on the Site. Contractor's measures shall include, at a minimum, maintaining a log of all persons entering and leaving the Site and who they represent, what they are delivering and to whom.

Contractor shall repair all damage to City's property resulting from Contractor's failure to provide adequate security measures at no cost to City.

Contractor shall maintain a lock on the Construction access gate at all times.

Contractor shall supply additional security fencing, barricades, lighting, and other security measures as required to protect and control the Site.

Contractor shall provide a Safety Program in accordance with all applicable federal, state, and local regulation codes, rules, laws and ordinances.

6.28 Public Facilities

Where overhead service to a structure, known to receive service, does not exist, then underground service shall be assumed to exist.

Contractor's attention is directed to the existence of underground sewer, water, gas, power, telephone and cable and other utilities within the areas in which Work is to be performed. Contractor shall, at least 2 Business Days, or as otherwise noted, prior to commencement of excavation, notify the following owners of these Underground

Facilities:

A. Storm drainage lines:
City of Cupertino

B. Water:
San Jose Water Co., 374 West Santa Clara, San Jose, CA 95113-9971, Phone: 408-279-7900

C. Cable:
Comcast, 1900 S. Tenth St., San Jose, CA 95112, Phone: 408-918-3230

D. Electrical/Gas:
Pacific Gas & Electric, 10900 N. Blaney Ave., Cupertino, CA 95014, Phone: 408-725-2098

E. Phone:
Pacific Bell/AT&T, 3475 B N. First Street, San Jose, CA 95134, Phone: 408-493-7236

F. Sanitary:
Cupertino Sanitary, 20833 Stevens Creek Blvd., Suite 104, Cupertino, CA 95014, Phone: 408-259-7071

The Contractor shall have all of the utilities, underground mains, and services that may conflict with the project, located in the field. The Contractor shall contact Underground Service Alert (USA) two (2) working days in advance of any work, for location of the underground facilities, at 800-642-2444.

Underground vaults and lines are shown on the Drawings. Contractor shall exhibit extreme care when conducting this work and may be required to hand dig in these locations. The vaults and lines shall be protected throughout the construction period.

Attention is directed to the presence of overhead telephone, cable and power lines and a power pole in the area. The existing power pole shall be protected throughout the construction period. Protection of these power poles may require assistance from PG&E, AT&T and Comcast. Cost for assistance by PG&E, AT&T and Comcast shall be borne by Contractor.

Attention is directed to the existing utilities in the area. Contractor shall notify utility companies prior to digging in this area and shall abide by any provisions instructed by the utility company for protection of their facility including hand digging in this area. Costs for compliance with all mitigation measures shall be borne by Contractor.

6.29 Legal Actions Against the City

No representative, officer, or employee of City, no member of the governing body of the locality in which the Project is situated, no member of the locality in which City was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the Project, during the tenure of the official or for one year thereafter, shall, as principal, agent, attorney or otherwise, be directly or indirectly interested, in the Contract Documents or the proceeds thereof.

6.30 Limit of Liabiltiy

CITY, AND EACH OF ITS OFFICERS, THE CITY COUNCIL, EMPLOYEES, CONSULTANTS (INCLUDING WITHOUT LIMITATION CONSULTING ENGINEER) AND AGENTS INCLUDING, BUT NOT LIMITED TO, ENGINEER EACH OTHER CITY REPRESENTATIVE SHALL HAVE NO LIABILITY TO CONTRACTOR FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, EXCEPT TO THE LIMITED EXTENT THAT THESE CONTRACT DOCUMENTS OR APPLICABLE PUBLIC CONTRACTING STATUTES MAY SPECIFY THEIR RECOVERY.

SECTION 7. PROSECUTION AND PROGRESS OF WORK

7.1 Assignment

The performance of the Contract may not be assigned except upon the written consent of the Council. Consent will not be given to any proposed assignment which would relieve the original Contractor or surety of their responsibilities under the Contract.

Contractor may assign moneys due, or to become due under the Contract, and such assignment will be recognized by City, if given proper notice thereof, to the extent permitted by law, but any assignment of moneys shall be subject to all proper setoffs in favor of City and to all deductions provided for in the Contract and particularly all money withheld, whether assigned or not, shall be subject to being used by City for the completion of the Work in the event that Contractor should be in default therein.

7.2 Notice to Proceed

The Contract Time will commence to run on the date indicated on the Notice to Proceed. Contractor shall not do any work at the site prior to the date on which the Contract Time commences to run.

7.3 Commencement of Work

Contractor shall not begin Work until receipt from City of the Notice to Proceed, and shall, upon receiving notice, begin Work within the time specified in the notice. The time specified in said notice will allow a period of at least 10 days after the date of said notice for commencement of Work. After receipt of said notice, Contractor shall diligently prosecute the Work to completion. Contractor shall provide, at least 24 hours in advance, written notice to City of Contractor's intention to start Work and specify the date on which Contractor intends to start.

No Work shall begin until the Contract, bonds and certificates of insurance required by Section 2 have been received and approved.

7.4 Work Progress Schedule

A. General

Progress Schedule shall be based on and incorporate milestone and completion dates specified in Contract Documents. Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in Document 00520 (Contract), unless an earlier (advanced) time of completion is requested by Contractor and agreed to by City. A Change Order shall formalize any such agreement.

1. City is not required to accept an earlier (advanced) schedule, i.e., one that shows early completion date(s) for the Contract Time.
2. Contractor is not entitled to extra compensation in event agreement is reached on an earlier (advanced) schedule and Contractor completes its Work, for whatever reason, beyond completion date shown in earlier (advanced) schedule but within the Contract Time.
3. A schedule showing the Work completed in less than the Contract Time, which has been accepted by City, shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the Work and Contract Substantial Completion. Project Float is a resource available to both City and Contractor.
4. Float Ownership: Neither City nor Contractor owns float. The Project owns the float. As such, liability for delay of any Substantial Completion or Final Completion date rests with the party whose actions, last in time, actually cause delay to a Substantial Completion or Final Completion date.

    a. For example, in the event of unexcused delay by Party A and Party B, and if Party A uses some, but not all of the float and Party B later uses remainder of the float as well as additional time beyond the float, Party B shall be liable for the time that represents a delay to the Substantial Completion date.
    b. Under this scenario, Party A would not be responsible for the time since it did not consume all of the float and additional float remained; therefore, the Substantial Completion Date was unaffected.

c Progress Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing Contract schedule and monitoring actual progress as compared to Progress Schedule rests with Contractor.

d Failure of Progress Schedule to include any element of the Work or any inaccuracy in Progress Schedule will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract. City's acceptance of Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon City, or act to relieve Contractor of its responsibility for means and methods of construction.

e Transmit each item under form approved by City.

- Identify Project with the City Project number, and name of Contractor.
- Provide space for Contractor's approval stamp and City's review stamps.
- Submittals received from sources other than Contractor will be returned to Contractor without City's review.

B. Initial and Original Progress Schedule

Initial Schedule submitted for review at the Preconstruction Conference shall serve as Contractor's schedule for up to 30 Days after the Notice to Proceed.

Initial Schedule must indicate detailed plan for the Work to be completed in first 30 Days of the Contract; details of planned mobilization of plant and equipment; sequence of early operations; and procurement of materials and equipment. Show Work beyond 30 Days in summary form.

Contractor shall submit its Original Schedule for review no later than first progress payment. Original Schedule and all updates shall comply with all standards herein.

All Schedules shall be time-scaled.

All Schedules shall be cost- and resource-loaded. Reviewed cost- and resource-loaded Schedule will be used as basis for monthly progress payments. Use of Initial Schedule for progress payments shall not exceed 30 Days.

Except as otherwise expressly provided in this Document, meet with City to review and discuss the each Schedule (i.e., Initial, Original and monthly updates) within seven Days after each Schedule has been submitted to City.

City's review and comment on any Schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).

Contractor shall make corrections to Schedule necessary to comply with Contract requirements and shall adjust Schedule to incorporate any missing information requested by City. Resubmit Initial Schedule if requested by City.

If Contractor is of the opinion that any of the Work included on its Schedule has been impacted, submit to City a written Time Impact Evaluation (TIE) in accordance with this Section. The TIE shall be based on the most current update of the Initial Schedule.

C. Schedule Format and Level of Detail

Each Schedule (Initial, Original and updates) shall indicate all separate fabrication, procurement and field construction activities required for completion of the Work, including but not limited to the following:

1. All Contractor, Subcontractor, and assigned Contractor work shall be shown in a logical work sequence that demonstrates a coordinated plan of work for all contractors. The intent is to provide a common basis of acceptance, understanding, and communication, as well as interface with other contractors.

2. Activities related to the delivery of Contractor and City-furnished equipment to be Contractor-installed per Contract shall be shown.

3. All activities shall be identified through codes or other identification to indicate the building (i.e. buildings, Site work) and Contractor/Subcontractor responsibility to which they pertain.

4. Break up the Work schedule into activities of durations of approximately 21 Days or less each, except for non-field construction activities or as otherwise deemed acceptable by City.

5. Show the critical path in red. For each activity, show early start, late start, early finish, late finish, durations measured in Days, float, resources, predecessor and successor activities, planned workday/week for the activity, man power loading, and scheduled/actual progress payments.

Seasonal weather conditions (which do not constitute a delay as defined herein) shall be considered in the planning and scheduling of all work influenced by high or low ambient temperatures or presence of high moisture for the completion of the Work within the allotted Contract Time.

Failure by Contractor to include any element of Work required for performance of the Work on the detailed construction schedule shall not excuse Contractor from completing all Work required within the Contract Time.

A two-week "look ahead," detailed daily bar chart schedule shall be updated and issued weekly. Utilize computer-scheduling software, such as Microsoft Project software or approved equivalent, for all scheduling including schedule updates.

D. Monthly Schedule Update Submittals

Following acceptance of Contractor's Initial Schedule, monitor progress of Work and adjust Schedule each month to reflect actual progress and any anticipated changes to planned activities.

Each Schedule update submitted shall be complete, including all information requested for the Initial Schedule and Original Schedule submittal.

Each update shall continue to show all Work activities including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed, and Contractor warrants the accuracy of as-built information as shown.

Within five Days after monthly Schedule update, submit the updated Schedule.

Within five Days of receipt of above-noted revised submittals, City review will either indicate REVISE AS NOTED AND RESUBMIT or REJECT monthly schedule update submittal.

1. If REVISE AS NOTED AND RESUBMIT, percent complete shown in monthly update will be basis for Application for Payment by Contractor. The schedule update shall be submitted as part of Contractor's Application for Payment.

2. If REJECTED, update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.

Updating, changing or revising of any report, curve, schedule or narrative submitted to City by Contractor under this Contract, nor City's review of any such report, curve, schedule or narrative shall not have the effect of amending or modifying, in any way, the Contract Substantial Completion date or milestone dates or of modifying or limiting, in any way, Contractor's obligations under this Contract.

E. Schedule Revisions

Updating the Schedule (Initial and Original) to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, however, revisions to activity durations and sequences are expected on a monthly basis.

To reflect revisions to the Schedule, provide City with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of Work, provide a schedule diagram that compares the original sequence to the revised sequence of Work. Provide the written narrative and schedule diagram for revisions three Days in advance of the monthly schedule update. Clearly show and discuss any changes in the critical path.

Schedule revisions shall not be incorporated into any schedule update until City has reviewed the revisions. City may request further information and justification for schedule revisions and, within three Days, provide City with a complete written narrative response to City's request.

If City does not agree with Contractor's revision, and Contractor disagrees with City's position, Contractor has seven Days from receipt of City's letter rejecting the revision, to provide a written narrative providing full justification and explanation for the revision. Contractor's failure to respond in writing within seven Days of City's written rejection of a schedule revision shall be contractually interpreted as acceptance of City's position, and Contractor waives its rights to subsequently dispute or file a claim regarding City's position. If Contractor files a timely response as provided in this paragraph, and the parties are still unable to agree, Contractor's sole right shall be to file a claim as provided in this Document.

At City's discretion, Contractor can be required to provide Subcontractor certifications of performance regarding proposed schedule revisions affecting said Subcontractors.

F. Recovery Schedule

If a Schedule update shows a substantial completion date 21 Days beyond any Contract Substantial Completion date, or individual Milestone completion dates, submit to City within seven Days the proposed revisions to recover the lost time. As part of this submittal, provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, provide a schedule diagram comparing the original sequence to the revised sequence of Work. If City requests, show the intended critical path; secure appropriate Subcontractor and supplier consent to the recovery Schedule; submit a narrative explaining trade flow and construction flow changes, duration changes, added/deleted activities, critical path changes and identify all near critical paths and man hour loading assumptions for major Subcontractors.

The revisions shall not be incorporated into any Schedule update until City has reviewed the revisions. If City does not agree with Contractor's revisions, City and Contractor shall follow the procedures in paragraphs above.

At City's discretion, Contractor can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

G. Time Impact Evaluation (TIE) For Change Orders and Other Delays

When Contractor is directed to proceed with changed work, prepare and submit, within 14 Days from the direction to proceed, a TIE that includes both a written narrative and a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how Contractor proposes to incorporate the changed work in the schedule, and how it impacts the current Schedule update critical path or otherwise. Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram shall be tied to the main sequence of scheduled activities to enable City to evaluate the impact of changed work to the scheduled critical path.

Comply with the requirements of this Section for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.

Contractor is responsible for all costs associated with the preparation of TIEs, and the process of incorporating TIEs into the current schedule update. Provide City with four copies of each TIE.

Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount City allows, and Contractor may submit a claim for additional time claimed by Contractor as provided in this Document.

H. Time Extensions

Contractor is responsible for requesting time extensions for time impacts that, in the opinion of Contractor, impact the critical path of the current schedule update. Notice of time impacts shall be given in accordance with this Document

Where an event for which City is responsible impacts the projected Substantial Completion date, provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. Also include a detailed cost breakdown of the labor, equipment, and material Contractor would expend to mitigate City-caused time impact. Submit mitigation plan to City within 14 Days from the date of discovery of said impact. Contractor is responsible for the cost to prepare the mitigation plan.

Failure to request time, provide TIE, or provide the required mitigation plan will result in Contractor waiving its right to a time extension and cost to mitigate the delay.

No time will be granted under the Contract Documents for cumulative effect of changes.
City will not be obligated to consider any time extension request unless requirements of Contract Documents are complied with.

Failure of Contractor to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.

Notwithstanding any other provision of this Section, if Contractor does not submit a TIE within the required 14 Days for any issue, Contractor hereby agrees that Contractor does not require a time extension for that issue.

I. Project Status Reporting

In addition to submittal requirements for scheduling identified in this Section, provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each Schedule as specified herein. Status reporting shall be in form specified in this paragraph below.

Prepare monthly written narrative reports of status of Project for submission to City. Written status reports shall include:

1. Status of major Project components (percent complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.

2. Progress made on critical activities indicated on each Schedule, including inspections.

3. Explanations for any lack of work on critical path activities planned to be performed during last month.

4. Explanations for any schedule changes, including changes to logic or to activity durations.

5. List of critical activities scheduled to be performed during the next month.

6. Status of major material and equipment procurement.

7. Any delays encountered during reporting period.

8. Provide printed report indicating actual versus planned resource (labor, materials and equipment) loading for each trade and each activity. This report shall be provided on weekly and monthly basis.

    a. Actual resource shall be accumulated in field by Contractor, and shall be as noted on Contractor's daily reports. These reports will be basis for information provided in monthly and weekly printed reports.
    b. Explain all variances and mitigation measures.

9. Contractor may include any other information pertinent to status of Project. Include additional status information requested by City at no additional cost.

10. Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.

At the close of each workday provide City with report of Contractor and its Subcontractors' work activities for that day, including trades, equipment, work activities worked on, staff levels, and equipment deliveries.

7.5 Temporary Suspension of Work

By written order to Contractor, City may suspend the Work wholly or in part for an indefinite period, or for such period as City may deem necessary, for any of the following reasons:

- Weather conditions or other conditions which are unfavorable for the proper prosecution of the Work;
- Failure of Contractor to carry out orders given or to perform any provisions of the Contract; or
- The convenience and benefit of City**.**

Such suspension shall be effective upon receipt by Contractor of the written order suspending the Work and shall be terminated upon receipt by Contractor of the written order terminating the suspension.

If, under authority of Convenience and benefit of City, as stated above, City orders a suspension of all or a portion of the Work, which is the current controlling operation, it will be cause for a time extension if it affects the controlling item of Work.

7.6 Liquidated Damages

In case all the Work called for under the Contract in all parts and requirements is not finished or completed within the number of days as set forth in Document 00520 (Contract), it is agreed that damage will be sustained by City, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which City will sustain in the event of and by reason of such delay; and it is, therefore, agreed that Contractor will pay to City the sum set forth in Document 00520 (Contract) per day for each and every day's delay in finishing the Work in excess of the number of days prescribed; and Contractor agrees to pay said liquidated damages herein provided for, and further agrees that City may deduct the amount thereof from any moneys due, or that may become due, to Contractor under the Contract.

7.7 Termination of Control

Failure to supply an adequate working force or material of proper quality, or in any other respect to prosecute the Work with the diligence and force specified by the Contract, is grounds for termination of Contractor's control over the Work and for taking over the Work by City.

7.8 Termination of Contract for Cause

Contractor shall be in default of the Contract Documents and City may terminate Contractor's right to proceed under the Contract Documents, for cause, should Contractor commit a material breach of the Contract Documents and not cure such breach within ten (10) calendar days of the date of notice from City to Contractor demanding such cure; or, if such breach is curable but not curable within such ten (10) day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Contractor to avail itself of a time period in excess of 10 calendar days, Contractor must provide City within the ten (10) day period with a written plan acceptable to City to cure said breach, and then diligently commence and continue such cure according to the written plan).

In the event of termination by City as provided above for cause, Contractor shall deliver to City possession of the Work in its then condition, including but not limited to, all designs, engineering, Project records, cost data of all types, plans and specifications and contracts with vendors and subcontractors, all other documentation associated with the Project, and all construction supplies and aids dedicated solely to performing the Work which, in the normal course of construction, would be consumed or only have salvage value at the end of the construction period. Contractor shall remain fully liable for the failure of any Work completed and materials and equipment provided through the date of such termination to comply with the provisions of the Contract Documents. The provisions of this Section shall not be interpreted to diminish any right which City may have to claim and recover damages for any breach of the Contract Documents or otherwise, but rather, Contractor shall compensate City for all loss, cost, damage, expense, and/or liability suffered by City as a result of such termination and failure to comply with the Contract Documents.

In the event a termination for cause is later determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience, and Contractor shall have no greater rights than it would have had following a termination for convenience. Any Contractor claim arising out of a termination for cause shall be made in accord with Section 9 herein. No other loss, cost, damage, expense or liability may be claimed, requested or recovered by Contractor.

7.9 Termination of Contract for Convenience

A. City may terminate performance of the Work under the Contract Documents in accordance with this clause in whole, or from time to time in part, whenever City shall determine that termination is in City's best interest. Termination shall be effected by City delivering to Contractor notice of termination specifying the extent to which performance of the Work under the Contract Documents is terminated and the effective date of the termination.

B. After receiving a notice of termination, and except as otherwise directed by City, Contractor shall:

1. Stop Work under the Contract Documents on date and to extent specified in notice of termination;
2. Place no further orders or subcontracts for materials, services, or facilities except as necessary to complete portion of Work under the Contract Documents which is not terminated;
3. Terminate all orders and subcontracts to extent that they relate to performance of Work terminated by the notice of termination;
4. Assign to City in manner, at times, and to extent directed by City, all right, title, and interest of Contractor under orders and subcontracts so terminated. City shall have the right, in its sole discretion, to settle or pay any or all claims arising out of termination of orders and subcontracts;
5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with approval or ratification of City to extent City may require. City's approval or ratification shall be final for purposes of this section;
6. Transfer title to City, and deliver in the manner, at the times, and to the extent, if any, directed by City, all fabricated or un-fabricated parts, Work in process, completed Work, supplies, and all other material produced as part of, or acquired in connection with performance of, Work terminated by the notice of termination, and completed or partially completed drawings, drawings, specifications, information, and other property which, if the Project had been completed, would have been required to be furnished to City;
7. Use its best efforts to sell, in manner, at times, to extent, and at price or prices that City directs or authorizes, any property of types referred to in preceding paragraph, but Contractor shall not be required to extend credit to any purchaser, and may acquire any such property under conditions prescribed and at price or prices approved by City. Proceeds of transfer or disposition shall be applied to reduce payments to be made by City to Contractor under the Contract Documents or shall otherwise be credited to the price or cost of Work covered by Contract Documents or paid in such other manner as City may direct;
8. Complete performance of the part of the Work which was not terminated by the notice of termination; and
9. Take such action as may be necessary, or as City may direct, to protect and preserve all property related to Contract Documents which is in Contractor's possession and in which City has or may acquire interest.

C. After receipt of a notice of termination, Contractor shall submit to City its termination claim, in form and with all certifications required by Section 9. Contractor's termination claim shall be submitted promptly, but in no event later than 6 months from effective date of the termination. Contractor and City may agree upon the whole or part of the amount or amounts to be paid to Contractor because of a total or partial termination of Work under this Section. If Contractor and City fail to agree on the whole amount to be paid to Contractor because of the termination of the Work under this Section, City's total liability to Contractor by reason of the termination shall be the total (without duplication of any items) of:

1. The reasonable cost to Contractor, without profit, for all Work performed prior to the effective date of the termination, including Work done to secure the Project for termination. Reasonable cost may not exceed the applicable percentage completion values derived from the progress schedule and the schedule of values. Deductions shall be made for cost of materials to be retained by Contractor, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits against cost of Work. Reasonable cost will include reasonable allowance for Project overhead and general administrative overhead not to exceed a total of ten percent of direct costs of such Work. When, in City's opinion, the cost of any item of Work is excessively high due to costs incurred to remedy or replace defective or rejected Work, reasonable cost to be allowed will be the estimated reasonable cost of performing the Work in compliance with requirements of Contract Documents and excessive actual cost shall be disallowed.

2. A reasonable allowance for profit on cost of Work performed as determined in the preceding paragraph, provided that Contractor establishes to City's satisfaction that Contractor would have made a profit had the Project been completed, and provided further that the profit allowed shall not exceed 5 percent of cost.

3. Reasonable costs to Contractor of handling material returned to vendors, delivered to City or otherwise disposed of as directed by City.

4. A reasonable allowance for Contractor's internal administrative costs in preparing termination claim.

5. Except as provided in this Section, City shall not be liable for costs incurred by Contractor or Subcontractors after receipt of a notice of termination. Such non-recoverable costs include, but are not limited to, anticipated profits on Work not performed as of the date of termination, post-termination employee salaries, post-termination general administrative expenses, post-termination overhead or unabsorbed overhead, costs of preparing and submitting Contractor's Bid, attorney's fees of any type, and all costs relating to prosecution of claim or lawsuit.

6. City shall have no obligation to pay Contractor under this Section unless and until Contractor provides City with updated and acceptable as-builts and Project Record Documents for Work completed prior to termination.

D. In arriving at the amount due Contractor under this clause, there shall be deducted in whole (or in the appropriate part[s] if the termination is partial):

1. All unliquidated advances or other payments on account previously made to Contractor, including without limitation all payments applicable to the terminated portion of Contract Documents;

2. Any claim which City may have against Contractor in connection with Contract Documents; and

3. The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by Contractor or sold under provisions of this Section, and not otherwise recovered by or credited to City.

7.10 Contractor's Cost Data

Contractor shall maintain cost accounting records for the contract pertaining to, and in such a manner as to provide a clear distinction between, the following six categories of costs of work during the life of the contact:

A. Direct costs of contract item work.

B. Direct costs of changes in character in conformance with Section 3.3, Change in Work.

C. Direct costs of extra work in conformance with Section 3.3, Change in Work.

D. Direct costs of work not required by the contract and performed for others.

E. Direct costs of work performed under a notice of potential claim in conformance with the provisions in Section 9.

F. Indirect costs of overhead.

See also section 3.4, Change in Contract Price, regarding cost accounting records for daily extra work.

City shall have the right to inspect, audit, and copy Contractor's books and records related to the Project wherever located, and to inspect the Site, including Contractor's trailer, or other job Site office, and this requirement shall be contained in the subcontracts of Subcontractors working on Site. Contractor shall maintain in good order and City shall have the right to inspect and obtain copies of the following documents at all times: all Contract Documents, all planning and design documents, all Bid Documents, all design modification proposals, all value engineering or other cost reduction proposals, all revisions made to the original design, and all job progress reports and photographs, and as-built drawings maintained by Contractor.

City or any of its duly authorized representatives shall, from start of work until the expiration of 4 years after filing the Notice of Completion and Acceptance under this Contract or any subcontract under it, have access to and the right to examine any of Contractor's or subcontractor's payrolls, records of personnel, invoices of materials, records of plant and equipment costs, and any and all other directly pertinent books, documents, papers, and records of such Contractor or subcontractors, involving transactions related to said Contract or subcontracts. In the event State or Federal funds are involved in the financing of the project, the State or Federal Government shall have the same rights of inspection as City.

The cost accounting records for this Contract shall be maintained separately from other contracts during the life of this Contract, and for a period of not less than 3 years after the date of acceptance of the Work. If Contractor intends to file claims against City, Contractor shall keep all required cost accounting records until complete resolution of all claims has been reached.

7.11 Coordination with Utilities

In general, the location of existing utility facilities as shown on the Drawings is approximate. This information has been obtained from utility maps furnished by the various agencies involved, and City does not guarantee either the correctness of locations or the extent of such locations.

Service laterals, such as house sanitary, water, electrical, gas, cable TV, storm or telephone cables, or appurtenances, may not all be shown on the Drawings. City may not indicate the presence of service laterals or appurtenances whenever the presence of such utilities can be inferred from the presence of other visible facilities, such as buildings, meter boxes or junction boxes, on or adjacent to the construction Site. No changes in the Contract Price or Contract time will be made due to the presence of unidentified or incorrectly located service laterals or appurtenances. It shall be the responsibility of Contractor to ascertain the exact location of the utility facilities.

Unless otherwise indicated on the Drawings or specified in the Specifications, Contractor shall maintain in service all utilities including house services, power, lighting, and telephone conduits, and any other surface or subsurface structure or facility of any nature that may be affected by the Work; provided, however, that Contractor, for convenience, may arrange with the owner to temporarily disconnect house service lines or other facilities along the line of the work. The cost of disconnecting and restoring such utilities shall be borne by Contractor.

In the event that a main or trunk line utility facility is encountered which interferes with the Work and is neither shown on the Drawings nor specified in the Specifications, Contractor shall immediately notify City in writing. City will either have the appropriate utility company or public agency relocate the facility, or City will direct Contractor to relocate the facility in accordance with Section 3.3, Change in Work.

In the event that a main or trunk line utility facility is encountered which interferes with the Work and which Contractor believes is not shown on the Drawings or indicated in the Specifications with reasonable accuracy, Contractor shall immediately notify City in writing. Reasonable accuracy is defined as being within the tolerances noted on the Drawings. If City determines that the main or trunk line utility facility was shown on the Drawings or indicated in the Specifications with reasonable accuracy, Contractor shall be solely responsible for relocation or removal, and no additional time will be granted nor will additional compensation be made for any additional work required. If City determines that the main or trunk line utility facility was not shown on the

Drawings or indicated in the Specifications with reasonable accuracy, City will either have the appropriate utility company or public agency relocate the facility, or City will direct Contractor to relocate the facility in accordance with Section 3.3, Change in Work.

When a delay in the completion of the project is caused by the failure of City or the owner of a utility facility to provide for removal or relocation of existing main or trunk line utility facilities which are not shown on the Drawings or indicated in the Specifications, or which are not shown on the Drawings or indicated in the Specifications with reasonable accuracy, the Contract time will be extended in accordance with Section 3.5, Change of Contract Time.

7.12 Temporary Facilities

A. Temporary Electricity

Contractor shall provide, maintain, and pay for electrical power at the Site for construction purposes and for Contractor's and Construction Manager's trailers. Contractor must provide all necessary wiring and appurtenances for connection to City's system.

B. Temporary Communications

Provide, maintain, and pay for all applicable communications and data services, without limitation, to Contractor's field office commencing at time of Project mobilization, including all installation and connection charges.

C. Temporary Water

1. Provide, maintain, and pay for suitable quality water service required for construction operations.

2. All water required for and in connection with the Work, including without limitation for dust control, shall be furnished by and at the expense of Contractor. Contractor will be responsible for all costs/fees associated with water usage. Contractor shall furnish necessary pipe, hose, nozzles, meter, and tools and perform all necessary labor. Unnecessary waste of water will not be permitted. Special hydrant wrenches shall be used for opening and closing fire hydrants; in no case shall pipe wrenches be used for this purpose. Contractor to coordinate services with the appropriate Water Company.

D. Fence

1. All existing fences affected by the Work shall be maintained by Contractor until Final Completion. Fences which interfere with construction operations shall not be relocated or dismantled until City gives written permission to do so, and the period the fence may be left relocated or dismantled has been agreed upon. Where fences must be maintained across the construction easement, adequate gates shall be installed. Gates shall be kept closed and locked at all times when not in use.

2. On completion of the Work across any tract of land, Contractor shall restore all fences to their original or to a better condition and to their original locations. Contractor will be responsible for all costs associated with the relocating of the fence as required for new installation of work.

E. Temporary Sanitary Facilities

1. Provide and maintain required temporary buildings with sanitary toilets for use of all workers. At a minimum, sanitary facilities shall be located at trailer site, staging area, and adjacent to work area and as far away from adjacent residences as possible. Location must be approved by City prior to placement.

2. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 persons. Contractor shall enforce the use of such sanitary facilities by all personnel at the Site.

3. Comply with all minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

7.13 Project Record Documents

A. Project Record Drawings

1. During the construction period, maintain a set of prints of Contract Drawings and Shop Drawings for Project Record Documents purposes. Label each document (on first sheet or page) "PROJECT RECORD" in 2-inch high printed letters. Keep record documents current. Note: A reference by number to a Change Order, CCD, RFI, RFQ, RFP, Field Order or other such document is not acceptable as sufficient record information on any record document. Do not permanently conceal any Work until required information has been recorded

2. Mark the PROJECT RECORD drawings to indicate the actual installation where the installation varies appreciably from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

- Dimensional changes to the Drawings
- Revisions to details shown on the Drawings
- Depths of various elements of foundation level or survey datum
- Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements
- Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure
- Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub outs, invert elevations, and similar items
- Actual numbering of each electrical circuit
- Field changes of dimension and detail
- Revisions to routing of piping and conduits
- Revisions to electrical circuitry
- Actual equipment locations
- Duct size and routing
- Changes made by Change Order or CCD
- Details not on original Contract Drawings
- Mark completely and accurately Project Record Drawing prints of Contract Drawings or Shop Drawings, whichever is the most capable of showing actual physical conditions. Where Shop Drawings are marked, show cross-reference on Contract Drawings location.
- Mark Project Record Drawing sets with red, erasable colored pencil; use other colors to distinguish between changes for different categories of the Work at the same location.
- Mark important additional information that was either shown schematically or omitted from original Drawings.
- Note CCD numbers; alternate numbers, Change Order numbers, and similar identification.

- Responsibility for Mark-up: Where feasible, the individual or entity who obtained Project Record Drawing data, whether the individual or entity is the installer, Subcontractor, or similar entity, is required to prepare the mark-up on Project Record Drawings.
  - (a) Accurately record information in an understandable and legible drawing technique.
  - (b) Record data as soon as possible after it has been obtained. In the case of concealed installations, record and check the mark-up prior to concealment.

3. Preparation of Record Drawings: Immediately prior to inspection for Certification of Substantial Completion, review completed marked-up Project Record Drawings with City. When authorized, prepare a full set of correct transparencies of Contract Drawings and Shop Drawings.
   - a. Incorporate changes and additional information previously marked on print sets. Erase, redraw, and add details and notations where applicable. Identify and date each Drawing; include the printed designation "PROJECT RECORD DRAWING" in a prominent location on each Drawing.
   - b. Refer instances of uncertainty to City for resolution.
   - c. Distribution: Whether or not changes and additional information were recorded, organize and bind original marked-up set of prints that were maintained during the construction period into manageable sets. Bind the set with durable paper cover sheets, with appropriate identification, including titles, dates, and other information on cover sheets.
4. Distribution of Marked-Up Drawings: Submit the marked-up Project Record Drawings set to City for City's records.
5. Shop Drawings and Samples: Maintain as record documents; legibly annotate Shop Drawings and Samples to record changes made after review.

B. Project Record Specifications

During the construction period, maintain one copy of the Project Specifications, including addenda and modifications issued, for Project Record Documents purposes.

Mark the Project Record Specifications to indicate the actual installation where the installation varies substantially from that indicated in Specifications and Modifications issued. Note related Project Record Drawing information, where applicable. Give particular attention to substitutions, selection of product options, Change Order and Construction Change Directive work, and information on concealed installation that would be difficult to identify or measure and record later.

1. In each Specification Section where products, materials or units of equipment are specified or scheduled, mark the copy with the proprietary name and model number of the product furnished.
2. Record the name of the manufacturer, catalog number, supplier and installer, and other information necessary to provide a record of selections made and to document coordination with Project Record Product Data submittals and maintenance manuals.
3. Note related Project Record Product Data, where applicable, for each principal product specified, indicate whether Project Record Product Data has been submitted in maintenance manual instead of submitted as Project Record Product Data.
4. Upon completion of mark-up, submit Project Record Specifications to City for City's records.

C. Additional Requirements for Final Project Record Documents

1. Prior to Substantial Completion of the Work, City will make available to Contractor originals of the Drawings and Specifications, as current Microsoft® Word for Windows, and current AutoCAD Land Development Desktop for Windows in drawing format (.DWG) files. Note all changes thereon for the final Project Record Documents and provide one set of mylar

reproducibles, one set of revised Specifications and one set of disks or CDs to be submitted to City.

2. After Substantial Completion and before Final Completion, carefully transfer all data shown on the job set of Record Drawings to the corresponding computer files, coordinating the information as required.

   Clearly indicate at each affected detail and other drawings a full description of changes made during construction, and the actual location of items as previously specified.

   "Cloud" all affected areas.

   Stamp each Record Drawing with the following information:

   a. Project Record Document.
   b. Prepared by: Contractor's name, permanent address.
   c. Date prepared.
   d. Contractor's signature.
   e. City Project Number.

D. Project Record Product Data

1. During the construction period, maintain one copy of each Project Record Product Data submittal for Project Record Document purposes.
   a. Mark Project Record Product Data to indicate the actual product installation where the installation varies substantially from that indicated in Project Record Product Data submitted. Include significant changes in the product delivered to the Site, and changes in manufacturer's instructions and recommendations for installation.
   b. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
   c. Note related Change Orders and mark-up of Project Record Drawings, where applicable.
   d. Upon completion of mark-up, submit a complete set of Project Record Product Data to City for City's records.
   e. Where Project Record Product Data is required as part of maintenance manuals, submit marked-up Project Record Product Data as an insert in the manual, instead of submittal as Project Record Product Data.
   f. Contractor is responsible for mark-up and submittal of Project Record Product Data for its own Work.
2. Material, Equipment, and Finish Data:
   a. Provide data for primary materials, equipment and finishes as required under each Specification Section.
   b. Submit two sets prior to final inspection, bound in 8-1/2 inches by 11 inches three-ring binders with durable plastic covers; provide typewritten table of contents for each volume.
   c. Arrange by Specification Section number and give names, addresses, and telephone numbers of Subcontractors and suppliers. List:
      - Trade names.
      - Model or type numbers.
      - Assembly diagrams.
      - Operating instructions.
      - Cleaning instructions.
      - Maintenance instructions.
      - Recommended spare parts.
      - Product data.

E. Miscellaneous Project Record Submittals

Refer to other Specification Sections for miscellaneous record keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready

for use and reference. Submit to the City for City's records. Categories of requirements resulting in miscellaneous records include, but are not limited to, the following:

- Field records on excavations and foundations
- Field records on underground construction and similar work
- Survey showing locations and elevations of underground lines
- Invert elevations of drainage piping
- Surveys establishing lines and levels
- Authorized measurements utilizing unit prices or allowances
- Records of plant treatment
- Ambient and substrate condition tests
- Certifications received in lieu of labels on bulk products
- Batch mixing and bulk delivery records
- Testing and qualification of tradespersons
- Documented qualification of installation firms
- Load and performance testing
- Inspections and certifications by governing authorities
- Leakage and water-penetration tests
- Fire resistance and flame spread test results
- Final inspection and correction procedures

F. Recording

Post changes and modifications to the Contract Documents as they occur. Do not wait until the end of the Project. City may periodically review Project Record Documents to assure compliance with this requirement.

G. Submittal

1. At completion of Project, deliver Project Record Documents to City.
2. Accompany submittal with transmittal letter containing:
   a. Date
   b. Project title and number
   c. Contractor's name and address
   d. Number and title of each Project Record Document
   e. Certification that each document as submitted is complete and accurate, and signature of Contractor or Contractor's authorized representative.

7.14 Preconstruction Conference

City will call for and administer Preconstruction Conference at time and place to be announced (usually the week prior to start of Work at the Site).

Contractor, all major Subcontractors, and major suppliers shall attend Preconstruction Conference.

Agenda will include, but not be limited to, the following items.

- Schedules
- Personnel and vehicle permit procedures
- Use of premises
- Location of the Contractor's on-Site facilities
- Security
- Housekeeping
- Submittal and RFI procedures
- Inspection and testing procedures, on-Site and off-Site
- Utility shutdown procedures
- Control and reference point survey procedures
- Injury and Illness Prevention Program
- Contractor's Initial Schedule
- Contractor's Schedule of Values
- Contractor's Schedule of Submittals

City will distribute copies of minutes to attendees. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Preconstruction Conference.

7.15 Weekly Progress Meeting

City will schedule and administer weekly progress meetings throughout duration of Work. Progress meetings will be held weekly unless otherwise directed by City.

Meetings shall be held at Contractor's on-Site office unless otherwise directed by City.

An City representative will prepare agenda and distribute it 4 Days in advance of meeting to Contractor.

City will record. Within 3 Days after meeting, City will distribute minutes to Contractor, who will distribute to those affected by decisions made at meeting. Attendees can either submit comments or additions to minutes prior to the next progress meeting, or may attend the next progress meeting and submit comments or additions there. Minutes will constitute final memorialization of results of meeting.

Progress meetings shall be attended by Contractor's job superintendent, major Subcontractors and suppliers, City, and others as appropriate to agenda topics for each meeting.

Agenda will contain the following items, as appropriate:

- Review, revise as necessary, and approve previous meeting minutes
- Review of Work progress since last meeting
- Status of Construction Work Schedule, delivery schedules, adjustments
- Submittal, RFI, and Change Order status
- Review of the Contractor's safety program activities and results, including report on all serious injury and/or damage accidents
- Other items affecting progress of Work

7.16 Right of Way Delays

If, through the failure of the City to acquire or clear right of way, Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment and plant, there shall be paid to the Contractor that amount that the Engineer may find to be a fair and reasonable compensation for that part of the Contractor's actual loss, that, in the opinion of the Engineer, was unavoidable, determined as follows:

Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the performance of extra work paid for on a force account basis, as provided in Section 3.04 of this document with the following exceptions:

- The right of way delay factor for each classification of equipment shown in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates, which is a part of the contract, will be applied to that equipment rental rate.
- The time for which the compensation will be paid will be the actual normal working time during which the delay condition exists, but in no case will exceed 8 hours in any one day.
- The days for which compensation will be paid will be the calendar days, excluding Saturdays, Sundays and legal holidays, during the existence of the delay, except that when rental of equipment is paid for under the provisions in Section 3.4, Change in Contract Price, no payment will be made for right of way delays in conformance with the provisions of Section 7.11, Coordination with Utilities.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of workers, cost of extra moving of equipment and cost of longer hauls. Compensation for idle time of equipment will be determined as provided in this Section and compensation for idle time of workers will be determined as provided in Section 3.4, Change in Contract Price, and no markup will be added in either case for overhead and profit.

The cost of extra moving of equipment and the cost of longer hauls will be paid for as extra work as provided in Section 3.3, Change in Work.

If performance of the Contractor's work is delayed as the result of the failure of the City to acquire or clear right of way, an extension of time determined pursuant to the provisions in Section 7.6, Liquidated Damages, will be granted.

SECTION 8. MEASUREMENT AND PAYMENT

8.1 Measurement of Quantities

All Work except Work based on time and materials will be paid for at a contract price per unit of measurement and will be measured by City in accordance with the United States Standard Measures and Metric. Unless otherwise specifically provided, City will compute quantities by a method which, in City's opinion, is best suited to obtain an accurate determination. The weights of metalwork, pipe, and other metal parts to be paid for on the basis of weight, will be determined by City. City will not provide scales for weighing material. City will determine the weight of each part or item in the most practicable manner and will use for that purpose manufacturer's weights, or in their absence, catalog weights or estimated weights, in that order; provided, that weights of nonmetallic coatings will be excluded.

8.2 Deductions from Payments

City may, at its option and at any time, retain out of any amounts due Contractor, sums sufficient to cover claims, filed pursuant to Section 3179 et seq. of the Civil Code.

8.3 Progress Payment

Unless otherwise agreed, Contractor shall submit to City, on or before the first (1st) day of each month, five (5) copies of a request for payment for the cost of the Work put in place during the period from the 1st day of the previous month to the 30th day of the previous month. Such requests for progress payments shall be based upon prices of all labor and acceptable materials incorporated in the Work up until midnight of the last day of that one month period, less the aggregate of previous payments. If Contractor is late submitting its payment request, that payment request may be processed at any time during the succeeding one month period, resulting in processing of Contractor's payment request being delayed for more than a day for day basis.

Acceptable materials shall be those materials which will become a part of the finished construction work. The basis for partial payments of lump sum or other unit Contract items will be determined by Contract between City and Contractor. City shall retain 5 percent of such estimated value of work done and 5 percent of the value of the materials so estimated to have been furnished and delivered and unused as aforesaid, and shall pay to Contractor, while carrying on the Work, the balance not retained as aforesaid, after deducting therefrom all previous payments and all sums to be kept or retained under the provisions of the Contract. No such estimate or payment shall be required to be made when, in the judgment of City, the Work is not proceeding in accordance with the provisions of the Contract, or when, in City's judgment, the total value of the Work done since the last estimate amounts to less than $1,000. No such estimate or payment shall be considered to be an acceptance of any defective Work or improper materials. All progress estimates and payments shall be subject to correction in the final estimate.

Contractor shall, at the time any payment request is submitted, certify in writing the accuracy of the payment request and that Contractor has fulfilled all scheduling requirements of this Document 00700 including updates and revisions. The certification shall be executed by a responsible officer of Contractor.

When an item of work is designated as (F) in the Bid Form, (Document 00400), the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, or the item or any portion of the item is eliminated. If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions, except as otherwise provided for minor structures in Caltrans Standard Specifications, Section 51, "Measurement." If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as (F) in the Bid Form, (Document 00400) shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantity shown in the Bid Form for a final pay item and the quantity or summation of quantities for the same item shown on the plans, payment will be based on the quantity shown in the Bid Form.

When an item of work is designated as (P) in the Bid Form, (Document 00400), a portion of the estimated quantity for that item of work shall be eligible for partial payment.

8.4 Final Payment

As soon as practicable after Final Acceptance of the Work, Contractor shall submit to City five (5) copies of a final request for payment for the cost of the Work, which request will show deductions for prior payments and any other amounts to be retained under Section 8.2, Deduction from Payments. The amount determined due, less the amount retained, will be paid. This retained amount will not be due or payable until 35 days after the completion of all of the Work including punch list items and the recording of Notice of Completion and Final Acceptance in the manner provided by law, and until after Contractor has furnished City a release of any and all claims by Contractor or Subcontractors (Document 00650) against City arising by virtue of this Contract, except such claims in definite amounts as Contractor may specifically exempt from the operation of the release and the furnishing of any guaranty.

8.5 Scope of Payment

Payment for all items of Work at the unit or lump sum price shall be considered as full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the item of Work, and no additional allowance will be made therefor.

Payment for items of Work which are called for in the Specifications or shown on the Drawings but which are not separately identified in the Bid form shall be compensated as part of the bid price of one or more of the items which are listed, and no additional allowance will be made therefor.

8.6 Substitution Of Securities In Lieu Of Retention

Pursuant to provisions of Public Contract Code Section 22300, substitution of securities for any monies withheld under the Contract Documents to insure performance is permitted under following conditions:

At request and expense of Contractor, securities listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and City which are equivalent to the amount withheld under retention provisions of the Contract Documents shall be deposited with Controller or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such monies to Contractor. Upon final acceptance and 35 days after the completion of all of the work including punch list items and the recording of the Notice of Completion, securities shall be returned to Contractor.

Alternatively, Contractor may request and City shall make payment of retentions earned directly to the escrow agent at the expense of Contractor. At the expense of Contractor, Contractor may direct the investment of the payments into securities and Contractor shall receive the interest earned on the investments upon the same terms provided for in this section for securities deposited by Contractor. Upon final acceptance and 35 days after the completion of all of the work including punch list items and the recording of the Notice of Completion, Contractor shall receive from escrow agent all securities, interest, and payments received by the escrow agent from City, pursuant to the terms of this section. Contractor shall pay to each subcontractor, not later than twenty (20) Days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each subcontractor, on the amount of retention withheld to insure the performance of Contractor.

Contractor shall be beneficial owner of securities substituted for monies withheld and shall receive any interest thereon.

Contractor shall enter into escrow agreement according to Document 00680 (Escrow Agreement), as authorized under Public Contract Code Section 22300, specifying amount of securities to be deposited, terms and conditions of conversion to cash in case of default of Contractor, and termination of escrow upon completion of the Contract Work.

8.7 Effect of Payment

Payment will be made by City, based on City's observations at the Site and the data comprising the Application for Payment. Payment will not be a representation that City has:

- Made exhaustive or continuous on-Site inspections to check the quality or quantity of Work;
- Reviewed construction means, methods, techniques, sequences, or procedures;
- Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by City to substantiate Contractor's right to payment; or made examination to ascertain how or for what purpose Contractor has used money previously paid on account of the Contract Sum.

SECTION 9. CLAIMS BY CONTRACTOR

9.1 General

A Contract Interpretation Disputes:

Should it appear to Contractor that the Work to be performed or any of the matters relative to the Contract Documents are not satisfactorily detailed or explained therein, or should any questions arise as to the meaning or intent of the Contract Documents, Contractor shall give written notice to City. Contractor shall bear all costs incurred in the giving of such notice. All issues regarding the interpretation of the Specifications shall be referred to City for interpretation and determination. City shall have the right but not the obligation to affirm or disaffirm any City interpretation of the Plans or Specifications, which affirmance or disaffirmance shall be final. All issues regarding the Contract Documents shall be determined by City whose determination shall be final. If Contractor should disagree with City's determination regarding any aspect of the Contract Documents, Contractor's sole and exclusive remedy is to file a claim in accordance with this Section. Notwithstanding and pending the resolution of any claim, Contractor shall diligently prosecute the Disputed Work (as defined in following paragraphs) to Final Completion.

B Work Disputes:

Should any dispute arise under the Contract Documents respecting the true value of any Work performed, the implementation of the Work required by the Contract Documents, any Work omitted, any extra Work which Contractor may be required to perform or time extensions, respecting the size of any payment to Contractor during the performance of the Contract Documents, or of compliance with Contract Documents procedures, the dispute shall be decided by City and its decision shall be final and conclusive. If Contractor disagrees with City's decision, Contractor's sole and exclusive remedy is to file a claim in accordance with this Section. Notwithstanding and pending the resolution of any claim, Contractor shall diligently prosecute the Disputed Work to Final Completion.

The claim notice and documentation procedure described in this Section applies to all claims and disputes arising under the Contract Documents, including without limitation any claim or dispute by any Subcontractor or material supplier. All Subcontractor and supplier claims of any type shall be brought only through Contractor as provided in this Section. Under no circumstances shall any Subcontractor or supplier make any direct claim against City.

"Claim" means a written demand or written assertion by Contractor seeking, as a matter of right, the payment of money, the adjustment or interpretation of the Contract Documents terms, or other relief arising under or relating to the Contract Documents. In order to qualify as a "claim," the written demand must state that it is a claim submitted under this Section.

A voucher, invoice, payment application, or other routine or authorized form of request for payment is not a claim under the Contract Documents. If such request is disputed as to liability or amount, then the disputed Portion of the submission may be converted to a claim under the Contract Documents by submitting a separate claim in compliance with claim submission requirements.

The provisions of this Section constitute a non-judicial claim settlement procedure, and also a claim presentment procedure by agreement under Section 930.2 of the Government Code, shall survive termination or completion of the Contract Documents, and may not be changed, waived, modified, or its requirements reduced absent a written change order approval by City Council. Contractor shall bear all costs incurred in the preparation and submission of a claim. Pursuant to Government Code Section 930.2, the one-year period in Government Code section 911.2 shall be reduced to 150 days. Any claims presented in accordance with the Government Code shall affirmatively indicate Contractor's prior compliance with the claims procedure herein and previous dispositions under Section 9.2, Procedures, below.

Contractor shall impose the claim notice and documentation requirements in this Contract on Contractor's subcontractors of all tiers, and require them to submit to Contractor all claims against Contractor and/or City within the times and containing the documentation required by this Section. The claim notice and documentation procedure described in this Section applies to all claims and disputes arising under the Contract Documents, whether or not specifically referred to in any specific Portion of the Contract. Government Code Section 930.2 et. seq. applies to this procedure.

9.2 Procedures

Should any clarification, determination, action or inaction by City, Work, or any other event, in the opinion of Contractor, exceed the requirements of or not comply with the Contract Documents, or otherwise result in Contractor seeking additional compensation in time or money for any reason (collectively "Disputed Work"), then Contractor and City shall make good faith attempts to resolve informally any and all such issues, claims and/or disputes.

A. Before commencing the Disputed Work, or within seven (7) Days after Contractor's first knowledge of the Disputed Work, whichever is earlier, Contractor must file a written notice of the Disputed Work with City stating clearly and in detail its objection and reasons for contending the Work or interpretation is outside the requirements of the Contract Documents.

1. If a written notice of Disputed Work is not issued within this time period, or if Contractor proceeds with the Disputed Work without first having given the notice required by this Section, Contractor shall waive its rights to further claim on the specific issue.

B. City will review Contractor's timely notice of Disputed Work and provide a decision within 15 days and Owners' written decision shall be final and conclusive. Prior to making its decision, the City may at its discretion request a meeting with Contractor to discuss the Disputed Work

1. If, after receiving the decision, Contractor agrees with it, it shall so notify the City, in writing, within seven (7) Days after receiving the decision.

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2. If, after receiving the decision, Contractor disagrees with it or still considers the Work required of it to be outside of the requirements of the Contract Documents, it shall so notify City, in writing, within seven (7) Days after receiving the decision, that a formal claim will be issued.

a. Within thirty (30) Days of receiving the decision, Contractor shall submit its claim in the form specified herein and all arguments, justification, cost or estimates, schedule analysis, and detailed documentation supporting its position.

3. Contractor's failure to furnish notification within seven (7) Days and all justifying documentation within thirty (30) Days will result in Contractor waiving its right to the subject claim.

4. If Disputed Work persists longer than thirty (30) days, then Contractor shall, every thirty (30) days until the Disputed Work ceases, submit to City a document titled "Claim Update" which shall update and quantify all elements of the Claim as completely as possible.

a. Contractor's failure to submit a Claim Update or to quantify costs every thirty (30) days shall result in waiver of the claim for that thirty (30) day period.

5. Claims or Claim Updates stating that damages will be determined at a later date shall not comply with this Section and shall result in Contractor waiving its claim(s).

C. Upon receipt of Contractor's formal claim including all arguments, justifications, cost or estimates, schedule analysis, and documentation supporting its position as previously stipulated, City or its designee will review the issue and render a final determination.

1. City may in its discretion conduct an administrative hearing on Contractor's claim, in which case Contractor shall appear, participate, answer questions and inquiries, and present any further evidence or analysis requested by City to evaluate and decide Contractor's claim.

D. If Contractor's claims at project completion total less than $375,000, then claims resolution shall proceed in the manner prescribed by Section 1.5, Chapter 1, Part 3 of Division 2 of the California Public Contract Code. If such claims exceed $375,000, then Contractor shall prepare a compendium of claims not resolved as a result of these procedures, and submit them in a claim submitted under the Government Claims Act, Government. Code Section 901 *et seq.*, for final investigation and consideration of their settlement prior to initiation of any litigation thereon, as required by Government Code Section 945.4. For all claims under or over $375,000, pursuant to Government Code Section 930.2, the one-year period in Government Code Section 911.2 shall be reduced to 150 days.

E. Claims shall be calculated in the same manner as Change Orders per Section 3, Scope of Work. Except where provided by law, or elsewhere in these contract documents, if applicable, City shall not be liable for special or consequential damages. Contractor shall be limited in it's recovery on claims to the change order calculations set forth in Section 3, Scope of Work.

9.3 Claim Format

Contractor shall submit the claim justification in the following format: (a) Cover letter and certification of the accuracy of the contents of the claim, (b) summary of claim including underlying facts, entitlement, quantum calculations and Contract Document provisions supporting relief, (c) list of documents relating to claim including specifications, Plans, clarifications/requests for information, schedules, cost calculations, and other supporting documents, (d) chronology of events and correspondence, (e) analysis of claim merit, (f) analysis of claim cost, and (g) attach supporting documents referenced in (c).

9.4 Mediation

All claims not subject to the claim resolution procedures set forth in Section 9.2, Procedures, shall, as a condition precedent to litigation thereon, first be mediated. Mediation shall be non-binding and utilize the services of a mediator mutually acceptable to the parties, and, if the parties cannot agree, a mediator selected by the American Arbitration Association from its panel of approved mediators trained in construction industry mediation. All statutes of limitation shall be tolled from the date of the demand for mediation until a date two weeks following the mediation's conclusion. All unresolved claims shall be submitted to the same mediator. The cost of mediation shall be equally shared.

9.5 Exclusive Remedy

Contractor's performance of its duties and obligations specified in this Section and submission and mediation of a claim as provided in this Section is Contractor's sole and exclusive remedy for the payment of money, extension of time, the adjustment or interpretation of Contract Documents terms or other contractual or tort relief arising from the Work. This exclusive remedy and the limitation of liability (expressed herein and elsewhere throughout the Contract Documents) apply notwithstanding the completion, termination, suspension, cancellation, breach or rescission of the Work or the Contract Documents, negligence or strict liability by City,

its representatives, consultants or agents, or the transfer of the Work or the Project to City for any reason whatsoever. Contractor waives all claims of waiver, estoppel, release, bar, or any other type of excuse for non-compliance with the claim submission requirements. Compliance with the claim submission and mediation procedures described in this Section is a condition precedent, and a prerequisite within the meaning of Section 930.6 of the Government Code, to the right to commence litigation or to seek to file a Government Code Claim (where applicable) or to commence any other legal action. No claim or issue not raised in a timely protest and timely claim submitted under this Section may be asserted in any Government Code Claim, in any subsequent litigation, or in any legal action. If Contractor fails to raise any claim(s) or issue(s) in a timely protest and timely claim submitted under this Section, then Contractor may not thereafter assert such claim(s) or issue(s) in any Government Code Claim, subsequent litigation, or legal action. City shall not be deemed to have waived any provision under this Section, if at City's sole discretion, a claim is accepted in a manner not in accord with Section.

END OF DOCUMENT

DOCUMENT 00800

SPECIAL CONDITIONS

PART 1 GENERAL

1.1 SUMMARY

A. Document includes summary of Work including:
- 1.2 Work Covered By Contract Documents
- 1.3 Bid Items, Allowances, and Alternates
- 1.4 Work Under Other Contracts
- 1.5 Contract Time
- 1.6 Work Sequence
- 1.7 Work Days and Hours and Noise Disturbances
- 1.8 Cooperation of Contractor and Coordination with Other Work and Continued Use of The Site
- 1.9 Maintenance, Product Handling, and Protection
- 1.10 Partial Occupancy/Utilization Requirements
- 1.11 Contractor Use of Premises
- 1.12 Lines and Grades
- 1.13 Protection of Existing Property, Structures and Utilities
- 1.14 Damage to Existing Property
- 1.15 Dust Control
- 1.16 Parking
- 1.17 Lay down / Staging Area
- 1.18 Permits
- 1.19 Punch List Verification
- 1.20 Actual Damages for Violations
- 1.21 Unfavorable Construction Conditions
- 1.22 Construction Site Access
- 1.23 Site Administration
- 1.24 Weather Delay
- 1.25 Project Record Documents
- 1.26 City Supplied Materials
- 1.27 Mobilization
- 1.28 Recycling
- 1.29 Submittals for Quality Assurance

- 2.1 Products Ordered In Advance (N/A)
- 2.2 City-Furnished Products

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. Work generally consists of constructing a building that will be approx. 2,100 square feet; the building will also include approx. 1,100 square feet of covered outdoor area. The building will contain three (3) meeting rooms of various sizes, two restrooms and office space with other space for storage and operational area. The project also includes the relocation of the existing Blacksmith Shop and the accessible upgrade to the existing park restrooms. There will also be some site work for accessibility improvements and access. Work includes but is not limited to demolition; clearing; earthwork; grading; installing utility lines; construction of concrete foundations; building construction; solar PV system, relocation of existing building; interior upgrades to an existing building; concrete and asphalt flat work. The work site contains habitat areas and protected wildlife species and is in a preserve that will remain open to the public during construction. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work.

B. Contractor's use of the premises for trailer and storage is limited to the construction area as approved by the City and possible use of McClellan Ranch West (22241 McClellan Road). The City must approve any location proposed by the Contractor.
C. Contractor shall be solely responsible for all utilities (including without limitation electricity, water, gas, etc.) at the Site.
D. Existing equipment removed but not reused, as a part of the Work, shall be returned to the City where indicated. Contractor shall carefully remove all equipment, specified or indicated to be salvaged and reused, or to remain the property of City. Contractor shall store and protect salvaged items specified or indicated to be reused in the Work.. Salvaged items not to be reused in the Work, but to remain City's property shall be delivered by Contractor in good condition to City.

   Any items indicated to be salvaged which are damaged in removal, storage, or handling, through carelessness or improper procedures, shall be replaced by Contractor in kind or with new items. Contractor may furnish and install new items, in exchange for those indicated to be salvaged, in which case such removed items will become Contractor's property. Existing materials and equipment, removed by Contractor, shall not be reused in the Work except where so specified or indicated.
E. This Document 00800 (Special Conditions) and Document 00700 (General Conditions) include measures that Contractor shall follow to execute the work.

1.3 BID ITEMS, ALLOWANCES, AND ALTERNATES

Bid Items

A. Any Bid Item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract, without compensation in any form or adjustment of other Bid Items or prices therefore, in accordance with Document 00700 (General Conditions).
B. Payment of all items is subject to the provisions of the Document 00700 (General Conditions).
C. For all Bid Items, furnish and install all work indicated and described in Specifications and all other Contract Documents, including connections to existing systems. Work and requirements applicable to each individual Bid Item, or unit of Work, shall be deemed incorporated into the description of each Bid Item. Bidder should take particular notice that any and all items of Work, called for in the Construction Documents, but not included in a description of any specific bid item, shall be considered as included in one (1) or more of the bid items and that no additional compensation for those items of Work, beyond the Base Bid, will be allowed. Work of this nature includes, but is not limited to, such items as flagmen, water, all safety requirements, or work and materials required to provide public convenience and safety, barricades, lights, vehicular detours, and pedestrian walkways.
D. For Lump Sum Bid items, bidder shall determine and include in its pricing all materials, labor, and equipment necessary to complete each Bid Item as shown and specified in the Contract Documents.

Allowances: NONE

A. Allowance work shall be completed only after the Allowance Authorization Letter is issued and as specified in Document 00700 (General Conditions) Identify Allowance Item work on the Progress Schedules and on Applications for Payment.
B. The Amount given on Document 00400 under each Allowance Item is the sum of money set aside for each Allowance Item. These amounts shall be included in the Contract Sum on the Bid Form.
C. If the cost of work done under any Allowance Item is less than the amount given on the Bid Form under that Allowance Item, the Contract Sum shall be reduced by the difference between the amount given in the Bid Form and the cost of work actually done.
D. Scope of Allowances: N/A
E. Description of Allowances: N/A

Alternates NONE

1.4 WORK UNDER OTHER CONTRACTS

Work at the site performed by others may include Landscaping and maintenance by City or a City's contractor.

1.5 CONTRACT TIME

The Contract Time will commence on the date indicated in the Notice to Proceed. City may give a Notice to Proceed at any time within 30 Days after the Notice of Award. Contractor shall not do any Work at the Site prior to the date on which the Contract Time commences.

Contractor shall achieve Final Completion of the entire Work and be ready for Final Payment in accordance with Section 00700 (General Conditions) within **270 Calendar Days** from the date when the Contract Time commences to run as provided in Document 00700 (General Conditions)

At the option of the City, the contractor may be required to suspend all work and activities during the City's annual Holiday Closure in late December and early January of each year. No work shall be done during this suspension except such work as is necessary for the proper care and protection of work already performed, or except in case of an emergency, and in any case, only with the prior written permission of the Engineer. This suspension of work will be at no cost to the City. Calendar days will not be assessed during this suspension of work.

1.6 WORK SEQUENCE

A. Contractor shall coordinate construction schedule and operations with City.
B. Contractor shall allow safe passage around the construction area at all times. The preserve and trail must stay open for use during the project. The City will also have classes and other events that will take place during the construction at the preserve. A list of expected classes and events is provided in the Appendix for information only and the City reserves the right to modify it at any time.
C. Contractor acknowledges that shoring may be required to maintain a safe excavation and protect facilities or pipelines, including both existing and recently constructed under this Contract. All expenses for shoring of excavations for construction of basins and pipelines shall be included.
D. When required by the specifications or contract documents or plans the Contractor shall follow the sequence of operations as set fourth therein.

1.7 WORK DAYS AND HOURS AND NOISE DISTURBANCES

Work hours and noise pose a special concern for projects in residential neighborhoods. The City is very concerned for its residents and will diligently enforce the restrictions below. **Each violation of the restrictions by the general contractor, subcontractors, suppliers, vendors and others working on the project will result in a $3,000 liquidated damages being assessed against the General Contractor and deducted from each progress payment.**

A. **Work Days**: Monday-Friday inclusive, except as otherwise directed or approved by the City.
B. **Work Hours**: 7:00 a.m.-5:00 p.m. local time, weekdays, 9:00 a.m. – 5:00 p.m. on Saturdays, 9:00 – 4:00 p.m. Sundays. Also in accordance with the City Municipal Code Chapter 10.48 Community Noise Control.
C. **Worker Arrival and Parking**: Workers may arrive at the job site no earlier than 7:00 a.m. Workers must park at McClellan Ranch West, 22241 McClellan Road or on one of the residential streets adjacent to or near the project site, without blocking residential driveways and access. Workers are encouraged to car-pool. **Violations of these requirements will result in a $3,000 dollar liquidated damages to Bidder/Contractor, per occurrence. Be aware that traffic to Schools on McClellan**

Road sometimes backs up past the driveway to the Preserve. Contractor should consider adjusting delivery times to avoid the backup and delays.

D. **Equipment and Material Delivery and Off-Haul Hours**: No equipment or material may be delivered or off-hauled except between the hours of 7:00 a.m. and 5:00 p.m. No equipment that has a safety back up beeper may be operated before 7:00 a.m. on any day.

E. Work at the Site on weekends or holidays is not permitted, unless Contractor requests otherwise from City in writing at least 2 working days in advance and City approves in its sole discretion. In the case of Work by Contractor after normal working hours, Contractor shall be responsible for any additional inspection costs incurred by the City. Such costs may be withheld from any succeeding monthly progress payment.

F. Connections to Existing Facilities. Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities, including structures, drain lines, and utilities such as water, sewer, gas, telephone, and electric. In each case, Contractor shall receive permission from City or the owning utility prior to undertaking connections and Contractor shall coordinate as needed to accommodate the facilities operations. Contractor shall protect facilities against deleterious substances and damage.

G. Road Shutdown. Contractor shall execute the Work while roads are in operation except for the periods of permitted shutdown. For shutdown periods, Contractor shall prepare and submit a detailed plan that includes shutdown schedule, planned sequence of work, milestones and projected times of completions of activities, any anticipated problems, Contractor's supervisory personnel, actions desired of City and staff, and contingency plans. Contractor shall allow sufficient time for review and re-submittal of the shutdown plan until acceptable to City. Contractor shall employ sufficient labor, superintendence, and equipment on a 24-hour, 7 days a week basis during shutdown and other operational disruptions to complete Work within the specified periods at no additional cost to the City. Once initiated, Work may proceed on extra shift or around-the-clock basis as necessary. When required to minimize treatment process interruptions while complying with specified sequencing constraints, Contractor shall provide power, lighting, controls, instrumentation, and safety devices.

H. No non-construction noise shall be allowed, this includes amplified music, radio or other noise not due to construction activities.

1.8 COOPERATION OF CONTRACTOR AND COORDINATION WITH OTHER WORK AND CONTINUED USE OF THE SITE

A. Coordinate with City and any City forces, or other contractors and forces, as required by Document 00700 (General Conditions) and this document. City's facility will be accessible and useable at all times.

B. Employ a full time coordinator to constantly review Contract Documents, submittals, changes, and prepare overlay drawings as necessary to avoid conflicts, errors, omissions and untimely construction.

C. The existing facilities will remain open to the public, except for where work will be commencing, only the construction area must be kept closed to the public for the duration of the project. Contractor is to secure the site from public access at all times. This may require the use of a security guard, signage, perimeter fencing and other measures. All payment for site security shall be included in Bid.

D. City will continue to allow the public access to the preserve and to hold classes and other events at the preserve. The Contractor shall keep the area around the construction zone open during all times and in a safe, clean and neat condition. A list of expected classes and events is provided in the Appendix for information only and the City reserves the right to modify it at any time.

E. Access to 4H and community garden area must be kept clear and for use of patrons and access by garbage truck and other delivery trucks. Contractor must position his construction fence to allow for this access.

F. Park restroom shall be kept open at all times except for a 1 month period when work for accessible upgrades and concrete/site work is completed. During this time the Contractor shall provide 4 unisex porta potties (3 standard and 1 handicap accessible) and a wash station. The Contractor shall have them maintained during the period the park restrooms are not usable. The Contractor shall coordinate the closure time and their location with the City. The porta potties shall be removed when the park

restrooms are in service. The Contractor shall coordinate work on the restroom and site work so that the park restrooms are only out of service once for a maximum amount of time of 1 month.

1.9 MAINTENANCE, PRODUCT HANDLING, AND PROTECTION

A. Transport, deliver, handle, and store materials and equipment at the Site in such a manner as to prevent the breakage, damage or intrusions of foreign matter or moisture, and otherwise to prevent damage.
B. Transport, deliver, handle, and store materials and equipment at the Site in such a manner as to prevent the breakage, damage or intrusions of foreign matter or moisture, and otherwise to prevent damage.
C. Hazardous substance compliance: Provide City with copies of the OSHA Material Safety Data Sheets (MSDS) for all products containing a hazardous substance, examples: Adhesives, paints, sealants, and the like.
D. Packaging: Provide packaged material in manufacturer's original containers with seals unbroken and labels intact until incorporated into the Work.
E. Remove all damaged or otherwise unsuitable material and equipment promptly from the Site.
F. Protection: Protect all finished surfaces.
G. Asbestos Removal: If, during the progress of the Work, additional suspected asbestos-containing products are identified, Contractor shall stop work in the affected area and engage an asbestos removal Subcontractor to verify the materials and, if necessary, encapsulate, enclose, or remove and dispose of all asbestos in accordance with current regulations of the Environmental Protection Agency and the U. S. Department of Labor – Occupational Safety and Health Administration, the state asbestos regulating agency, and any local government agency. Payment for such work will be made by Change Order.

1. Asbestos Removal Subcontractor's Qualifications. The Subcontractor for asbestos removal shall be regularly engaged in this type of activity and shall be familiar with the regulations that govern this work. The Subcontractor shall demonstrate to the satisfaction of City that it has successfully completed at least three asbestos removal projects
   a. that it has the necessary staff and equipment to perform the work; and,
   b. that it has an approved site for disposal of the asbestos, and;
   c. that it has liability insurance covering the asbestos abatement work.
2. The asbestos removal Subcontractor shall submit a work plan of its proposed removal procedure to City before beginning work and shall certify that the methods are in full compliance with the governing regulations. The work plan shall cover all aspects of the removal, including health and safety of employees and building occupants, hygiene facilities, employee certification, clearance criteria, transportation and disposal, enclosure techniques, and other techniques appropriate for the proposed work.

1.10 PARTIAL OCCUPANCY/UTILIZATION REQUIREMENTS

A. Allow City to take possession of and use any completed or partially completed portion of the Work during the progress of the Work as soon as is possible without interference to the Work.
B. Possession, use of Work, and placement and installation of equipment by City shall not in any way evidence the completion of the Work or any part of it.
C. Contractor shall not be held responsible for City caused damage to the occupied part of the Work resulting from City occupancy.
D. Make available, in areas occupied, on a 24-hour per day and 7-day per week basis if required, any utility services in condition to be put in operation at the time of occupancy.
   1. Responsibility for operation and maintenance of said equipment shall remain with Contractor.
   2. Make, and City shall certify, an itemized list of each piece of equipment so operated with the date operation commences.
   3. Itemized list noted above shall be basis for commencement of warranty period for equipment.
   4. City shall pay for utility cost arising out of occupancy by City during construction.
E. Use and occupancy by City prior to acceptance of Work does not relieve Contractor of its responsibility to maintain insurance and bonds required under the Contract until entire Work is completed and accepted by City.
F. Prior to date of Final Acceptance of the Work by City, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to defective materials or workmanship

or to operations of Contractor, shall be made at expense of Contractor, as required in Document 00700 (General Conditions).

G. Use by City of Work or part thereof as contemplated by this Document 00800 shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Contractor of any responsibilities under Contract, nor act as waiver by City of any of the conditions thereof.

H. City may specify in the Contract Documents that portions of the Work, including electrical systems or separate structures, shall be substantially completed on dates or durations described in preceding paragraphs of this Document 00800, if any, prior to substantial completion of all of the Work. Notify City in writing when Contractor considers any such part of the Work ready for its intended use and substantially complete and request City to issue a Certificate of Substantial Completion for that part of the Work.

1.11 CONTRACTOR USE OF PREMISES

A. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, and laws.

B. Do not unreasonably encumber Project Site with materials or equipment.

C. Assume full responsibility for protection and safekeeping of products stored on premises.

D. Move any stored products that interfere with operations of City or other contractor.

E. Parking, storage, staging, trailer and work areas shall be coordinated and approved by the City and comply with all other Contract documents requirements. Contractor's use of the premises for trailer, storage and parking is limited to areas the City will allow. Prior to placement of any parking, equipment and supplies, the Contractor shall submit a site utilization plan to the City for review and approval. The site utilization plan shall define the Contractor's proposed area of use.

1.12 LINES AND GRADES

A. All Work shall be done to the lines, grades, and elevations indicated on the Drawings and as specified in section 02015.

B. The Contractor shall provide all surveying for the project. The City will not be providing any points for horizontal or vertical controls. All additional survey, layout, and measurement work shall be performed by Contractor as a part of the Work and paid for in various items of work.

C. Contractor shall provide at its cost an experienced instrument person, competent assistants, and such instruments, tools, stakes and other materials required to complete the survey, layout, and measurement work. In addition, Contractor shall furnish, at its cost, competent persons and such tools, stakes, and other materials as City (and/or any Engineer) may require in establishing or designating control points, or in checking survey, layout, and measurement work performed by Contractor.

D. Contractor shall keep City informed, within a reasonable time in advance, of the times and places at which it wishes to do Work, so that any checking deemed necessary by City may be done with minimum inconvenience to City and minimum delay to Contractor.

E. Contractor shall remove and reconstruct Work that is improperly located.

1.13 PROTECTION OF EXISTING PROPERTY, STRUCTURES AND UTILITIES

A. The Drawings may indicate existing above-grade and below-grade structures, drainage lines, storm drains, sewers, water, gas, electrical, water, phone and data cable and other similar items and utilities that are known to City.

B. Contractor shall locate these known existing installations before proceeding with trenching or other operations which may cause damage, shall maintain them in service where appropriate, and shall repair any damage to them caused by the Work, at no increase in Contract Sum.

C. Additional utilities whose locations are unknown to City are suspected to exist. Contractor must be alert to their existence. If additional utilities are encountered, Contractor must immediately report to City for disposition.

D. In addition to reporting, if a utility is damaged, Contractor must take appropriate action as provided in Document 00700 (General Conditions).

E. Additional compensation or extension of time on account of utilities not indicated or otherwise brought to Contractor's attention including reasonable action taken to protect or repair damage shall be determined as provided in Document 00700 (General Conditions).

F. Contractor shall carry out construction activities in a manner that does not disrupt privacy, access to private property, or traffic, except as allowed by permit, or does not disrupt the flow of storm water or impair the storm water channel.
G. For Contractor's convenience, the Contractor will be allowed to remove the two asphalt medians at the preserve's entry from McClellan Road to the construction site. If Contractor chooses to remove the median(s), the existing signs shall be stored for re-installation at the time when access and median restoration occurs. During the time the medians are removed the Contractor will provide maintenance to the existing striping and make the area safe for pedestrian and vehicle traffic. This may require temporary signage to be installed. All removal, storage, maintenance, safety and restoration work will be at the Contractors expense. Restoration by Contractor shall be to the satisfaction of the City.

1.14 DAMAGE TO EXISTING PROPERTY

A. Contractor will be responsible for any damage to existing structures, Work, materials, or equipment because of its operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, City.
B. Contractor shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.
C. Contractor shall be responsible for all damage to streets, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or workers to or from the Work. Contractor shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

1.15 DUST CONTROL

A. Contractor shall take reasonable measures to prevent unnecessary dust. The following items shall be specifically implemented to control dust:
   1. All construction locations with active excavation shall be watered at least twice daily or more often as necessary.
   2. Cover all trucks hauling soil, sand, and other loose materials; or require all trucks to maintain at least two feet of freeboard.
   3. Pave, apply water daily, or apply non-toxic soil stabilizers on all un-paved access roads, parking areas, and staging areas at construction site.
   4. Sweep daily or more often as necessary, with water sweepers all paved access roads, parking areas, and staging areas at construction sites during project.
   5. Enclose, cover, or water twice daily, exposed stockpiles (dirt, sand, etc.)
   6. Limit the speed of all construction vehicles to 5 miles per hour while on the Site.

B. Buildings, swimming pools, or operating facilities which may be affected adversely by dust shall be adequately protected from dust. Existing and new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.

1.16 PARKING

Parking is not permitted on the job site by Contractor's workers, workers are to park at McClellan Ranch West, 22241 McClellan Road, or on one of the streets adjacent to or near the project site, without blocking residential driveways and access, or elsewhere offsite. Workers are encouraged to car-pool.

1.17 LAYDOWN/STAGING AREA

Contractor shall utilize an area approved by the City for storage of all construction materials. The construction fence shall not obstruct traffic of garbage truck and visitor to the 4H and community garden area located to the east of the construction area in the preserve. This area shall be fenced and locked by Contractor for security purposes.

1.18 PERMITS

Applicable permits: Permits, agreements, or written authorizations that are known by the City to apply to this project are listed below:

City of Cupertino building permit – no fee required; Contractor shall obtain a "no-fee" building permit from the City.

Cal/OSHA Permit: The Contractor shall obtain, as applicable, a permit as required by Cal/OSHA for each of the following:

- Construction of trenches or excavations that are five feet or more in depth and into which a person is required to descend.
- Construction or demolition of any building, structure, or scaffolding for false-work more than three stories high, or the equivalent height (36 feet).
- Erection or dismantling of vertical shoring systems more than three stories high, or the equivalent height (36 feet).

1.19 PUNCH LIST VERIFICATION

A punch list examination will be performed upon Substantial Completion of Work. One follow-up review of punch list items for each discipline will be provided. If multiple Site visits are required to review punch list items, due to incompleteness of the Work by Contractor, Contractor may be required to reimburse City for these visits.

1.20 ACTUAL DAMAGES FOR VIOLATIONS

A. In addition to damages which are impracticable or extremely difficult to determine, for which liquidated damages will be assessed as described in Document 00700 (General Conditions) and Document 00520 (Contract), City may incur actual damages resulting from loss of use of any permit described in this Document, or from use in violation of legal or regulatory requirements where the violations result from Contractor's activities. Violations or threatened violations may subject the City to fines and/or other costs or civil liabilities.

B. Contractor shall be liable for and shall pay City the amount of any actual losses in addition to liquidated damages or other remedies provided by the Contract Documents.

C. The amount of liquidated damages provided in Document 00520 (Contract) is not intended to include, nor does the amount include, any damages incurred by City for reasons other those listed in that paragraph. Any money due or to become due to Contractor may be retained by City to cover both the liquidated and the actual damages described above and, should such money not be sufficient to cover such damages, City shall have the right to recover the balance from Contractor or its sureties.

1.21 UNFAVORABLE CONSTRUCTION CONDITIONS

During unfavorable weather, wet ground, or other unsuitable construction conditions, Contractor shall confine its operations to Work, which will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions, which would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by Contractor to perform the Work in a proper and satisfactory manner.

1.22 CONSTRUCTION SITE ACCESS

The McClellan Ranch Preserve must be kept open at all times during the construction. Contractor shall, at all times, limit access to the Site to necessary personnel only. All personnel associated with construction of the Project shall enter the site through Contractor's access gate. Access for construction personnel shall be limited to the hours between 7:00 a.m. and 5:00 p.m. local time. All mail and deliveries (Federal Express, equipment, etc.) shall be sent to a separate address (at Contractor's gate), specifically arranged by Contractor for the Project. Contractor is responsible for providing adequate signage to alert delivery persons to the new address. Contractor is to secure the site from public access at all times. This may

require the use of a security guard, signage, perimeter fencing and other measures. All payment for site security shall be included in Bid.

The Contractor's access to the property from McClellan Road with trucks that are outside the legal load limits will not be allowed to travel across the bridge just west of the Preserves entrance on McClellan Road. If there are trucks that will require a City Transportation Permit for a load over the legal load limits, the truck will be require to travel to the site using a route that will not cross the bridge west of the driveway. The maximum legal truck loads are as follows: 25 Tons for Type 3 Legal Trucks; 37 Tons for Type 3S2 Legal Trucks; and 43 Tons for Type 3-3 Legal Trucks. Contractor is responsible to obtain in advance of delivery all required transportation permits, including a City Transportation Permit, for all trucks that exceed the load limits described. This City permit shall be at no-fee to the Contractor.

Also the Contractor needs to be aware that there will be school traffic that will cause delays due to the schools that are located east of the Preserve on McClellan Road. The Contractor should time deliveries to avoid these traffic congested times.

1.23 SITE ADMINISTRATION

Contractor shall be responsible for all areas of the Site used by it and by all Subcontractors in the performance of the Work. Contractor shall exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to City or others. Contractor shall have the right to exclude from the Site all persons who have no purpose related to the Work or its inspection, and may require all persons on the Site (except City's employees) to observe the same regulations Contractor requires of its employees.

Contractor shall provide the City with a key or combination to the Contractor's access gate lock or allow the City to install a lock into a "daisy-chain" at the Contractor's access gate. Contractor shall maintain the City's lock within the "daisy-chain" and shall not cut-off or lock-out the City installed lock throughout the performance of the Work. If Contractor cuts-off lock, Contractor shall immediately replace the lock in-kind and at its own expense and provide the City with the keys. In the event the Contractor needs to remove the City installed lock, the Contractor will submit a request to the City. The request will provide City a minimum 2-day advance notice and justification for the City installed lock removal. City and Contractor shall resolve Contractor's request and the next scheduled Weekly Progress Meeting.

In accordance with City Municipal Code Chapter 10.90: Smoking in Recreational Areas, no person is allowed to smoke anywhere in a Recreational Areas and twenty-five (25) feet from the boundary of the Recreational area. This includes streets and sidewalks adjacent to Recreational areas. Violation of this shall be penalized in accordance with the above referenced chapter.

1.24 WEATHER DELAY

See Document 00700 section 3.5 Change of Contract Time, subsection B. Extensions of Time for Delay Due to Excusable Inclement Weather.

1.25 PROJECT RECORD DOCUMENTS

Contractor shall prepare during construction the project Record Drawings and Specification in accordance with Document 00700, recording and tracking changes in a timely manner. Contractor shall make copies of the annotated Project Record Drawings and Specifications available to City and the Engineer of Record at intervals convenient to the Engineer of Record. Prior to any payment the Project Record Drawing will be reviewed by the City or City representative to verify that changes are being tracked. The final project Record Drawings will be prepared by the Architect based on the contractor's mark ups.

1.26 CITY SUPPLIED MATERIALS

See Section 2.2 below.

1.27 MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization" of the 2010 Standard Specifications and is eligible for partial payments since the contract documents contain a bid item for mobilization.

1.28 RECYCLING

The Contractor shall divert from landfill a minimum of 60 percent of all construction and demolition waste, in accordance with the City of Cupertino's Ordinance No. 10-2070. Submit a properly completed "Waste Management Plan" as a part of the permit application process. An application fee will not be required. Comply with the General Conditions, Article 3.13 – Inert Solids and Plant Materials Recycling for requirements for the collection of debris, identification and disposal of recyclable materials, and the documentation of recycling.

1.29 SUBMITTALS FOR QUALITY ASSURANCE

In the Technical Provisions the City specifies quality assurance requirements, including qualifications for special skills and experience requirements of the Contractor. For any specified skill, the Contractor may utilize a subcontractor that specializes in the work and meets the performance requirement or the Contractor may self-perform the work, subject to demonstrating the necessary skill, experience, and/or certifications to perform the work.

In general, the Contractor shall submit verification that the materials and labor skills meet the specified requirements prior to implementing the specific work. However, for the list below, the Contractor shall submit verification of the specified materials and/or labor skills within 30 days of the date of the Notice to Proceed.

Section Number	Name of Contractor/Subcontractor/Installer
02 43 13	Structure Relocation Subcontractor (Mover/Installer)
03 54 16	Hydraulic Cement Underlayment Applicator
08 35 35	Folding Door Installer
10 22 26	Operable Partition Installer
23 21 13	Hydronic Piping Installer
26 31 00	Photovoltaic System Installer
26 31 00.10	Photovoltaic Energy Maximizer and Security System Installer

PART 2 PRODUCTS

2.1 PRODUCTS ORDERED IN ADVANCE (N/A)

2.2 CITY-FURNISHED PRODUCTS

A. City will furnish item as specified in the technical provisions. This includes locksets and reclaimed framing lumber if the Contractor chooses to use it, the appendix includes a Certificate of Inspection for the reclaimed framing lumber and inventory of the material to be provided. The Contractor will be able to view lumber during the pre-bid meeting only.

B. City's Responsibilities:
   1. Arrange for and deliver City-reviewed Shop Drawings, Product Data, and Samples, to Contractor.
   2. Arrange and pay for delivery to site.
   3. On delivery, inspect City provided products jointly with Contractor.
   4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
   5. Arrange for manufacturers' warranties, inspections, and service.

B. Contractor's Responsibilities:
   1. Review City-reviewed Shop Drawings, Product Data, and Samples.

2. Receive and unload City and Contractor provided products at site; inspect for completeness or damage jointly with City.
3. Handle, store, install, and finish products.
4. Repair or replace items damaged after receipt.
5. Install into Project per Contract Documents.

END OF DOCUMENT

SECTION 00820

SPECIAL ENVIRONMENTAL CONDITIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES:

A. Requirements for compliance with environmental documents, resource agency standards, and related environmental regulations.

1.02 ARCHEOLOGICALLY SENSITIVE AREAS

General: It is the intent of the City to comply with all State and Federal laws related to the protection of cultural resources. Contractor's attention is directed to Section 106 of the National Historic Preservation Act of 1966 (36 CFR 800, revised 1999). California Public Resources Code Chapter 1.7, section 5097.5 makes it a misdemeanor for anyone to knowingly disturb a historical feature. California Public Resources Code Sections 5097.98 and 5097.99 require protection of Native American remains which might be discovered and outline procedures for handling any burial found. The California Public Resources Code Section 5097.9 and Health and Safety Code 7050 require coordination with the State Native American Heritage Commission (NAHC).

Contractor's attention is directed to the fact that the project site is near an archaeological sensitive area, but is not known to contain any archaeological or cultural resources. However it is possible that the project could reveal as yet unknown prehistoric or historic archaeological resources. Work shall comply with applicable measures. Additional requirements are noted below.

A. Prior to the initiation of construction or ground-disturbing activities, the City shall conduct a tailgate meeting to inform all construction personnel of the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Personnel shall be informed of the procedures that would be followed upon the discovery of suspected discovery of archaeological materials, including Native American remains and their treatment.

1. If all construction personnel are not available to attend the City conducted tailgate meeting prior to initiation of construction or ground-disturbing activities, the Contractor may video-tape the tailgate meeting to inform construction personnel not present at the tailgate meeting. Contractor shall be responsible for and provide the following at no cost to the City:

a. Video:

1. The video shall capture the presentation in such a manner to provide quality audio and visual information to all Contractors' personnel working at the site to assure optimum training outcomes. Audio must be clear, consistent and audible without adjusting volume throughout the video delivery method. Extraneous noises not related to the City representative's presentation shall be limited. Visual images must be focused on the City's representative and/or to a point of reference the City's representative has called attention to. Visual quality should be clear, consistent and without distractions. Distractions include but are not limited to jittery, skipping or bumped images, over or under exposure or other visual quality impairments.
2. A copy of the video shall be provided by the Contractor to the City for City review and approval. Once approved by the City, the Contractor shall provide the City with a copy of

the video and the Contractor shall maintain a copy of the approved video at the Project site until the Project is accepted by the City.

b. Training coordination:
   1. At the City's discretion, a City representative may be present at all video training occurrences. In order to facilitate City attendance, the Contractor shall provide the City a minimum of five working day notice prior to conducting video training.

c. Training certification:
   1. At the conclusion of the video training, each Contractor personnel shall sign a training certification form that they have received and understood the training content. Contractor personnel shall not be allowed on the Project site until Contractor personnel have received the training and signed the training certification form. The Contractor shall maintain a binder of original signed training certification forms at the construction site and provide the City one copy of each original within 2 days of the training occurrence. The binder shall become the training record.

d. Training records:
   1. Access to Contractor training records may be requested by the City or a City representative at any time. Random checking of Contractor personnel on the job site by the City or City representative may occur at any time. Contractor personnel that have not received the training or do not have a signed training certification on file will be immediately removed from the Project site until such time that the Contractor demonstrates that Contractor personnel possess training certification as described above. Removal of Contractor personnel under this condition shall be at no cost or schedule delay to the City.

B. Upon discovery of possible buried prehistoric and historic cultural materials (including potential Native American skeletal remains), work within 25 feet of the find shall be halted and the City shall be notified. The City shall retain a qualified archaeologist to review and evaluate the find. Construction work shall not begin again until the archaeological or cultural resources consultant has been allowed to examine the cultural materials, assess their significance, and offer proposals for any additional exploratory measures deemed necessary for the further evaluation of, and/or mitigation of adverse impacts to, any potential historical resources or unique archaeological resources that have been exposed. If the discovery is determined to be a unique archaeological or historical resource, and if avoidance of the resource is not possible, the archaeologist shall inform the City of the necessary plans for treatment of the find(s) and mitigation of impacts. The treatment plan shall be designed to result in the extraction of sufficient non-redundant archaeological data to address important regional research considerations. The City shall insure that the treatment program is completed. The work shall be performed by the archaeologist and shall result in a detailed technical report that shall be filed with the California Historical Resources Information System, Northwest Information Center, CSU Rohnert Park. Construction in the immediate vicinity of the find shall not recommence until treatment has been completed. If human remains are discovered, they shall be handled in accordance with State law including immediate notification of the County Medical Examiner/Coroner.

C. All excavation contracts for the project shall contain provisions for stop-work in the vicinity of a find exposing archaeological resources during subsurface construction. In addition, the contract documents shall recognize the need to implement any mitigation conditions required by the permitting agency. In general, the appropriate construction conditions should be included in any contract that has the potential for ground disturbing operations.

Full compensation for work involved in complying with the requirements of this section shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor, except for the following: Contractor labor, equipment and materials used in assisting an archaeologist, if required, will be paid for as extra work as provided in Doc. 00700 General Conditions.

1.03 TREE PROTECTION AND ENVIRONMENTALLY SENSITIVE AREAS

If for any reason construction requires the removal of a protected tree not already noted in the plans, authorization would have to be obtained in advance from the City. All requirements for removal as stated in the authorization, including installation of replacement trees, would have to be followed. Also see Document 00823 Tree Protection for more requirements.

Contractor's attention is directed to the fact that the project site is in a natural setting which includes wildlife that may be temporarily disturbed by construction activities. An Environmentally Sensitive Area (ESA) may be established if a sensitive or protected species establishes in the project area. If needed, the exact location of the boundaries of ESA(s) shall be established by the City's representative.

Contractor shall place temporary high visibility plastic mesh fencing at the boundary of each ESA. Within the boundaries of the fenced ESA, no project related activities shall take place. Contractor shall preserve and protect the ESA at all times and is prohibited from entering fenced ESA for any purpose. This specifically prohibits vehicle access, storage, or transport of any materials, including hydrocarbon and lead contaminated materials or any other project related activities. An ESA shall only be removed upon written direction from the Engineer.

If Contractor's work progress is delayed by reason of establishment of an ESA, it will be cause for a time extension if the delay affects the controlling item of work, per Document 00700, General Conditions.

1.04 WILDLLIFE PROTECTIVE MEASURES

The environmental review process has identified biological measures that shall be applied as wildlife protective measures and shall be implemented before, during, and after construction. Contractor shall comply with all project permits and the following provisions as a requirement of the Contract:

A. Creek Corridor & Wetlands

Contractor shall take all reasonable precautions to prevent incidental incursions of personnel, equipment or materials into wetlands, creek channel areas and adjacent vegetation that are outside the noted work limits. Contractor shall remain within designated work area limits during construction at along creek areas within the project limits. No work is permitted below the top of bank unless specifically noted in the contract documents.

B. Western Pond Turtle, California Red-Legged Frog and San Francisco Dusky-footed Woodrat

Special-status wildlife species could potentially be affected by project activities. All work shall be performed in accordance with applicable permit and resource agency requirements and applicable regulations:

The following avoidance measures shall be implemented.

- *Preconstruction Survey.* In the 2 days prior to the start of construction activities, a City-provided biologist shall perform one daytime survey for San Francisco dusky-footed woodrat (woodrat) if the project scope could affect woodrats or their habitat. The entire work area including any burrows, rock and woodpiles that may be disturbed by construction activities shall be inspected for woodrats. If woodrats are detected, the California Department of Fish and Wildlife (CDFW) should be contacted on how to proceed.

- *Employee Education Program.* An employee education program shall be conducted prior to the initiation of project activities. The program shall consist of a brief presentation by persons knowledgeable in federally listed and state special status species biology and legislative protection to explain concerns to contractors and their employees. The program would include the following: a description of western pond turtles, California red-legged frogs, and San Francisco dusky-footed woodrats and their habitat needs; an explanation of the

status of these species and their protection under state and federal laws; and a list of measures to reduce impacts to wildlife during project activities. Crews shall be instructed that if a California red-legged frog is found, it is to be left alone and the project foreman and the U.S. Fish and Wildlife Service must be notified immediately. Likewise if a western pond turtle or woodrat nest is found, it is to be left alone and the project foreman and CDFW must be notified immediately. Project crew is to sign a sheet for receipt of training.

- If all project crews are not available to attend the City conducted employee education program prior to initiation of project activities, the Contractor may video-tape the employee education program to inform project crews not present at the employee education program. Contractor shall be responsible for and provide the video-taping at no cost to the City as described under 1.02.A of these Special Environmental Conditions.

- *Speed Limit.* Vehicles shall not drive more than 5 miles per hour within the project area. If any woodrats, western pond turtles or California red-legged frogs are seen in the path of a vehicle, the vehicle shall stop until the animal is out of the path. Parked vehicles shall be thoroughly checked underneath before they are moved to ensure that no protected wildlife is on the ground below the vehicle.

Contractor shall provide City with at least fifteen (15) and no more than thirty (30) days advance notice of planned start of construction activities so that Preconstruction Survey noted above can be scheduled. A City-provided biologist shall conduct the survey.

Contractor shall provide City with at least fifteen (15) days advance notice of initiation of project activities so that Education Program can be scheduled. City's representative will conduct an Education Program in the City of Cupertino within two weeks of such notification. Contractor shall be responsible for arranging for attendance by all personnel working at the site, including but not limited to subcontractors, foremen, superintendents, employees and contractor's representatives.

C. Bats

Bats are protected by California Department of Fish and Game Code section 4150 and are considered nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided by code or in accordance with adopted regulations. A tree within a nearby area of the creek corridor contains a protected maternity roost for a colony of big brown bats.

All work shall be performed in accordance with the measure below. The following avoidance measure shall be implemented:

- Preconstruction Surveys. A pre-demolition survey for roosting bats shall be conducted prior to any construction and to any large tree removal during maternity season (March 1 to August 31). The survey shall be conducted by a qualified City-provided biologist.

City has retained a qualified biologist that will provide the preconstruction survey.

D. Noise

Contractor shall limit work to the hours noted elsewhere in Document 00800, Special Conditions and elsewhere in the contract documents. Any deviation from these hours shall be approved in writing by City.

Contractor shall maintain and operate all equipment consistent with the manufacturer's specifications. Construction equipment will include available noise suppression devices and properly maintained mufflers.

Contractor shall site fixed and mobile equipment to minimize noise emissions outside the right-of-way, and shall minimize the staging of construction equipment and unnecessary idling of equipment in the vicinity of residences and other sensitive receptors.

All pre-construction biological surveys in this section are valid for a period of two (2) calendar days maximum, except as otherwise noted herein. Contractor shall begin work within two (2) calendar days after the completion of the pre-construction surveys, or a new pre-construction survey for that species shall be required. If the Contractor does not begin work within two (2) days after the completion of the original pre-construction surveys, the cost of the new pre-construction survey or surveys will be paid by the Contractor and such costs will be deducted from any money due or to become due to the Contractor. No additional time shall be allowed for any delays that accrue due to the need for new pre-construction surveys.

If Contractor's work progress is delayed due to compliance with the requirements of this Section, it will be cause for a time extension if the delay affects the controlling item of work, per Document 00700, General Conditions.

1.05 RAPTORS AND OTHER NESTING BIRDS

The Contractor is to note that nesting/breeding birds, including raptors, may be present in the project area. For all migratory birds except raptors, the nesting season in the project area is considered to be from February 15th to August 31st; for raptors the nesting season begins February 1. It is against the law to harm these birds or their eggs or active nests, and other wildlife, as per the Migratory Bird Treaty Act and the California Fish and Game Code.

All work shall be performed in accordance with the measures below.

- Vegetation, tree, and building or structure removal activities within the project area should be scheduled if feasible to take place outside of the nesting season (Feb. 1 to Aug. 31) to avoid impacts to nesting birds. In order to avoid impacts to raptor nests during the non nesting season, a preconstruction survey of trees that could support raptor nests shall be completed. The survey shall be conducted by a City-provided biologist. Every attempt shall be made to protect trees that contain raptor nests.

- If construction is to occur during the nesting season, a qualified City-provided biologist shall conduct a pre-construction survey for nesting raptors and other birds within 2 days prior to start of construction activities. If active nests are not present, construction activities can take place as scheduled. If more than 2 days elapse between the initial nest search and the beginning of construction activities, another nest survey shall be conducted. If any active nests are detected, a qualified biologist shall determine the appropriate buffer to be established around the nest.

City's biologist shall conduct the required pre-construction survey. The Contractor shall notify City at least fifteen (15) days and no more than thirty (30) days in advance of the date for any active construction activity at the project site to allow scheduling of the pre-construction surveys for nesting birds.

The pre-construction wildlife survey in this section is valid for a period of two (2) calendar days maximum, except as otherwise noted herein. Contractor shall begin work within two (2) calendar days after the completion of the pre-construction surveys, or a new pre-construction survey for that species shall be required. If the Contractor does not begin work within two (2) days after the completion of the original pre-construction surveys, the cost of the new pre-construction survey or surveys will be paid by the Contractor and such costs will be deducted from any money due or to become due to the Contractor. No additional time shall be allowed for any delays that accrue due to the need for new pre-construction surveys.

The work site is may contain active nests. If construction is to begin during breeding season, a joint site walk will be held prior to initiation of construction activities, and after the pre-construction nesting survey. Active nests will be identified and jointly marked in the field at that time.

If Contractor's work progress is delayed due to compliance with the requirements of this Section, it will be cause for a time extension if the delay affects the controlling item of work, per Document 00700, General Conditions.

1.06 BEE HIVES

Bee hives are known to occur within trees and below ground in close proximity to and within the work limits. At the joint site walk referenced in Section 1.06 above, known existing bee hives will also be identified.

Contractor shall address stinging insects in their Safety Plan, and shall conduct safety training and provide personal protective equipment (PPEs) for working around stinging insects as needed. Contractor shall inform workers to be aware of bee hives and exercise caution not to disturb hives during work related activities.

No hives shall be disturbed outside the work limits. If a previously unidentified hive is discovered within the work limits, Contractor shall notify the Engineer immediately and inform workers of the newly identified hive. In the event that a hive is disturbed, Contractor shall notify the Engineer and conduct work in proximity of hive in accordance with the approved Safety Plan.

The Contractor shall be responsible for any work rescheduling, relocation or stoppages due to disturbance of a bee hive and shall be expected to complete all work as specified elsewhere in these specifications.

1.07 SUDDEN OAK DEATH

The Contractor is responsible for complying with any requirements regarding Sudden Oak Death (SOD), including any requirements from the Santa Clara Agricultural Commissioner or federal agencies regarding quarantines for plant material.

The Contractor shall be thoroughly familiar with the provisions of 7 CFR Part 301, Phytophthora Ramorum; Quarantine and Regulations (Federal Register Vol. 67, No. 31 6827-6837, dated Thursday, February 14, 2002), hereafter referred to as the Rules and Regulations.

The Contractor shall avoid activities that could result in a need to comply with the specified Rules and Regulations to the maximum extent practicable. In the event that a situation arises that cannot be avoided involving one or more of the quarantined species, soils or other regulated materials as defined therein, the Contractor shall implement the provisions in the specified Rules and Regulations. Furthermore, the Contractor shall contact the Santa Clara County Agriculture Commissioner (SCCAC) for additional information and direction.

The Engineer shall be notified immediately in the event a situation arises requiring compliance with the Rules and Regulations and subsequent notification of the SCCAC. Furthermore, documentation shall be provided to the Engineer enumerating the steps taken to comply.

The Contractor shall follow precautionary measures to help limit the inadvertent spread of SOD disease, including but not limited to the following:

a. Conduct operations during the dry season as much as possible and in a manner that will minimize and prevent wet soil, mud and plant material adhering to vehicles, equipment, and boots; utilize paved and rocked roads and landings to the extent possible.
b. Inspect material and equipment before it enters the site to ensure that no host material (soil or attached pieces of plants) is being transported into the site.
c. Completely clean all mud, dirt and soil from shoes, boots, vehicles and equipment that were used on any site within a SOD zone, to remove soil and any imbedded host plant material, prior to bringing such items to the work site.
d. Equipment coming from potentially SOD-infested sites must be completely cleaned of soil and plant material at that site and inspected carefully to ensure potential SOD-containing soil, or parts of plants, is not transported to the project site.
e. All plants and all soil material that is brought to the site for use in the project must be from SOD-free sources and SOD-free regions, and must be able to provide appropriate documentation or certification.
f. If Contractor equipment or forces have worked in a SOD zone:

    - Prepare and use sanitation kits consisting of chlorine bleach and water (10:90 mixture of bleach:water), Clorox Cleanup (registered trademark) or Lysol (registered trademark), a scrub brush, metal scraper, or boot brush; and plastic gloves.
    - Disinfect tools used in tree removal and pruning with Lysol spray, a 70% or greater solution of alcohol or a Clorox solution (1 part Clorox: 9 parts water, or Clorox Clean-up). If equipment such as a chain saw cannot be

treated with disinfectants, consider runnit it through a non-host plant before leaving the infested site to break fee any lodged material.

- Sanitize shoes, pruning gear, and other equipment before working in the project area.
- Before leaving a SOD disease infected site, use all reasonable methods to sanitize gear and equipment. Scrape, brush, and/or hose off accumulated soil and mud from clothing, gloves, boots, and shoes. Remove mud, earth and plant debris by blowing out or power washing trucks and other equipment and vehicles. If complete on-site sanitation is not possible, finish decontaminating at a local power was facility or an isolated area in an equipment yard.
- Additional information on Sudden Oak Death may be obtained by visiting http://suddenoakdeath.cnr.berkeley.edu/html/treatment___management.html.

1.08 HYDROLOGY AND FLOODING

Much of the land along Stevens Creek including McClellan Ranch Park, and some or all of the proposed work site, falls within a known flood plain and is subject to flooding during storm and high water events. Flooding can occur swiftly and with no advance notice. Upstream of the project site, the Santa Clara Valley Water District (SCVWD) operates the Stevens Creek Reservoir and Dam. SCVWD may choose to implement releases of water from the reservoir without notice that may exacerbate high water or flood conditions in the Stevens Creek Corridor. Flooding can inundate portions of the work site within the flood plain at any time during the rainy season. Furthermore, such flood waters can bring aquatic wildlife, including federally-threatened steelhead, into the work site. Steelhead are federally protected and any harm to them or to their habitat can result in severe penalties.

Because of these circumstances, the Contractor must be prepared to completely clear the work site and to completely remove all equipment, tools, materials and other property from the work site if flooding conditions may occur. A special effort shall be made to remove first any items that could harm water quality or harm wildlife should they come into contact with creek waters. Contractor shall be prepared to implement such a clearing effort immediately, 24 hours per day, 7 days per week throughout the flood season (October 15 to April 30). It shall be the Contractor's responsibility to keep himself or herself apprised of weather and storm conditions during this time that could lead to a high water event. The Contractor's attention is directed to the SCVWD website which contain information about reservoirs' status at http://alert.valleywater.org/gageresv-cross.html., and information about stream guaging stations including an upstream Stevens Creek stream guage, Alert ID #1482 at http://alert.valleywater.org/gagestrm.html. The data are not guaranteed as accurate but provide reference information that can be useful.

1.09 SCHEDULE AND COMPENSATION

Full compensation for work involved in complying with the requirements of this Section 00820 shall be considered as included in the contract price and no additional time or compensation will be allowed therefor.

If Contractor's work progress is delayed due to compliance with the requirements of this Section 00820, it will be cause for a time extension if the delay affects the controlling item of work, per Document 00700, General Conditions.

END OF SECTION

DOCUMENT 00821

INSURANCE

A. At or before the date specified in Document 00200 (Instructions to Bidders), Contractor shall furnish to City satisfactory proof that Contractor has taken out for the entire period covered by the Contract the following classes of insurance in the form and with limits and deductibles specified below:

1. Comprehensive General Liability Insurance covering claims for personal injury, bodily injury and property damage arising out of the Work and in a form providing coverage not less than that of a standard Commercial General Liability Insurance policy ("Occurrence Form"). Such insurance shall provide for all operations and include independent contractors, products liability, completed operations for one year after Final Completion of the last Phase to be completed and acceptance of the final payment for the Work, contractual liability, and coverage for explosion, collapse and underground hazards. The limits of such insurance shall not be coverage of less than $2,000,000 each occurrence, $4,000,000 general aggregate limit.. The policies shall be endorsed to provide Broad Form Property Damage Coverage.
2. Comprehensive Automobile Liability Insurance covering all owned, non-owned, and hired vehicles. Such insurance shall provide coverage not less than the standard Comprehensive Automobile Liability policy with limits not less than $1,000,000 each person Bodily Injury, $1,000,000 each occurrence Bodily Injury, and $1,000,000 each occurrence Property Damage.
3. All-Risk Course of Construction Insurance **N/A** for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws, water damage, flood, and damage caused by frost and freezing, in the amount of 100 percent of the completed value of the Work to be performed under this Contract. Deductible shall not exceed $25,000. Each loss shall be borne by Contractor.
4. Workers' Compensation Insurance for all persons whom the Contractor may employ in carrying out Work contemplated under Contract Documents, in accordance with the Act of Legislature of State of California, known as "Workers' Compensation Insurance and Safety Act," approved May 26, 1913, and all acts amendatory or supplemental thereto, in the statutory amount, $1,000,000 each occurrence.

B. All policies of insurance shall be placed with insurers acceptable to City. The insurance underwriter(s) must have an A. M. Best Company rating of A, 7 or better or otherwise acceptable to the City. Required minimum amounts of insurance may be increased should conditions of Work, in opinion of City, warrant such increase. Contractor shall increase required insurance amounts upon direction by City.

C. Required Endorsements: The policies required under paragraphs A.1, A.2 and A.3 of this Document shall be endorsed as follows:

1. Name the City of Cupertino, a Municipal Corporation of the State of California, its City Council, and their employees, representatives, consultants (including without limitation Consulting Engineer), and agents, and Engineers, and Guilbane Building Company as additional insured, but only with respect to liability arising out of the activities of the named insured.
2. Each such policy shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limit of the insurance company's liability required under paragraphs A.1, A.2 and A.3 of this Document 00821.(Endorsement of Aggregate Limits of Insurance Per Project)
3. Insurance shall be primary and no other insurance or self-insured retention carried or held by City shall be called upon to contribute to a loss covered by insurance for the named insured.
4. Insurance shall contain a provision requiring the insurance carriers to waive their rights of subrogation against City and all additional insureds, as well as other insurance carriers for the Work.

D. Certificates of insurance and endorsements shall be on forms provided in Document 00530, (Insurance Forms) have clearly typed thereon City Project Number and title of Contract Documents. Written notice of cancellation, non-renewal, or reduction in coverage of any policy shall be mailed to City (Attention: Contract Administration/Inspection) at the address listed in Document 00520 (Contract), 30 Days in advance of the effective date of the cancellation, non-renewal, or reduction in coverage. Contractor shall maintain insurance in full force and effect during entire period of performance of Contract Documents, the following insurance in amounts not less than the amounts specified. Contractor shall keep insurance in force during warranty and guarantee periods, except that Contractor may discontinue All-Risk Course of Construction Insurance after Final Payment. At time of making application for extension of time, and during all periods exceeding the Contract Time resulting from any cause,

Contractor shall submit evidence that insurance policies will be in effect during requested additional period of time. Upon City's request, Contractor shall submit to City, within 30 Days, copies of the actual insurance policies or renewals or replacements.

E. Contractor shall pay all insurance premiums, including any charges for required waivers of subrogation or the endorsement of additional insureds. If Contractor fails to maintain insurance, City may take out comparable insurance, and deduct and retain amount of premium from any sums due Contractor under Contract Documents.

F. If injury occurs to any employee of Contractor, Subcontractor or sub-subcontractor for which the employee, or the employee's dependents in the event of employee's death, is entitled to compensation from City under provisions of the Workers' Compensation Insurance and Safety Act, as amended, or for which compensation is claimed from City, City may retain out of sums due Contractor under Contract Documents, amount sufficient to cover such compensation, as fixed by the Act, as amended, until such compensation is paid, or until it is determined that no compensation is due. If City is compelled to pay compensation, City may, in its discretion, either deduct and retain from the Contract Sum the amount so paid, or require Contractor to reimburse City.

G. Nothing in this Document 00821 shall be construed as limiting in any way the extent to which Contractor or any Subcontractor may be held responsible for payment of damages resulting from their operations.

H. Except that Subcontractors need to obtain coverage of not less than $2,000,000 each occurrence, $4,000,000 general aggregate limit of Comprehensive General Liability insurance, all Subcontractors shall maintain the same insurance required to be maintained by Contractor with respect to their portions of the Work, and Contractor shall cause the Subcontractors to furnish proof thereof to City within ten Days of City's request.

I. The following provisions apply to any licensed professional engaged by Contractor to perform portions of the Work ("Professional").

1. Each Professional shall maintain the following insurance at its sole cost and expense:

   a. Provided such insurance is customarily required by City when professionals engaged in the profession practiced by Professional directly contract with City, Professional Liability Insurance, insuring against professional errors and omissions arising from Professional's work on the Project, in an amount not less than $1,000,000 combined single limit for each occurrence. If Professional cannot provide an occurrence policy, Professional shall provide insurance covering claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than two years following Final Completion of the Project.

   b. All insurance required by paragraphs A.1, A.2 and A.4 of this Document 00821. Professional shall satisfy all other provisions of paragraphs A, B, C, D, E and F of this Document 00821 relating to that insurance, including without limitation providing required insurance certificates (containing the required endorsements) before commencing its Work on the Project.

J. If required by City, Contractor shall obtain and maintain Contractor's Pollution Legal Liability Insurance in a form, with limits, and from an insuring entity reasonably satisfactory to City.

END OF DOCUMENT

DOCUMENT 00822

APPRENTICESHIP PROGRAM

Contractor and Subcontractors shall comply with the requirements of California Labor Code Sections 1776, 1777.5, and 1777.6 concerning the employment of apprentices by Contractor or Subcontractors. Willful failure to comply may result in penalties, including loss of the right to Bid on or receive public works contracts.

Section 1777.5, as amended, requires a Contractor or Subcontractor employing tradespersons in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of a public works project and which administers the apprenticeship program in that trade for a certification of approval. The certificate shall also fix the ratio of apprentices to journeypersons that will be used in performance of the Contract. The ratio of work performed by apprentices to journeypersons in such cases shall not be less than one hour of apprentices work for every five hours of labor performed by journeypersons (the minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeypersons), except:

A. When unemployment for the previous three-month period in the area exceeds an average of 15 percent;

B. When the number of apprentices in training in the area exceeds a ratio of one to five;

C. When a trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis state-wide or locally; or

D. Assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyperson.

Contractor is required to make contributions to funds established for administration of apprenticeship programs if Contractor employs registered apprentices or journeypersons in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of the California Department of Industrial Relations, or from the Division of Apprenticeship Standards and its branch offices.

END OF DOCUMENT

DOCUMENT 00823
TREE PROTECTION

1) Introduction -- Tree Protection is much more than just placing fences around trees. Tree Protection includes, but is not limited to:

- **a** **The protection of the above and below-ground portions of trees and plants including roots, trunks, branches and foliage.** Protection of roots includes reduction and/or prevention of soil compaction caused by vehicles, equipment, materials or foot traffic.
- **b** **Protective Fencing and Signage** surrounding the Tree Protection Zone around the tree or group of trees.
- **c** **Pre-Demolition and Construction meetings on site with the Project Arborist,** for example regarding initial tree protection fencing locations.
- **d** **Ongoing updating and consultation with the Project Arborist** regarding site work and potential tree impacts – as needed.
- **e** **Periodic Tree Protection Inspections and Reports** by the Project Arborist.
- **f** **Pre-work Clearance Tree Pruning for demolition and construction** (handled by Contractor's-appointed tree service).
- **g** **Organic mulch placed in tree protection zones** .
- **h** **Irrigation of trees** if necessary before and during demolition and construction.
- **i** **Dealing with tree roots** relative to soil grubbing, grading, structure or pavement removal, excavations, etc. The goal is reduce damage to tree roots as much as possible.
- **j** **Removal of trees** that will not remain on site, without damaging trees that will remain.

2) DEFINITIONS

- **a** 3 and 5 X DBH: DBH is trunk "diameter at breast height" (4.5 feet above the ground). 3 and 5 times DBH are used to calculate root protection distances for trees in feet from the trunk. The 3 and 5xDBH distances for each tree are listed in the Complete Tree Table in the Arborist Report for the project.
- **b** Air spade: a commercial grade, hand-held metal probe attached to a large air compressor by a hose. Pressurized air is discharged from the tip of the probe. The air is used to excavate soil away from items such as tree roots, or to dig trenches or remove soil with minimal damage to tree roots (compared to traditional soil removal methods).
- **c** Arborist Designations**:**
  - i) **Arborist**: a person who provides advice about urban trees.
  - ii) **Board Certified Master Arborist** (ISA) must meet higher eligibility requirements than a Certified Arborist, pass a more comprehensive test and has a greater and more specific continuing education requirement.
  - iii) **Certified Arborist**: is an Arborist certified through the ISA (International Society of Arboriculture) after passing a test demonstrating basic knowledge about urban trees and their management, fulfilling an ongoing continuing education requirement and paying regularly scheduled certification fees.
  - iv) **City Arborist** is that person designated as such by the City of Cupertino. The City Arborist is responsible for City-owned trees.

v) **Project Arborist**: A Qualified Arborist who is the appointed consulting arborist for the project and provided and paid for by the Contractor.

vi) **Qualified Arborist**: An ISA Board-Certified Master Arborist and/or or an ASCA RCA that has experience in working as the Project Arborist on construction projects.

vii) **Registered Consulting Arborist (RCA)** is an arborist certified by the ASCA (American Society of Consulting Arborists). This is the highest level of arborist certification and requires a longer period of pre-certification work experience and/or formal education than an ISA Certified or Board-Certified Arborist. RCA's must have a more comprehensive knowledge of arboriculture, and demonstrate a minimum acceptable report writing proficiency.

b Demo: an abbreviation for Demolition.

c Dripline (tree): the area under the total branch spread of the tree, all around the tree.

d Existing tree: those trees existing on project property prior to any demolition or construction for a project.

e Owner: is the City of Cupertino or a designated representative of the City of Cupertino

f Tree: a woody perennial plant usually having one dominant trunk and a mature height greater than 15 feet. Multiple-trunk trees have more than one trunk.

g Tree Protection Zone (TPZ) means, unless otherwise specified by the Owner, the area inside the tree protection fencing on a construction project, containing the tree trunk(s) and extending to10 feet beyond the dripline of the tree or as close to this distance as possible, given the nature of the site and proposed improvements. The TPZ should be jointly agreed upon by the general contractor and the Owner and Project Arborist. The TPZ and tree protection fencing are put in place prior to any work on site (including demo) and remain in effect until the construction project (including landscaping) is fully completed. The TPZ may change during the span of the project (e.g. it may extend outward farther from the trunk if existing improvements are removed during demo) and more open ground space for the tree is created).

h Tree Service: A company that performs tree pruning and tree removals as their main business. **Qualified Tree Service**: A tree service with a supervising arborist who has the minimum certification level of ISA (International Society of Arboriculture) Certified Arborist, in a supervisory position on the job site during execution of the tree work. The tree service shall have a State of California Contractor's license for Tree Service (C61-D49) and provide proof of Workman's Compensation and General Liability Insurance. The person(s) performing the tree work must adhere to the most current of the following arboricultural industry tree care standards:

- Best Management Practices, Tree Pruning. International Society of Arboriculture, PO Box 3129, Champaign, IL 61826-3129. 217-355-9411
- ANSI A300 Pruning Standards. Ibid. (Covers tree care methodology).
- ANSI Z133.1 Safety Requirements for Arboricultural Operations. Ibid. (Covers safety).

3) GENERAL:

a **These Tree Protection Specifications Apply To Any Existing Tree On Site That Will Not Be Removed And Will Be Within Or Near Any Area Where Demo Or Construction Will Occur.** This includes any tree that is not located in an area that is completely fenced off from construction with a perimeter construction fence. If any portion of the canopy of a tree outside the construction zone overhangs a perimeter construction fence, these specifications shall apply to such trees as well.

b **Trees have value and a monetary value for individual trees that can be calculated by the project arborist**. The contractor may be charged the full value of the tree if a tree that is supposed to be saved is removed due to contractor negligence. Tree damage due to contractor's negligence will be charged at a percentage of the tree damaged, based upon the calculated tree value, up to 100% of that tree's value, as determined by the Owner. The contractor may also be charged for work to repair damage to the tree, including soil compaction remediation.

c **Unexpected conditions occur and changes are necessary on all construction projects.** Such situations may necessitate that changes or modifications be made to these Tree Protection Specifications. Any concerns or conflicts with these Specifications should be brought to the attention of the Owner immediately so that alternate methods may be agreed upon.

d **Notify the Owner as soon as there are changes in site or construction management personnel,** for example a new site superintendent. The Owner must always be provided with current contact information for the parties who are involved with the project.

e **New Landscaping can severely impact existing trees.**. Refrain from rototilling within tree driplines. Any planting within this area should be done by hand and not using power equipment such as soil augers. Plants and new irrigation including irrigation trenching are best kept at least 6 to 10 feet away from the trunks of existing trees (or *5xDBH*, whichever is greater), depending upon the size and type of tree, and the environmental conditions. Farther is better. Some established tree species should have no planting or irrigation in their vicinity, for example California native oaks. For this particular project, leaving as much of the existing native vegetation in place is preferable.

f **Underground Utilities:** Every attempt should be made to keep new underground utility lines outside tree protection zones and as far away from existing trees as possible. Any utilities found within or passing through tree protection zones at any point in the construction process should be brought to the attention of the Owner so that a change can be investigated to move the utilities out of these zones. If any utility lines will pass underneath the dripline of the tree, through tree protection zones or within the 5xDBH distance to the trunk, the Project Arborist shall review the utility location and may prescribe any mitigation procedures that will reduce damage to trees and get approval from the Owner. Abandoned pipes and utilities should be cut at existing grade and not pulled out, if their removal would damage tree roots. Trenching radially toward the trunk of the tree, rather than linearly across the trunk and dripline of the tree, will often cause less root damage.

g **Construction Vehicle Access:** There should be a defined route for construction vehicles and large equipment, in order to reduce damage to trees and other vegetation. Clearly show and label the construction vehicle route on the Tree Protection Fencing Plan as well as grading and other applicable construction plans. Preferably there should be one entrance and one exit to the site.

h **Designated Storage & Parking Areas:** There must be designated storage and parking areas on site, away from protected trees.

i **Project Arborist Presence During Work**: The Owner may require the presence of the Project Arborist when working is being completed near driplines or in root areas and tree protection zones.

4) PRE-DEMOLITIONLITION/CONSTRUCTION:

a **Pre-Demo/Construction Meeting** at the site shall be conducted with the Project Arborist, the Owner, and the general contractor. The general contractor is responsible to see that these tree protection specifications are implemented and that all people working at the site, making deliveries or are otherwise involved with the project site are aware of and adhere to these specifications. A copy of these Specifications is to remain and be accessible at the site at all times. Additional meetings on site with workers may be necessary and if needed should be organized with the Project Arborist when required by the Owner. Tail-gate meetings may be recommended to include review of unusual circumstances, conditions or procedures to be followed.

b **Irrigation.** Any trees that will be near construction or demolition disturbance should be well hydrated before any demolition or construction work begins. The Project Arboirist will determine whether or not irrigation is required at any time before or during the project and will supply directions for irrigation. The frequency and amount of water will depend upon the weather, real or expected root damage to the tree, tree species and condition and the soil moisture status. The Contractor should irrigate the trees if necessary ideally 2 weeks before any work will begin, or as soon as possible prior to the commencement of work, if the soil is not moist to at least 12 inches below the surface . At the Project Arborist's discretion, such irrigation may include drought tolerant trees which should normally be "summer dry" such as native California oaks, if they are expected to experience root damage during construction. Pre-construction irrigation helps the trees go into the project strong and not drought-stressed, so they will be better able to weather any root damage they may experience. During construction the Contractor should be prepared to supply the trees with non-recycled water from a water truck or other suitable water source at least several times per week during the normally dry months, as well as if there is insufficient rain during the normal wet season. Irrigation directions shall be supplied by the Project Arborist and reviewed by the Owner as necessary to keep the trees properly hydrated.

c **Pruning for Site Access and Construction Clearance.** Tree pruning for construction clearance should be as little as possible, and only what is required to allow site access, demolition and construction. An exception to this would be pruning to mitigate an acute hazardous condition, which should always be done as soon as possible. Aesthetic or other

pruning can be done after the project has been completed so do not mix this with site access or construction pruning.

In order to ensure quality and consistency, the Contractor will appoint and utilize a Qualified Tree Service to perform all tree pruning. Tree work shall be performed according to the most current arboricultural industry standards listed below. Prior to commencement of any work, the contractor shall submit a Site Access Clearance Pruning Plan for approval and use by the Owner. In order to avoid unnecessary pruning, NO construction clearance pruning will be performed until planned improvements have been properly staked in the field. In the event of pruning required to mitigate an acute hazardous condition, contact the Owner as soon as possible for instructions. The Project Arborist may be required by the Owner to ovesee the pruning work.

i) Best Management Practices, Tree Pruning. International Society of Arboriculture, PO Box 3129, Champaign, IL 61826-3129. 217-355-9411.
ii) ANSI Z1331 American National Standards for Tree Care Operations. Secretariat: National Arborist Association, Inc. American National Standards Institute, 11 West 42nd St., New York, New York, 10036. (Covers safety).
iii) ANSI A300 Pruning Standards. Ibid. (Covers tree care methodology).

- *If urgent pruning is necessary for immediate construction clearance this may be done by the general or demolition contractor if approved by the Project Arborist. In this case a short stub[1] should be left which can be removed by a qualified tree service at a later time. Notify the Owner immediately.*

d) Tree Protection Fencing Requirements for all trees that may be affected by site work.

i) **All construction activities shall be conducted outside tree protection fencing.** These activities include, but are not limited to, the following: demolition, grubbing grading, trenching, equipment cleaning, stockpiling and dumping materials (including soil fill) and equipment/vehicle operation and parking.

ii) **Fencing Materials and Installation[2]**: The fencing shall be as Type 1 Fencing as described below and shown in Detail #1 unless otherwise prescribed for certain areas as directed by the Owner. If Type 1 Fencing is not possible on the project or a portion of the project, then this must be brought to the attention of the Owner and alternative fencing agreed to.

(1) **Fencing Types**

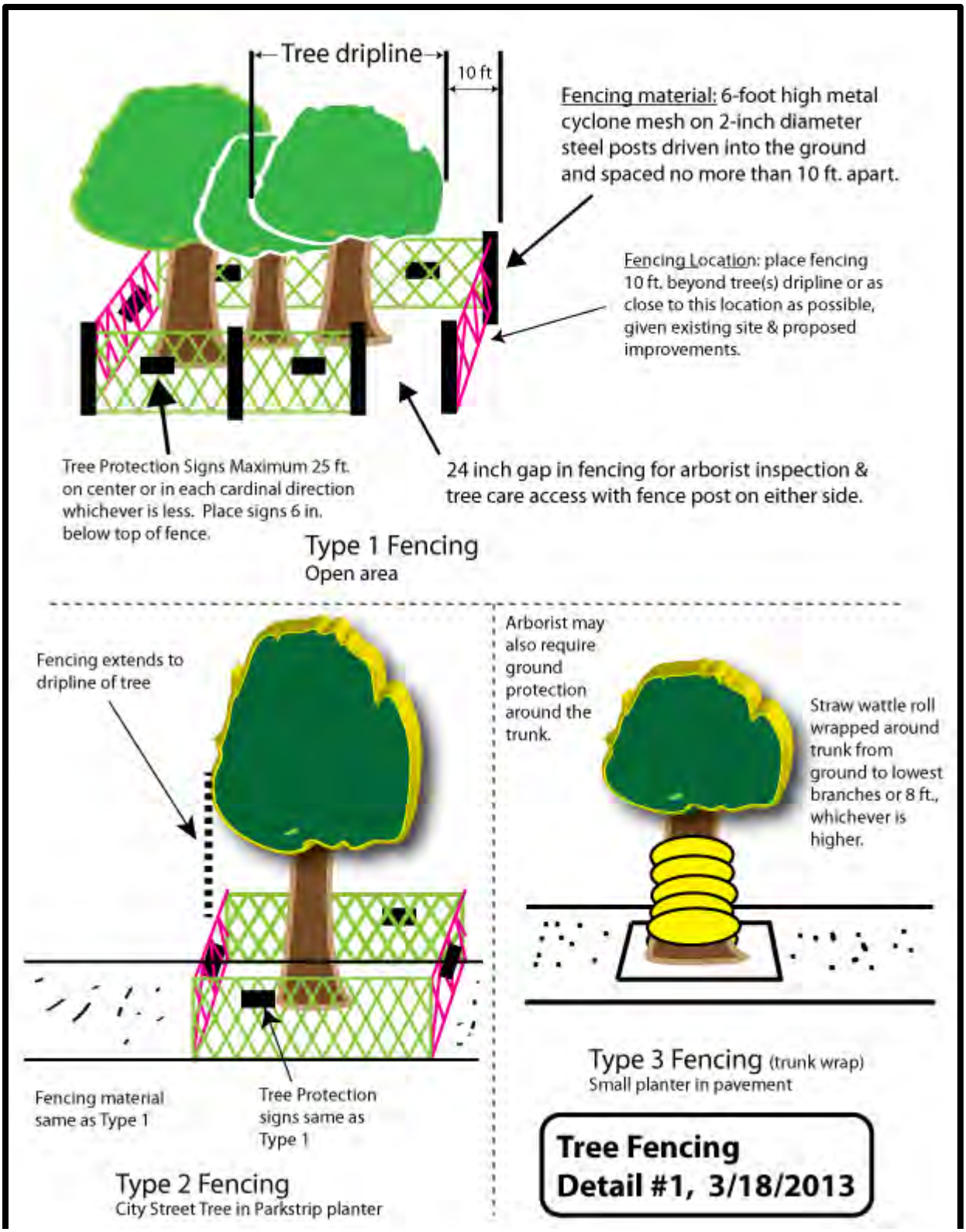
(a) Type 1 Fencing**:** shall be 6-foot high chain-link fencing mounted on 2-inch diameter galvanized posts, driven into the ground to a depth of at least 2 feet and

[1] Stub: a short length of branch remaining following the removal of a branch through pruning, versus the more correct method of cutting a branch back to just beyond the branch collar and branch bark ridge. Leaving stubs in trees is generally a poor practice.

[2] Chain-Link Protection-Zone Fencing: Galvanized-steel fencing fabricated from minimum 2-inch (50-mm) opening, 0.148-inch- (3.76-mm-) diameter wire chain-link fabric; with pipe posts, minimum 2-3/8-inch- (60-mm-) OD line posts, and 2-7/8-inch- (73-mm-) OD corner and pull posts; with 1-5/8-inch- (42-mm-) OD top rails and 0.177-inch- (4.5-mm-) diameter bottom tension wire; with tie wires, hog ring ties, and other accessories for a complete fence system.

spaced no more than 10 feet apart. An 18 - 24-inch gap shall be left in the fencing for Arborist inspection and tree care access. There must be a fence post on either side of this gap.

(b) Type II Fencing**:** For trees situated within a narrow planting strip (e.g. park strip planter between a road and a sidewalk) surrounded by pavement to remain; only the planting strip shall be enclosed with the required chain link protective fencing in order to keep the sidewalk and street open for public use. The fencing shall include the entire dripline of the tree that overhangs the planting area.


Tree dripline
10 ft
Fencing material: 6-foot high metal cyclone mesh on 2-inch diameter steel posts driven into the ground and spaced no more than 10 ft. apart.
Fencing Location: place fencing 10 ft. beyond tree(s) dripline or as close to this location as possible, given existing site & proposed improvements.
Tree Protection Signs Maximum 25 ft. on center or in each cardinal direction whichever is less. Place signs 6 in. below top of fence.
24 inch gap in fencing for arborist inspection & tree care access with fence post on either side.
Type 1 Fencing
Open area
Fencing extends to dripline of tree
Fencing material same as Type 1
Tree Protection signs same as Type 1
Type 2 Fencing
City Street Tree in Parkstrip planter
Arborist may also require ground protection around the trunk.
Straw wattle roll wrapped around trunk from ground to lowest branches or 8 ft., whichever is higher.
Type 3 Fencing (trunk wrap)
Small planter in pavement
Tree Fencing
Detail #1, 3/18/2013

iii) **Fencing Placement:**

(1) **Fencing shall be placed 10 feet beyond the dripline of the tree.**

(a) **If it is not possible or practical to place the tree protection fencing as directed above given the nature of the site and the proposed work**, then the fencing shall be placed as far from the trunk of the tree as possible, while still allowing construction work to progress, in order to protect as much of the ground underneath the canopy of the tree as well as the canopy of the tree itself.

(2) **The area inside the tree protection fencing, containing the protected tree or trees, is the Tree Protection Zone (TPZ).**

(3) **The Owner shall meet with the general contractor on the project site prior to both demolition and construction to discuss and agree upon tree protection fencing locations**. Tree protection fencing locations shall be spray painted on the ground and any deviations to the Type 1 Tree Protection Fencing must be noted and agreed to by both the Project Arborist and the general contractor and the Owner.

(4) **The Owner shall inspect the fencing after installation.**. If the fencing is non-compliant then. no work (including staging of equipment or materials) may begin on site until the Owner has approved the tree protection fencing.

(5) **The fencing shall not be moved from its Owner approved locations without permission**. No work may occur within the fencing without the Owner permission. If contractor or others feel that the fencing must be moved or work must be done inside the fenced area call the Owner to arrange a field meeting. In some cases this may be taken care of over the phone. Whatever the case, the Owner permission is necessary in order to move or take down the tree protection fencing.

(6) **Perimeter construction fencing** may serve as a portion of tree protection fencing upon approv Owner. Such perimeter fencing must have tree protection signs attached to it facing the project site, as described in item (*v*) below.

iv) **Fencing maintenance:** Fence posts must be maintained vertical, level and plumb, and shall not be allowed to lean. Fence mesh shall be taught and shall not sag. Do not lean construction equipment, materials, supplies or other items on the tree protection fencing.

v) **Tree Protection Fencing Signage:** Tree Protection Signs are required to be affixed to all tree protection fencing with four plastic wire ties; one wire tie in each corner of the sign. The Tree Protection Sign Template *(Detail #2, on page 11)* shall be used to order and make the Tree Protection Signs. The written portion of the sign shall face the project work area. The sign shall be a minimum 8.5 x 11 inches and be constructed of either aluminum or corrugated plastic. U Signs must be securely affixed to the Tree Protection Fencing with one plastic wire tie in each corner. The top of the sign shall be 6 inches below the top of the fence. The sign must be level and must face the construction work.

Detail #2 Tree Protection Sign Template

i) **Duration of Fencing:** Tree protection fencing must remain in place until final inspection of the project, including landscaping (unless otherwise authorized by the Owner). A great deal of tree damage can occur during landscaping.

ii) **Fencing Visibility:** Durable neon-colored flagging tape may be woven through the top of the tree protection fencing, or about 12 inches of orange plastic ski fencing can be attached to the top of the metal chain link fencing to increase visibility to vehicle operators.

iii) **Other:**
   (1) **Do not direct vehicle or equipment exhaust** toward protection zones.
   (2) **Prohibit heat sources, flames, ignition sources, and smoking** within or near protection zones and organic mulch.
   (3) **Restrict vehicular traffic to areas outside the dripline of the tree**, even when the entire dripline is not surrounded by tree protection fencing, whenever possible

b **Mulching – Existing Trees to Remain. No supplemental mulching is required** for existing trees to remain on this project – however; the existing natural topsoil, surface plant litter and live vegetation must remain in place until landscaping, in order to protect the root system of the trees. No site clearing or grubbing (e.g. scraping of surface of soil to remove vegetation and plant debris) shall occur except in the distinct areas where improvements will be located. Depending upon tree and site conditions, the Project Arborist may call for mulch material (tree trimming chippings from a local tree service) to be delivered to the site and spread around trees as the project progresses.

2) DURING DEMOLITION/CONSTRUCTION:

a **Project Arborist Presence During Work**: work around specific trees (such as trenching or excavation near certain trees) is called out on the plans as requiring the Project Arborist to be present during the work. If not called out on the plans the Owner may request the Project Arborist presence for the oversite of work near trees.

b **Except in the distinct areas where improvements will be located and soil disturbance is necessary for construction, the existing natural topsoil, surface**

plant litter and live vegetation must remain in place until landscaping, in order to protect the root system of the trees. No site clearing or grubbing (e.g. scraping of surface of soil to remove vegetation and plant debris) shall occur except in those areas approved for soil disturbance. Depending upon tree and site conditions, the Project Arborist may call for mulch material to be delivered to the site and spread around trees as the project progresses.

c **Structures, underground features and other improvements to be removed within any tree protection zone shall use the smallest equipment possible**, and the equipment shall sit outside the tree protection zone and as far from protected trees as possible. The Project Arborist should be on site to monitor demolition activity.

d **Unavoidable Vehicle Traffic within Tree Protection Zones:** Where vehicles or equipment must travel within tree protection zones, protection of the soil to reduce compaction must be accomplished through one or more of the following, to be approved by the Project Arborist and the Owner:

i) **Apply 6-12 inches of woodchip mulch** to the area
ii) **Lay 1-inch thick plywood or 4 x 4 inch wood beams over a 4+ inch thick layer of wood chip mulch**
iii) **Apply 4 to 6 inches of gravel over a taut, staked geotextile fabric**
iv) **Placing commercial logging or road mats on top of a 4+ inch thick mulch layer**
v) **Lay steel plates on top of supportive 4x4" lumber or railroad ties** to span over tree root zones.
vi) **Note that all stone, and base rock, all geotextile and any mulch exceeding 4 inches in depth** will need to be removed after work in the area has been completed.

e **Unavoidable foot traffic or worker access for construction within tree protection zones:** The ground surface should be cushioned with one or more of the following, agreed upon by the Project Arborist and the Owner:

i) Flakes taken from bales of hay and overlain with ¾ or 1" thick sheets of plywood. Use at least 2 layers of flakes (or as many as needed to provide a 4 to 6 inch height. Move this protection as needed, but keep as much of this protection in place as possible.
ii) 6-inches of mulch overlain by ¾-inch thick plywood
iii) 8-12 inches of mulch spread over the ground surface

f **Dealing with Roots that are exposed, must be removed or are damaged:**

i) **Any soil disturbance within the tree protection zone and/or the tree dripline (whichever is greater) should be done with great care as follows:**

(1) **If grading (cut or fill) will occur, then hand or air-spade excavate of a *root observation and root cutting trench* at the edge of soil disturbance near a protected tree(s):** this trench must be air spade or hand dug to the depth of the excavation at the edge of the soil disturbance. Roots that roots that must be removed within the soil disturbance area shall be exposed and cut cleanly within this trench. The excavation of this trench must not cause the soil disturbance to come any closer to the tree than is necessary for construction of the improvement. The trench must be at least 12 inches wide. Within the trench, cut exposed roots that need to be removed cleanly with sharp pruning tools as specified. The Project Arborist should be present

to inspect the exposed roots after the trench has been dug and also to observe, supervise and assist with the root cutting. If the Project Arborist is not present then leave cut root pieces close to the trees from which they were cut, for the arborist to check at a later time.

(2) **Specifically regarding the utility trench from McClellan Road down to the Environmental Education Center Building:** this trench must be hand dug along its entire length that is underneath the dripline of any existing trees. Roots must be dealt with as directed in items #2.f.iii. (1) – (3) iv-v. The trench will be located between tree #27 (7-inch trunk diameter coast buckeye), tree #28 (10-inch diameter coast live oak), and tree #29 (28-inch buckeye). The Project Arborist should be present to inspect the exposed roots and assist with root cutting during this work.

(3) **After roots that must be removed have been cut within the above trench,** heavy equipment may be used to continue soil work beyond the trench, but the equipment must not contact the roots that have been cut at the edge of the trench, or any soil or roots on the tree-side of the trench.

(4) **If the excavation of the above root observation and cutting trench and cutting of roots prior to soil disturbance is not possible**, then the Project Arborist should be notified beforehand and alternate methods agreed upon by the Owner.

ii) **Underground Utility Trench excavations:** must be dug by hand, air spade or by mechanically tunneling under roots within the area underneath the dripline of trees or within the fenced-off TPZ for that tree. Trench cuts should be kept moist by spraying with water and covered until backfilled.

(1) **When mechanical tunneling (boring) is substituted for open trenching, maintain the following depths per trunk DBH in Table 4.0 on the next page.** The nearest edge of the excavation for launching and recovery pits should be located at least the 5xDBH distance from the edge of the trunk of the tree. Less root damage will occur if the tunnel is located directly underneath the trunk versus to the side of the trunk.

Table 4.0

DEPTH OF TUNNELING

Tree Diameter (DBH)	Depth of Tunneling
9" Or Less Measured At 6"	2.5'
10-14" Measured At 54"	3.0'
15-19" Measured At 54"	3.5'
More Than 19" Measured At 54" Depth of Tunnel	4.0'

iii) **Root cutting tools:**

(1) The following root uncovering and cutting tools are mandatory**:**

- Round-blade shovel
- Large mattock
- Tree pruning saws designed for root cutting
- Pruning loppers with minimum 1-inch diameter cutting capacity

(2) The following tools are recommended**:**

- Hand mattock
- Hand trowel shovel
- Recipro-saw with wood cutting blades (especially pruning blades – have several new blades on hand)
- Concrete circular saw (rock or root cutting saw, e.g. Stihl TS-400 with a 12-inch blade, preferably carbon or diamond-tipped – start with a new blade and have extra blades on hand).
- Chain saw (for large roots, e.g. over 4 inches in diameter start with a new chain and have extra chains on hand)

(3) Professional root cutting equipment such as a Dosco™ or Vermeer™ root cutting machine may be used for cutting roots over long linear distances, if pre-approved by the Project Arborist.

iv) **Cutting the roots**: Roots that are 2 inches or greater in diameter that must be removed or are damaged must be cleanly cut. Roots smaller than 2 inches in diameter are encouraged to be cut. Roots larger than 4 inches in diameter should not be cut without the Project Arborist's approval. Leave existing roots in place when possible (e.g. routing pipes underneath if this is acceptable). When roots must be cut use appropriate root cutting tools, as specified above. Tools must be sharp and in good condition. Cut roots at a right angle when possible. Cut roots back to branch roots growing in a direction away from the work

area when possible. When roots are cut back to a trench wall, cut them flush with the face of the wall. Do not break, tear or chop rots. Do not use a backhoe or other equipment that rips, tears, or pulls roots. Place all cut roots in a pile near the tree where they were cut so that the Project Arborist can review and document.

v) **Covering exposed and/or cut roots and keeping them moist until backfill or other permanent soil covering is in place**: Areas of soil disturbance with tree roots (even if roots are not visible) should be sprayed with water on at least a daily basis if necessary in order to keep the exposed soil and roots as moist as possible. On warm days several sprayings may be necessary. This wetting down should continue until permanent covering is placed on the exposed soil surface or trenches are backfilled. Mulch material placed on level areas will keep those areas moister much longer than if the soil is left bare. Trench walls should be sprayed with water and covered with 2 layers of natural (not synthetic) burlap (two or more layers are preferable), discarded carpeting, old sheets or blankets, cardboard sections, organic mulch held in place with plywood or other materials that will perform the same function and are safe for tree roots.

g **Structure demolition:** structures should be collapsed inward and/or away from adjacent trees. Demolition equipment must sit outside tree protection zones.

h **Pavement removal:** This may be done with a backhoe if done carefully so as not to damage the trunk of the tree, and to disturb the roots of the tree as little as possible. If the backhoe, excavator or heavy equipment bucket or other soil removing device is working within 6 feet of the trunk of the tree, then the trunk must have ¾-inch thick plywood placed in front of it, or the trunk must be wrapped with straw wattle. The backhoe or other equipment must sit on existing pavement or outside the T PZ and work backwards. Alternatively, pavement may be broken into manageable pieces (e.g. by hand with jackhammer) and hand placed onto a loader. Where roots larger than 2 inches in diameter have grown into the existing base course material, use the existing material as the new material and do not remove and replace it. Any roots that are exposed or damaged must be appropriately cut, covered and kept moist as described previously.

i **Trees to be removed:**

i) **Trees to be removed must be removed without damaging trees that will remai**n.

ii) **Trees to be removed that will be felled** must fall away from the tree protection zone of trees to remain.

iii) **Trees to be removed that will be pulled out**: If roots are entwined with trees to remain, the Project Arborist my require that the large roots close to the trunk of the tree to be removed be severed close to the trunk before the tree is extracted from the soil, or grinding the stump below ground, to avoid damage to the roots of trees to remain.

iv) **If tree canopies are knit together (branches from more than one tree intermingle with each other) then the demo contractor may NOT remove these trees** – they must instead be removed by a qualified tree service that will cut the trees down carefully in order to avoid damage to adjacent trees and any understory that is to remain.

v) **If trees to be removed are far away from trees that will remain, the demo contractor may remove these trees by pulling or pushing them over** as long as roots or aboveground portions of nearby remaining trees will not be damaged. Alternatively grind the stumps of trees to be removed to 12 inches below grade, again if this grinding will not be near trees that will remain. If trees to be removed are close to trees that will remain then do not push or pull over the tree or grind the stump, but rather cut the trunk to a stump that is as flush with the ground as possible. The method of tree removal should be

agreed upon at the site on a tree by tree basis between the Owner and the Project Arborist and contractor prior to any tree removals.

j **Damage to trees:** Any damage or injury to trees shall be reported within 6-hours to the In the event of injury, the following mitigation and damage control measures shall apply:

i) Root injury: Bark or trunk wounding: Current bark tracing and treatment methods shall be performed by a Qualified Tree Service or the Project Arborist within two days.

ii) Scaffold branch or leaf canopy injury: Remove broken or torn branches back to an appropriate branch capable of resuming terminal growth within five days. If leaves are heat scorched from equipment exhaust pipes, consult the Project Arborist within 6 hours.

iii) Fines for damage to trees: $100 per inch of width (e.g. for bark scraping of trunk or branches), as measured by the Project Arborist. Other damage: the full or partial value of the tree (as per Trunk Formula Method, Replacement Cost Method or Cost of Repair Method[3], as determined by the Owner. **For soil compaction** (e.g. tree protection fencing was removed and vehicles were parked in the TPZ – the Project Arborist will require water jet irrigation, radial trench mulching, regular mulching and/or other treatments.

3) OTHER:

a **No herbicides are allowed to be used underneath pavement** or in any other area on site.

b **Any herbicides used on site must be labeled as "safe to use around trees".**

c **Do Not Dump Cement Tailings, Chemicals or Other Waste Products into any Future Landscape Area, not just within Tree Protection Zones.** Preferably, have a designated washout pit far from landscape areas.

d **Liming of the soil for soil compaction is not allowed near trees:** Liming is toxic to plant roots! If there will be any liming on site consult with the Project Arborist long beforehand in order to make sure that the lime is not anywhere near trees or other vegetation that is planned to be saved. A very large lime-free buffer zone (e.g. at least 50 feet) from the dripline of any trees or plants should be maintained between vegetation and liming.

e **Dust Control Program.** During periods of extended drought, wind or grading, spray wash trunk, limbs and foliage to remove accumulated construction dust. The Project Arborist may request that this be done at their discretion.

f **Do not use trees as a winch support**.

g **Do not hang, tie, attach, lean against or otherwise allow materials, supplies, debris or other things to contact trees.**

h **Trees shall not be fertilized before, during or after the construction process unless specifically prescribed by the Project Arborist.** Most fertilizer applications to established trees in this area are unnecessary and often cause more harm than good. For

[3] *Guide for Plant Appraisal*, 9th Edition. Council of Tree & Landscape Appraisers. International Society of Arboriculture. 2000.

example, nitrogen increases plant metabolism and can put additional stress on trees that are already under stress from site (environment) changes and root damage such as commonly occurs during construction projects. Fertilization can also promote unnecessary growth of foliage which removes energy reserves from roots and increases the tree water requirement. Fertilizers are salts that increase the osmotic potential of the soil and can magnify drought stress injury to plants.

6) TREE PROTECTION SUPERVISION:

a **Tree Protection Inspections & Documentation:** The Project Arborist must supervise any work within the tree protection zone, or when roots or branches of the tree are encountered or are expected to be encountered – whether or not these are within or above the Tree Protection Zone. The Project Arborist will inspect the site for tree protection specification compliance periodically from prior to demolition until immediately after construction is completed. The resultant Tree Protection Inspection Report should be submitted to the Owner for distribution as soon as possible after each tree protection inspection. The Tree Protection Inspection Report shall include status of the following:

i) Inspector name and contact information
ii) Date and time of inspection:
iii) Date of last inspection
iv) Reason for inspection
v) Weather (approximate temperature, any rainfall, etc.)
vi) Current demolition or construction work on site
vii) Additional demolition or construction work completed since last inspection
viii) Tree protection fencing status (including tree protection signage)
ix) Mulching status (if required)
x) Tree work done within last inspection period (pruning, irrigation, etc.)
xi) Grading, trenching, excavations, cut or exposed roots, root recutting and protection
xii) Other

b **The following Project Arborist site inspections are mandatory and must be documented as per the items listed in Tree Protection Inspections & Documentation, item 6.a. above:**

i) **Tree Protection Fencing**. The Owner shall be in receipt of a written statement from the Project Arborist verifying that the Project Arborist has conducted a field inspection of the trees and that the protective tree fencing is in place prior to issuance of a demolition, grading or building permit, unless otherwise approved by the Owner.
ii) **Pre-Construction Meeting**. Prior to commencement of demolition or construction, the Project Arborist shall conduct a pre-demolition/construction meeting to discuss tree protection with the site superintendent, grading equipment operators and the Owner.
iii) **Inspections of Rough Grading or Trenching**. The Project Arborist shall perform an inspection during the course of rough grading adjacent to the Tree Protection Zone to ensure trees will not be injured by compaction, but or fill, drainage and trenching, and if required, inspect tree wells, drains and special paving. The contractor shall provide the Project Arborist at least 48 hours advance notice of such activity.
iv) **Periodic General Tree Protection Inspections**: The Project Arborist shall perform periodic inspections to monitor changing site and tree condition. These inspections should preferably be unannounced. The Owner shall be in receipt of the inspection report as per item 6.a. above. See *Detail #2*, the *Periodic Tree Protection Inspection Report template*

v) **Special Activity within the Tree Protection Zone**. Work within this area requires the direct onsite supervision of the Project Arborist.

7) REFERENCES:

1) Arboriculture – Integrated Management of Landscape Trees, Shrubs & Vines, 4th edition. Harris et al. Prentice Hall. 2004.
2) Guide for Plant Appraisal. 9th Edition. Council of Tree & Landscape Appraisers. International Society of Arboriculture. 2000.
3) Tree Technical Manual. Standards & Specifications. City of Palo Alto. Palo Alto Municipal Code, Chapter 8.10030. Dave Dockter, June 2001 (First edition). Palo Alto Department of Planning & Community Environment. Available online at: http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=6436
4) Pruning Standards:
   a. Best Management Practices, Tree Pruning. 2008. International Society of Arboriculture, PO Box 3129, Champaign, IL 61826-3129. 217-355-9411
   b. ANSI Z133.1 American National Standards for Tree Care Operations. 2006 Edition. Secretariat: National Arborist Association, Inc. American National Standards Institute, 11 West 42nd St., New York, New York, 10036.
   c. ANSI A300 Pruning Standards. 2008 Edition. Ibid.
5) Trees & Development. Matheny et al. International Society of Arboriculture. 1998.
6) *The* Guide for Plant Appraisal, 9th edition. Council of Tree & Landscape Appraisers. International Society of Arboriculture. 2000.
7) Species Classification and Group Assignment, Western Chapter of the International Society of Arboriculture, 2004.

8) ENCLOSURES:

a Tree Protection Sign Template

b Tree Protection Sign Order Form (used along with the above template) to order metal or plastic signs tree protection signs from a sign company

c "Keeping Native Calif. Oaks Healthy". Hagen. June 1990. California Department of Forestry & Fire Protection. Tree Notes #7.

DOCUMENT 00824

TEMPORARY WATER POLLUTION CONTROL

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes requirements for the Water Pollution Prevention Program for water pollution prevention and control, including associated SWPPP. The SWPPP is provided in the Appendix.

1.02 RELATED WORK

A. Section 31 10 00 Site Clearing

B. Section 31 20 00 Excavating

C. Section 31 30 00 Earthwork

1.03 REFERENCES

A. State of California, Department of Transportation (Caltrans), 2010 Standard Specifications Section 13, “Water Pollution Control.”

B. Water pollution control work shall conform to the requirements in the Caltrans "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Plan (WPCP) Preparation Manual” and the "Construction Site Best Management Practices (BMPs) Reference Manual," and addenda thereto, hereafter referred to respectively as the "Preparation Manual" and the "Construction Site BMP Manual" and collectively as the "Manuals” except as otherwise authorized by RWQCB in the proposed SWPPP for this project. Copies of the Manuals and the Permits may be obtained from the Department of Transportation, Sacramento, California 9581. Copies of the Manuals may also be obtained from Caltrans’ Internet Web Site at: http://www.dot.ca.gov/hq/construc/stormwater/.

C. Santa Clara Valley Water District (SCVWD) Stream Maintenance Program including Best Management Practices, and subsequent addenda

D. Regional Water Quality Control Board (RWQCB) and State Water Quality Control Board (SWQCB) requirements and the most current version of the State of California Construction General Permit.

E. National Pollutant Discharge Elimination Permit (NPDES) Municipal Stormwater Permit, per the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit, Order R2-2009-0074, NPDES Permit No. CAS612008, October 2009 and any subsequent updates or revisions.

F. C.3 Stormwater Handbook, Santa Clara Valley Urban Runoff Pollution Prevention Program, April 2012

G. Bay Area Air Quality Management District (BAAQMD) guidelines.

1.04 SUBMITTALS

A. As part of the water pollution control work, a Storm Water Pollution Prevention Plan, hereafter referred to as the "SWPPP," is required for this contract. The SWPPP shall conform to the provisions in the Manuals, the requirements of the applicable codes, regulations and permits, and the contract documents.

1. The Contractor shall submit to the Engineer a cost break-down for the contract lump sum item of water pollution control, including the cost of compliance with the SWPPP.

2. The Contractor shall submit a completed, completely filled in SWPPP document and identify their Qualified SWPPP Practitioner (QSP) within 10 working days of contract award.

3. The Contractor’s QSP shall prepare and provide to the City, all requirements and project registration documents (PRDs) needed for submittal to SWRCB as indicated on the SWPPP, fully completed and ready to upload.

2. The Contractor shall not perform any clearing and grubbing, demolition, or other construction activities on the project, until such program has been submitted to and accepted by SWRCB and authorization secured.

B. A copy of the SWPPP, together with updates, revisions and amendments shall be kept at the construction site.

C. The Contractor shall develop a Temporary Water Pollution Control Schedule that shall describe the timing of grading or other work activities that could affect water pollution. The Temporary Water Pollution Control Schedule shall be updated by the Contractor to reflect any changes in the Contractor's operations that would affect the necessary implementation of water pollution control practices.

1.05 DESCRIPTION

A. COMPLIANCE

1. City shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for the project and the necessary permit registration documents (PRDs) shall be digitally filed with the California State Water Resources Control Board (SWRCB) through the Stormwater Multi-Application and Report Tracking System (SMARTS database) prior to the Notice to Proceed. The annual permit fee shall be paid by the City.

2. The City is the “Legally Responsible Party” (LRP) for the project..

3. The City’s representative shall perform the role of “Qualified SWPPP Developer” (QSD) and shall be responsible for any formal amendments to the SWPPP if such

occurs. The QSD's name, contact information, and certification number shall be included in the SWPPP.

4. The Contractor shall perform the role of "Qualified SWPPP Practitioner" (QSP) and shall be responsible for oversight of field SWPPP implementation, monitoring, sampling, and reporting. In addition, the Contractor's QSP shall enforce and oversee any changes to the SWPPP's Water Pollution Control Plan if such occurs.

5. Contractor shall confirm authorization of coverage of this project under the State of California Construction General Permit.

6. Contractor shall be responsible for implementation of the project SWPPP, including installation and repair of all BMPs, with oversight by Contractor's QSP, and all other items noted in Sections C and D below.

B. LRP Responsibilities (City)

1. Electronically file (upload) Permit Registration Documents (PRDs) to SWRCB.

2. Obtain WDID from the State Water Resources Control Board and add it to the original SWPPP document.

3. Provide SMARTS User Name for QSD, QSP, and data entry persons to the Approved Signatory.

4. File Notice of Termination on SMARTS, upload photographs, and coordinate with Approved Signatory for certification.

C. QSD Responsibilities (City's representative)

1. Develop and amend SWPPP.

2. Confer with QSP at start of project and as required during construction and/or for any major amendments to the SWPPP if required.

3. Prepare major amendments to the SWPPP, if required, coordinate certification with approved signatory.

4. Oversee implementation of the SWPPP.

D. QSP Responsibilities (Contractor)

1. Oversee and direct implementation of the SWPPP.

2. Ensure SWPPP documentation is on site, available, and up to date at all times (including all inspection forms, REAP's, weather forecast printouts, etc.) during construction hours.

3. Oversee and direct minor changes to the SWPPP, document as necessary, and so inform the Engineer.

4. Coordinate major amendments to the SWPPP, if such occurs, with the City and QSD and ensure that any changes are properly implemented by the Contractor.

5. Perform ongoing visual monitoring of the project site as required.

6. Perform on-site inspection within 48 hours prior to forecast storm events with 50% chance or greater of rain, and more stringent inspection if so required.

7. Complete Rain Action Event Plan (REAP) 48 hours prior to forecast storm events with 50% chance of rain or greater, and more complete more stringent REAP preparation if so required. REAPs shall be developed for all phases of construction.

8. Perform daily on-site inspections during storm events as required, including sampling and monitoring for pH, turbidity and other factors as required a minimum of 3 times daily at each stormwater discharge point.

9. Perform on-site inspections within 48 hours after a qualifying rain event or as otherwise required.

10. Perform on-site weekly inspections year round for the duration of the project or as otherwise required.

11. Perform quarterly non-stormwater management inspections.

12. Perform sampling of non-stormwater pollutants as required.

13. Prepare and complete Construction General Permit annual report for submittal to SMARTS.

14. Prepare and submit NAL Exceedance reports for submittal to SMARTS if requested by Regional Board.

D. Contractor Responsibilities

1. A copy of the Water Pollution Control Plan from the SWPPP will be included in the Appendix for purposes of determining costs associated with Contractor's responsibilities of this Section.

2. Material submittals for Water Pollution Control Best Management Practices (BMP's) as set forth in the General Provisions and elsewhere in the contract documents.

3. Provide QSP with City-reviewed construction schedule and any updates.

4. Install BMPs in accordance with the SWPPP and as directed by the QSP throughout the du-ration of the project until the Notice of Termination for the SWPPP is approved by the State Water Resources Control Board.

5. Immediately notify QSP of any damage to installed BMPs during construction activities and repair damage as instructed by QSP.

6. Provide QSP with access to the construction site as required to perform all QSP duties, in-cluding, but not limited to, inspections of all BMPs, sampling, monitoring, testing, and related activities.

7. Provide QSP with progress reports that address any forthcoming change of construction schedule or sequence so that QSP can direct implementation of any additional BMPs as set forth by the SWPPP. QSP must be notified 48 hours prior to starting each major construction task.

8. Maintain sufficient BMP materials on hand to implement the Water Pollution Control Plan throughout the duration of the project, replace any deficient BMPs and/or address any minor changes required by the QSP.

1.06 OTHER

A. The Contractor shall exercise every reasonable precaution to protect the creek from pollution by harmful materials and shall conduct the operations and schedule the operations so as to avoid any actions which could adversely affect creek water or stormwater quality. Contractor shall co-ordinate water pollution control work with all other work done on the contract.

B. Water pollution control maintenance work and compliance with the Storm Water Pollution Prevention Plan (SWPPP) shall be considered as integral practices to implement water pollution control. Failure to fully comply with the requirements of the SWPPP shall subject the Contractor to all fines, damages and job delays incurred due to failure to implement the SWPPP.

C. Due to the critical nature of this work, failure to implement temporary water pollution control maintenance work, as determined by the Engineer, shall result in a permanent deduction of any fines levied against the City, and City's costs, both direct and indirect, for addressing or responding to such fine(s) or for compliance with temporary water pollution control measures or requirements not being performed. The amount payable under the contract shall include permanent deductions resulting from failure to perform water pollution control maintenance work. The parties agree that failure to implement temporary water pollution control maintenance work constitutes a damage to the City. If the water pollution control maintenance program work is not implemented continuously or as directed by the QSP or Engineer, progress payments shall be adjusted to reflect failure to perform maintenance work as determined by the Engineer.

D. Nothing in the terms of the Contract nor in the provisions of these specifications shall relieve the Contractor of the responsibility for compliance with applicable Sections of the Fish and Game Code, or other applicable statutes relating to prevention or abatement of water pollution.

E. Any areas of exposed earth created by the Contractor beyond what is shown on the plans and referred to in the technical specifications shall also be subject to these provisions except that the Contractor shall be fully responsible for all costs and liabilities associated with erosion control and water quality protection work in these areas.

1.07 WATER POLLUTION CONTROL MAINTENANCE PROGRAM

A. The Contractor shall furnish sufficient personnel, materials and adequate equipment to perform the water pollution control maintenance work immediately and to work continuously until its completion. Water pollution control maintenance work shall consist of maintaining temporary water pollution control measures throughout the duration of the contract.

1.08 WATER POLLUTION CONTROL IMPLEMENTATION

A. The Contractor shall have a year-round program for implementing, inspecting and maintaining water pollution control practices for wind erosion control, tracking control, non-storm water control, and waste management and materials pollution control and for compliance with the SWPPP requirements.

B. Upon approval of the SWPPP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, maintaining, removing and disposing of the water pollution control practices included in the SWPPP and any amendments. Unless otherwise directed by the Engineer, the Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Doc. 00700 General Conditions and Doc. 00800 Special Conditions and the most current code requirements. Requirements for installation, construction, inspection, maintenance, removal, and disposal of water pollution control practices are specified in the Manuals.

C. The National Weather Service Forecast Office weather forecast shall be monitored and used by the Contractor on a daily basis. If precipitation is predicted, the necessary water pollution control practices shall be deployed prior to the onset of the precipitation and in accordance with the SWPPP.

D. Contractor and QSP shall ensure that site inspections occur before a forecast storm, during the storm (at 24-hour hour intervals during extended rains), and after a storm. Inspections shall be documented as per the Manual and in accordance with the SWPPP and SWRCB requirements.

E. If the Contractor or the QSP or Engineer identifies a deficiency in any aspect of the implementation of the approved SWPPP or amendments, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and acceptable under the approved SWPPP and applicable regulations, and approved by the QSP in writing, but not later than the onset of precipitation. If the Contractor fails to correct the identified deficiency by the date agreed or prior to the onset of precipitation the project shall be in noncompliance. Attention is directed to Doc. 00700 General Conditions, of these Specifications and the payment sections of these special provisions regarding noncompliance.

F. If the Contractor fails to conform to the provisions of "Temporary Water Pollution Control," the Engineer may order the suspension of construction operations which create water pollution.

PART 2 - PRODUCTS

2.01 MATERIALS

A. General: Materials shall be as specified in the most current CASQA BMP Construction Handbook Fact Sheets, the Water Pollution Control Plan and SWPPP, the Manuals, and these specifications, and the provisions of the General and Special Conditions Documents 00700 and 00800.

END OF SECTION

APPENDIX A

1. Updated Geotechnical Investigation, by Cotton, Shires and Associates, Inc., Dated May 2013
2. Arborist Report by Deborah Ellis, MS – Dated December 17, 2012
3. List of Potential Classes and Events at McClellan Ranch During Construction
4. SCCP Master Plan and Restoration Plan Mitigation Monitoring Reporting Plan
5. Stormwater Pollution Prevention Plan – dated June, 2013.
6. Inventory of City Supplied Recycled Wood

APPENDIX - FOR INFORMATION ONLY

UPDATED GEOTECHNICAL INVESTIGATION

McCLELLAN RANCH ENVIRONMENTAL EDUCATION CENTER AND BLACKSMITH SHOP

CUPERTINO, CALIFORNIA

Prepared for:
CITY OF CUPERTINO
Department of Public Works
10300 Torre Avenue
Cupertino, California 95014

MAY 2013

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

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APPENDIX - FOR INFORMATION ONLY

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

May 2, 2013
E5143

Carmen Lynaugh
CITY OF CUPERTINO
Public Works Manager
10300 Torre Avenue
Cupertino, California 95014

SUBJECT: **Updated Geotechnical Investigation**
RE: Proposed Environmental Education Center and Blacksmith Shop – McClellan Ranch
Cupertino, California

Dear Ms. Lynaugh:

With this letter, Cotton, Shires and Associates, Inc. (CSA) is pleased to submit the following report describing the findings, conclusions and recommendations of our geotechnical investigation for the Environmental Education Center and relocated Blacksmith Shop at McClellan Ranch in Cupertino, California.

Included in this report are an engineering geologic characterization and geotechnical assessment of the site conditions at the subject property, conclusions and recommendations regarding geotechnical hazards and design criteria for each building.

We appreciate the opportunity to have been of service to you on this project. If you have any questions regarding this report, please contact our office.

Very truly yours,
COTTON, SHIRES AND ASSOCIATES, INC.

David T. Schrier

REGISTERED PROFESSIONAL ENGINEER
DAVID T. SCHRIER
GE 2334
EXP 12/31/13
GEOTECHNICAL
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STATE OF CALIFORNIA

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POS:AM:DTS:st

UPDATED GEOTECHNICAL INVESTIGATION
McClellan Ranch Environmental Education Center and Blacksmith Shop
Cupertino, California

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APPENDIX - FOR INFORMATION ONLY

TECHNICAL REPORT

COTTON, SHIRES AND ASSOCIATES, INC.

UPDATED GEOTECHNICAL INVESTIGATION
McClellan Ranch Environmental Education Center and Blacksmith Shop
Cupertino, California

1.0 INTRODUCTION

1.1 Project Description

In this report we present the results of our geotechnical investigation for the two planned new buildings at McClellan Ranch (Figure 1). We understand that the new buildings consist of an Environmental Education Center at McClellan Ranch and the relocated Blacksmith Shop. We previously performed a geotechnical investigation of the subsurface conditions in this area of McClellan Ranch for an Environmental Class with a different building footprint, and prepared a report dated November 5, 2007.

Based on our review of a conceptual site plan provided to us, we understand that both the proposed Environmental Education Center and Blacksmith Shop will be tucked against the northwestern facing slope, just below McClellan Road. We further understand that both buildings will be single-story, wood-framed structures, and that the Environmental Education Center will have a slab-on-grade floor while the foundation for the blacksmith shop is unknown at this time.

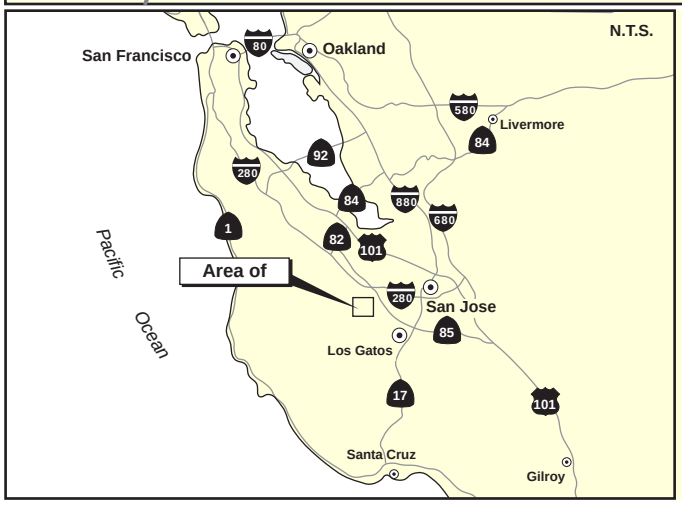
Planned grading will most likely consist of cuts and fills up to 6 feet or more at the Environmental Education Center to address a thick layer of non-engineered fill underlying the proposed building footprint.

We have not yet been provided with foundation loads, but anticipate that building loads will be light, as is typical for wood and pre-fabricated metal-framed construction.

1.2 Purpose and Scope of Work

The purpose of our updated investigation was to develop geotechnical data for project design. Our objectives were to: 1) evaluate surface and subsurface conditions; and 2) develop conclusions and recommendations regarding: geotechnical hazards; site

APPENDIX - FOR INFORMATION ONLY



Reference: Thomas Guide 2001

COTTON, SHIRES & ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

SITE LOCATION MAP

McClellan Ranch Environmental Education Center and Blacksmith Shop,
CUPERTINO, CALIFORNIA

GEO/ENG. BY	SCALE	PROJECT
DTS	1"=1,900'	E5143
APPROVED	DATE	FIGURE
AM	May 2013	1

grading; foundation type and design criteria; retaining wall design and support of slab-on-grade floors.

The specific scope of work performed for our investigation included the following tasks:

1) Review of in-house geologic data for the site, and our previous investigation report;
2) Subsurface exploration using small-diameter borings;
3) Laboratory testing of representative earth materials;
4) Geotechnical engineering analysis of the field and laboratory data; and
5) Preparation of this report and the accompanying graphics.

2.0 SITE CHARACTERISTICS

2.1 Terrain

Both buildings are located near the base of moderately steep canyon slopes in a relative level valley. Both proposed building pads will be constructed into (or at the base) of a 20-foot high, 2.5:1 (H:V) northwest-facing slope. Elevations vary from 334 feet to 343 feet at the Environmental Education Center and Blacksmith Shop sites (Kier & Wright Topographic Survey). In general, the topography slopes down, towards the north and west (toward the creek) in the vicinity of McClellan Ranch.

2.2 Geologic Setting

The proposed structures are located in the Santa Clara Valley east of the Santa Cruz Mountains. Both sites are mapped as being underlain, at depth, by alluvial fan materials (Brabb, Graymer and Jones) likely deposited by Stevens Creek. Both sites are situated in a small canyon formed by the prehistoric channels of Stevens Creek.

Existing improvements in the vicinity of the proposed Environmental Education Center and Blacksmith Shop include a goat stable, barn, the existing blacksmith shop, parking, entrance building, 4H office building, paved entrance roadway and parking area, and ancillary structures.

2.3 Seismic Setting

The proposed site area is situated in a very seismically active area. Historically, this area has been subjected to very strong to violent shaking from major earthquakes and the sites will continue to experience very strong ground shaking in the future. The nearest and controlling faults, with respect to site ground shaking, are the Monta Vista fault, located roughly ¼-mile to the southwest, and the San Andreas fault, located approximately 3.75 miles also to the southwest (see Figure 2). The McClellan Ranch area is located within a State (California Geological Survey) Mapped Liquefaction Hazard Zone.

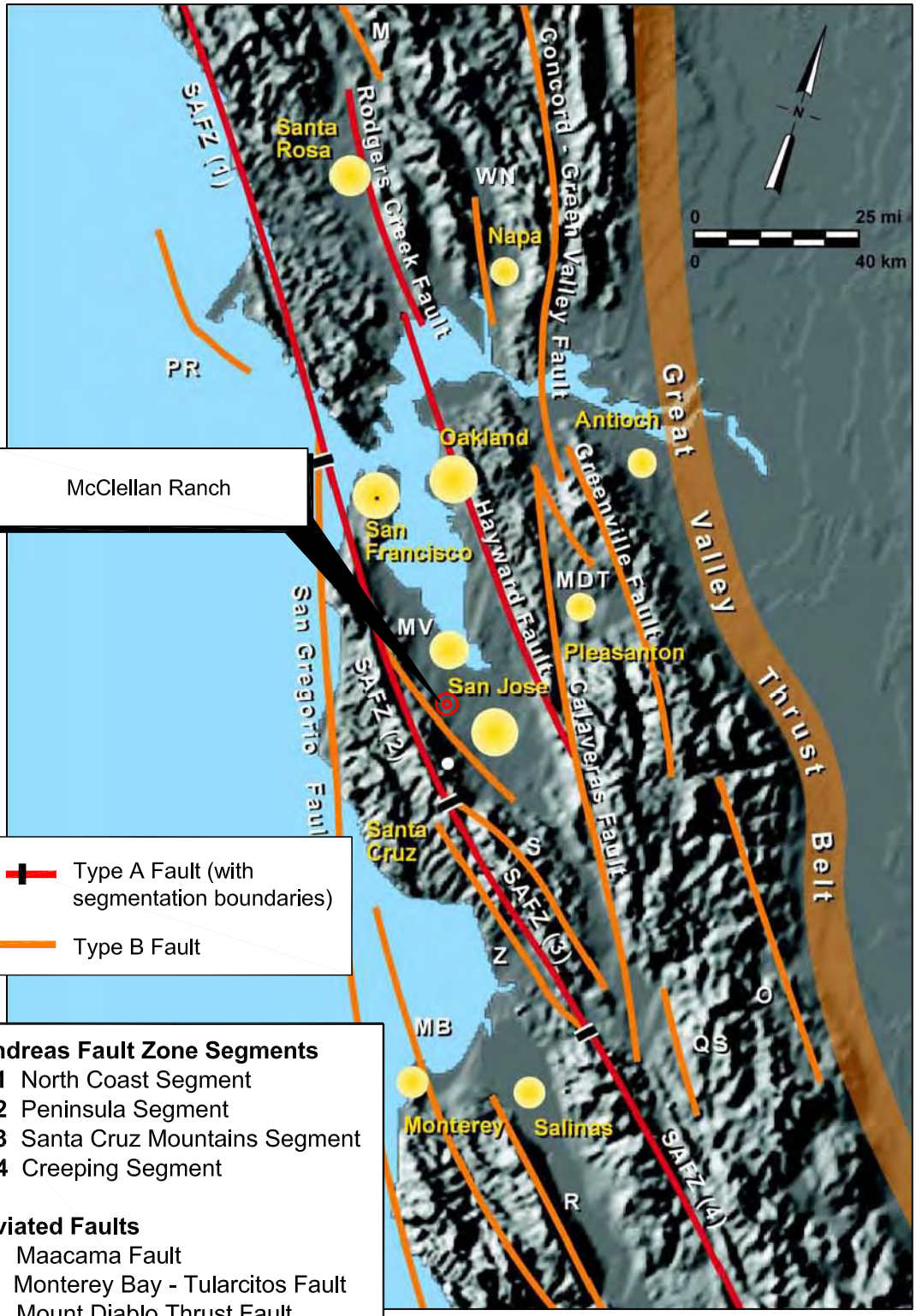
2.3.1 **Probabilistic Analysis** - We performed a probabilistic analysis of the site employing Probabilistic Hazard Curves from the U.S.G.S. Seismic Hazard Curves and Uniform Hazard Response Spectra program. The results of our probabilistic analysis indicate an appropriate Design Basis Earthquake (10 percent probability of exceedance in 50 years or a 475-year return interval, which is generally used for residential and commercial buildings) peak horizontal ground acceleration of **0.60g**.

Taking into account the above earthquake Moment Magnitudes, the 2010 California Building Code (CBC) coefficients presented in Section 5.6, and the results of the probabilistic approach, it is our opinion that McClellan Ranch could experience a peak horizontal ground acceleration (PGA) as high as **0.60g**.

3.0 SUBSURFACE CONDITIONS

3.1 Subsurface Exploration

We explored the subsurface conditions at the Environmental Education Center and Blacksmith Shop sites on September 25, 2007, and April 4, 2013, by means of three small-diameter exploratory borings drilled to depths of 19.5 feet to 49.5 feet at the locations shown on Figure 3. We generally encountered alluvial fan and terrace materials consisting of stiff sandy silt, dense to very dense silty sand with gravel, very stiff sandy clay and very dense clayey sand; however, in Boring CSA/SD-4 we encountered 6 feet of very soft to medium dense silty and sandy non-engineered fill material (see Figure 4).



Type A Fault (with segmentation boundaries)

Type B Fault

San Andreas Fault Zone Segments

SAFZ-1 North Coast Segment
SAFZ-2 Peninsula Segment
SAFZ-3 Santa Cruz Mountains Segment
SAFZ-4 Creeping Segment

Abbreviated Faults

M	Maacama Fault
MB	Monterey Bay - Tularcitos Fault
MDT	Mount Diablo Thrust Fault
MV	Monta Vista - Shannon Fault
O	Ortigalita Fault
PR	Point Reyes Fault
QS	Quien Sabe Fault
R	Rinconada Fault
S	Sargent - Berrocal Fault
WN	West Napa Fault
Z	Zayante - Vergeles Fault

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

SAN FRANCISCO BAY AREA FAULT MAP
McClellan Ranch Environmental Education Center and Blacksmith Shop
Cupertino, California

GEO/ENG BY	SCALE	PROJECT NO.
AM	1"=25 mi	E5143
APPROVED BY	DATE	FIGURE NO.
DTS	MAY 2013	2

We were unable to determine the lateral limits of this fill material, and consequently elected to not show it on Figure 3. It is possible that this fill was associated with a basement of a previously demolished building or an underground utility excavation.

A detailed description of the exploration program, the logs of the borings, and the results of the laboratory testing program performed on representative samples are presented on the boring logs in Appendix A and the laboratory test results of Appendix B.

3.2 Groundwater Conditions

Groundwater was not encountered in any of the borings. Groundwater levels may be higher during other times of the year, especially during and after winter rains.

3.3 Laboratory Testing

We performed laboratory tests on several of the disturbed and undisturbed samples obtained from our borings. Those tests included Atterberg limits, in-situ unit weight of the soil, natural moisture content, sieve analysis, unconsolidated-undrained triaxial strength tests, and corrosivity potential. Based on the results of the Atterberg limits tests, the near surface material appear to have low to moderate plasticity (Liquid Limit = 24, Plasticity Index = 6). Based on the results of our in-situ unit weight and moisture content tests, the near-surface material has low to moderate moisture content (4.8 percent to 14.7 percent), and moderate dry unit weights (97 pcf to 119 pcf). Based on the results of our unconsolidated-undrained triaxial compression shear strength tests, the near-surface soils have high undrained shear strengths (5,791 psf and 5,997 psf).

Based on the results of the corrosivity potential tests on near-surface samples taken in the vicinity of the Environmental Education Center, the minimum resistivity is equal to 4,757 ohm-cm, the chloride content is less than 2 mg/kg, the sulfate content is less than 5 mg/kg and the pH is 8.1. These test results appear to indicate low potential for corrosion, but these values should be evaluated by the project civil/structural engineer for determining potential impacts to proposed structures.

4.0 POTENTIAL GEOTECHNICAL HAZARDS

In the following section, we list identified potential geotechnical hazards at the proposed sites, along with corresponding degrees of determined potential risk, as well as our recommendations for possible mitigation measures.

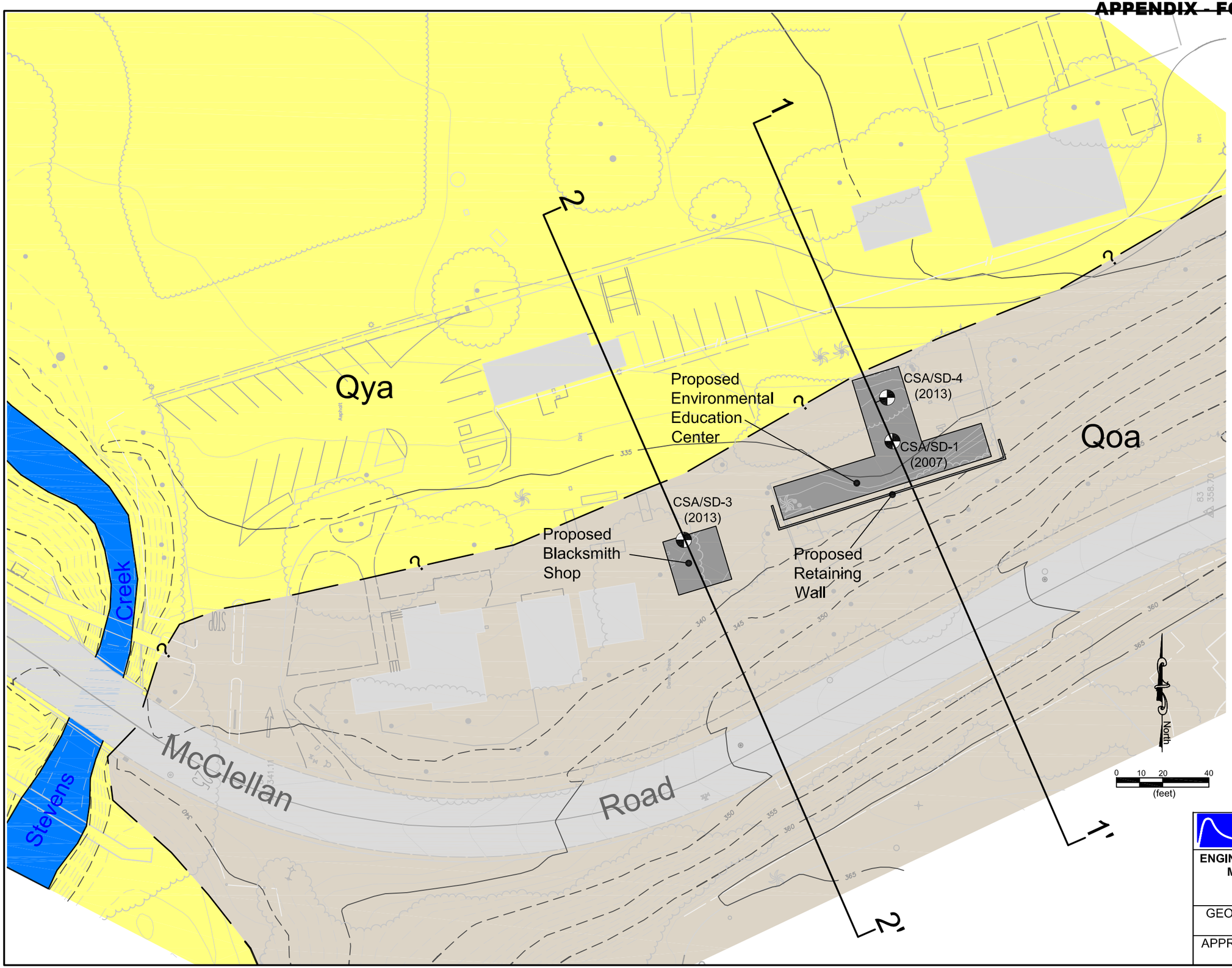
4.1 Seismic Hazards

Seismic ground shaking associated with a large earthquake on any one of the nearby faults is considered to be a hazard in the area of the two sites. Peak horizontal ground accelerations of 0.60g should be anticipated at the McClellan Ranch site (see report Section 2.3).

Seismically-induced ground failure mechanisms include fault rupture, differential compaction, lurching, liquefaction and landsliding. Active faults have not been recognized on, or mapped through, the subject sites. Consequently, the potential for fault rupture at the proposed sites is considered to be **low**.

Due to the very soft to medium dense silty and sandy non-engineered fill material encountered in Boring CSA/SD-4, there is a **moderate to high** potential that a building supported on a shallow foundation bearing on this material will settle differentially and lurch. In order to mitigate this high potential risk, we have provided recommendations to remove the upper 6 feet of material underlying the Environmental Education Center including this non-engineered fill material, and replace it with engineered, compacted fill. As an alternative, we have also provided recommendations to support the Environmental Education Center on deep foundations bearing below the non-engineered fill material.

Due to the dense consistency of the subsurface materials encountered in our borings and the absence of ground water, the potential for liquefaction from earthquake-induced ground shaking is considered to be **low**. The potential for seismically induced landsliding is considered **low to moderate** due to the proximity to the adjacent 2.5:1 slope.



EXPLANATION

EARTH MATERIALS

Qya — YOUNGER ALLUVIAL TERRACE DEPOSITS

Qoa — OLDER ALLUVIAL FAN DEPOSITS

MAP SYMBOLS

CSA/SD-3 (2013) — Small-Diameter Exploratory Boring Location

2 2' — Engineering Geologic Cross Section Location

Geologic Contact Dashed Where Approximate Queried Where Uncertain

Base Map from "Stevens Creek Corridor Park", prepared by HTNB Corporation Engineers Architects Planners, dated 10/14/04

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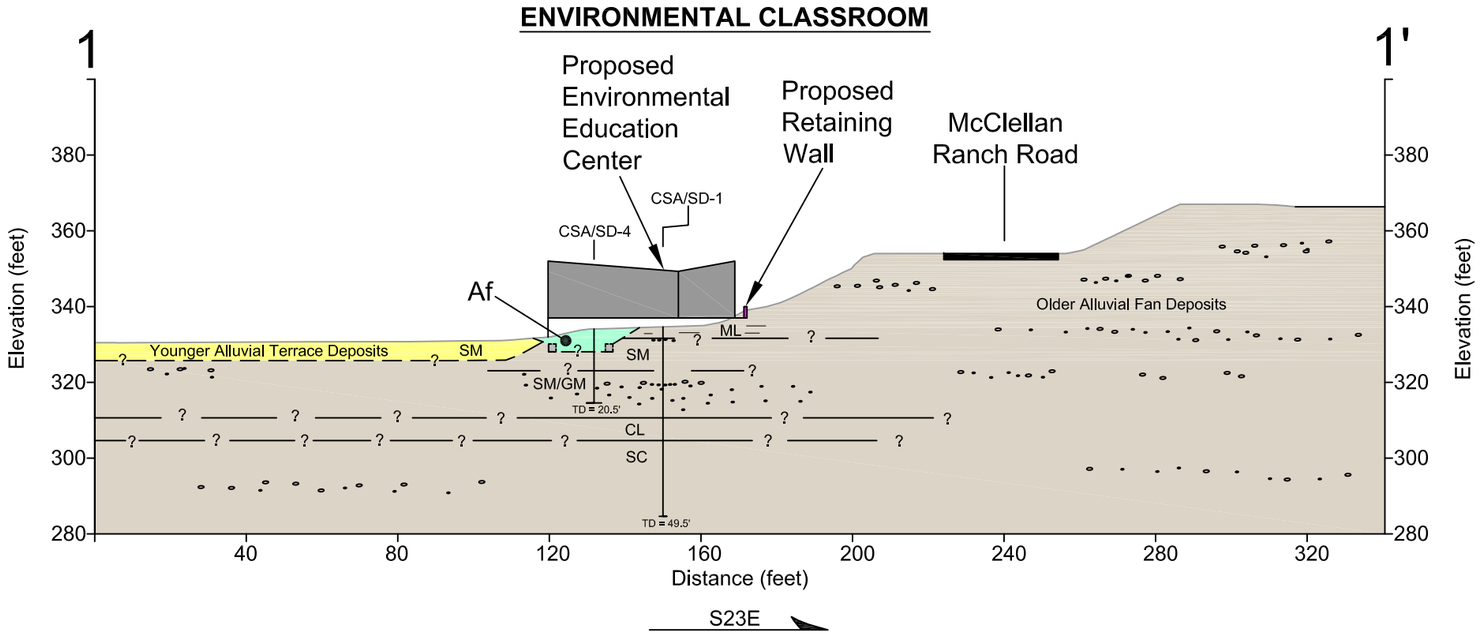
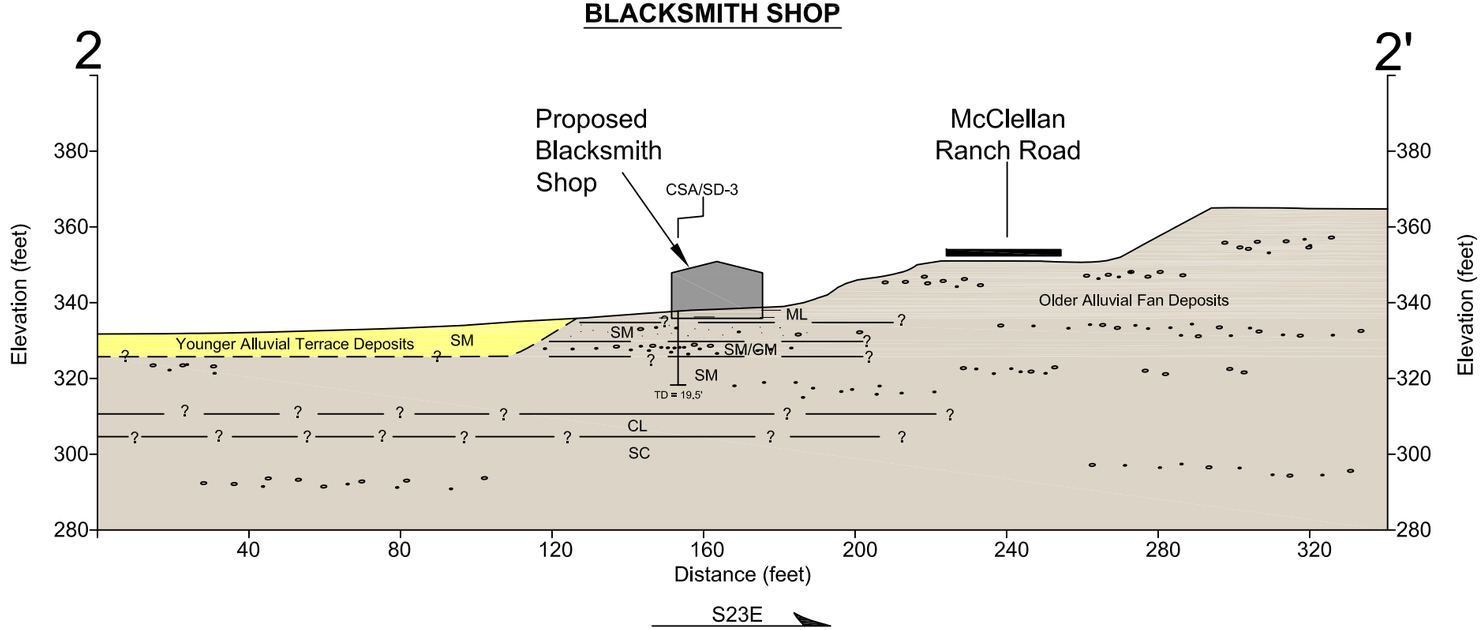
ENGINEERING GEOLOGIC AND BORING LOCATION MAP
McClellan Ranch Environmental Education Center and Blacksmith Shop
CUPERTINO, CALIFORNIA

GEO/ENG BY	SCALE	PROJECT NO.
AM	1"=40'	E5143
APPROVED BY	DATE	FIG. NO.
DTS	MAY 2013	3

ENVIRONMENTAL CLASSROOM



BLACKSMITH SHOP



EXPLANATION

EARTH MATERIALS

ARTIFICIAL FILL

YOUNGER ALLUVIAL TERRACE DEPOSITS

SM: Silty Sand with Gravels

OLDER ALLUVIAL FAN DEPOSITS

ML: Sandy Silt with gravels
SM: Silty Sand with Gravels
SM/GM: Silty Sand with Gravels
CL: Sandy Clay with Gravels
SC: Clayey Sand with Gravels

SYMBOLS

CSA/SD-4
TD = 20.5'
Small-Diameter Exploratory Boring Location And Depth

Geologic Contact
Dashed Where Approximate
Queried Where Uncertain

40
20
20
40
(feet)

COTTON, SHIRES & ASSOCIATES, INC.
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ENGINEERING GEOLOGIC SECTIONS 1-1' and 2-2'
McClellan Ranch Environmental Education Center and Blacksmith Shop
CUPERTINO, CALIFORNIA

GEO/ENG BY	SCALE	PROJECT NO.
AM	1"=40'	E5143
APPROVED BY	DATE	FIG. NO.
DTS	MAY 2013	4

4.2 Surficial Erosion

The surficial soil horizons of sandy and silty alluvium encountered in the borings are **moderately to highly** susceptible to surficial erosion. The typical improvements for surface drainage and erosion control should reduce the potential for future surficial soil erosion.

4.3 Settlement Behavior

Based on our analysis, there is a **moderate to high** potential that the very soft to medium dense silty and sandy non-engineered fill material encountered in Boring CSA/SD-4, will settle differentially under the anticipated building loads if supported on shallow foundations. In order to mitigate this potential risk, we have provided recommendations to remove the upper 6 feet of material underlying the Environmental Education Center including the non-engineered fill material, and replace it with engineered, compacted fill. As an alternative, we have also provided recommendations to support the Environmental Education Center on deep foundations bearing below the non-engineered fill material.

There is also a **low to moderate** potential that the low expansivity sandy/silty material will expand if or when wetted. Either compression or expansion of the alluvium could result in relatively minor amounts of differential foundation movement.

We understand that the preferred foundation type for Environmental Education Center is a shallow, slab-on-grade foundation, while the foundation Blacksmith Shop hasn't been determined yet.

While we have not been provided with specific building/wall loads, for our static settlement calculations we assumed that the dead-plus-long-term-live-load for the structures would be less than approximately 2,400 pounds per square foot (psf) (equal to the bearing capacity of the near surface materials at the Blacksmith Shop) or 3,500 psf (equal to the bearing capacity if the upper 6 feet of soil is reworked as engineered fill at the Environmental Education Center). Based on these assumptions, we estimate that total static settlement for both the Blacksmith Shop and the Environmental Education

Center should be less than 1 inch, and differential settlements should be less than 1/2 inch across the bottom of the buildings.

4.4 Corrosion Potential

Based on the results of the laboratory corrosivity potential tests in the near-surface soils at the sites, it appears that site is in a non-corrosive environment; however, we recommend that the project civil/structural engineer (or an engineer who specializes in corrosion) assess the results of the corrosivity tests.

5.0 RECOMMENDATIONS

5.1 Foundation Design Considerations

The principal factors affecting foundation type selection are the 6 feet of non-engineered fill encountered in CSA/SD-4 and the high potential for differential settlement. Properly designed and constructed shallow foundations should provide satisfactory support for the buildings provided that the upper 6 feet of material underlying the Environmental Education Center is removed and replaced as engineered fill. As an alternative, the Environmental Education Center can be supported on a structural slab that is in turn supported on a deep pier foundation. We have provided recommendations for both alternatives in the following section.

5.2 Foundation Design Criteria

5.2.1 **Shallow Foundation** - The Blacksmith Shop can be supported by shallow spread footings which should be at least 18 inches wide, and founded at least 24 inches below the lowest adjacent final grade. The footings should be designed for an allowable bearing capacity of 2,400 pounds per square foot (psf) for dead-plus-live loads, and 3,600 psf under total loads, including wind or seismic forces. Resistance to lateral loads should be computed using a concrete/soil base friction coefficient of 0.39, and 400 pcf equivalent fluid passive resistance below an embedment depth of 1 foot and where there is at least 8 horizontal feet of soil cover.

5.2.2 Slab-on-Grade – Provided that the upper 6 feet of material is removed and replaced as engineered fill, the Environmental Education Center can be supported on slab-on-grade foundations. The foundation should be equipped with a thickened, minimum 18-inch wide perimeter footing bearing at least 24 inches below lowest adjacent grade. The footing should be sized for an allowable bearing pressure of 3,500 pounds per square foot (psf) for dead-plus-live loads, and 5,250 psf for total design loads (dead-plus-live plus wind or seismic loads). Resistance to lateral forces should be calculated using a base coefficient of friction of 0.39 for the bottom of the slab. The slab should be at least 8 inches thick (or greater as determined by the Project Structural Engineer) and reinforced with at least No. 4 bars at 16-inch centers each way (or greater reinforcement as determined by the Project Structural Engineer), and provided with crack control joints at maximum 10 feet on centers.

Slabs-on-grade floor and concrete flatwork subgrades should be prepared as recommended in Section 5.3, Site Grading. Slab-on-grade floors should be directly underlain by at least 6 inches of clean, free-draining gravel or crushed rock (100% passing the 3/4-inch sieve; 0-10% passing the No. 4 sieve). For damp-proofing of the slab, a layer of Moistop Underslab Vapor Retarder (15 mil) or approved equivalent should be provided over the capillary break (gravel or crushed rock).

5.2.3 Cast-in-Place Piers - The Environmental Education Center can be supported by a reinforced concrete structural slab supported by reinforced concrete piers. The drilled, cast-in-place piers should derive vertical support from adhesion (skin friction) in firm undisturbed alluvium as determined in the field by the Project Geotechnical Engineer at the time of construction. Piers should be sized according to the following criteria:

Vertical Capacity - minimum three (3) pier diameter spacing

Minimum pier diameter	18 inches
Minimum pier penetration into alluvium (below fill)	8 feet
Allowable adhesion (skin friction), for reinforced concrete dead plus live loads:	
In fill material	0 psf
0 to 1 feet into alluvial material (to account for down-drag)	0 psf
Below 1 feet in alluvial material	450 psf

Lateral Passive Resistance - piers [equivalent fluid pressure applied over an effective width of two (2) pier diameters]

In fill and/or 0 to 1 feet in alluvium material.....0 pcf

Below 1 foot in alluvial material.....400 pcf

The above adhesion value (skin friction) can be increased by 1/3 for seismic loading and should be decreased by 1/2 for uplift. The upper portion of the piers should be formed to create vertical surfaces, and "mushrooming" of pier tops and over-pours around grade beams should be prevented. Drilled pier holes should be machine-cleaned of all loose material prior to the placement of steel and concrete. Piers should be steel reinforced with a cage including a minimum of 4, No. 5 bars vertical (with greater reinforcement as required by the project Structural Engineer). Casing could be necessary to prevent the caving.

If water is present in the pier holes, prior to placing concrete, the water should be pumped out until the pier holes are dry, or the concrete should be poured by tremie methods to displace the water.

All piers should be connected at their tops by continuous structural slab which in turn will support the building.

5.2.4 Structural Slab - The subgrade for the pier-supported structural slab should be prepared as recommended under Site Grading (Section 5.3). The structural slab should be a minimum of 9 inches thick (or thicker as determined by the Project Civil or Structural Engineer), and reinforced with minimum No. 4 steel reinforcing bars at maximum 16 inches on centers (or tighter as determined by the Project Civil or Structural Engineer), both ways. Slab thickness, and steel reinforcement size and layering should be increased above these minimums, as designed by the Project Civil or Structural Engineer.

5.3 Site Grading

Based on our field investigation, grading excavations should be within the capabilities of heavy-duty excavation equipment (i.e., drill rigs and dozers and excavators). Provided

that construction takes place during the dry season, significant dewatering is not anticipated to the assumed depths of excavation.

It should be noted that we encountered high blow counts in our small-diameter borings in alluvium, consequently heavy-duty excavating and drilling equipment may be necessary for achieving the design grades and pier depths.

5.3.1 Site Preparation – All loose material, vegetation, concrete, asphalt, debris, the approximately 6 feet of fill material (unless the pier foundation option is selected), and other deleterious material should be stripped and removed from the areas to be occupied by the buildings. This material should be disposed of in a suitable location off-site or stored on-site for later use in landscaping (if approved for such use by the project landscape architect).

In the planned Environmental Education Center, the site should be excavated to a uniform minimum depth of 6 feet below the existing ground surface (unless the pier foundation option is selected), and at least a horizontal distance of 5 feet beyond the outside edge of the planned perimeter foundation.

Excavation should proceed as necessary for planned grades, and soft and/or yielding materials in the location of the planned structures should be over-excavated and replaced with engineered fill. Slab-on-grade subgrade and areas to be filled should be scarified to at least an 8-inch depth, moisture conditioned to at least two percent over optimum moisture content and should be compacted to at least 90 percent relative compaction based on ASTM D-1557-12.

5.3.2. Compacted Fill - Excavated on-site material can be used for structural fill provided it is free of organic material and other debris and rocks greater than 4 inches in maximum dimension. Imported fill material, if required, should free of organics, it should contain no material larger than 4 inches and have a plasticity index of less than 15, it should be free of hazardous contamination (per State of California requirements), and it should be free of Asphaltic Concrete grindings. The fill should be placed in horizontal lifts not exceeding 8 inches in loose thickness, moisture conditioned to at least optimum moisture content, and compacted in lifts to at least 95 percent relative compaction beneath structures, and 90 percent relative compaction elsewhere.

5.3.3 Utility Trench Backfill - Utility trenches should be backfilled with imported material or approved, on-site soil. Bedding materials for pipes should be in accordance with the manufacturer's recommendations. The backfill should be compacted to at least 90 percent relative compaction. Equipment and methods should be used that are suitable for work in confined areas without damaging trench walls, and conduits.

5.3.4 Cutslope Design - Any new permanent cut slopes in alluvium should not exceed an inclination of 2:1 (H:V). All exposed cuts should be inspected a field representative of CSA during construction to evaluate the stability and provide additional recommendations, if necessary. Any new permanent cut slopes steeper than 2:1 (H:V) should be supported by properly designed retaining walls.

During the dry season, temporary cut slopes of 1.5:1 (H:V) in alluvium should be satisfactory for construction purposes, provided that they are inspected and approved by our field representative at the time of construction and monitored daily during construction. Excavation methods, shoring, bracing and safety of excavations are the responsibility of the contractor. All excavations should comply with applicable local, State and Federal safety regulations.

5.4 Retaining Wall Design

We understand that walls up to 8 feet high at the Environmental Education Center are being considered, and that wall types are still being determined. We have provided recommendations for a continuous, shallow foundation (i.e., cantilever wall) wall.

5.4.1 Cast-in-Place, Shallow Foundation - Cast-in-place shallow foundation (cantilever) type retaining wall footings should have a minimum width of 24 inches, and be founded at least 30 inches below the lowest adjacent final grade in firm, undisturbed natural alluvial material. The footings should be designed for allowable bearing capacity of 2,400 pounds per square foot (psf) for dead-plus-live loads, and 3,600 psf under total loads, including wind or seismic forces. Cast-in-place shallow foundation supported retaining walls should be designed to resist an active lateral fluid pressure of 45 pcf for the existing 2.5:1 sloping backfill (at the Environmental Education Center). Cast-in-place retaining walls should be provided with at least one foot of freeboard.

Resistance to lateral loads should be computed using a base friction coefficient of 0.39, and 400 pcf equivalent fluid passive resistance below an embedment depth of 1.5 feet. If additional lateral resistance is required, a deep continuous foundation "key", can be used to increase the lateral resistance.

5.4.2 Backdrain - A backdrain should be constructed behind all retaining walls. The backdrain should be a minimum 12-inch wide continuous blanket of either Caltrans Class 2 Permeable Material or 3/4-inch x 1/2-inch clean crushed drainrock enclosed in Mirafi 140N (or approved equivalent) filter fabric, and should extend to within 1 to 1-1/2 feet of the ground surface where an impervious fill and/or asphaltic concrete cap or concrete lined V-ditch should be placed. A minimum 4-inch diameter PVC Schedule 40 perforated drain pipe should be placed near the bottom of the drainrock (perforations down), surrounded by a minimum of 4 inches of drainrock. The pipe should be sloped to drain at a minimum of 1% to a suitable discharge location away from structures and into an energy dissipater type structure.

5.5 Surface Drainage

We recommend that all surface drainage be permanently diverted away from the planned buildings at a minimum 2% grade into an appropriate catch basin/storm drain system. All roof downspouts should be connected to tight line drain pipes that are directed, in turn, into an appropriate catch basin/storm drain system.

5.6 Seismic Design

A peak ground acceleration of 0.60g should be anticipated for design purposes.

Based on our geotechnical investigation, the site location and our interpretation of the 2010 CBC documents related to Earthquake Loads (CBC Section 1613), we are providing the following parameter recommendations from the corresponding figures and tables:

Parameter	Referenced Table/Figure/Eqn.	Value
Site Classification	1613.5.2	C
Mapped Spectral Acc. 0.2 Sec. (g)	1613.5(3)	$S_S = 2.405$
Mapped Spectral Acc. 1 Sec. (g)	1613.5(4)	$S_1 = 0.859$
Fa – Site Coefficient	1613.5.3(1)	1.0
Fv – Site Coefficient	1613.5.3(2)	1.3
$S_{MS} = F_a S_S$	16-37	2.405
$S_{M1} = F_v S_1$	16-38	1.117
$S_{DS} = 2/3\ S_{MS}$	16-39	1.604
$S_{D1} = 2/3\ S_{M1}$	16-40	0.745

5.7 Erosion Control

All graded slopes higher than eight (8) feet, and steeper than 20 percent (5:1) should be covered with a securely staked erosion control blanket consisting of straw and coconut fiber and treated with hydroseed prior to exposure to rain. All other grounds disturbed by construction activities should be treated with hydroseed prior to exposure to rain.

An approved Storm Water Pollution Prevention Plan (SWPPP) should be implemented in accordance with Caltrans Standard Specifications. If freshly graded slopes are exposed to rain, this plan should include properly keyed and staked straw bale barriers at the base of the slopes higher than eight feet and steeper than 20 percent.

5.8 Technical Review

Supplemental geotechnical design recommendations should be provided by our firm based on specific design needs developed by the other project design professionals. This report, and any supplemental recommendations, should be reviewed by the contractor as part of the bid process. It is strongly recommended that no construction be started nor grading undertaken until the final drawings, specifications, and calculations have been reviewed and approved in writing by a representative of **Cotton, Shires and Associates, Inc.**

5.9 Earthwork Construction Observation and Testing

All excavations should be inspected by a representative of **Cotton, Shires and Associates, Inc.** prior to filling or pouring of concrete foundations. Any grading should also be inspected and tested as appropriate to assure adequate stripping and compaction. Our office should be contacted with a minimum of 48 hours advance notice of construction activities requiring inspection and/or testing services.

6.0 INVESTIGATION LIMITATIONS

Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering geology and geotechnical engineering principles and practices. No warranty, expressed or implied, or merchantability of fitness, is made or intended in connection with our work, by the proposal for consulting or other services, or by the furnishing of oral or written reports or findings. The investigation was performed and this report prepared for the exclusive use of the client, and for specific application to proposed site development as outlined in the body of the report.

Any recommendations and/or design criteria presented in this report are contingent upon our firm being retained to review the final drawings and specifications, to be consulted when any questions arise with regard to the recommendations contained herein, and to provide testing and inspection services for earthwork and construction operations. Unanticipated soil and geologic conditions are commonly encountered during construction which cannot be fully determined from existing exposures or by limited subsurface investigation. Such conditions may require additional expenditures during construction to obtain a properly constructed project. Some contingency fund is recommended to accommodate these possible extra costs.

This report is issued with the understanding that it is the responsibility of the owner, or of the owner's representative, to ensure that the information and recommendations contained herein are called the attention of the project engineer and incorporated into the plans. Furthermore, it is also the responsibility of the owner, or of the owner's representative, to ensure that the contractor and subcontractors carry out such recommendations in the field.

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APPENDIX A

Field Investigation
Logs of Exploratory Borings

APPENDIX A
FIELD INVESTIGATION

We explored subsurface conditions at the Environmental Education Center and Blacksmith sites at McClellan Ranch in Cupertino, California on September 25, 2007, and April 4, 2013 by means of three borings drilled to depths of 19-1/2 to 49-1/2 feet using truck-mounted, hollow and solid stem auger equipment. The locations of the borings are shown on Figure 3. The engineering geologist and engineer who logged the borings visually classified the soils in accordance with ASTM D-2487. We obtained relatively undisturbed samples of the materials encountered at selected depths. These samples were obtained in brass liners that were 2.5 inches in outside diameter and 6 inches long; the liners were inside a 3-inch diameter modified split-barrel California Sampler. The sampler was driven with a 140-pound hammer that was raised by rope and cathead and allowed to freely fall about 30 inches. We also performed Standard Penetration Tests at selected depths. The depths of the sampling (and penetration testing) are shown on the boring logs. The circled or bold number at the conclusion of the sampling interval represents the corrected blow count from a modified California sampler to Standard Penetration Test value accomplished by multiplying the blow count by a factor of 0.68.

Descriptive logs of the borings are presented in this appendix. These logs depict our interpretation of the subsurface conditions at the dates and locations indicated, based on representative samples collected at roughly a five-foot sampling intervals. It is not warranted that they are representative of subsurface conditions at other times and locations. The contacts on the logs represent the approximate boundaries between earth materials, and the transitions between these materials may be gradual.

APPENDIX - FOR INFORMATION ONLY

COTTON, SHIRES, AND ASSOCIATES, INC.

LOG OF EXPLORATORY DRILLING

Project Environmental Building **Boring No.** SD-1

Location McClellan Ranch Park **Project No.** E0347

Drilling Contractor/Rig Britton / Crawler **Date of Drilling** 9/25/07

Ground Surface Elev. 334' **Logged By** AM **Hole Diameter**

Surface Conditions **Weather**

Depth (feet)	Graphic Log	USCS Class.	Geotechnical Description	Sample Desig.	Dry Density (pcf)	Moisture Content (%)	SPT Bl./ft.	Sample Type	Recov.	Remarks
		ML	ALLUVIUM 0'-BOH							Start Drilling 8:29 AM
			0'-3' Sandy Silt with Gravel: Moderate to dark brown, stiff, dry to moist, gravels are sub-rounded				6	MC		
2				T-1			12		14/18"	LL = 24, PI = 6
				T-2	101	6.1	19			
							21			
		SM	3'-24' Silty Sand with Gravel: Moderate to dark brown, dense, gravels are up to 2" diameter ~30% gravels				25	MC		
4				T-3		3.9	25		16/18"	10.8% Passing #200 sieve
				T-4	110	4.8	24			
							33			
6			@6' Color changes to orange brown, gravels are rounded up to 1/2" diameter ~15% gravels, very dense							
							29	MC		
8				T-5	107	12.1	50/4"		8/9"	8:51 AM
							34/4"			
10							12	MC		
				T-6			37		15/17"	
				T-7	119	9.7	50/5"			TX/UU 5,791 (2,000)
12							59/11"			
14										
							12	MC		
16				T-8			46		14/16"	
				T-9			50/4			9:08 AM
			@15' Gravel size increases (up to 2" diameter)				65/10"			
18										
20			@20' Moisture increases				37	MC		
				T-10	113	10.8	50/4"		7/9"	
							34/4"			
22										
24		CL	24'-30' Sandy Clay with Gravels; yellowish brown, very stiff, moist.							
							8	MC		9:28 AM
				T-11			16		17/18"	
26				T-12	115	17.0	26			TX/UU 6,328 (4,003)
							29			
28										

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Project BLACKBERRY FARMS / E0347 **Date** 9/25/07 **Boring No.** SD-1

Depth	Graphic Log	USCS Class.	Geotechnical Description	Sample Desig.	Dry Density (pcf)	Moisture Content (%)	SPT BL./ft.	Sample Type	Recov. (%)	Remarks
		SC	30′-49.5′Clayey Sand with Gravels; yellowish brown to reddish brown, dense, moist, gravels are sub-angular up to 3”	T-13 / T-14			8 / 30 / 50/5”	MC	15/17”	
32							**54/11”**			
34										9:58 AM
				T-15 / T-16			32 / 50/6”	MC	12/12”	
36							**34/6”**			
38										
40				T-17 / T-18			39 / 50/3”	MC	9/9”	10:30 AM
42							**34/3”**			
44										
				T-19 / T-20			18 / 50/6”	MC	12/12”	10:46 AM
46							**34/6”**			
48										
				T-21 / T-22			25 / 50/4”	MC	9/10”	End Drilling 11:00 AM
50			TD = 49.5’ No Groundwater Encountered				**34/4”**			
52										
54										
56										
58										
60										
62										

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CONSULTING ENGINEERS AND GEOLOGISTS

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LOG OF EXPLORATORY DRILLING

Project McClellan Ranch Environmental Education Center and Blacksmith Shop **Boring** CSA/SD-3

Location McClellan Ranch Park **Project No.** E5143

Drilling Contractor/Rig Britton/ CME 55 **Date of Drilling** 4/4/13

Ground Surface Elev. 338' **Logged By** SWN **Hole Diameter** 8" Hollow stem

Surface Tan bark overlaying aggregate base "pad" **Weather** Cloudy/rainy

Depth (feet)	Graphic Log	USCS Class.	Geotechnical Description	Sample Desig.	Dry Unit Wt. (pcf)	Moisture Content (%)	SPT Blows/ft	Sample Type	Recov. (%)	Remarks
		AB	0'- 0.5' - Aggregate Base - 1" dia. angular crushed rock.							8:22 AM Begin drilling Driller reports 7" of AB, hard drilling
2		ML	**0.5'- BOH': ALLUVIUM** 0.5' - 3.0' - Sandy Silt with Gravel - Medium brown, stiff, dry, sand is fine with ~10% medium grain, gravelsare 1" dia. subrounded to subangular 20-30%.	T-1			8 7	MC		
				T-2			9			
							11			
4			3.0'- 8.0' - Silty Sand with Gravel - Light brown, dense, moist, percent gravel increases to 30-40%, mostly subrounded, some fractured/angular and weathered gravels.	T-3			8 20	MC		
				T-4	97	6.3	28			
6		SM	5.0' - Gravels subrounded, 1"=2" dia., poorly graded.				32			5.0' - Recover mostly gravel, 1"-1.5", poorly graded, loose hole, fines lost in ascent.
8			6.0'- 8.0' - Gravel size increases to 1.5" dia.	B-1			7 8 19	SPT	50%	7.0' - (8:41 AM) SPT gravels 7.75' - Add water
10		SM/ GM	8.0'- 12.0' - Silty Sandy Gravel - Brown, medium dense 1" dia. subangular gravels, sand is fine to medium grained.				27			
12			12.0'-17.0' - Gravelly Silty Sand - Light brown, very dense, fine to medium grained, dry to moist, ~40% gravels, 1/4" to 1.5" dia. subangular gravels.							12.0' - Driller noticed tight hole, steady hard drilling. 8:54 AM
				T-5			26			
14				T-6			50/5.5"	MC		
							34/5.5			
16		SM								Drilling smoothed out
18		SM	17.0'- BOH - Silty Sand with Gravel - Brown, very dense, wet, medium to coarse sand, very dense, 1/4"-1" subangular to subrounded gravel.							9:10 End drilling. Backfill hole with 1 bag baselite II/V, 47 lb bag. Finish backfilling 9:25 AM
20			Total Depth = 19.5' No ground water encountered during drilling. Drill time 0:48							
22										
24										
26										
28										

COTTON, SHIRES AND ASSOCIATES, INC.

LOG OF EXPLORATORY DRILLING

Project McClellan Ranch Environmental Classroom and Blacksmith Shop
Boring CSA/SD-4
Location McClellan Ranch Park
Project No. E5143
Drilling Contractor/Rig Britton/ CME 55
Date of Drilling 4/4/13
Ground Surface Elev. 334'
Logged By SWN
Hole Diameter 8" Hollow stem
Surface loose/yeilding sandy soil
Weather Cloudy/rainy

Depth (feet)	Graphic Log	USCS Class.	Geotechnical Description	Sample Desig.	Dry Unit Wt. (pcf)	Moisture Content (%)	SPT Blows/ft	Sample Type	Recov. (%)	Remarks
			0.0'- 6.0': ARTIFICIAL FILL							9:35 AM - No spoils/ soft material
		ML	0- 3.0' - Sandy Silt with Gravel - Dark brown, very soft to soft, dry to moist, gravels are 1.5" dia. max. and subrounded.				5			
2							8	MC		
				T-1			8			
			3.0'- 6.0' - Silty Sand with Gravel - Dark brown, medium dense, dry to moist, 3" dia. subangular gravels 30-50%.				11			
4		SM					9			9:41 AM
				T-2			15	MC		
				T-3			18			Add water (still no spoils)
6			**6.0' - BOH: ALLUVIUM**				22			Smoothes out, steady/hard
			6.0'- 11.0' - Silty Sand with Gravel - Orange brown, very dense, dry to mosit, 2" dia. fractured and weathered gravel, subrounded.							
8							18			
		SM		T-4			42	MC		
				T-5	114	14.7	50/5"			TX/UU 5,997 (2,500)
10							62/11"			
			11.0'- BOH - Silty Sand with Gravel - Orange brown, dense, medium grained, moist, gravels 1.5" dia. subrounded, 20-30%.							Color change in spoils.
12										Not getting good recover, add water. 13.5'- Hit brief gravel section
14				T-6			16			
			15.0' - Moisture increases and gravel increases to 40-50%.	T-7			29	MC		
				T-8	116	13.0	43			
16		SM/ GM					48			
18										
							25			
20				T-9			43	MC		
				T-10			42			
			Total Depth = 20.5'				58			10:28 AM End drilling.
22			No ground water encountered during drilling. Drill time 0:53							Backfilled with 1 bags of baselite II/V Portland cement (47 lb bags)Finish backfilling at 10:45 AM.
24										
26										
28										

APPENDIX B

Laboratory Testing
Summary of Laboratory Test Results

APPENDIX B
LABORATORY TESTING

The laboratory analysis performed for the site consisted of limited testing of the principal soil types sampled during the field investigation to evaluate index properties and strength parameters of subsurface materials. The soil descriptions and the field and laboratory test results were used to assign parameters to the various materials at the site. The results of the laboratory testing program are presented in this appendix and on the boring logs.

The following laboratory tests were performed as part of this investigation:

1. Detailed soil description, ASTM D-2487;
2. Natural moisture content of the soil, ASTM D-2216;
3. In-situ unit weight of the soil (wet and dry);
4. Atterberg limits determination of the soil, ASTM D-4318;
5. Triaxial compression shear strength of the soil, ASTM D-2850;
6. Percent minus the No. 200 sieve, ASTM D-1140; and
7. Caltrans Soil Corrosivity testing.

Cooper Testing Labs, Inc.
937 Commercial Street
Palo Alto, CA 94303

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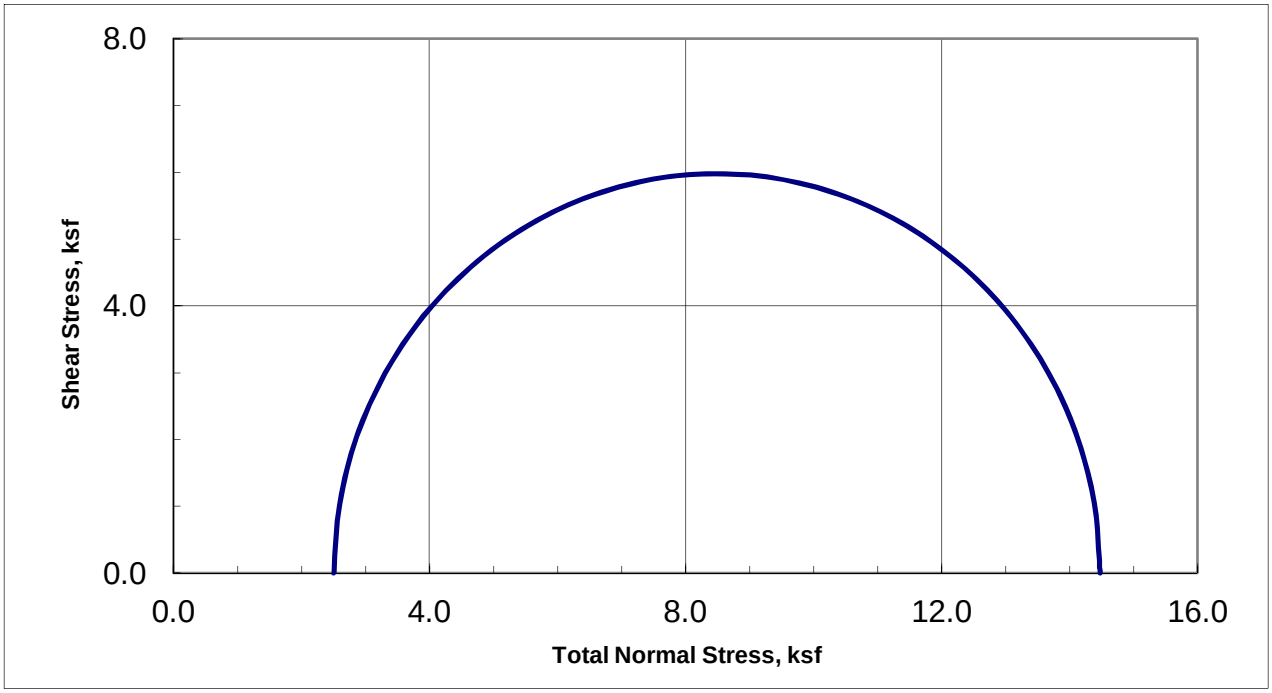
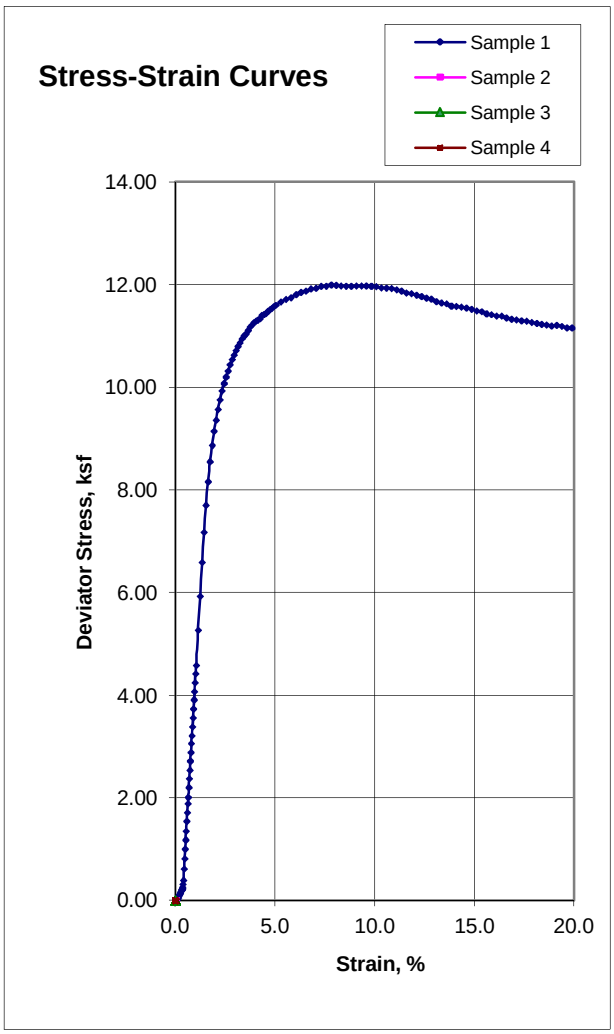
Unconsolidated-Undrained Triaxial Test

ASTM D-2850





Sample Data	1	2	3	4
Moisture %	14.7			
Dry Den,pcf	114.0			
Void Ratio	0.479			
Saturation %	83.1			
Height in	5.03			
Diameter in	2.43			
Cell psi	17.4			
Strain %	7.80			
Deviator, ksf	11.994			
Rate %/min	1.00			
in/min	0.050			
Job No.:	026-541			
Client:	Cotton, Shires & Associates			
Project:	McClellan Ranch GNVE Classroom - E0347			
Boring:	EB-2			
Sample:	T-5			
Depth ft:	9-9.5			

Visual Soil Description	
Sample #	
1	Dark Yellowish Brown Clayey SAND w/ Gravel
2	
3	
4	
Remarks:	

COOPER TESTING LABORATORY

Corrosivity Test Summary

CTL # 026-375 **Date:** 10/2/2007 **Tested By:** PJ **Checked:** PJ
Client: Cotton, Shires & Associates **Project:** Blackberry Farms **Proj. No:** E0347
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP	Moisture	Soil Visual Description
Boring	Sample, No.	Depth, ft.	As Rec.	Minimum	Saturated	mg/kg	mg/kg	%		(Redox)	As Received	
						Dry Wt.	Dry Wt.	Dry Wt.		mv	%	
			ASTM G57	Cal 643	ASTM G57	Cal 422-mod.	Cal 417-mod.	Cal 417-mod.	Cal 643	SM 2580B	ASTM D2216	
Bulk 1	SD-1	1.5 - 3	-	4757	-	<2	<5	<0.0005	8.1	-	4.8	Brown Silty SAND w/ Gravel

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Deborah Ellis, MS

Consulting Arborist & Horticulturist

Service since 1984

ARBORIST REPORT

McClellan Ranch
Environmental Education Center Project
Cupertino, California

Prepared for:
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City of Cupertino, Public Works Department
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DECEMBER 17, 2012 (Revised from December 11, 2012)

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APPENDIX - FOR INFORMATION ONLY

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Cover photo: valley oak #4 next to the blacksmith shop. All photos in this report were taken by D. Ellis on November 7, 2012.

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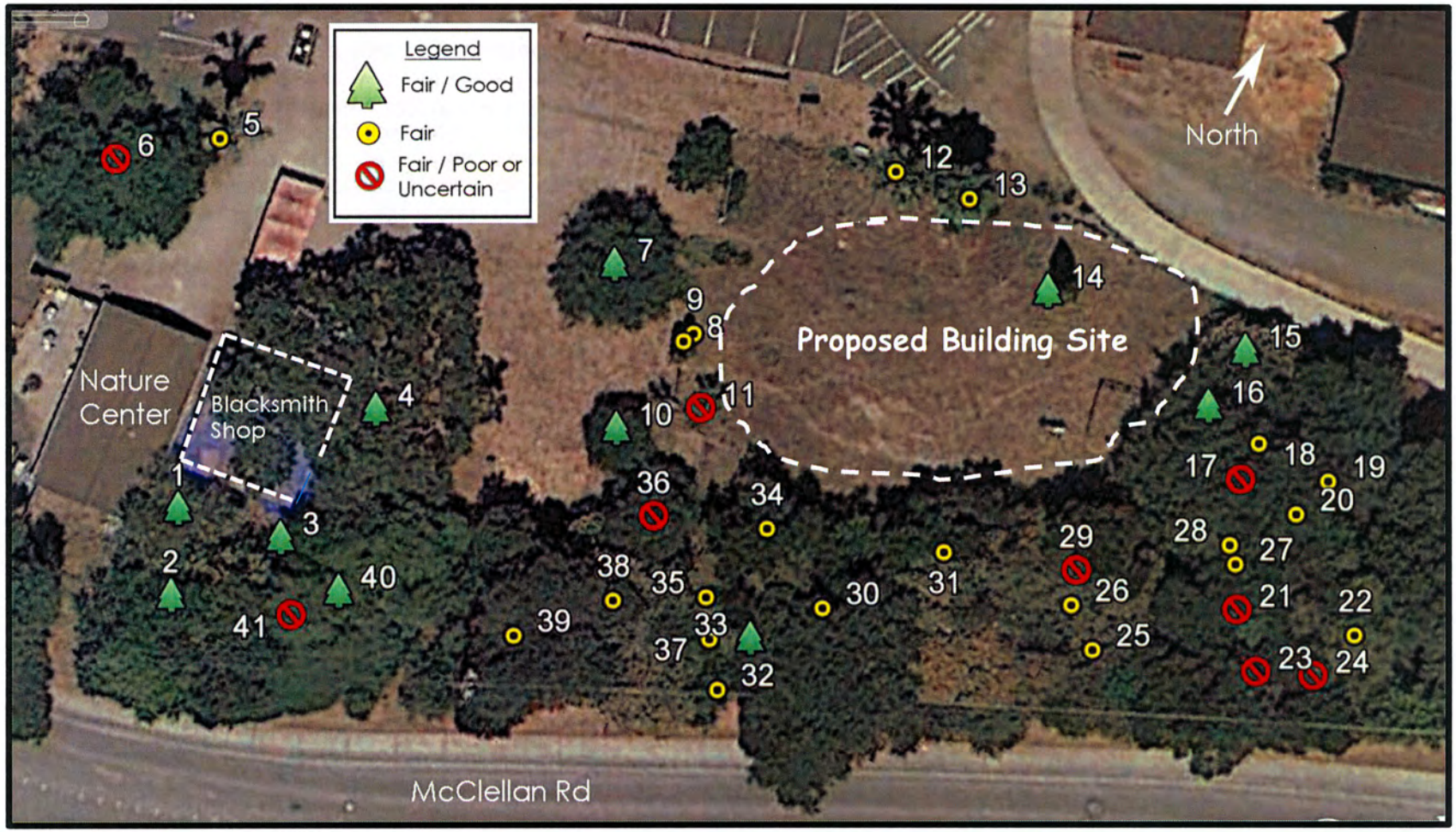
TREE MAP

(Tree trunk locations are approximate)



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SUMMARY

Terms highlighted at their first occurrence are explained in the Glossary beginning on page 20.

Forty-one trees have been evaluated and are described in this report for the McClellan Ranch Environmental Education Center project. The trees that were evaluated for this report have trunk diameters of 6 inches or greater and are located within or adjacent to the proposed construction or within the slope area adjacent to McClellan Road. These trees are described briefly the *Summary Tree Table* (Table 1) on page 4 and in greater detail in the *Complete Tree Table* (Table 2) beginning on page 6. The Complete Tree Table also includes guidelines for tree root protection distances for individual trees.

Based upon my evaluation of the present condition of these trees:

- **Three trees should be removed**. They are: **#6 coast live oak** (21" trunk diameter), **#17 elderberry** (9") and **#41 coast live oak** (28"). All of these trees have poor structure and are likely to cause problems if they fail. The elderberry can be cut down to a short stump and will likely resprout. The coast live oaks have significant structural defects and could cause injury or property damage if and when they fail.

- **Three trees should be evaluated in greater detail if they may remain on the developed site:**

  - **#4 valley oak** (39"), the largest and most focal point tree of the site, next to the blacksmith shop. This oak has several structural defects that should be looked at more closely. Remodeling of the blacksmith shop is also of concern because this building is very close to the tree, and a large scaffold branch of the oak rests on the front decorative panel of the building. Detailed information and recommendations for this tree are included on pages 14 and 15.
  - **#29 California buckeye** (20, 10 & 8"): the 20-inch trunk is dead and decayed and should be removed. Additional portions of the tree may be dead as well, but since this tree is dormant and leafless now it is difficult to accurately discern how much of the tree is dead or alive. It should be evaluated next mid-Spring (e.g. April) in order to see the dead portions which should be pruned away.
  - **#38 coast live oak** (16") this tree leans 60 degrees towards the building site. After remedial pruning, propping should be considered.

- **The remaining trees on site may be reasonable to retain depending** upon the degree of construction damage they are likely to experience, and also the usage of the area in their vicinity, relative to their condition. Construction plans have not been developed for this project; therefore this evaluation and report do not include an expected impact of construction for each tree. Expected

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construction impact information and recommendations can be provided after some preliminary construction plans are available to me for review. In the meantime architects can use the tree root protection distances for each tree that are included in the Complete Tree Table, and canopy outlines from the aerial maps as initial guidelines for designing improvements around trees

For those trees that will be retained on the site, custom Tree Protection Specifications (a separate document) have been prepared and are included as an attachment.

The Tree Preservation Strategy for this project is:

Attempt to save as many existing trees as possible except for those trees that are within or too close to proposed construction, trees that are in poor condition, pose unacceptable risk, or that may cause significant problems on the renovated site.

The Northeast end of the slope area, with **Italian cypress #14**, **California buckeye #15** and **coast live oak #16** labeled.

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TABLE 1 SUMMARY TREE TABLE

Tree #	Common Name	Trunk Diameter (DBH)	Preservation Suitability
01	elderberry	6,6,9,8	Fair/Good
02	coast live oak	15	Fair/Good
03	Italian buckthorn	2,2,3,3,4,4,6,6	Fair/Good
04	valley oak	39	Fair/Good
05	Calif. fan palm	35	Fair
06	coast live oak	21	Poor
07	coast live oak	13	Fair/Good
08	Italian cypress	4,4	Fair
09	Italian cypress	6,2	Fair
10	coast live oak	7	Fair/Good
11	giant yucca	4,4,4,4,4,2,2,2	Fair/Poor
12	Mexican Fan palm	23	Fair
13	Mexican Fan palm	20	Fair
14	Italian cypress	9,5	Fair/Good
15	Calif. buckeye	5,5,4,5,4,3,3	Fair/Good
16	coast live oak	19	Fair/Good
17	elderberry	9 (4)	Poor
18	valley oak	8	Fair
19	coast live oak	16	Fair
20	coast live oak	10	Fair
21	coast live oak	8	Fair/Poor

Tree #	Common Name	Trunk Diameter (DBH)	Preservation Suitability
22	coast live oak	13	Fair
23	coast live oak	10	Fair/Poor
24	coast live oak	8	Fair/Poor
25	coast live oak	28	Fair
26	Calif. buckeye	8	Fair
27	Calif. buckeye	7	Fair
28	coast live oak	11	Fair
29	Calif. buckeye	20,8,10	Uncertain
30	coast live oak	8,9,12	Fair
31	Calif. buckeye	9,9,10,4,4,4	Fair
32	coast live oak	6,3	Fair
33	coast live oak	19,20	Fair/Good
34	holly leaf cherry	6	Fair
35	Calif. buckeye	8	Fair
36	Calif. buckeye	6	Fair/Poor
37	coast live oak	16	Fair
38	coast live oak	16	Fair
39	holly leaf cherry	7	Fair
40	Calif. buckeye	9,9,10,4,4,4	Fair/Good
41	coast live oak	28	Poor

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RECOMMENDATIONS

1) **Have the following trees evaluated in greater detail: #4 valley oak, #29 California buckeye and #38 coast live oak** as mentioned in the Summary and discussed for these individual trees. Detailed information on valley oak #4 is included on pages 14 and 15.

2) **In general, try to keep improvements (and any additional over-excavation or work area beyond the improvement) as far from tree trunks as possible.** *3xDBH*[1] should be considered the absolute minimum distance from any disturbance to the tree trunk on one side of the trunk, for root protection. If there will be disturbances on multiple sides of the trunk, then 5xDBH or greater should be used. Tree canopies must also be taken into account when designing around trees.

3) **Determination of a construction envelope outside of which construction and/or soil disturbance should not extend beyond (relative to tree protection)** is not possible at this time due to lack of a detailed existing topographic plan. If and when such plan is produced, I can then draw the envelope on the plan. The topographic plan should include accurate tree trunk locations as well as tree canopy driplines (the outer edge of the dripline is sufficient for groups of trees).

4) **The remaining trees on site should be re-evaluated** after trees to be removed are taken out.

5) **For those trees that will be retained on the site, follow directions in the attached document, Tree Protection Specifications** for this project to the greatest extent possible, before site demo and during and after construction.

6) **General Tree Maintenance**:

   a) The root collars and lower trunks of some of the trees were obscured from view by vegetation, excess soil or other covering. Such portions of the tree should be uncovered and the tree re-evaluated by the arborist.

   b) Do no unnecessary pruning, fertilization or other tree work. Pre-construction pruning should be limited to the absolute minimum required for construction clearance. Additional instructions for pruning are included in the Tree Protection Specifications. In general, trees should be pruned as little as possible. The most important post-construction pruning for this project will be the removal of large dead, cracked or hanging branches over target areas. I can advise you more about any additional pruning that may be beneficial after the project is completed.

---

1) [1] 3xDBH: See page 19 for an explanation of 3 and 5xDBH, which are used to calculate root protection distances for trees.

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APPENDIX

TABLE 2 COMPLETE TREE TABLE

Data field information is included on pages 11 to 13. This Table is continued through page 10.

Tree #	Species & Common Name	Trunk Diameter (DBH)	Size	CONDITION		Work Recommended	Preservation Suitability	Notes	TREE ROOT PROTECTION DISTANCES		
				vigor	structure				3xDBH	5xDBH	OTPZ
01	*Sambucus mexicana*, Blue elderberry (elderberry)	6,6,9,8	22*20	80	60		Fair/Good		5	8	19
02	*Quercus agrifolia*, coast live oak	15	20*20	70	50		Fair/Good	Ground squirrel burrows at root collar.	4	6	8
03	*Rhamnus alaternus*, Italian buckthorn	2,2,3,3, 4,4,6,6	20*16	70	60		Fair/Good	There are some dead trees and shrubs in this wooded slope area that you may want to remove to "clean up" this area and reduce fire fuel.	4	8	18
04	*Quercus lobata*, valley oak	39	45*60	60	60	**PRUNE**: crown cleaning, slight construction clearance pruning of small diameter branches (1-inch or less) over the blacksmith shop. **OTHER**: Aerial inspection of tree during pruning *(see pages 14 & 15)*, also root collar excavation & inspection and additional evaluation of area of lower trunk that sounded different during mallet tap test. Contact D. Ellis regarding referrals for this additional work. After remedial pruning check and adjust support cables if necessary.	Fair/Good	See pages 14 & 15. I would rate the preservation suitability of this as "Fair" if this were not a significant focal point tree for the property.	10	16	48

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Tree #	*Species* & Common Name	Trunk Diameter (DBH)	Size	CONDITION		Work Recommended	Preservation Suitability	Notes	TREE ROOT PROTECTION DISTANCES		
				vigor	structure				3xDBH	5xDBH	OTPZ
05	*Washingtonia filifera*, Calif. fan palm	35	50*9	60	60	**PRUNING**: remove skirt of dead fronds. **OTHER**: aerial evaluation of animal burrowing holes in trunk to check for decay. Inform D. Ellis of results, and possibly follow-up with tomography.	Fair	This palm has been climbed with spikes for frond removal, which is unnecessary and should not continue in the future. There are scattered small animal (bird or rodent) burrowing holes in the trunk which indicate internal decay.	9	15	26
06	coast live oak	21	30*40	70	40	**REMOVE**. But If tree remains, PRUNING: significant end weight reduction on long, heavy branches, immediately.	Poor	See page 16 for a complete discussion of this tree.	5	9	16
07	coast live oak	13	28*25	75	60	**PRUNING**: crown cleaning pruning and then structural improvement pruning of multiple attachments of scaffolds and other crowded branches.	Fair/Good		3	5	6
08	*Cupressus sempervirens* `Stricta', Italian cypress	4,4	20*3	70	60	**PRUNING**: clip back wayward branchlets to maintain the smooth columnar shape of the tree. Cut at least several inches inside the main canopy.	Fair		2	2	6
09	Italian cypress	6,2	20*3	70	60	**OTHER**: remove weedy vine growing into tree.	Fair		2	3	7
10	coast live oak	7	18*16	70	60	**PRUNING**: structural improvement.	Fair/Good		2	3	4
11	*Yucca elephantipes*, giant yucca	4,4,4,4, 4,2,2,2	12*20	50	50		Fair/Poor	A sprawling large woody succulent shrub.	4	6	14

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Tree #	*Species* & Common Name	Trunk Diameter (DBH)	Size	CONDITION		Work Recommended	Preservation Suitability	Notes	TREE ROOT PROTECTION DISTANCES		
				vigor	structure				3xDBH	5xDBH	OTPZ
12	*Washingtonia robusta*, Mexican Fan palm	23	50*15	60	60	**PRUNING**: remove skirt of dead fronds, and also dead flower stalks.	Fair		6	10	17
13	Mexican Fan palm	20	45*12	60	50	**PRUNING**: same as previous.	Fair		5	8	15
14	Italian cypress	9,5	30*5	85	80	**PRUNING**: clip back wayward branchlets to maintain the smooth columnar shape of the tree. Make cuts at least several inches inside the main canopy.	Fair/Good		3	5	12
15	*Aesculus californica*, Calif. buckeye	5,5,4,5, 4,3,3	18*18	80	70		Fair/Good	Stump sprout, but a very nice looking tree.	4	7	17
16	coast live oak	19	32*22	80	60		Fair/Good		5	8	14
17	elderberry	9 (4)	8*15	10	10	**REMOVE**	Poor	Nearly dead, but may resprout from stump after cutting down.	2	4	9
18	valley oak	8	18*22	75	40		Fair	The trunk of this tree bows significantly toward the trail due to shade cast by surrounding trees and the slope to the south.	2	3	6
19	coast live oak	16	50*25	70	40	**PRUNING**: end weight reduction of the large scaffold branch growing toward the trail.	Fair		4	7	8
20	coast live oak	10	35*15	60	50		Fair		2	4	5
21	coast live oak	8	30*12	50	40	**PRUNING**: subordination of slightly smaller co-dominant scaffold branch.	Fair/Poor		2	3	4
22	coast live oak	13	40*25	60	60		Fair		3	5	6

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Tree #	*Species* & Common Name	Trunk Diameter (DBH)	Size	CONDITION		Work Recommended	Preservation Suitability	Notes	TREE ROOT PROTECTION DISTANCES		
				vigor	structure				3xDBH	5xDBH	OTPZ
23	coast live oak	10	25*10	40	40		Fair/Poor	Very bowed trunk and a grove-affected tree. Note large dead fallen over tree nearby -- you may want to remove this dead tree to reduce fire hazard.	2	4	5
24	coast live oak	8	25*8	60	40		Fair/Poor		2	3	4
25	coast live oak	28	30*35	70	50	**PRUNING**: remove dead, decayed 8-inch diameter stub over the sidewalk.	Fair	Somewhat precariously positioned on the slope.	7	12	21
26	Calif. buckeye	8	20*25	70	40		Fair		2	3	6
27	Calif. buckeye	7	18*12	70	50		Fair		2	3	5
28	coast live oak	11	40*20	60	60		Fair		3	5	6
29	Calif. buckeye	20,8,10	35*30	50	40	**PRUNING** (see Notes)	Uncertain	The large trunk appears to be dead and is very decayed; this should be removed. The smaller trunks are live suckers of the original tree. Wait until the tree is fully foliated next Spring (e.g. April) when it is easier to discern what is alive and dead.	7	12	36
30	coast live oak	8,9,12	28*25	70	50		Fair	Stump sprout.	5	9	16
31	Calif. buckeye	9,9,10,4,4,4	25*25	70	50		Fair		6	10	25
32	coast live oak	6,3	30*15	60	40		Fair		2	3	4
33	coast live oak	19,20	30*40	70	60	**PRUNING**: length reduction and end weight reduction of long heavy branches over sidewalk.	Fair/Good		8	12	22

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Tree #	*Species* & Common Name	Trunk Diameter (DBH)	Size	CONDITION		Work Recommended	Preservation Suitability	Notes	TREE ROOT PROTECTION DISTANCES		
				vigor	structure				3xDBH	5xDBH	OTPZ
34	*Prunus ilicifolia*, holly leaf cherry	6	22*18	70	60		Fair		2	2	6
35	Calif. buckeye	8	25*10	60	50		Fair		2	3	6
36	Calif. buckeye	6	16*12	50	40		Fair/Poor		2	2	4
37	coast live oak	16	30*25	70	50	**PRUNING**: length reduction and end weight reduction and subordination of co-dominant fork toward building site to North.	Fair	Tree leans and sweeps downslope toward the building site.	4	7	8
38	coast live oak	16	30*25	60	40	**PRUNING**: crown cleaning, length reduction and end weight reduction toward building site to North. After pruning consider propping this tree -- it leans 60° downslope.	Fair		4	7	8
39	holly leaf cherry	7	20*18	60	60		Fair		2	3	7
40	Calif. buckeye	9,9,10,4, 4,4	25*35	80	60		Fair/Good		6	10	25
41	coast live oak	28	40*30	50	40	**REMOVE**	Poor	Several large branch failures in the past have caused decay and cavities on the trunk. Canopy density is sparse and the tree appears to be declining. Phone/cable lines run through canopy.	7	12	21

End of Table

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EXPLANATION OF TREE TABLE DATA COLUMNS:

1) **Tree Number** (the field tag number of the existing tree). Each existing tree in the field is tagged with a 1.25 inch round aluminum number tag that corresponds to its tree number referenced in the arborist report, Tree Map, Tree Protection Specifications and any other project plans where existing trees must be shown and referenced.

2) **Tree Name and Type:**
   Species: The *Genus* and *species* of each tree. This is the unique scientific name of the plant, for example *Sambucus caerulea* where *Sambucus* is the Genus and *caerulea* is the species. The scientific names of plants can be changed from time to time, but those used in this report are from the most current edition of the Sunset Western Garden Book (2007) Sunset Publishing Corporation. The scientific name is presented at its first occurrence in the Tree Table, along with the regional common name. After that only the common name is used.

3) **Trunk DBH**. Tree trunk diameter in inches "at breast height" (measured at 4.5 feet above ground level). This is the forestry and arboricultural standard measurement height that is also used in many tree-related calculations. It is also the trunk diameter measurement height required by the City of Cupertino. For multi-trunk trees, trunk diameter is measured for the largest trunk and estimated for all smaller trunks. A number in parentheses (3) after the trunk diameter(s) indicates that it was not possible to measure the trunk at 4.5 feet (due to tree architecture) and so the diameter was measured at this alternate height (in feet), which reflects a more realistic trunk diameter for the tree.

   Examples: an "18" in the DBH Diameter column means that the tree has a diameter of 18 inches at 4.5 feet above the ground. An "18 (2)" means that trunk diameter was 18 inches at 2 feet above the ground. "18, 7, 5" means that this is a multi-trunk tree with trunk diameters of 18, 7 and 5 inches at 4.5 feet above the ground.

4) **Size**: tree size is listed as height x width in feet, estimated and approximate and intended for comparison purposes.

5) **Condition Ratings**: Trees are rated for their *condition* on a scale of *zero to 100* with zero being a dead tree and 100 being a perfect tree (which is rare – like a supermodel in human terms). A 60 is "average" (not great but not terrible either). There are two components to tree condition – ***vigor*** and ***structure***, and each component is rated separately. Averaging the two components is not useful because a very low rating for either one could be a valid reason to remove a tree from a site -- even if the other component has a high rating. Numerically speaking for each separate component:

   - **100** is equivalent to *Excellent* (an `A' academic grade), **80** is *Good* (B), **60** is *Fair* (C), **40** is *Poor* (D), **20** is *Unacceptable* (F) and **0** is *Dead*.

Relative to the scope of work for this report, tree condition has been rated but not explained in detail and recommendations for the management of tree condition have not been included. The tree owner may contact Deborah Ellis for additional information on tree condition and specific recommendations for the general care of individual trees relative to their condition.

The condition of the tree is considered relative to the tree species and present or future intended use of the site to provide an opinion on the tree's Preservation Suitability Rating (i.e. "Is this tree worth keeping on this site, in this location, as explained in Table 3 below. This is based upon the scenario that the tree is given enough above and below-ground space to survive and live a long life on the site. Ratings such as "Fair/Good" and "Fair/Poor" are intermediate in nature. The Preservation Suitability rating is not always the same as the Condition Rating because (for example) some trees with poor condition or structure can be significantly improved with just a small amount of work – and it would be worthwhile to keep the tree if this were done.

Table 3 Preservation Suitability Rating Explanation

Excellent	Such trees are rare but they have unusually good health and structure and provide multiple functional and aesthetic benefits to the environment and the users of the site. These are great trees with a minimum rating of "Good" for both vigor and structure. Equivalent to academic grade `A'.
Good	These trees may have some minor to moderate structural or condition flaws that can be improved with treatment. They are not perfect but they are in relatively good condition and provide at least one significant functional or aesthetic benefit to the environment and the users of the site. These are better than average trees equivalent to academic grade `B'.
Fair	These trees have moderate or greater health and/or structural defects that it may or may not be possible to improve with treatment. These are "average" trees – not great but not so terrible that they absolutely should be removed. The majority of trees on most sites tend to fall into this category. These trees will require more intensive management and monitoring, and may also have shorter life spans than trees in the "Good" category. Retention of trees with moderate suitability for preservation depends upon the degree of proposed site changes. Equivalent to academic grade `C'.
Poor	These trees have significant structural defects or poor health that cannot be reasonably improved with treatment. These trees can be expected to decline regardless of management. The tree species themselves may have characteristics that are undesirable in landscape settings or may be unsuitable for high use areas. I do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Equivalent to academic grade `D'.
None	These trees are dead and are not suitable for retention in their location. In certain settings however, (such as wilderness areas, dead trees are beneficial as food and shelter for certain animals and plants including decomposers. Equivalent to academic grade `F'.

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14. **Notes:** This may include any other information that would be helpful to the client and their architects and contractors within the scope of work for this report, such as a more detailed explanation of tree condition or expected construction impact. When reasonable, methods of reducing construction impact (including design changes) are presented here.

15. **Tree Protection Distances** *(See page 19).*
    a. Root Protection:
    - **3 and 5xDBH**: Both the 3 and 5xDBH distances are listed for each tree. For multi-trunk trees 100% of the DBH of the largest trunk is added to 50% of the DBH for all other trunks in order to compute the operational DBH to use for these the Tree Protection Distance calculations.
    - **OTPZ (Optimum Tree Protection Zone)**: This is calculated as per the text, *Trees & Development*, Matheny et al., International Society of Arboriculture, 1998. This method takes into account tree age and the particular tree species tolerance of root disturbance. Because it may not be possible to maintain the OPTZ distance recommended for trees on many projects due to crowded site conditions, the Arborist may omit this requirement and list only the 3 and 5xDBH distances.

    b. Canopy Protection: Additional space beyond root zone protection distances may be necessary for canopy protection.

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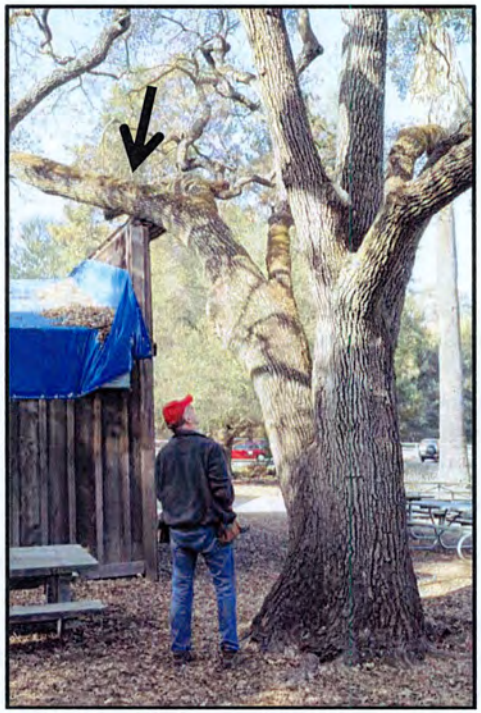
VALLEY OAK #4

This tree has some significant structural defects and presents what in my opinion is a "Moderate" risk to users of the property. This scenario is not unusual for a large old valley oak tree such as this, which has existed in an area where there has been development and activity around for many decades. In order to eliminate all risk associated with this tree you will need to eliminate the tree, which is probably a very undesirable option.



There is a **small cavity on the large scaffold branch that grows toward the blacksmith shop and rests on the decorative facing along the false front facade** – this should be investigated in greater detail from within the tree *(see photos above)*. Also to be investigated is exactly how much this facing is supporting the branch; this is unclear to me from the ground. The branch is clearly touching the

corrugated metal roof but it does not seem to be crushing the metal; nor has the branch grown around or engulfed the metal or the wood in this area. If and when this false front is taken down, it may be advisable to jack up the branch slightly, support the branch with a prop, and then ease the branch down slowly back onto the façade after this portion of the structure is replaced. We will have to work out the exact details after learning more about the degree to which the building and the tree are interacting. If the building is truly supporting the branch like a prop, and it has been this way for a while, then it may be advisable to continue to prop the branch in this manner. The branch may not be able to support itself after the prop is removed, and a compounding factor is that there is decay in the branch above the contact with the building.

A **large scaffold branch failed** out of the Northeast side of the tree; there is some loose bark and visible decay here which should be evaluated in greater detail from within the tree. There is an **old wound on the lower trunk and root collar on the North side** – the bark is thinner here and the area sounds different when tapped with a rubber mallet – it would be a good idea to investigate this further as well. The **canopy density of this oak may be sparser than normal** but it is hard to tell if this is actually the case because the tree is in the process of shedding its leaves in preparation for winter dormancy. Because of this I advise evaluating canopy density next mid-summer (e.g. mid June) after the tree should be fully foliated. I can tell now however, that there are at least several dead branches to 3 inches in diameter.

This oak has **4 branch support cables** installed in its canopy. These cables support long scaffold branches that are growing toward the horizontal on the North side of the trunk. All of these support cables are attached to a relatively small diameter portion of the trunk above, relatively close together. The problem is that this portion of the trunk leans slightly toward the branches that it supports, so the supported branches may be actually pulling the anchoring of the tree toward them – there is no good anchor or counterbalance here. The supported branches are stable now, but I have to question how long this will last. It seems that the only way to counteract the pull toward the supported branches would be to install an anchoring guy wire cable from the ground to the trunk on the opposite side of the branch cables. This could be problematic in terms of visitor usage of the area.

Recommendations: if you wish to keep the tree I advise evaluating it in greater detail as previously advised. Gradual shortening the length of and reducing end weight on the cable-supported branches on an annual basis is very important. The best time to do this pruning would be in mid to late summer after the tree's annual foliage is fully mature.

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COAST LIVE OAK #6

This is a nice looking oak tree in a prominent location of the site, but it has serious structural stability problems. The trunk of the tree has cracked below the crotch of two large and heavy scaffold branches. Three support bolts have been installed through the cracked trunk in an effort to try to hold it together and prevent the tree from falling apart. I don't think the bolts have been in the tree more than a few years, and so far the support system has held the tree together. The North side of the trunk has a bleeding crack that extends down the trunk for a distance of at least 5 feet and far below the lower end of the original crack, however. There is also a fair amount of fine twig death and the tree's leaves are small than normal -- this may be a symptom of additional interior wood damage beyond the crack itself. This does not seem like a good tree to keep in an area that is used by the public. I recommend removing the tree, eliminating the risk and planting a new oak in this area.

Coast live oak #6 from the east.

Arrow point to bottom the crack on the south side of the trunk. I have placed red dots over the bolt ends visible from this view.

The North side of the trunk where the crack seems to be continuing down the trunk close to the ground with wetwood exudation.

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SUPPORTING INFORMATION

PURPOSE & USE OF REPORT

This survey and report was requested by Carmen Lynaugh, Cupertino Department of Public Works. The purpose of the report is to identify and describe the existing trees that are within or adjacent to proposed construction of the Environmental Education Center - - their size, condition and suitability for preservation. The audience for this report is the City of Cupertino and project architects and contractors. The goal of this report is to preserve existing trees on site that are in acceptable condition, are good species for the area and will fit in well with the proposed modified use of the site.

METHODOLOGY

I performed a basic evaluation of the subject trees on November 7, 2012. Tree characteristics such as form, weight distribution, foliage color and density, wounds and indicators of decay were noted. Surrounding site conditions were also observed. Evaluation procedures were taken from:

- *Guide for Plant Appraisal*, 9th edition, 2000, authored by the Council of Tree and Landscape Appraisers (CTLA) and published by the International Society of Arboriculture (ISA).
- *Species Classification and Group Assignment* published by the Western Chapter of the International Society of Arboriculture (WCISA), 1992.
- *Tree Hazard Evaluation Form* taken from *Evaluation of Hazard Trees in Urban Areas*, 2nd Ed., Matheny & Clark, International Society of Arboriculture, 1994.

The above three references serve as industry professional standards for tree and landscape evaluations.

Each of the trees was tagged in the field with metal number tags that correspond with the tree numbers referenced in this report and on the Tree Map. I measured the trunk diameter of each tree with a diameter tape at 4.5 feet above the ground. DBH is used calculate tree protection distances and other tree-related factors. Trunk diameter was rounded to the nearest inch. I estimated the tree's height and canopy spread. Tree *Condition* (structure and vigor) was evaluated and I also recorded additional notes for trees when significant. Tree species and condition are considered in combination with the current or (if applicable) proposed use of the site yields the *Tree Preservation Suitability* rating. The more significant trees (or groups of trees) were photographed with a digital camera. Some of these photos are included in this report, but all photos are available from me by email if requested.

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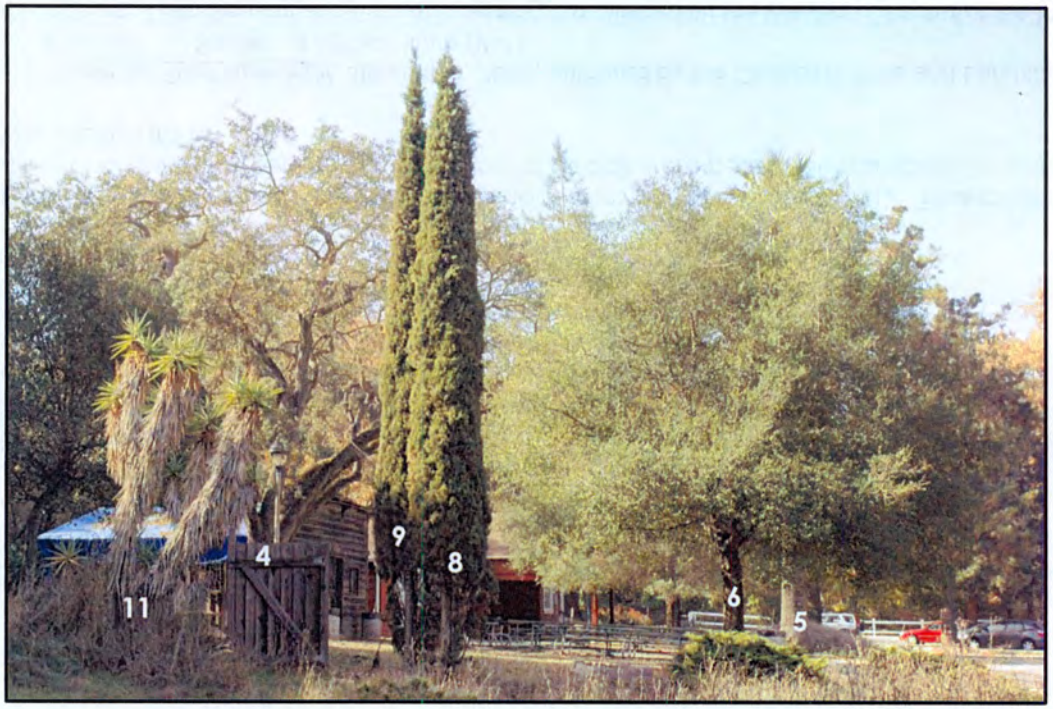
OBSERVATIONS

SITE CONDITIONS

There are several older farm buildings on the site, as well as a blacksmith shop that was moved to the site from another location for educational purposes. Site topography is level except for the slope area down from McClellan Road along the south perimeter of the property. Sun exposure for the trees varies from full to partly shaded, depending upon proximity to other tree and to the slope area. The slope area is generally overgrown and very crowded with trees and shrubs. The trees and shrubs within the project site are mostly native to the immediate area and of natural growth, except for **#3 Italian buckthorn**, **#5 California fan palm**, **#8, 9 and 14 Italian cypress**, **#11 giant yucca** and **#12** & **13 Mexican fan palms**.



Some of the non-native trees on site, such as **Italian cypress trees #8 and 9** and **yucca #11**. **California fan palm #5** (native to southern California desert areas) is to the right and hidden by (native) **coast live oak #6**. **Valley oak #4** is in the background between trees #9 and 11.

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TREE PROTECTION DISTANCES

3 TO 5 X DBH

No one can estimate and predict with absolute certainty how far a soil disturbance such as an excavation must be from the edge of the trunk of an individual tree to affect tree stability or health at a low, moderate or severe degree -- there are simply too many variable involved that we cannot see or anticipate. 3xDBH however, is a reasonable "rule of thumb" minimum distance (in feet) any excavation should be from the edge of the trunk *on one side of the trunk.* This is supported by several separate research studies including (Smiley, Fraedrich, & Hendrickson 2002, Bartlett Tree Research Laboratories. *DBH* is trunk "diameter at breast height" (4.5 feet above the ground). This distance is often used during the design and planning phases of a construction project in order to estimate root damage to a tree due to the proposed construction. It tends to correlate reasonably well with the *zone of rapid taper*, which is the area in which the large *buttress roots* (main support roots close to the trunk) rapidly decrease in diameter with increasing distance from the trunk. For example, using the 3X DBH guideline an excavation should be no closer than 4.5 feet from the trunk of an 18-inch DBH tree. Such distances are guidelines only, and should be increased for trees with heavy canopies, significant leans, decay, structural problems, etc. It is also important to understand that in actual field conditions we often find that much less root damage occurs than was anticipated by the guidelines. 3xDBH may be more of an aid in preserving tree stability and not necessarily long-term tree health. 5X DBH or greater is the "preferred" minimum distance which should be strived for, and this distance or greater should probably be used when there are multiple trenches on more than one side of the trunk. The roots beyond the zone of rapid taper form an extensive network of long, rope-like roots one to two inches in diameter. These woody perennial roots are referred to as *transport roots* because they function primarily to transport water and minerals. Maintaining a 5xDBH tree protection zone or greater around a tree will preserve more of these transport roots, which will have less of an impact on tree health than if the excavation were closer to the trunk.

OTPZ (OPTIMUM TREE PROTECTION ZONE)

OTPZ is the distance in feet from the trunk of the tree, all around the tree, that construction or other disturbance should not encroach within. If this zone is respected, then chances of the tree surviving construction disturbance are very good. This method takes into account tree age, DBH and the particular species tolerance to root disturbance. Although there are no scientifically based methods to determine the minimum distance for construction (for example, root severance) from trees to assure their survival and stability, there are some guidelines that are often used in the arboricultural industry. The most current guideline comes from the text, Trees & Development, Matheny et al., International Society of Arboriculture, 1998. The tree protection zone calculation method in this text was used to obtain the OTPZ's provided in this report. Due to the crowded, constrained nature of many building sites it is often not be possible to maintain the OPTZ distance recommended for many of the trees -- therefore I have also listed alternate distances of 3 and 5X DBH *(see paragraph above).*

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GLOSSARY

1) **Aerial inspection**: an experienced tree climber climbs into the tree and looks for and examines in greater detail, any structural defects and concerns from within the tree canopy. Such defects may not be visible or may not be visible enough from the ground in order to make a more accurate assessment of their significance. If reporting back to another consulting arborist, the climber may take notes and/or photographs or perform certain tests (such as advanced decay detection tests with certain decay detection instrumentation).
2) **Basic Evaluation of Trees**: A visual evaluation of the tree from the ground, without climbing into the tree or performing detailed tests such as extensive digging, boring or removing samples. This is an initial screening of the tree after which the evaluator may recommend that additional, more detailed examination(s) be performed.
3) **Cables, Cabling**: Wire cables attached between trunks and or branches on the same or adjacent trees, as support mechanisms for the trees or a portion of the tree, such as a long, horizontal branch. Cabling should only be done after other methods of tree structural improvement have been employed, such as corrective pruning. Once installed, cables should be checked at least once every 5 years and adjusted if necessary, as per the American National Standards A300 Part 3, 2008, Support Systems: a. Cabling Bracing & Guying.
4) **Canopy density** refers to the percentage of leaf cover in a tree canopy (after full leaf expansion and maturation), which varies with tree species and age. A lower than normal canopy density can indicate tree decline.
5) **Co-dominant** refers to two leaders, branches or trunks that arise at the same point on a tree and are about the same diameter. This is an undesirable structural defect that is a weak point in the tree. Co-dominant stems typically lack the overlapping tissue present in a branch or trunk collar, which may be why trees with this defect split so easily. Included bark between members also reduces the strength of the union. It is best that branches or trunks originate with space between them, or if they arise at the same point that they be of different sizes. Co-dominant leaders can often be corrected (one leader removed) when trees are young. When trees are older it is often better to subdue the smaller or more undesirable member by thinning the terminal ½ of the foliage by 25% to slow its growth and ultimate size relative to the other member, rather than create a large wound by removing one of the members. Large wounds are much more subject to decay than are smaller wounds and there is no natural decay barrier between the members. The length of the less desirable branch or leader can also be shortened as a part of the remedial pruning.
6) **Crown cleaning pruning**: selective pruning to remove one or more of the following parts: dead, diseased and/or broken branches.
7) **Dripline**: the area under the total branch spread of the tree, all around the tree. Although tree roots may extend out 2 to 3 times the radius of the dripline, a great concentration of active roots is often in the soil directly beneath this area. The dripline is often used as an arbitrary "tree protection zone". For multi-trunk trees, trunk diameter is measured for the largest trunk and estimated for all smaller trunks. A number in parentheses (3) after the trunk diameter(s) indicates that it was not possible to measure the trunk at 4.5 feet (due to tree architecture) and so the diameter was measured at this alternate height (in feet), which more accurately reflects true trunk diameter near the desired DBH height.
8) **Grove**: is a group of trees that located close together that shelter each other from wind and the elements, having "knit" canopies. If of the same species, there is usually root grafting between trees, which lends support from the ground, as well as water and mineral sharing. Removal of one or some grove members could cause remaining members to be unstable due to a reduction of previous shelter. Grove trees often have asymmetrical canopies when viewed as individuals.

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9) **Length Reduction Pruning** (of branches): (also called reduction pruning) reducing the length of a branch to increase stability and safety, usually by a small amount such as 10 to 20%. When a branch is shortened, it should be cut back to a lateral branch of sufficient size or a bud (for a very small branch or a twig); whichever is most appropriate according following industry pruning standards. Branches reduced in length should also have any secondary branches growing from t hem reduced in length as well, so that secondary branch length tapers back toward the trunk or parent branch. For example, secondary branches at the tip of a primary branch should be the shortest, and subsequent secondary branches should increase in length back toward the parent branch or trunk. This maintains a low center of gravity on the branch, with the longest, heaviest branches closest to the parent branch or trunk and the shortest, lightest branches out toward the tip.
10) **Mallet Tap Test** (also called "trunk sounding"). A rubber mallet is used to tap a tree trunk or branch to look for obvious loose bark, decay, cavities or other obvious defects that can be found by this quick, simple, inexpensive but cursory method. Sound, feel and the bounce of the mallet can be used to find obvious defects, but it usually cannot detect deep interior defects which are not visible to the user.
11) **Multiple trunks (leaders) or branch attachments** are a common structural defect in many tree species such as ash and flowering pear. In this condition, more than one branch or trunk originates at the same point. These attachments are not as strong as well-spaced branches or trunks, particularly if included bark between them that prevents a solid wood connection.
12) **Prop, Propping**: tree support system (generally considered as a last resort) used when pruning, cabling and other methods of tree structural stabilization improvement have not worked or can't be used. Metal or wood posts (usually vertically oriented or at an angle) resting on the ground surface are often used as the prop supports, with the tree or portion of the tree resting on the holding or receiving portion of the prop. Arboriculture Industry standards for propping are included in the ANSI A300 Standards for Tree Support Systems, 2000 and also Best Management Practices, Tree Support Systems: Cabling, Bracing and Guying from the International Society of Arboriculture, 2001.
13) **Root collar**: area at the base of the trunk (usually flared) where the roots and trunk merge; also called the root flare or root crown of the tree or shrub. Buttress roots (the main support roots of the tree) originate here and are often visible for a short distance above the ground. The root collar is critical to whole-tree health and stability.
14) **Root collar excavation and examination**: A root collar excavation carefully uncovers the root collar area (with hand digging tools, water or pressurized air). The area is then examined to assess its health and structural stability. Buttress roots may be traced outward from the trunk several feet.
15) **Scaffold branch**: a primary structural branch arising from the trunk of a tree. Usually the largest and often the lowest branches of the tree.
16) **Structural Improvement Pruning** and other tree work to reduce the possibility of branch, trunk or root failure (Mature Trees): the removal or shortening of live branches or stems to influence: orientation, spacing, growth rate (subordination or invigoration), size relationship, and strength of attachment and ultimate size of branches. May involve tactics such as end weight reduction, subordination pruning, reduction pruning, cabling, bracing or other types of tree work.
17) **Stub**: a short length of branch remaining following the removal of a branch through pruning, versus the more correct method of cutting a branch back to just beyond the branch collar. Leaving stubs in trees is generally a poor practice.
18) **Stump sprout trees** are the result of a tree trunk being cut down to a short stump close to the ground. If the tree survives, it sends out many small shoots (suckers) from around the cut stump. Some of these suckers may survive and grow to become significant trunks. These trunks are spaced very close together and usually have included bark between them, which reduces the strength of their union. Such trunks are prone to

failure. Stump sprout trees can be very structurally unsound, particularly as they become large and old. There is often a great deal of decay associated with the mother stump, which can also reduce mechanical stability.

19) **Subordination pruning**: the removal, typically of the upright or end portion of a parent branch or trunk, to slow growth rate, so other portions of the tree grow faster. Subordination pruning which shortens a branch or competing leader to a lower, lateral branch can be used to reduce branch weight, change branch orientation, alter growth rate to improve the size of a pruned branch relative to the trunk or parent branch.
20) **Suckers** are secondary upright shoots arising from the roots or root collar (junction between roots and trunk) of a tree, or below the graft union. On a grafted tree the suckers (originating from the stock which includes the roots), are often not the same plant species as the scion (the grafted, desirable aboveground part). Suckers can be a nuisance in landscape situations. In nature however, suckers can serve to keep a tree alive after fire or mechanical damage that kills or removes the aboveground part of the tree.
21) **Tomography** (tomographic scanning of trees): Tomography is a method of imaging the interior of an object by sending invisible waves (sound, magnetic, x-ray, etc.) through an object. The changes that the waves experience as they pass through the object provide data, which through mathematical algorithms is translated into a two-dimensional color-coded image. Interpretation of the image provides information on the mechanical and sometimes chemical properties of the interior of the object. A common type of tomography used for medical imaging is the MRI scan, which uses magnetic waves. For trees, sonic (sound wave) and electric resistance tomography is used to investigate the interior of tree trunks and large branches. Sonic tomography measures wood density and electric resistance tomography measures hydration and other chemical properties of the wood. Sonic and electric resistance tomography provides more and higher quality information than either method used alone. Deborah Ellis provides tree tomography services to clients.
22) **Wetwood**: the exudation of liquid from the wood of a tree or woody shrub, caused by an internal bacterial infection. Not usually treated, because the acidity of the liquid suppresses most (more damaging) wood decay fungi. It is a good idea to investigate and monitor wetwood areas, however, as they can be an indication of a structural defect in the tree.

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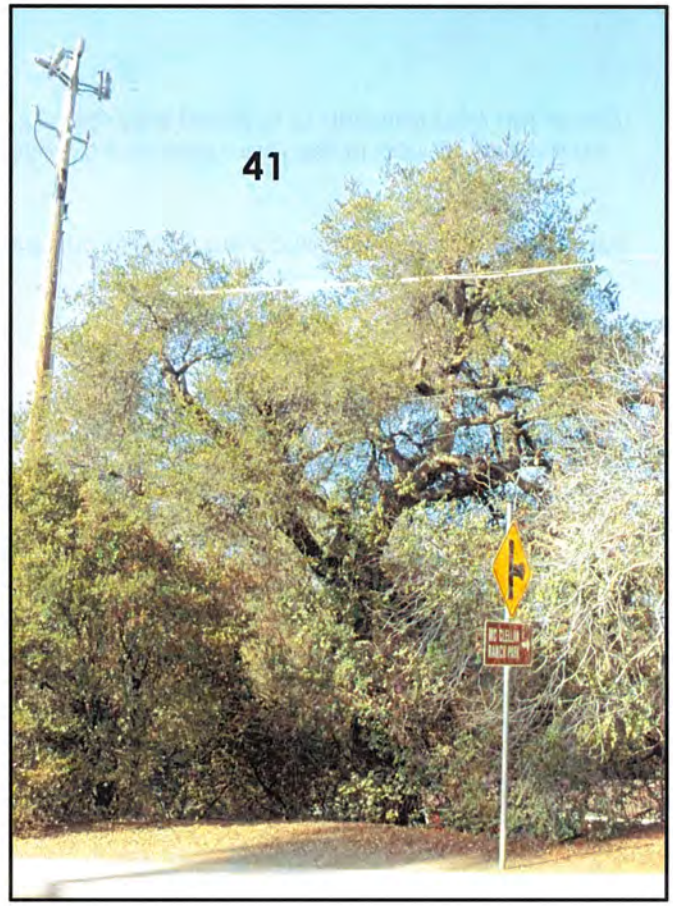

Some of the trees on the slope area, near McClellan Road.

Left photo: **coast live oak #25**, for which some pruning is recommended.

Right photo: **coast live oak #25**, which is full of decay and recommended for removal.

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ASSUMPTIONS & LIMITATIONS

1) **Many trees on the slope area had their root collars and or lower trunks covered** with soil, vegetation or debris and were obstructed from view when I conducted my tree evaluation. The obstructions should be removed and the project arborist should then be called back to re-examine these previously covered areas.

2) **The measures noted within this report** are designed to assist in the protection and preservation of the trees mentioned herein, should some or all of those trees remain, and to help in their short and long term health and longevity. This is not however; a guarantee that any of these trees may not suddenly or eventually decline, fail, or die, for whatever reason. Because a significant portion of a tree's roots are usually far beyond its dripline, even trees that are well protected during construction often decline, fail or die. Because there may be hidden defects within the root system, trunk or branches of trees, it is possible that trees with no obvious defects can be subject to failure without warning. The current state of arboricultural science does not guarantee the accurate detection and prediction of tree defects and the risks associated with trees. There will always be some level of risk associated with trees, particularly large trees. It is impossible to guarantee the safety of any tree. Trees are unpredictable.

3) **Loss or alteration of any part of this report** invalidates the entire report.

4) **Unless expressed otherwise**:
   a) **Information contained in this report covers only** those items that were examined and reflects the condition of those items at the time of inspection.

   b) **The inspection is limited to visual examination** of accessible items without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

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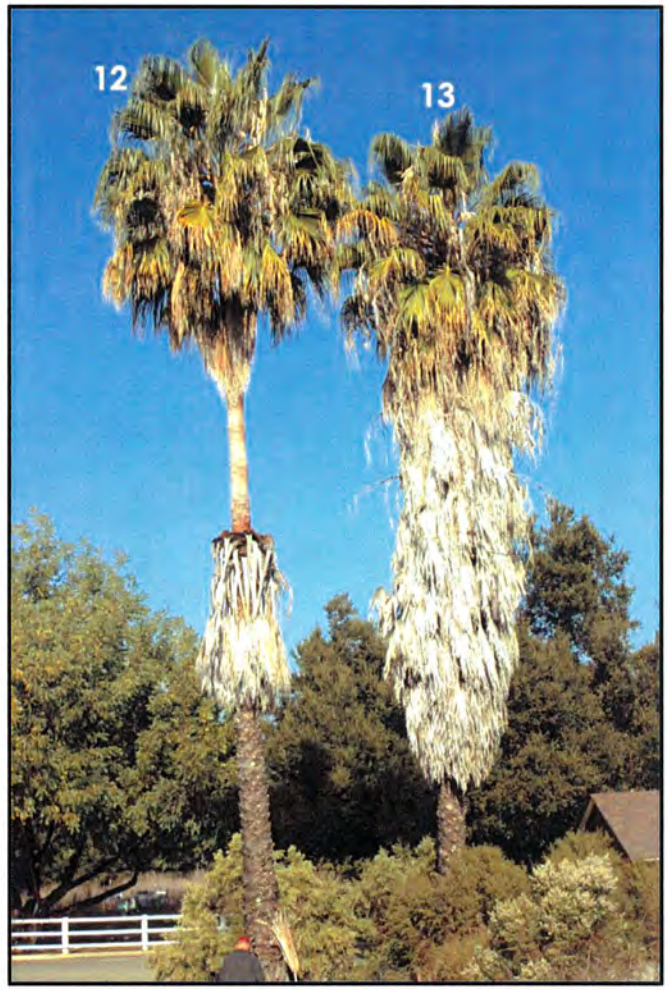
I certify that the information contained in this report is correct to the best of my knowledge, and that this report was prepared in good faith. Thank you for the opportunity to provide service again. Please call me if you have questions or if I can be of further assistance.

Sincerely,

Deborah Ellis

Deborah Ellis, MS.
Consulting Arborist & Horticulturist
Certified Professional Horticulturist #30022
ASCA Registered Consulting Arborist #305
I.S.A. Board Certified Master Arborist WE-457B

Enclosure: Tree Protection Specifications for McClellan Ranch Environmental Education Center. D. Ellis, November 15, 2012.



Mexican fan palms
#12 & 13 from the south.

APPENDIX - FOR INFORMATION ONLY

Appendix

McClellan Ranch Ctiy Programs Schedule During Construction Period

This schedule covers City run programs that will be taking place at McClellan Ranch during the construction period. Contractor will keep site safe and access to other areas of the park at all time.

Note: This is not a complete list of program but a sample of what could take place during the

Legend:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

March 2014						
Day	Dates	Time	Program	Number of Participants	Parking Demands	Use Area
Saturday	1					
Sunday	2					
Monday	3					
Tuesday	4					
Wednesday	5					
Thursday	6	3:30pm-5:00pm	Nature Journal	15	Drop-off, pick-up	Museum, Restrooms, Bleachers,
Friday	7					
Saturday	8					
Sunday	9					
Monday	10					
Tuesday	11					
Wednesday	12					
Thursday	13	3:30pm-5:00pm	Nature Journal	15	Drop-off, pick-up	Museum, Restrooms, Bleachers,
Friday	14					
Saturday	15	3:00pm - 4:00pm	Spring Equinox Walk	20	Park and Stay	Museum, Restrooms, Bleachers,
Sunday	16					
Monday	17					
Tuesday	18					
Wednesday	19					
Thursday	20	3:30pm-5:00pm	Nature Journal	15	Drop-off, pick-up	Museum, Restrooms, Bleachers,
Friday	21					
Saturday	22					
Sunday	23					
Monday	24					
Tuesday	25					
Wednesday	26					
Thursday	27					
Friday	28					
Saturday	29					
Sunday	30					

Monday	31					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

April 2014						
Day	Dates	Time	Program	Number of Participants	Parking Demands	Notes
Tuesday	1	3:30pm - 5:00pm	Nature Explorers	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	2					
Thursday	3	3:30pm - 5:00pm	Insects	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	4					
Saturday	5	3:00pm-4:30pm	Bug Days	20	Drop-off, pick-up	Museum, Restrooms, Bleachers,
Sunday	6					
Monday	7					
Tuesday	8	3:30pm - 5:00pm	Nature Explorers	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	9					
Thursday	10	3:30pm - 5:00pm	Insects	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	11					
Saturday	12					
Sunday	13					
Monday	14					
Tuesday	15	9:00am - 3:00pm	Spring Break Camp	32	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	16	9:00am - 3:00pm	Spring Break Camp	32	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Thursday	17	9:00am - 3:00pm	Spring Break Camp	32	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	18					
Saturday	19					
Sunday	20					
Monday	21					
Tuesday	22	3:30pm-5:00pm	Amphibians/Reptiles	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	23	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Thursday	24	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm - 5:00pm	Insects	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	25	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Saturday	26					
Sunday	27					
Monday	28	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Tuesday	29	3:30pm-5:00pm	Amphibians/Reptiles	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,

Wednesday	30	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Thursday	31					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

May 2014						
Day	Dates	Time	Program	Number of Participants	Parking Demands	Use Area
Thursday	1	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm-5:00pm	Birds	15	Drop-off, Pick-Up	Creek trail
Friday	2	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Saturday	3	3:00pm-4:30pm	Bug Days	20	Park and stay	Museum, Restrooms, Bleachers,
		8:00pm - 9:30pm	Exploring the Night Sky	20	Park and stay	Museum, Restrooms, Bleachers,
Sunday	4					
Monday	5					
Tuesday	6	3:30pm-5:00pm	Amphibians/Reptiles	15	Drop-off, Pick-Up	Museum, Restrooms, Bleachers,
Wednesday	7					
Thursday	8	3:30pm-5:00pm	Birds	15	Drop-off, Pick-Up	Creek trail
Friday	9					
Saturday	10	2:00pm-3:30pm	Blacksmithing	20	Park and Stay	Museum, Restrooms, Bleachers,
Sunday	11					
Monday	12					
Tuesday	13	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Wednesday	14	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Thursday	8	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm-5:00pm	Birds	15	Drop-off, Pick-Up	Creek trail
Friday	16	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Saturday	17					
Sunday	18					
Monday	19					
Tuesday	20	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm-5:00m	Tracking & Observing	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	21	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Thursday	22	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Friday	23	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Saturday	24					
Sunday	25					
Monday	26					

Tuesday	27	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm-5:00m	Tracking & Observing	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	28	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Thursday	29	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm-5:00pm	The Sun	15	Drop-off, Pick-Up	Museum, Restrooms, Bleachers,
Friday	30	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Saturday	31					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

June 2014						
Day	Dates	Time	Program	Number of Participants	Parking Demands	Notes
Sunday	1					
Monday	2					
Tuesday	3	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm-5:00pm	Tracking & Observing	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	4	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Thursday	5	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
		3:30pm-5:00pm	The Sun	15	Drop-off, Pick-Up	Museum, Restrooms, Bleachers,
Friday	6	9:15am - 1:00pm	3rd Grade Creek Tours	46-79	Bus plus 2-8 vehicles	Bleachers, Restroom, Creek trail
Saturday	7					
Sunday	8					
Monday	9					
Tuesday	10					
Wednesday	11					
Thursday	12					
Friday	13					
Saturday	14					
Sunday	8					
Monday	16	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Tuesday	17	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	18					
Thursday	19	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
		6:30p - 7:45p	Silkworms	20	Park and Stay	Museum, Restrooms, Bleachers,
Friday	20	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Saturday	21					
Sunday	22					
Monday	23	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Tuesday	24	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	25					
Thursday	26	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
		6:30p - 7:45p	Leaf prints	20	Park and Stay	Museum, Restrooms, Bleachers,

Friday	27	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Saturday	28					
Sunday	29					
Monday	30	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

July2014						
Day	Dates	Time	Program	Number of Participants	Parking Demands	Use Area
Tuesday	1	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	2					
Thursday	3	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	4					
	5					
	6					
Monday	7	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Tuesday	8	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	9					
Thursday	10	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
		6:30pm-7:45pm	Goats	20	Park and Stay	Museum, Restrooms, Bleachers,
Friday	11	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	12					
	13					
Monday	14	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Tuesday	15	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	16					
Thursday	17	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	18	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	19					
	20					
Monday	21	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Tuesday	22	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	23					
Thursday	24	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
		6:30pm-7:45pm	Snakes	20	Park and Stay	Museum, Restrooms, Bleachers,
Friday	25	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	26					
	27					
Monday	28	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,

Tuesday	29	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
	30					
Thursday	31	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
		6:30pm-7:45pm	Poultry	20	Park and Stay	Museum, Restrooms, Bleachers,

Key:

After school/Weekend (1-2 hours)

All Day Camp

CUSD Creek Tour

August 2014						
Day	Dates	Time	Program	Number of Participants	Parking Demands	Use Area
Friday	1	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Saturday	2					
Sunday	3					
Monday	4	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Tuesday	5	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	6					
Thursday	7	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	8	9:00am-2:00pm	Science Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Saturday	9					
Sunday	10					
Monday	11	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Tuesday	12	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	13					
Thursday	14	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	15	9:00am-2:00pm	Nature Camp	30	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Saturday	16					
Sunday	17					
Monday	18					
Tuesday	19					
Wednesday	20					
Thursday	21					
Friday	22					
Saturday	23					
Sunday	24					
Monday	25					
Tuesday	26					
Wednesday	27					
Thursday	28					
Friday	29					
Saturday	30					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

September 2014

Day	Dates	Time	Program	Number of Participants	Parking Demands	Notes
Monday	1					
Tuesday	2					
Wednesday	3					
Thursday	4	3:30pm -5:00pm	Exploring Nature	15	Drop-off, pick-up	Museum, Restrooms, Bleachers,
Friday	5					
Saturday	6					
Sunday	7					
Monday	8					
Tuesday	9	3:30pm -5:00pm	Autumn at the Ranch	15	Drop-Off, Pick Up	Museum, Restrooms, Bleachers,
Wednesday	10					
Thursday	11	3:30pm -5:00pm	Exploring Nature	15	Drop-off, pick-up	Museum, Restrooms, Bleachers,
Friday	12					
Saturday	13					
Sunday	14					
Monday	15					
Tuesday	16	3:30pm -5:00pm	Autumn at the Ranch	15	Drop-Off, Pick Up	Museum, Restrooms, Bleachers,
Wednesday	17					
Thursday	18	3:30pm -5:00pm	Exploring Nature	15	Drop-off, pick-up	Museum, Restrooms, Bleachers,
Friday	19	9:00am - 3:00pm	A day at the Ranch	24	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Saturday	20					
Sunday	21					
Monday	22					
Tuesday	23	3:30pm -5:00pm	Autumn at the Ranch	15	Drop-Off, Pick Up	Museum, Restrooms, Bleachers,
Wednesday	24					
Thursday	25					
Friday	26					
Saturday	27					
Sunday	28					
Monday	29					
Tuesday	30					

Wednesday	31					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

October 2014

Day	Dates	Time	Program	Number of Participants	Parking Demands	Notes
Wednesday	1					
Thursday	2					
Friday	3					
Saturday	4					
Sunday	5					
Monday	6					
Tuesday	7	3:30pm - 5:00pm	Bones & Skulls	15	Drop-off , Pick-up	Museum, Restrooms, Bleachers, Creek trail
Wednesday	8	3:30pm - 5:00pm	Pumpkins, Acorns	15	Drop-off , Pick-up	Museum, Restrooms, Bleachers, Creek trail
Thursday	9					
Friday	10					
Saturday	11	9:00am - 2:00pm	Make Knitting Needles	15	Park and Stay	Museum, Restrooms, Bleachers, Creek trail
Sunday	12					
Monday	13					
Tuesday	14	3:30pm - 5:00pm	Bones & Skulls	15	Drop-off , Pick-up	Museum, Restrooms, Bleachers, Creek trail
Wednesday	15	3:30pm - 5:00pm	Pumpkins, Acorns	15	Drop-off , Pick-up	Museum, Restrooms, Bleachers, Creek trail
Thursday	16					
Friday	17					
Saturday	18	9:00am - 2:00pm	Bones & Skulls	20	Park and Stay	Museum, Restrooms, Bleachers, Creek trail
Sunday	19					
Monday	20					
Tuesday	21	3:30pm - 5:00pm	Bones & Skulls	15	Drop-off , Pick-up	Museum, Restrooms, Bleachers, Creek trail
Wednesday	22	3:30pm - 5:00pm	Pumpkins, Acorns	15	Drop-off , Pick-up	Museum, Restrooms, Bleachers, Creek trail

Thursday	23					
Friday	24					
Saturday	25					
Sunday	26					
Monday	27					
Tuesday	28	3:30pm - 5:00pm	Bones & Skulls	15	Drop-off , Pick-up	Museum, Restrooms, Bleachers, Creek trail
Wednesday	29					
Thursday	30					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

November 2014

Day	Dates	Time	Program	Number of Participants	Parking Demands	Notes
Saturday	1	1:00pm - 3:00pm	Rope Making	20	Park and Stay	Museum, Restrooms, Bleachers,
Sunday	2					
Monday	3					
Tuesday	4	3:30pm - 5:00pm	Meeting Animals	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	5					
Thursday	6	3:30pm - 5:00pm	Knitting	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	7					
Saturday	8					
Sunday	9					
Monday	10					
Tuesday	11	3:30pm - 5:00pm	Meeting Animals	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	12					
Thursday	13	3:30pm - 5:00pm	Knitting	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	14					
Saturday	15					
Sunday	16					
Monday	17					
Tuesday	18	3:30pm - 5:00pm	Meeting Animals	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Wednesday	19					
Thursday	20	3:30pm - 5:00pm	Knitting	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	21					
Saturday	22					
Sunday	23					
Monday	24					
Tuesday	25					
Thursday	26					
Friday	27					
Saturday	28					
Sunday	29					
Monday	30					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

December 2014

Day	Dates	Time	Program	Number of Participants	Parking Demands	Use Area
Monday	1					
Tuesday	2					
Wednesday	3					
Thursday	4	3:30pm-5:00pm	Knitting	15	Drop-off, Pick-up	Museum, Restrooms, Bleachers,
Friday	5					
Saturday	6					
Sunday	7					
Monday	8					
Tuesday	9					
Wednesday	10					
Thursday	11					
Friday	12					
Saturday	13					
Sunday	14					
Monday	15					
Tuesday	16					
Wednesday	17					
Thursday	18					
Friday	19					
Saturday	20					
Sunday	21					
Monday	22					
Tuesday	23					
Wednesday	24					
Thursday	25					
Friday	26					
Saturday	27					
Sunday	28					
Monday	29					

Tuesday	30					
Wednesday	31					

Key:

After school/Weekend (1-2 hours)
All Day Camp
CUSD Creek Tour

Appendix
For Information Only

Stevens Creek Corridor Park
Master Plan and Restoration Plan
Initial Study
Technical Appendices

April 2006

City of Cupertino

APPENDIX I
MITIGATION MONITORING AND REPORTING PLAN

APPENDIX I.

MITIGATION MONITORING AND REPORTING PLAN

The following Mitigation, Monitoring and Reporting Plan (MMRP), was prepared for this project pursuant to CEQA Guidelines. According to the Guidelines:

"In order to ensure that the mitigation measures and project revisions identified in the Initial Study/Mitigated Negative Declaration are implemented, the Lead Agency, the City of Cupertino (City) shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." (§15097(a))

"The Lead Agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both." (§15097 (c))

The MMRP lists the Impacts, Mitigation Measures, and Timing of the Mitigation Measure (when the measure will be implemented) related to the Stevens Creek Corridor project. The responsibility for ensuring that the mitigation measure has been implemented would be the responsibility of the City of Cupertino. All of the mitigation measures listed in the MMRP would be implemented by the City or by its appointees.

According to CEQA Guidelines Section 15126.4 (a) (2), "Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments." Therefore, all mitigation measures listed in this MMRP would be adopted by the City when the project is approved.

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
		BIOLOGY		
Impact: The removal of structures and the removal or trimming of shrubs or trees could impact nesting birds, if present.	**Mitigation Measure BIO-1**: Vegetation, tree, bridge, and building removal activities within the project area shall be scheduled to take place outside of the nesting season (February 1 to August 31) to avoid impacts to nesting birds. In order to avoid impacts to existing raptor nests during the non nesting season, a preconstruction survey of all trees that could support raptor nests shall be completed. Every attempt shall be made to protect trees and nests that contain raptor nests. However, if construction is unavoidable during the nesting season, a qualified biologist shall conduct a survey for nesting raptors and other birds within five days prior to the start of construction activities. If active nests are not present, construction activities can take place as scheduled. If more than 5 days elapse between the initial nest search and the beginning of construction activities, another nest survey shall be conducted. If any active nests are detected, a qualified biologist shall determine the appropriate buffer to be established around the nest. CDFG generally accepts a 50-foot radius buffer around passerine and non-passerine land bird nests, and up to a 250-foot radius for raptors, however the biologist shall have flexibility to reduce or expand the buffer depending on the specific circumstances.	**Implementation**: Qualified biologists **Timing**: During the construction phase of the project	**Monitoring**: Project manager to schedule removal and/or trimming outside of nesting season. If not feasible, project manager shall ensure that removal/trimming is completed within five days of the completion of nest surveys. If nests are found, project manager and implementation biologist would ensure that buffer is maintained until chicks have fledged. Biologist would provide a memo report on the results of the nest survey to project manager.	**Initials**_____ **Date**_____
Impact: Construction activities such as, but not limited to, grading or the noise generated from a	**Mitigation Measure BIO-2**: The following avoidance measures shall be implemented as necessary and as determined by a qualified bat biologist (defined as a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing	**Implementation**: Qualified bat biologist. **Timing**: Prior to construction	**Monitoring**: Project manager to schedule construction activities near maternity roost tree outside of maternity	**Initials**_____ **Date**_____

N/A = NOT APPLICABLE TO PROJECT

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
chainsaw or other loud noises could result in the abandonment of the big brown bat maternity colony roost and therefore impact the on-site big brown bat population.	the biologist to handle and collect bats): ~~a. Temporal avoidance. To avoid disturbance to an active maternity colony, construction activities adjacent to the roost tree shall commence after young are volant (flying) (i.e., after July 31) and end before maternity colonies form (i.e., prior to March 1). CDFG considers the maternity season to occur from March 1 to August 31. Thus the project construction can be scheduled from September 1 through March 1 to avoid potential construction disturbance to the maternity roost.~~ ~~b. Construction buffer zones. Depending upon the type of potential disturbance to the big brown bat maternity colony roost, a qualified bat biologist shall determine the extent of construction-free zones around the sycamore tree #278 identified as the active maternity colony/day roost. Although impacts to the roost are greater during the maternity season, a buffer zone for the non-breeding season day roost shall also be established by a bat biologist. This buffer would be placed to prevent the loss of roots and branches. California Department of Fish and Game would need to be notified of any active nurseries within the construction zone.~~ c. Preconstruction surveys. Because the big brown bats could move their primary day roost to an on-site building or tree (and other species of bats occurring on the project site could form a new roost), a predemolition survey for roosting bats shall also be conducted prior to any construction or large tree removal. The survey shall be conducted by a qualified bat biologist. ~~d. Exclude bats prior to construction disturbance of, or loss of, roosts. If any roosting area with a nursery as determined by the preconstruction survey is~~		season. If not feasible, project manager shall ensure that measures a-d listed in BIO-2 are followed. Bat biologist completing work would submit a letter to CDFG and project manager of monitoring activities and results.	

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
	~~planned (and required) to be removed, a qualified bat biologist shall exclude bats outside of the maternity season (i.e., prior to March 1 or after July 31 when young are volant or flying) with the use of one-way doors. Tree cutting or construction shall then follow no less than three days after because all bats may not exit each night. If a nonbreeding bat hibernaculum is found in a building or tree that needs removal, the individual bats shall be safely evicted also through the use of one-way doors as described above.~~ N/A			
Impact: If present within creek or adjacent upland N/A **habitat, ~~CRLF, WPT~~, and woodrat nests could be crushed by project activities or by vehicle or human access.** N/A For CRLF & WPT	**Mitigation Measure BIO-3**: The following avoidance measures for ~~WPT, CRLF~~, and Dusky-footed woodrat shall be implemented: N/A a. Preconstruction Survey. In the two days prior to the start of project activities, a qualified biologist shall perform one daytime survey for CRLF. The entire work area, including any burrows, rocks and woodpiles that may be disturbed by construction activities, shall be inspected for CRLF. If CRLF is detected, work shall be delayed and the USFWS shall be contacted on how to proceed (since it is a Federally Threatened species). If during this survey WPT or woodrats are also detected, the CDFG shall be contacted on how to proceed (since they are State Species of Special Concern). b. Employee Education Program. An employee education program shall be conducted prior to the initiation of project activities. The program shall consist of a brief presentation by persons knowledgeable in federally listed and state special status species biology and legislative protection to explain concerns to contractors and their employees. The program would include the following: a description of CRLF ,WPT, and woodrats and their habitat needs; an explanation of the status of CRLF,	**Implementation**: Qualified biologists, project supervisor and all crew members. **Timing**: Prior to construction and during construction as specified.	**Monitoring:** (a) Survey biologists to submit a letter report of survey results to project manager. (b) Project crew to sign a sheet for receipt of CRLF, WPT, and woodrat training. Sign-in sheet held by project supervisor. (c) Biological monitor to report daily to project supervisor. (d) Project supervisor to enforce speed limit and parked vehicle check.	**Initials**_____ **Date**_____

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
	WPT, and woodrats and their protection under state and federal laws; and a list of measures being taken to reduce impacts to CRLF, WPT, and woodrats during project activities. Crews shall be instructed that if a CRLF is found, it is to be left alone and the project foreman and the USFWS must be notified immediately. Likewise, if a WPT or woodrat nest is found, it is to be left alone and the project foreman and CDFG must be notified immediately. ~~c. Daily Monitoring. During the construction phase of the project, a qualified biologist or a trained, on-site monitor shall check the site in the morning every day before construction activities begin for the presence of CRLF, WPT, woodrat or other wildlife present within the work area. If CRLF, WPT, or woodrat is found, construction would be halted and the monitor would immediately notify the appropriate regulatory agency. Subsequent recommendations made by the USFWS or CDFG shall be followed. The monitor would not handle or try to relocate any special-status species. (An alternative strategy for action in the event a CRLF, WPT, or woodrat nest is found would be to create a Handling/Salvage Plan to be agreed upon by USFWS and CDFG. This Plan would potentially avoid any long delays associated with finding a CRLF, WPT, or woodrat and would need to include procedures such as how and where to move individuals.)~~ d. Speed Limit. Vehicles shall not drive more than 5 miles per hour within the project area. If any WPT, CRLF, or woodrats are seen in the path of a vehicle, the vehicle shall stop until the animal is out of the path. Parked vehicles shall be thoroughly checked underneath before they are moved to ensure that no WPT, CRLF or woodrats are on the ground below the vehicle.			

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
Impact: Potential take of steelhead due to realignment, dewatering and relocation activities. N/A	**Mitigation Measure BIO-4:** The following Best Management Practices (BMPs) from the Santa Clara Valley Water District (District) 2005 BMP Handbook and Stream Maintenance Program would be used during project implementation to avoid impacts to steelhead due to dewatering or sediment filled runoff entering the creek because of trail construction, bank layback and/or, erosion stabilization structure removal (see Appendix A for full text of BMPs). These measures may be modified depending on the outcome of the NOAA Biological Opinion. 2005 BMP Handbook WQ-12 Dewater/ Bypass Water at Non-tidal Sites WQ-16 Avoid Erosion When Restoring Flows WQ-18 Erosion and Sediment Control Measures WQ-3 Pump/Generator Set Operations and Maintenance WQ-5 Soil Stockpiles WQ-10 Concrete Use Near Waterways WQ-15 Groundwater Management BI-7 Minimize Stream Access Impacts BI-2 Salvage Native Aquatic Vertebrates from Dewatered Channels BI-3 Conduct In-Channel Work During the Dry Season BI-8 Remove Temporary Fills as Appropriate WQ-6 Stabilized Construction Entrance HM-10 Vehicle and Equipment Fueling	**Implementation**: Project manager and qualified fisheries biologist **Timing**: Prior to project approval	**Monitoring**: Qualified fisheries biologist to submit a letter report of survey results to project manager, Corps and U.S. Fish and Wildlife Service. Any additional monitoring requirements called out in the Corps permit would also be followed.	**Initials**_____ **Date**_____

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
	~~HM-11 Vehicle and Equipment Maintenance~~ ~~BMPs are also included to minimize impacts from installing the two new bridges, which would require the use of concrete. Migrating steelhead would also be protected through implementing BMPs and Limited Operating Periods (LOPs). Newly created stream banks would be planted and mulched according to the Restoration Plan to minimize the effects of bank erosion during the first rains after the completion of construction.~~ N/A			
Impact: The expanded visitor use and new dog use within the project area has the potential to impact sensitive wildlife and habitat through off-trail use, improper disposal of dog waste, and increased sedimentation in thecreek. Native animals could leave nests or otherwise flee from dogs intruding into the habitat areas. N/A	~~**Mitigation Measure BIO-5**: To protect sensitive wildlife and habitat from impacts due to visitor and dog use throughout the project area, the following minimization and/or avoidance measures would be implemented:~~ N/A ~~a. Post signs. The City shall post signs intermittently along the trail to inform the public to stay on the trail, clean up dog waste, and leash law requirements.~~ ~~b. Patrols and Citations. The City Parks Service Officers shall complete patrols of the project area to enforce the leash law provisions, issue citations for violations and educate the public on the presence of special status species within the project area.~~ ~~c. Volunteer Patrols and Education. Volunteers shall provide frequent patrols of the project area (as much as once per day) to educate dog owners about the leash law provisions, inform visitors that use outside of Blackberry Farm is confined solely to the trail, and educate visitors about the presence and natural history of special status species found within the project area. The City would be responsible for volunteer training and coordination.~~	**Implementation**: City of Cupertino **Timing**: Immediately following project construction	**Monitoring**: The Recreation Supervisor for Blackberry Farm shall coordinate the posting of signs, ensure patrols completed by both City Parks Service Officers and volunteers, provide direction to maintenance crews for clean up of dog waste, and coordinate with SCVWD biologists to assess impacts associated with visitor and dog use within the project area and any adaptive management that needs to be completed.	**Initials**_____ **Date**_____

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
	d. Creek Use. Recreational use of the creek, such as wading, would be confined to one area in Blackberry Farm outside of the steelhead migratory and spawning season (October 15 to June 15 of any given year) to minimize creek disturbance. Likewise, students participating in guided educational programs through the environmental education center at McClellan Ranch would be limited to creek access in only one location. e. Park Cleanup. Park maintenance crews, or other City employees as designated by the Recreation Supervisor for Blackberry Farm, would clean up accumulated dog waste found within the project area. City Parks Service Officers and volunteer patrols would monitor accumulation rates and provide direction on the frequency and need for cleanup activities. f. Screen Trail. In order to provide wildlife refuge and cover, approximately 1 acre of upland and riparian understory planting would be provided. This would compensate for indirect effects associated with increased human and dog use within the corridor. g. Adaptive Management. If it is determined at any time that mitigation measures listed above are not sufficiently minimizing impacts to the native flora and fauna and restored habitats, the City shall discontinue permitting dogs within the project area. Likewise, if habitat disturbance or decreased steelhead survivorship is determined to be a direct impact from visitor misuse, appropriate measures shall be implemented, such as closing or fencing off portions of the trail, to avoid further impacts.			
Impact: The proposed trail may	**Mitigation Measure BIO-6:** Calculations for Recommended Tree Protection Zones would be	**Implementation**: City of Cupertino	**Monitoring**: City of Cupertino	

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
affect the root zones of native and/or heritage trees if it is placed within the dripline. N/A	prepared by a Arborist certified by the International Society of Arboriculture or American Society of Consulting Arborists prior to preparation of construction documents. These calculations would be made using the Conceptual Trail Plan. Based on these calculations, the trail would be rerouted and realigned to be outside of the dripline of any native trees. N/A	**Timing**: During trail design		**Initials**_____ **Date**_____\
Impact: Tree trimming or removal could violate City of Cupertino and CDFG policies regarding protected trees. N/A	**Mitigation Measure BIO-7:** The following measures would be implemented to ensure that no significant impacts would occur as a result of tree removal activities: N/A a. To satisfy the requirements of CDFG, all coast live oak trees removed from the project area would be replaced at a 3:1 ratio (3 trees planted for each tree removed). These trees are to be replaced in oak woodland habitat found throughout the project area. Oak trees would be replaced using direct-seeded acorns collected from the Stevens Creek Watershed from as close to the project site as possible. b. In the event that construction activities require the removal of specimen or heritage trees not included in Appendix H, an additional tree removal permit would have to be obtained from the City of Cupertino. All requirements for removal as stated in the tree removal permit would be followed. c. All planting activities shall be consistent with the Restoration Plan and with Guidelines and Standards for Land Use near Streams (SCVWRPC 2005), including guidelines regarding landscaping near natural vegetation such as "Use of Locally Native Species" and "Use of Ornamental or Non-native Landscaping".	**Implementation**: Project manager would apply for and obtain permits; contractor would remove trees. **Timing**: Appropriate permits would be obtained for tree removal prior to project approval. Trees would be replaced at required ratios post construction activities.	**Monitoring**: Project manager to supervise tree removal contractor. Project manager shall keep permits on file for five years, the restoration monitoring period.	**Initials**_____ **Date**_____\

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
		CULTURAL RESOURCES		
Impact: The project could affect as yet unknown prehistoric or historic cultural materials (including Native American skeletal remains).	**Mitigation Measure CUL-1**: Prior to the initiation of construction or ground-disturbing activities, the City of Cupertino Project Manager shall conduct a tailgate meeting to inform all construction personnel of the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Personnel shall be informed of the procedures that would be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains and their treatment.	**Implementation**: City – Public Works Dept. **Timing**: During a pre-construction field meeting with contractors	**Monitoring**: City – Public Works Dept.	**Initials**_____ **Date**_____
Impact: The project could affect as yet unknown prehistoric or historic cultural materials (including Native American skeletal remains).	**Mitigation Measure CUL-2**: Upon discovery of possible buried prehistoric and historic cultural materials (including potential Native American skeletal remains)[1], work within 25-feet of the find shall be halted and the City of Cupertino's Project Manager shall be notified. The Project Manager shall retain a qualified archaeologist to review and evaluate the find. Construction work shall not begin again until the archaeological or cultural resources consultant has been allowed to examine the cultural materials, assess their significance, and offer proposals for any additional exploratory measures deemed necessary for the further evaluation of, and/or mitigation of adverse impacts to, any potential historical resources or unique archaeological resources that have been exposed. If the discovery is determined to be a unique archaeological or historical resource, and if avoidance	**Implementation**: City – Public Works Dept. **Timing**: During construction	**Monitoring**: City – Public Works Dept.	**Initials**_____ **Date**_____

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
	of the resource is not possible, the archaeologist shall inform the Project Manager of the necessary plans for treatment of the find(s) and mitigation of impacts. The treatment plan shall be designed to result in the extraction of sufficient non-redundant archaeological data to address important regional research considerations. The Project Manager shall insure that the treatment program is completed. The work shall be performed by the archaeologist, and shall result in a detailed technical report that shall be filed with the California Historical Resources Information System, Northwest Information Center, CSU Rohnert Park. Construction in the immediate vicinity of the find shall not recommence until treatment has been completed. If human remains are discovered, they shall be handled in accordance with State law including immediate notification of the County Medical Examiner/Coroner.			
Impact: The project could affect as yet unknown prehistoric or historic cultural materials (including Native American skeletal remains).	**Mitigation Measure CUL-3**: All excavation contracts for the project shall contain provisions for stop-work in the vicinity of a find in the event of exposure of significant archaeological resources during subsurface construction. In addition, the contract documents shall recognize the need to implement any mitigation conditions required by the permitting agency. In general, the appropriate construction conditions should be included within the General Conditions section of any contract that has the potential for ground disturbing operations.	**Implementation**: City – Public Works Dept. **Timing**: Include in Plans and Specifications document	**Monitoring**: City – Public Works Dept.	**Initials**_____ **Date**_____
Impact: The project could affect cultural	~~**Mitigation Measure CUL-4**: Archaeological monitoring on a full-time basis shall be undertaken~~ N/A	**Implementation**: City – Public Works Dept.	**Monitoring**: City – Public Works Dept.	

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
materials related to CA-SCI-715. N/A	during subsurface construction within a 100-foot buffer zone of the recorded boundary of CA-SCI-715. N/A Actions that potentially require monitoring include habitat restoration, trail construction, and pedestrian/bicycle bridge construction. Archaeological monitoring on an intermittent basis to allow for spot checking of subsurface construction shall be undertaken for areas outside of the recorded boundary of CA-SCI-715 and the 100-foot buffer zone. Monitoring in these areas shall be at the discretion of the Professional Archaeologist retained to provide archaeological monitoring services.	**Timing**: During any subsurface construction activities within CA-SCI-715		**Initials**_____ **Date**_____
Impact: The project could affect cultural materials related to CA-SCI-715. N/A	**Mitigation Measure CUL-5**: Archaeological monitoring on a part time basis to allow for spot-checking of subsurface construction shall be undertaken for areas outside of the recorded boundary of CA-SCI-715 and the 100-foot buffer zone. N/A Monitoring in these areas shall be at the discretion of the Professional Archaeologist retained to provide archaeological monitoring services.	**Implementation**: City – Public Works Dept. **Timing**: During development of construction documents	**Monitoring**: City – Public Works Dept.	**Initials**_____ **Date**_____
Impact: The project could affect cultural materials related to CA-SCI-715. N/A	**Mitigation Measure CUL-6**: Construction methods and procedures to minimize subsurface disturbance shall be implemented where feasible and practical. N/A These may include: (1) planting by seed, and hand excavation for planting in the habitat restoration areas within 100-feet of the recorded boundary of CA-SCI-715; raising the grade of the proposed trail (capping) by engineered fill within 100-feet of the recorded boundary of CA-SCI-715. Fill shall be no less than 12-inches deep. Rubber tired or tracked equipment shall be used to minimize surface disturbance.	**Implementation**: City – Public Works Dept. **Timing**: During development of construction documents	**Monitoring**: City – Public Works Dept.	**Initials**_____ **Date**_____

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
HAZARDOUS WASTE				
Impact: Soils with hazardous levels of pesticide residue could be unearthed in the project vicinity. N/A	~~**Mitigation Measure HAZ-1:** Perform soil testing for pesticide residue where major soil disturbance would occur (such as the areas of creek realignment). If pesticides are detected, follow the appropriate contaminated material and handling protocol prior to and during any soil disturbance.~~ N/A	**Implementation**: City of Cupertino – Public Works Department **Timing**: During construction design	**Monitoring**: City of Cupertino – Public Works Department	**Initials**_____ **Date**_____
HYDROLOGY				
Impact: Park and Trail users could be subjected to health risks from heavy flow events. N/A	~~**Mitigation Measure HYD-01:** In the event of significant flood events, the City would close the trail corridor and would post signage at the Stevens Creek Boulevard and McClellan Ranch Road entrances alerting trail users of this closure.~~ N/A	**Implementation:** City of Cupertino — Public Works Department **Timing:** As needed, during significant flood events over 1500 cfs.	Monitoring: City of Cupertino — Public Works Department	**Initials**_____ **Date**_____
LAND USE				
Impact: Since it is not known at this time the exact design of the proposed Environmental Education Center, any design submitted to the City may not be consistent with the McClellan Ranch Master Plan.	**Mitigation Measure LU-1**: The proposed Environmental Education Center at McClellan Ranch Nature Preserve shall be designed to fit in with the existing buildings and to be consistent with the McClellan Ranch Master Plan Mission Statement.	**Implementation**: City of Cupertino – Public Works Department **Timing**: Prior to construction	**Monitoring**: City of Cupertino – Public Works Department	**Initials**_____ **Date**_____

Impact	Mitigation Measure	Implementation Responsibility & Timing	Monitoring Responsibility	Verified Implementation
PUBLIC SERVICES				
Impact: Lack of maintenance of the trails results in the degradation of the facilities and could result in safety, security, and liability issues. NA	~~**Mitigation Measure Pub-01:** The City of Cupertino Parks and Recreation Department shall ensure that adequate funds exist in the parks maintenance budget for park and trail maintenance prior to project completion.~~ NA	**Implementation**: City of Cupertino Parks and Recreation Department **Timing**: Prior to trail implementation	**Monitoring**: City of Cupertino	**Initials**_____ **Date**_____

STORMWATER POLLUTION PREVENTION PLAN

for

McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation

RISK LEVEL ***2***

Legally Responsible Person (LRP):

City of Cupertino
10300 Torre Avenue
Cupertino, CA 95014
Timm Borden, Department of Public Works
(408) 777-3354

Prepared for:

City of Cupertino
Cupertino, CA

Project Address:

22221 McClellan Road
Cupertino, CA 95014
Qualified SWPPP Practitioner (QSP): _____

SWPPP Prepared by:

Mark Thomas & Company, Inc.
1960 Zanker Road
San Jose, CA 95112
Qualified SWPPP Developer (QSD): Jimmy Sims

SWPPP Preparation Date

June 01, 2013

Estimated Project Dates:

Start of Construction	**09/30/2013**	Completion of Construction	**07/31/2014**

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Qualified SWPPP Developer

Approval and Certification of the Stormwater Pollution Prevention Plan

Project Name:	**McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation**
Project Number/ID :	2012-9133

"This Stormwater Pollution Prevention Plan and Attachments were prepared under my direction to meet the requirements of the California Construction General Permit (SWRCB Orders No. 2009-009-DWQ as amended by Order 2010-0014-DWQ). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below."

	July 24, 2013
QSD Signature	*Date*
Jimmy W. Sims	*21588*
QSD Name	*QSD Certificate Number*
Vice President/Principal, Mark Thomas & Company, Inc.	(408) 453-5373
Title and Affiliation	*Telephone Number*
jsims@markthomas.com	
Email	

Legally Responsible Person

Approval and Certification of the Stormwater Pollution Prevention Plan

Project Name:	**McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation**
Project Number/ID	2012-9133

"I certify under penalty of law that this document and all Attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Timm Borden

Legally Responsible Person

Signature of Legally Responsible Person or Approved Signatory	Date
	408-777-3354
Name of Legally Responsible Person or Approved Signatory	Telephone Number

Amendment Log

Project Name: **McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation**

Project Number/ID 2012-9133

Amendment No.	Date	Brief Description of Amendment, include section and page number	Prepared and Approved By
			Name: QSD#:_____

Section 1 SWPPP Requirements

1.1 INTRODUCTION

The McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation project is comprised of approximately 0.70 acres and is located at 22221 McClellan Road in Cupertino, California. The property is owned and managed by the City of Cupertino. The project location is shown on the Site Map in Appendix B.

This Stormwater Pollution Prevention Plan (SWPPP) is designed to comply with California's General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) Order No. 2009-0009-DWQ as amended in 2010 and 2012 by Order No. 2010-0014-DWQ (NPDES No. CAS000002) issued by the State Water Resources Control Board (State Water Board). This SWPPP has been prepared following the SWPPP Template provided on the California Stormwater Quality Association Stormwater *Best Management Practice Handbook Portal: Construction* (CASQA, 2012). In accordance with the General Permit, Section XIV, this SWPPP is designed to address the following:

- Pollutants and their sources, including sources of sediment associated with construction, construction site erosion and other activities associated with construction activity are controlled;
- Where not otherwise required to be under a Regional Water Quality Control Board (Regional Water Board) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated;
- Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology/Best Control Technology (BAT/BCT) standard;
- Identify and provide methods to implement BMP inspection, visual monitoring, Rain Event Action Plan (REAP), and Construction Site Monitoring Program (CSMP) requirements to comply with the General Permit.

1.2 PERMIT REGISTRATION DOCUMENTS

Required Permit Registration Documents (PRDs) shall be submitted to the State Water Board via the Stormwater Multi Application and Report Tracking System (SMARTS) by the Legally Responsible Person (LRP), or authorized personnel (i.e., Approved Signatory) under the direction of the LRP. The project-specific PRDs include:

1. Notice of Intent (NOI)
2. Risk Assessment (Construction Site Sediment and Receiving Water Risk Determination);
3. Site Map
4. Annual Fee;
5. Signed Certification Statement (LRP Certification is provided electronically with SMARTS PRD submittal) and

6. SWPPP

Site Maps can be found in Appendix B. A copy of the submitted PRDs shall also be kept in Appendix C along with the Waste Discharge Identification (WDID) confirmation.

1.3 SWPPP AVAILABILITY AND IMPLEMENTATION

The discharger shall make the SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone. (CGP Section XIV.C)

The SWPPP shall be implemented concurrently with the start of ground disturbing activities.

1.4 SWPPP AMENDMENTS

The SWPPP should be revised:

- If there is a General Permit violation
- When there is a reduction or increase in total disturbed acreage (General Permit Section II Part C.
- Wen BMPs do not meet the objectives of reducing or eliminating pollutants in stormwater discharges

Additionally, the SWPPP shall be amended when:

- There is a change in construction or operations which may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4)
- When there is a change in the project duration that changes the project's risk level or
- When deemed necessary by the QSD. The QSD has determined that the changes listed in Table 1.1 can be field determined by the QSP. All other changes shall be made by the QSD as formal amendments to the SWPPP

The following items shall be included in each amendment:

- Who requested the amendment
- The location of proposed change
- The reason for change
- The original BMP proposed, if any, and
- The new BMP proposed

Amendment shall be logged at the front of the SWPPP and certification kept in Appendix D. The SWPPP text shall be revised replaced, and/or hand annotated as necessary to properly convey the amendment. SWPPP amendments must be made by a QSD. The following changes

have been designated by the QSD as "to be field determined" and constitute minor changes that the QSP may implement based on field conditions.

Table 1.1 List of Changes to be Field Determined

Candidate changes for field location or determination by QSP[1]	Check changes that can be field located or field determined by QSP
Increase quantity of an Erosion or Sediment Control Measure	✓
Relocate/Add stockpiles or stored materials	✓
Relocate or add toilets	✓
Relocate vehicle storage and/or fueling locations	✓
Relocate areas for waste storage	✓
Relocate water storage and/or water transfer location	✓
Changes to access points (entrance/exits)	✓
Change type of Erosion or Sediment Control Measure	✓
Changes to location of erosion or sediment control	✓
Minor changes to schedule or phases	✓
Changes in construction materials	✓
(1) Any field changes not identified for field location or field determination by QSP must be approved by QSD	

1.5 RETENTION OF RECORDS

Paper or electronic records of documents required by this SWPPP shall be retained for a minimum of three years from the date generated or date submitted, whichever is later. These records shall be available at the Site until construction is complete. Records assisting in the determination of compliance with the General Permit shall be made available within a reasonable time, to the Regional Water Board, State Water Board or U.S. Environmental Protection Agency (EPA) upon request. Requests by the Regional Water Board for retention of records for a period longer than three years shall be adhered to.

1.6 REQUIRED NON-COMPLIANCE REPORTING

If a discharge violation occurs the QSP shall immediately notify the LRP and the LRP shall file a violation report electronically to the Regional Water Board within 10 days of identification of non-compliance using SMARTS. Corrective measures will be implemented immediately following the discharge or written notice of non-compliance from the Regional Water Board. Discharges and corrective actions will be documented and will include the following items:

- The date, time, location, nature of operation and type of unauthorized discharge
- The cause or nature of the notice or order

- The control measures (BMPs) deployed before the discharge event, or prior to receiving notice or order. The date of deployment and type of control measures (BMPs) deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent re-occurrence

Reporting requirements for Numeric Action Levels (NALs) exceedances are discussed in Section 7.8.

1.7 ANNUAL REPORT

The General Permit requires that permittees prepare, certify, and electronically submit an Annual Report no later than September 1st of each year. Reporting requirements are identified in Section XVI of the General Permit. Annual reports will be filed in SMARTS and in accordance with information required by the on-line forms.

1.8 CHANGES TO PERMIT COVERAGE

The General Permit allows for the reduction or increase of the total acreage covered under the General Permit when: a portion of the project is complete and/or conditions for termination of coverage have been met; when ownership of a portion of the project is purchased by a different entity; or when new acreage is added to the project.

Modified PRDs shall be filed electronically within 30 days of a reduction or increase in total disturbed area if a change in permit covered acreage is to be sought. The SWPPP shall be modified appropriately, shall be logged at the front of the SWPPP and cetrification of SWPPP amendments are to be kept in Appendix D. Updated PRDs submitted electronically via SMARTS can be found in Appendix E.

1.9 NOTICE OF TERMINATION

A Notice of Termination (NOT) must be submitted electronically by the LRP via SMARTS to terminate coverage under the General Permit. The NOT must include a final Site Map and representative photographs of the project site that demonstrate final stabilization has been achieved. The NOT shall be submitted within 90 days of completion of construction. The Regional Water Board will consider a construction site complete when the conditions of the General Permit, Section II.D have been met.

Section 2 Project Information

2.1 PROJECT AND SITE DESCRIPTION

2.1.1 Site Description

The McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation project site comprises approximately 0.70 acres and is located at 22221 McClellan Road in Cupertino, California. The project site is located approximately 0.88 miles west of California State Route 85. Stevens Creek runs through the project site, and drains to the San Francisco Bay at the Whisman Slough. The project is located at Lat 37 18' 47"/Long 122 03' 46" and is identified on the Site Map in Appendix B.

2.1.2 Existing Conditions

The project site is located near the base of moderately steep canyon slope in a relative level valley. The proposed buildings will be constructed into (or at the base) of a 20-foot high, 2.5:1 (H:V) northwest facing slope. Elevations at the proposed building vary from 334 feet to 343 feet. In general, the topography slopes down, towards the north and west (toward the creek) in the vicinity of the site McClellan Ranch.

Existing improvements in the vicinity of the proposed Environmental Education Center and Blacksmith Shop include a goat stable, barn, the existing blacksmith shop, parking, entrance building, 4H office building, paved entrance roadway and parking area, and ancillary structures.

2.1.3 Existing Drainage

In general, the site topography slopes down north then towards the west (Stevens creek) in the vicinity of the site. There exists a single drain inlet at the north end of the site next to the existing concrete walkway path. Currently the project site disposes overflow runoff into this inlet where an 8" cmp trunk is connected and outfalls to the creek.

2.1.4 Geology and Groundwater

The project site is located in the Santa Clara Valley east of the Santa Cruz Mountains. It is situated in a small canyon formed by the prehistoric channels of Stevens Creek. It is mapped as being underlain, at depth, by alluvial fan and terrace materials consisting of stiff sandy silt, dense to very dense silty sand with gravel, very stiff sandy clay and very dense clayey sand likely deposited by Stevens Creek. However, in test boring the middle part of the site, 6 feet of very soft to medium dense silty and sandy non-engineered fill material were encountered. It is possible that this fill was associated with a basement of a previously demolished building or an underground utility excavation. Groundwater was not encountered in the future Environmental Classroom site boring. Groundwater levels may be higher during other times of the year, especially during and after winter rains.

2.1.5 Project Description

The project will construct a building that has an area of approximately 2,100 square feet. The building will also include a 1,100 square feet of covered outdoor area. The building will contain 2 classrooms, a restroom, a resource room and an office space with other space for storage and operational area. The project also includes the relocation of the existing Blacksmith Shop and upgrades to accessibility to the existing park restrooms by providing new walkways that are compliant with accessibility standards. Work includes but is not limited to demolition; clearing; earthwork; grading; installing utility lines; construction of concrete foundations; building construction; relocation of existing building; interior upgrades to an existing building; concrete and asphalt flat work. The work site contains habitat areas and protected wildlife species.

Planned grading will most likely consist of cuts and fills up to 6 feet or more at the Environmental Education Center to address a thick layer of non-engineered fill underlying the proposed building footprint. Majority of the top soil will be excavated and disposed if not reused as backfill material for trenching activities. Graded materials are expected to be balanced onsite.

2.1.6 Developed Condition

Post construction surface drainage will be directed to the perimeter as surface flow around hydroseeded turf then flow through an infiltration trench lined with river washed rock designed to capture runoff through the voids. Overflow runoff shall surface flow through existing unlined swale towards the existing drain inlet and will discharge to the creek..

Table 2.1 Construction Site Estimates

Construction site area	0.70	acres
Percent impervious before construction	Less than 5	%
Runoff coefficient before construction	0.10	
Percent impervious after construction	24	%
Runoff coefficient after construction	0.25	

2.2 PERMITS AND GOVERNING DOCUMENTS

In addition to the General Permit, the following documents have been taken into account while preparing this SWPPP

- Regional Water Board requirements
- Contract Documents
- Air Quality Regulations and Permits
- Federal Endangered Species Act

- National Historic Preservation Act/Requirements of the State Historic Preservation Office
- State of California Endangered Species Act
- Clean Water Act Section 401 Water Quality Certifications and 404 Permits

2.3 STORMWATER RUN-ON FROM OFFSITE AREAS

There is no anticipated offsite run-on to this construction site because of existing stormwater conveyance system to prevent on-site flow. Site is elevated above surrounding area preventing any run-on of stormwater onto the site.

2.4 FINDINGS OF THE CONSTRUCTION SITE SEDIMENT AND RECEIVING WATER RISK DETERMINATION

A construction site risk assessment has been performed for the project and the resultant risk level is Risk Level 2.

The risk level was determined through the use of the K, LS provided in SMARTS, a site specific analysis. The risk level is based on project duration, location, proximity to impaired receiving waters and soil conditions. A copy of the Risk Level determination submitted on SMARTS with the PRDs is included in Appendix C.

Table 2.2 summarize the sediment risk factors and document the sources of information used to derive the factors.

Table 2.2 Summary of Sediment Risk

RUSLE Factor	**Value**	**Method for establishing value**
R	39.68	From Rainfall Erosivity factor Calculator from NPDES/EPA website
K	0.32	From RUSLE K factor map
LS	0.91	From RUSLE LS factor map
Total Predicted Sediment Loss (tons/acre)		**11.55**
Overall Sediment Risk Low Sediment Risk < 15 tons/ acre Medium Sediment Risk >= 15 and < 75 tons/acre High Sediment Risk >= 75 tons/acre		☒ **Low** ☐ **Medium** ☐ **High**

Runoff from the project site discharges into Stevens Creek that drains into the San Francisco Bay at Whisman Slough.

Table 2.3 Summary of Receiving Water Risk

Receiving Water Name	303(d) Listed for Sediment Related Pollutant(1)	TMDL for Sediment Related Pollutant(1)	Beneficial Uses of COLD, SPAWN, and MIGRATORY(1)
Stevens Creek	☐ Yes ☒ No	☐ Yes ☒ No	☒ Yes ☐ No
Overall Receiving Water Risk			☐ **Low** ☒ **High**
(1) If yes is selected for any option the Receiving Water Risk is High			

Based on the Combined Risk Level Matrix found in CGP, Appendix 1, this project's risk level is Level 2.

Risk Level 2 sites are subject to both the narrative effluent limitations and numeric effluent standards. The narrative effluent limitations require stormwater discharges associated with construction activity to minimize or prevent pollutants in stormwater and authorized non-stormwater through the use of controls, structures and best management practices. Discharges from Risk Level 2 site are subject to NALs for pH and turbidity shown in Table 2-4. This SWPPP has been prepared to address Risk Level 2 requirements (General Permit Attachment D).

Table 2.4 Numeric Action Levels

Parameter	Unit	Numeric Action Level Daily Average
pH	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	NTU	250 NTU

2.5 CONSTRUCTION SCHEDULE

The site sediment risk was determined based on construction taking place between September 30, 2013 and July 31, 2014. Modification or extension of the schedule (start and end dates) may affect risk determination and permit requirements. The LRP shall contact the QSD if the schedule changes during construction to address potential impact to the SWPPP. The estimated schedule for planned work can be found in Appendix F.

2.6 POTENTIAL CONSTRUCTION ACTIVITY AND POLLUTANT SOURCES

Appendix G includes a list of construction activities and associated materials that are anticipated to be used onsite. These activities and associated materials will or could potentially contribute pollutants, other than sediment, to stormwater runoff.

The anticipated activities and associated pollutants were used in Section 3 to select the Best Management Practices for the project.

For sampling requirements for non-visible pollutants associated with construction activity please refer to Section 7.4.A.3. For a full and complete list of onsite pollutants, refer to the Material Safety Data Sheets (MSDS), which are retained onsite at the construction trailer.

2.7 IDENTIFICATION OF NON-STORMWATER DISCHARGES

Non-stormwater discharges consist of discharges which do not originate from precipitation events. The General Permit provides allowances for specified non-stormwater discharges that do not cause erosion or carry other pollutants.

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the General Permit and listed in the SWPPP, or authorized under a separate NPDES permit, are prohibited.

Non-stormwater discharges that are authorized from this project site include the following:

- Dust control water application

These authorized non-stormwater discharges will be managed with the stormwater and non-stormwater BMPs described in Section 3 of this SWPPP and will be minimized by the QSP.

Activities at this site that may result in unauthorized non-stormwater discharges include:

- Vehicle and equipment cleaning, fueling and maintenance operations
- Vehicle and equipment wash water, including concrete washout water

Steps will be taken, including the implementation of appropriate BMPs, to ensure that unauthorized discharges are eliminated, controlled, disposed, or treated on-site.

Discharges of construction materials and wastes, such as fuel or paint, resulting from dumping, spills, or direct contact with rainwater or stormwater runoff, are also prohibited.

Section 3 Best Management Practices

3.1 SCHEDULE FOR BMP IMPLEMENTATION

BMP's must be implemented, modified and maintained to reflect the phase of construction and the weather conditions. In order to be effective, some BMPs must be installed before the site is disturbed. Contractor shall identify the schedule for deployment of BMPs. See Appendix I for checklist.

Table 3.1 BMP Implementation Schedule

	BMP	Implementation	Duration
Erosion Control	EC-1, Scheduling	Prior to Construction	Entirety of Project
	EC-2, Preservation of Existing Vegetation	Start of Construction	Entirety of Project
	EC-7, Geotextiles and Mats	During Earthwork, Grading	Entirety of Project
	EC-4, Hydroseed	During Construction	After Grading
Sediment Control	SE-1, Silt Fence in combination	Start of Construction	Entirety of Project
	SE-3, Fiber Rolls on toe and face of Slopes	Start of Construction	Entirety of Project
	SE-7, Sandbag Barrier SE-8, Street Sweeping	Start of Construction	Entirety of Project
	SE-10, SD Inlet Protection	Start of Construction	Entirety of Project
Tracking Control	TC-1, Stabilized Construction Entrance and Exit	Start of Construction	Entirety of Project
	TC-2, Stabilized Construction Roadway	Start of Construction	Entirety of Project
	TC-3, Entrance Outlet Tire Wash	Start of Construction	Entirety of Project
Wind Erosion	none		

3.2 EROSION AND SEDIMENT CONTROL

Erosion and sediment controls are required by the General Permit to provide effective reduction or elimination of sediment related pollutants in stormwater discharges and authorized non-

stormwater discharges from the Site. Applicable BMPs are identified in this section for erosion control, sediment control, tracking control, and wind erosion control.

3.2.1 Erosion Control

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles.

Since construction activities for this project require backfilling of engineered fill on overexcavations, hydroseeding is considered as necessary. Soil stabilization may not be a major concern for this project since most of the clearing and grading activities occur during non-rainy season. Furthermore, long term inactivity is not anticipated. Soil binders and regular watering may be utilized to control dust generation.

Sufficient erosion control materials shall be maintained onsite to allow implementation in conformance with this SWPPP.

3.2.2 Sediment Controls

Sediment controls are temporary or permanent structural measures that are intended to complement the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water.

The following sediment control BMP selection table indicates the BMPs that shall be implemented to control sediment on the construction site. Fact Sheets for temporary sediment control BMPs are provided in Appendix H.

Table 3.3 Temporary Sediment Control BMPs

CASQA Fact Sheet	BMP Name	Meets a Minimum Requirement[1]	BMP used		If not used, state reason
			YES	NO	
SE-1	Silt Fence	✓[2] [3]	✓		
SE-2	Sediment Basin			✓	N/A
SE-3	Sediment Trap			✓	N/A
SE-4	Check Dams			✓	N/A
SE-5	Fiber Rolls	✓[2][3]	✓		
SE-6	Gravel Bag Berm	✓[3]		✓	N/A
SE-7	Street Sweeping	✓	✓		
SE-8	Sandbag Barrier		✓		
SE-9	Straw Bale Barrier			✓	N/A
SE-10	Storm Drain Inlet Protection	✓ RL2&3	✓		
SE-11	ATS			✓	N/A
SE-12	Temporary Silt Dike			✓	N/A
SE-13	Compost Sock and Berm	✓[3]		✓	N/A
SE-14	Biofilter Bags	✓[3]		✓	
TC-1	Stabilized Construction Entrance and Exit	✓	✓		
TC-2	Stabilized Construction Roadway		✓		
TC-3	Entrance Outlet Tire Wash		✓		
Alternate BMPs Used:					**If used, state reason:**

[1] Applicability to a specific project shall be determined by the QSD
[2] The QSD shall ensure implementation of one of the minimum measures listed or a combination thereof to achieve and maintain the Risk Level requirements
[3]Risk Level 2 &3 shall provide linear sediment control along toe of slope, face of slope, and at the grade breaks of exposed slope

These temporary sediment control BMPs shall be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the Erosion Control Plan (Sheet C4.0) will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. Site specific details in the Site Map prevail over standard details included in the Site Map. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

Silt Fence
A temporary silt fence shall be installed around the project area as indicated on Sheet C4.0.

Fiber Rolls
Fiber rolls shall be placed along the length of the curb on the northern edge of the project area where the grade slopes down as indicated on Sheet C4.0.

Gravel Bag Berm
Gravel filled bags shall be installed around the storm drain inlet located on the northern edge of the parking lot, as indicated on Sheet C4.0.

Street Sweeping
Street sweeping and vacuuming of the McClellan Ranch parking lot shall be completed at regular intervals to prevent sediment from the project site from entering storm drains. Sweeping and vacuuming shall also be completed prior to final paving.

Storm Drain Inlet Protection
Storm drain inlet protection shall be installed at the single drain inlet collecting parking lot runoff, as indicated on Sheet C4.0. The storm drain inlet protection shall consist of gravel bag berms with a fiber roll perimeter.

Stabilized Construction Entrance and Exit
A stabilized construction entrance/exit shall be installed at the access point to the property used by construction vehicles. One access point is anticipated from McClellan Road to the project site.

Stabilized Construction Roadway
Construction access roads shall be stabilized immediately after grading and shall be maintained frequently to prevent erosion and control dust.

3.3 NON-STORMWATER CONTROLS AND WASTE AND MATERIALS MANAGEMENT

3.3.1 Non-Stormwater Controls

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the General Permit, are prohibited. Non-stormwater discharges for which a separate NPDES permit is required by the local Regional Water Board are prohibited unless coverage under the separate NPDES permit has been obtained for the discharge. The selection of non-stormwater BMPs is based on the list of construction activities with a potential for non-stormwater discharges identified in Section 2.7 of this SWPPP.

The following non-stormwater control BMP selection table indicates the BMPs that shall be implemented to control sediment on the construction site. Fact Sheets for temporary non-stormwater control BMPs are provided in Appendix H.

Table 3.4 Temporary Non-Stormwater BMPs

CASQA Fact Sheet	BMP Name	Meets a Minimum Requirement[1]	BMP used		If not used, state reason
			YES	NO	
NS-1	Water Conservation Practices	✓	✓		
NS-2	Dewatering Operation			✓	N/A
NS-3	Paving and Grinding Operation		✓		N/A
NS-4	Temporary Stream Crossing			✓	N/A
NS-5	Clear Water Diversion			✓	N/A
NS-6	Illicit Connection- Illegal Discharge Connection	✓		✓	N/A
NS-7	Potable Water Irrigation Discharge Detection		✓		N/A
NS-8	Vehicle and Equipment Cleaning	✓	✓		N/A
NS-9	Vehicle and Equipment Fueling	✓	✓		N/A
NS-10	Vehicle and Equipment Maintenance	✓	✓		N/A
NS-11	Pile Driving Operation			✓	N/A
NS-12	Concrete Curing		✓		
NS-13	Concrete Finishing		✓		
NS-14	Material and Equipment Use Over Water			✓	N/A
NS-15	Demolition Removal Adjacent to Water			✓	N/A
NS-16	Temporary Batch Plants			✓	N/A
Alternate BMPs Used:			**If used, state reason:**		

[1] Applicability to a specific project shall be determined by the QSD

Non-stormwater BMPs shall be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the Site Map will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. Site specific details in the Erosion Control Plan prevail over standard details included in the Plans. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

Water Conservation Practices

The following water conservation measures shall be incorporated to effectively manage water use on the project site to prevent non-stormwater discharges.

- Keep water equipment in good working condition
- Stabilize water truck filling area
- Repair water leaks promptly
- Discourage vehicle and equipment washing on the project site
- Avoid using water to clean construction areas. If water must be used for cleaning or surface preparation, the surface should be swept and vacuumed first to remove dirt. This will minimize the amount of water required
- Direct construction water runoff to areas where it can soak into the ground or be collected and reused
- Lock water tank valves to prevent unauthorized use

Dewatering Operation

Where possible, dewatered "sump" water shall be used for dust control. A temporary sediment settling basin (SE-2) shall be installed to control the release of "sump" water and allow sediment to settle out before discharging. Sediment removal shall occur when storage in the settling basin is reduced by one-third.

Paving and Grinding Operation

The following measures shall be incorporated into the site paving and grinding operations to prevent stormwater and non-stormwater discharges.
\

- Avoid paving during the wet season
- Reschedule paving and grinding activities if rain is forecasted
- Train employees and sub-contractors in pollution prevention and reduction
- Store materials in designated areas shown on Sheet C4.0, away from drainage courses to prevent stormwater run on
- Protect drainage courses, particularly in areas with a grade, by employing BMPs to divert runoff or to trap and filter sediment (as shown on Sheet C4.0)

- Stockpile material in designated areas shown on Sheet C4.0, removed from roadways away from drain inlets, drainage ditches, and watercourses. These materials should be stored consistent with WM-3, Stockpile Management
- Disposal of PCC (Portland cement concrete) and AC (asphalt concrete) waste should be in conformance with WM-8, Concrete Waste Management

Potable Water/Irrigation

Where irrigation systems are required, the contractor shall incorporate the following measures:

- Reuse discharges from water line flushing, where feasible
- Shut off the water source to broken lines, sprinkler or valves as soon as possible
- Adjust watering schedules to ensure an appropriate amount of water is used and to minimize runoff

Vehicle and Equipment Cleaning

Vehicles and Equipment shall not be cleaned on site except in designated Washout Facilities at the construction entrance/exit locations identified on Sheet C4.0 and on Sheet C5.0. No soaps or chemicals shall be used for rinsing of equipment.

Vehicle and Equipment Fueling

Use offsite fueling stations as much as possible. These businesses are better equipped to handle fuel and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate fueling area at a site.

- Discourage “topping-off” of fuel tanks
- Absorbent spill cleanup materials and spill kits should be available in fueling areas and on fueling trucks, and should be disposed of properly after use
- Drip pans or absorbent pads should be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area
- Use absorbent materials on small spills. Do not hose down or bury the spill. Remove the adsorbent materials promptly and dispose of properl.
- Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. With the exception of tracked equipment such as bulldozers and large excavators, most vehicles should be able to travel to a designated area with little lost time
- Train employees and subcontractors in proper fueling and cleanup procedures
- When fueling must take place onsite, designate an area away from drainage courses to be used. Fueling areas will be located within the Staging Areas shown on Sheet C4.0

- Fueling areas should be protected from stormwater runon and runoff, and should be located at least 50 ft away from downstream drainage facilities and watercourses as shown on Sheet C4.0. Fueling must be performed on level-grade areas
- Protect fueling areas with berms and dikes to prevent run-on, runoff, and to contain spills
- Nozzles used in vehicle and equipment fueling should be equipped with an automatic shutoff to control drips. Fueling operations should not be left unattended
- Use vapor recovery nozzles to help control drips as well as air pollution where required by Air Quality Management Districts (AQMD)
- Federal, state, and local requirements should be observed for any stationary above ground storage tanks

Vehicle and Equipment Maintenance

Use offsite repair shops as much as possible. These businesses are better equipped to handle vehicle fluids and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate maintenance area.

- If maintenance must occur onsite, use designated areas, located away from drainage courses. Dedicated maintenance areas should be protected from stormwater run-on and runoff, and should be located at least 50 feet from downstream drainage facilities and watercourses
- Drip pans or absorbent pads should be used during vehicle and equipment maintenance work that involves fluids, unless the maintenance work is performed over an impermeable surface in a dedicated maintenance area
- Place a stockpile of spill cleanup materials where it will be readily accessible
- All fueling trucks and fueling areas are required to have spill kits and/or use other spill protection devices
- Use absorbent materials on small spills. Remove the absorbent materials promptly and dispose of properly
- Inspect onsite vehicles and equipment daily at startup for leaks, and repair immediately
- Keep vehicles and equipment clean; do not allow excessive build-up of oil and grease
- Segregate and recycle wastes, such as greases, used oil or oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic and transmission fluids. Provide secondary containment and covers for these materials if stored onsite
- Train employees and subcontractors in proper maintenance and spill cleanup procedures.
- Drip pans or plastic sheeting should be placed under all vehicles and equipment placed on docks, barges, or other structures over water bodies when the vehicle or equipment is planned to be idle for more than 1 hour

- For long-term projects, consider using portable tents or covers over maintenance areas if maintenance cannot be performed offsite
- Consider use of new, alternative greases and lubricants, such as adhesive greases, for chassis lubrication and fifth-wheel lubrication
- Properly dispose of used oils, fluids, lubricants, and spill cleanup materials
- Do not place used oil in a dumpster or pour into a storm drain or watercourse
- Properly dispose of or recycle used batteries
- Do not bury used tires
- Repair leaks of fluids and oil immediately

Concrete Curing

For Chemical Curing:

- Avoid over spray of curing compounds
- Minimize the drift by applying the curing compound close to the concrete surface. Apply an amount of compound that covers the surface, but does not allow any runoff of the compound
- Use proper storage and handling techniques for concrete curing compounds. Refer to WM-1, Material Delivery and Storage
- Protect drain inlets prior to the application of curing compounds
- Refer to WM-4, Spill Prevention and Control

For Water Curing for Bridge Decks, Retaining Walls, and other Structures:

- Direct cure water away from inlets and watercourses to collection areas for evaporation or other means of removal in accordance with all applicable permits. See WM-8 Concrete Waste Management
- Collect cure water at the top of slopes and transport to a concrete waste management area in a non-erosive manner. See EC-9 Earth Dikes and Drainage Swales
- Utilize wet blankets or a similar method that maintains moisture while minimizing the use and possible discharge of water

For All Types of Chemical Curing:

- Educate employees, subcontractors, and suppliers on proper concrete curing techniques to prevent contact with discharge as described herein
- Arrange for the QSP or the appropriately trained contractor's superintendent or representative to oversee and enforce concrete curing procedures

Concrete Finishing
During all concrete finishing operations incorporate the following measures:

- Collect and properly dispose of water from high-pressure water blasting operations.
- Collect contaminated water from blasting operations at the top of slopes. Transport or dispose of contaminated water while using BMPs such as those for erosion control. Refer to EC-9, Earth Dikes and Drainage Swales
- Direct water from blasting operations away from inlets and watercourses to collection areas for infiltration or other means of removal.
- Protect inlets during sandblasting operations.
- Refer to WM-8, Concrete Waste Management for disposal of concrete debris.
- Minimize the drift of dust and blast material as much as possible by keeping the blasting nozzle close to the surface.
- Blast residue shall not contain hazardous waste products.

For all types of concrete finishing:

- Educate employees, subcontractors, and suppliers on proper concrete finishing techniques to prevent contact with discharge as described herein
- Arrange for the QSP or the appropriately trained contractor's superintendent or representative to oversee and enforce concrete finishing procedures

Demolition Removal Adjacent to Water

During demolition activities incorporate the following measures to protect the creek from debris and wastes associated with the demolition

- Use attachments on construction equipment such as backhoes to catch debris from small demolition operations
- Stockpile accumulated debris and waste generated during demolition away from the creek
- As necessary, ensure safe passage of wildlife
- Discharges to waterways shall immediately upon discovery be reported to the Regional Water Quality Control Board. A written discharge notification must follow within 7 days

3.3.2 Materials Management and Waste Management

Materials management control practices consist of implementing procedural and structural BMPs for handling, storing and using construction materials to prevent the release of those materials into stormwater discharges. The amount and type of construction materials to be utilized at the Site will depend upon the type of construction and the length of the construction period. The materials may be used continuously, such as fuel for vehicles and equipment, or the materials may be used for a discrete period, such as soil binders for temporary stabilization.

All construction raw materials (including dry materials, such as plaster and cement, pesticides and herbicides, paints, petroleum products, treated lumber, etc) will be stored in designated areas located away from storm drain inlets and surrounded by earth berms. Hazardous materials are to be stored in metal sheds with secondary containment. Other materials will be covered with plastic tarps when not in use. Material storage will also comply with local fire codes. The locations of the metal storage sheds, and/or areas covered with tarps change regularly as the site work and improvements move across the site, but the procedures remain the same. Employees will be trained in proper materials handling practices. Employees will, to the maximum extent practicable, ensure that those materials that are spread throughout the site are covered with impervious tarps or stored inside buildings.

Waste management consist of implementing procedural and structural BMPs for handling, storing and ensuring proper disposal of wastes to prevent the release of those wastes into stormwater discharges.

Hazardous waste materials will be stored (in the designated storage areas) in portable metal sheds with secondary containment. Stored hazardous wastes will not be mixed. To the maximum extent practicable, we will purchase only exact amounts of materials, and use each product up before disposing of their containers. Care will be taken to avoid over application of fertilizers, herbicides, and pesticides. All hazardous wastes shall be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility. The construction supervisor should monitor onsite hazardous waste storage and disposal procedures. Should there be a hazardous spill, the construction supervisor should also oversee the clean up and ensure that the incidents are reported in conformance with the applicable Material Safety Data Sheet (MSDS) and the instructions posted at the project site.

There will be covered dumpsters available for waste storage and removal on-site. Non-hazardous construction waste materials (including wood, paper, plastic, cleared trees and shrubs, building rubble, scrap metal, rubber, glass, etc.) will be collected once a day in the covered dumpsters. Workers will segregate recyclable wastes. They will empty the dumpsters once a week or more often as required, to be delivered to the City approved site for wasting or recycling.

Materials and waste management pollution control BMPs shall be implemented to minimize stormwater contact with construction materials, wastes and service areas; and to prevent materials and wastes from being discharged off-site. The primary mechanisms for stormwater contact that shall be addressed include:

- Direct contact with precipitation
- Contact with stormwater run-on and runoff
- Wind dispersion of loose materials
- Direct discharge to the storm drain system through spills or dumping
- Extended contact with some materials and wastes, such as asphalt cold mix and treated wood products, which can leach pollutants into stormwater

A list of construction activities is provided in Section 2.6. The following Materials and Waste Management BMP selection table indicates the BMPs that shall be implemented to handle

materials and control construction site wastes associated with these construction activities. Fact Sheets for Materials and Waste Management BMPs are provided in Appendix H.

Table 3.5 Temporary Materials Management BMPs

CASQA Fact Sheet	BMP Name	Meets a Minimum Requirement[1]	BMP used		If not used, state reason
			YES	NO	
WM-01	Material Delivery and Storage	✓	✓		
WM-02	Material Use	✓	✓		
WM-03	Stockpile Management	✓	✓		
WM-04	Spill Prevention and Control	✓	✓		
WM-05	Solid Waste Management	✓	✓		
WM-06	Hazardous Waste Management	✓	✓		N/A
WM-07	Contaminated Soil Management		✓		N/A
WM-08	Concrete Waste Management	✓	✓		
WM-09	Sanitary-Septic Waste Management	✓	✓		
WM-10	Liquid Waste Management		✓		
Alternate BMPs Used:				**If used, state reason:**	

[1] Applicability to a specific project shall be determined by the QSD.

3.4 POST CONSTRUCTION STORMWATER MANAGEMENT MEASURES

Post construction BMPs are permanent measures installed during construction, designed to reduce or eliminate pollutant discharges from the site after construction is completed.

This site is located in an area subject to a Phase I or Phase II Municipal Separate Storm Sewer System (MS4) permit approved Stormwater Management Plan. ☒ Yes ☐ No

Post construction runoff reduction requirements have been satisfied through the MS4 program, this project is exempt from provision XIII A of the General Permit.

Section 4 BMP Inspection, Maintenance and Rain Event Action Plans

4.1 BMP INSPECTION AND MAINTENANCE

The General Permit requires routine weekly inspections of BMPs, along with inspections before, during, and after qualifying rain events. A BMP inspection checklist must be filled out for inspections and maintained on-site with the SWPPP. The inspection checklist includes the necessary information covered in Section 7.6. A blank inspection checklist can be found in Appendix I. Completed checklists shall be kept in CSMP Attachment 2 "Monitoring Records.

BMPs shall be maintained regularly to ensure proper and effective functionality. If necessary, corrective actions shall be implemented within 72 hours of identified deficiencies and associated amendments to the SWPPP shall be prepared by the QSD.

Specific details for maintenance, inspection, and repair of Construction Site BMPs can be found in the BMP Factsheets in Appendix H.

4.2 RAIN EVENT ACTION PLANS

The Rain Event Action Plans (REAP) is a written document designed to be used as a planning tool by the QSP to protect exposed portions of project sites and to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures. These measures are intended to reduce the amount of sediment and other pollutants that could be generated during the rain event. It is the responsibility of the QSP to be aware of precipitation forecast and to obtain and print copies of forecasted precipitation from NOAA's National Weather Service Forecast Office.

The SWPPP includes REAP templates but the QSP will need to customize them for each rain event. Site-specific REAP templates for each applicable project phase can be found in Appendix J. The QSP shall maintain a paper copy of completed REAPs in compliance with the record retention requirements Section 1.5 of this SWPPP. Completed REAPs shall be maintained in Appendix J.

The QSP will develop an event specific REAP 48 hours in advance of a precipitation event forecast to have a 50% or greater chance of producing precipitation in the project area. The REAP will be onsite and be implemented 24 hours in advance of any the predicted precipitation event.

At minimum the REAP will include the following site and phase-specific information:

- Site Address
- Calculated Risk Level (2)
- Site Stormwater Manager Information including the name, company and 24-hour
- emergency telephone number
- Erosion and Sediment Control Provider information including the name, company and 24-hour emergency telephone number

- Stormwater Sampling Agent information including the name, company, and 24-hour emergency telephone number
- Activities associated with each construction phase
- Trades active on the construction site during each construction phase
- Trade contractor information and
- Recommended actions for each project phase

Section 5 Training

Appendix L identifies the QSPs for the project. To promote stormwater management awareness specific for this project, periodic training of job-site personnel shall be included as part of routine project meetings (e.g. daily/weekly tailgate safety meetings), or task specific trainings as needed.

The QSP shall be responsible for providing this information at the meetings, and subsequently completing the training logs shown in Appendix K, which identifies the site-specific stormwater topics covered as well as the names of site personnel who attended the meeting. Tasks may be delegated to trained employees by the QSP provided adequate supervision and oversight is provided. Training shall correspond to the specific task delegated including: SWPPP implementation; BMP inspection and maintenance; and record keeping.

Documentation of training activities (formal and informal) is retained in SWPPP Appendix K.

Section 6 Responsible Parties and Operators

6.1 RESPONSIBLE PARTIES

Approved Signatory(ies) who are responsible for SWPPP implementation and have authority to sign permit-related documents [is/are] listed below. Written authorizations from the LRP for these individuals are provided in Appendix L. The Approved Signatory(ies) assigned to this project [is/are]:

Name	Title	Phone Number
	QSP	
Carmen Lynaugh	Approved Signatory	408-777-3354
Jimmy Sims	QSD	408-453-5373

QSPs identified for the project are identified in Appendix L. The QSP shall have primary responsibility and significant authority for the implementation, maintenance and inspection/monitoring of SWPPP requirements. The QSP will be available at all times throughout the duration of the project. Duties of the QSP include but are not limited to:

- Implementing all elements of the General Permit and SWPPP, including but not limited to
  - Ensuring all BMPs are implemented, inspected, and properly maintained
  - Performing non-stormwater and stormwater visual observations and inspections
  - Performing non-stormwater and storm sampling and analysis, as required
  - Performing routine inspections and observations
  - Implementing non-stormwater management, and materials and waste management activities such as: monitoring discharges; general Site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than stormwater are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.
- The QSP may delegate these inspections and activities to an appropriately trained employee, but shall ensure adequacy and adequate deployment
- Ensuring elimination of unauthorized discharges
- The QSPs shall be assigned authority by the LRP to mobilize crews in order to make immediate repairs to the control measures
- Coordinate with the Contractor(s) to assure all of the necessary corrections/repairs are made immediately and that the project complies with the SWPPP, the General Permit and approved plans at all times
- Notifying the LRP or Authorized Signatory immediately of off-site discharges or other non-compliance events

6.2 CONTRACTOR LIST

The General Permit requires (Section VII.B.5) that the SWPPP include a list of names of all contractors, subcontractors, and individuals who will be directed by the QSP. The list is required to include telephone numbers and work addresses and the specific areas of responsibility of each subcontractor and emergency contact numbers. This is in SWPPP Appendix M.

Contractor

Name:	
Title:	
Company:	
Address:	
Phone Number:	
Number (24/7):	

Section 7 Construction Site Monitoring Program

7.1 Purpose

This Construction Site Monitoring Program was developed to address the following objectives:

1. To demonstrate that the site is in compliance with the Discharge Prohibitions and Numeric Action Levels (NALs) of the Construction General Permit
2. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives
3. To determine whether immediate corrective actions, additional Best Management Practices (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in stormwater discharges and authorized non-stormwater discharges
4. To determine whether BMPs included in the SWPPP and REAP are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges

7.2 Applicability of Permit Requirements

This project has been determined to be a Risk Level 2 project. The General Permit identifies the following types of monitoring as being applicable for a Risk Level 2 project.

Risk Level 2

- Visual inspections of Best Management Practices (BMPs)
- Visual monitoring of the site related to qualifying storm events
- Visual monitoring of the site for non-stormwater discharges
- Sampling and analysis of construction site runoff for pH and turbidity
- Sampling and analysis of non-stormwater discharges when applicable

7.3 Monitoring

Visual monitoring, inspections, and sampling requirements of the General Permit are triggered by a qualifying rain event. The General Permit defines a qualifying rain event as any event that produces ½ inch of precipitation. A minimum of 48 hours of dry weather will be used to distinguish between separate qualifying storm events.

The QSP should daily consult the National Oceanographic and Atmospheric Administration (NOAA) for the weather forecasts. These forecasts can be obtained at http://www.srh.noaa.gov/. Weather reports should be printed and maintained with the SWPPP in CSMP Attachment 1 “Weather Reports”.

Visual monitoring includes observations and inspections. Inspections of BMPs are required to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Visual observations of the site are required to observe storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources.

Table 7.1 identifies the required frequency of visual observations and inspections.

Table 7.1 Summary of Visual Monitoring and Inspections

Type of Inspection	Frequency
Routine Inspections	
BMP Inspections	Weekly[1]
BMP Inspections – Tracking Control	Daily
Non-Stormwater Discharge Observations	Quarterly during daylight hours
Rain Event Triggered Inspections	
Site Inspections Prior to a Qualifying Event	Within 48 hours of a qualifying event [2]
BMP Inspections During an Extended Storm Event	Every 24-hour period of a rainevent[2]
Site Inspections Following a Qualifying Event	Within 48 hours of a qualifying event[2]

[1] Most BMPs must be inspected weekly; those identified below must be inspected more frequently.

[2] Inspections are only required during scheduled site operating hours. Note however, these inspections are required daily regardless of the amount of precipitation.

A. Routine BMP Inspections

Inspections of BMPs are conducted to identify and record

- BMPs that are properly installed
- BMPs that need maintenance to operate effectively
- BMPs that have failed or
- BMPs that could fail to operate as intended

B. Non-Stormwater Discharge Observations

Each drainage area will be inspected for the presence of or indications of prior unauthorized and authorized non-stormwater discharges. Inspections will record:

- Presence or evidence of any non-stormwater discharge (authorized or unauthorized)
- Pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity,odor, etc. and
- Source of discharge

C. Rain-Event Triggered Observations and Inspections

Visual observations of the site and inspections of BMPs are required prior to a qualifying rain event; following a qualifying rain event, and every 24-hour period during a qualifying rain event. Pre-rain inspections will be conducted after consulting NOAA and determining that a precipitation event with a 50% or greater probability of precipitation has been predicted.

1. Visual Observations Prior to a Forecasted Qualifying Rain Event

Within 48-hours prior to a qualifying event a stormwater visual monitoring site inspection will include observations of the following locations:

- Stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- BMPs to identify if they have been properly implemented
- Any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard

BMP inspections and visual monitoring will be triggered by a NOAA prediction of rain in the project area.

2. BMP Inspections During an Extended Storm Event

During an extended rain event BMP inspections will be conducted to identify and record

- BMPs that are properly installed
- BMPs that need maintenance to operate effectively
- BMPs that have failed or
- BMPs that could fail to operate as intended

If the construction site is not accessible during the rain event, the visual inspections shall be performed at all relevant outfalls, discharge points, downstream locations. The inspections should record any projected maintenance activities.

3. Visual Observations Following a Qualifying Rain Event

Within 48 hours following a qualifying rain event (0.5 inches of rain) a stormwater visual monitoring site inspection is required to observe:

- Stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- BMPs to identify if they have been properly designed, implemented, and effective;
- Need for additional BMPs
- Any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard and
- Discharge of stored or contained rain water

D. Visual Monitoring Procedures

Visual monitoring shall be conducted by the QSP or staff trained by and under the supervision of the QSP.

The name(s) and contact number(s) of the site visual monitoring personnel are listed below and their training qualifications are provided in Appendix K.

Assigned inspector:_____ Contact phone: _____

Alternate inspector:_____ Contact phone: _____

Stormwater observations shall be documented on the *Visual Inspection Field Log Sheet* (see CSMP Attachment 3 "Example Forms"). BMP inspections shall be documented on the site specific BMP inspection checklist. Any photographs used to document observations will be referenced on stormwater site inspection report and maintained with the Monitoring Records in Attachment 2.

The completed reports will be kept in CSMP Attachment 2 "Monitoring Records".

E. Active Treatment Systems Monitoring

This project does not require a project specific Sampling and Analysis Plan for an ATS because deployment of an ATS is not planned.

F. Bioassessment Monitoring

This project is not subject to bioassessment monitoring because it is not a Risk Level 3 project.

7.4 Water Quality Sampling and Analysis Procedures

Water quality sampling and analysis is required for all Risk Level 2 and 3 projects. Typically, Risk Level 1 projects are not required to conduct water quality sampling and analysis unless there is a risk of non-visible pollutant discharge.

The purpose of sampling is to determine whether BMPs implemented on a construction site are effective in controlling potential construction site pollutants, which come in contact with stormwater or non-stormwater, and to demonstrate compliance with the applicable NALs or NELs.

Stormwater samples shall be collected for pollutants from all qualifying rain events that result in a discharge from the project site.

This section discusses the procedures and the information that need to be included in the CSMP for water quality sampling and analysis. This section is divided into the following:

- Potential pollutant sources
- Monitoring constituents by risk level
- Sampling locations
- Sample collection and handling; and
- Analytical methods, laboratories, and field meters

A. Potential Pollutant Sources

1. Sediment and Turbidity

Conditions or areas at a construction site that may cause sediment, silt, and /or turbidity in site runoff include:

- Exposed soil areas with inadequate erosion control measures
- Areas of active grading

- Poorly stabilized slopes
- Lack of perimeter sediment controls
- Areas of concentrated flow on unprotected soils
- Poorly maintained erosion and sediment control measures
- Tracking sediment onto roads and paved surfaces
- Unprotected soil stockpiles and
- Failure of an erosion or sediment control measure

2. High pH

Conditions or areas at a construction site that may cause high pH in site discharges include:

- Concrete pours and curing
- Concrete waste management areas
- Soil amendments (e.g. fly ash and lime) and
- Mortar and stucco mixing, application, and waste management areas

3. Non-Visible Pollutants

Monitoring for pollutants not visually detectable is only required if those pollutants are determined to be potentially present in stormwater leaving the construction site; and is typically the result of a BMP failure or spill on the construction site. This determination is documented in the pollutant source assessment in the SWPPP.

Projects should attempt to eliminate the exposure of construction materials to prevent stormwater pollution and limit sampling and analysis requirements. It is important to note that covered construction materials or those that are in their final constructed form, do not need to be monitored. Materials that are stored exposed to precipitation and may generate runoff need to be considered for non-visible pollutant monitoring.

Non-visible pollutants may also exist on the project site as a result of the land use prior to the start of the construction activity. The project Remedial Action Plan identifies site Potential Chemicals of Concern.

Non-visible pollutants in site discharges may result from materials that:

- Are being used in construction activities
- Are stored on the construction site
- Were spilled during construction operations and not cleaned up;
- Were stored (or used) in a manner that presented the potential for a release of the material during past land use activities
- Were spilled during previous land use activities and not cleaned up or
- Were applied to soil as part of past land use activities

B. Monitoring Constituents

Risk Level 2

- At a minimum, risk Level 2 projects are required to collect water quality samples for pH (during construction phases with a high risk of high pH discharge such as concrete pavement and sandblasting operations) and turbidity (all phases). Additional monitoring may be required by the RWQCB; however, monitoring for site chemicals of concern is not anticipated during water quality sampling, since ground disturbing activities of impacted fill will be minimal. Import fill used for cap construction will be certified clean fill
- Risk Level 2 projects are required to collect water quality samples if there is a BMP breach, malfunction, leakage, or spill. Water quality samples should be taken for non-visible pollutants that may have been discharged from the site as identified in the site pollutant source assessment
- Particle size analysis may be needed if a Risk Level 2 project is using a sediment basin or if needed to justify a site specific risk level calculation using RUSLE. The particle size analysis provides the information needed to determine the K-factor

C. Sampling Locations

Sampling locations are based on the site discharge locations; accessibility for sampling; and personnel safety. Planned sample locations are shown on the Site Maps in Appendix B.

1. Stormwater Runoff

Risk Level 2 projects are required to collect water quality samples of runoff that is discharged off-site. Samples must be representative of the runoff associated with construction activity from the entire project disturbed area. Samples locations representative of runoff in each drainage area should be considered to ensure adequate representation of the flow and characteristics of the site's discharges.

2. Non-Stormwater Runoff

Risk Level 2 projects are also required to collect water quality samples to characterize authorized and unauthorized non-stormwater discharged from the site.

3. Receiving Water

This project does not have a direct discharge to receiving waters; therefore receiving water monitoring is not required.

4. Non-Visible Pollutant Monitoring

In situations where a breach, malfunction, leakage, or spill has occurred, dischargers must collect a sample of runoff that has come into contact with the materials and must also collect a runoff sample that has not come into contact with the materials (uncontaminated sample) for comparison.

Only the QSP, or personnel trained in water quality sampling under the direction of the QSP shall collect samples.

Samples on the project site will be collected by the following contractor sampling personnel:

Name/Telephone Number:_____

Alternate(s)/Telephone Number:_____

D. Sample Collection and Handling

It is important to use the correct methods to collect and handle samples to ensure the samples are valid. While the handling requirements apply primarily to grab samples collected for laboratory analysis, field measurements can be affected by sample collection procedures.

The General Permit requires dischargers to designate and train personnel to collect, maintain, and ship water quality samples in accordance with the Surface Water Ambient Monitoring Program (SWAMP) 2008 Quality Assurance Program Plan (QAPrP), which is available at http://www.swrcb.ca.gov/water_issues/programs/swamp//tools.shtml#qa. Sampling methods, handling procedures, and locations should be identified in advance of the sampling event in order to provide sufficient time to gather the supplies and equipment necessary to sample and plan for safe access by the sampling crew(s).

Adherence to SWAMP sampling guidance and proper development of a sampling plan provides for consistent, reproducible, and accurate results. For some constituents, especially trace metals, trace organics, and organic carbon, sampling protocols are very important as contamination of samples due to incorrect sampling protocols is possible. Design of the field sampling procedures should carefully consider contamination potential from sample location (e.g., sediment disturbances, equipment exhaust), sampling techniques, and sample handling. Field crews should be trained in the appropriate site specific methods specified in the sampling plan. "Clean sampling" based on the US Environmental Protection Agency (EPA) Method 1669 should be used when sufficiently low detection concentrations are expected for at least trace metals and mercury. However, it is recommended that all sampling plans incorporate a "clean technique" approach including the following protocols:

- Samples (for laboratory analysis) are collected only in analytical laboratory-provided sample containers
- Clean, powder-free nitrile gloves should be worn for collection of samples
- Glove are changed whenever something not known to be clean has been touched
- Decontaminate all equipment (e.g. bucket, tubing) except laboratory provided sample containers, prior to sample collection using a trisodium phosphate (TSP)-soapy water wash, distilled water rinse, and final rinse with distilled water. (Dispose of wash and rinse water appropriately, i.e., do not discharge to storm drain or receiving water) and

- To reduce potential contamination, sample collecting personnel must adhere to the following rules while collecting samples
    - No Smoking
    - Never sample near a running vehicle
    - Do not park vehicles in the immediate sample collection are (even non-running vehicles)
    - Do not eat or drink during sample collection and
    - Do not breathe, sneeze, or cough in the direction of an open sample container

The most important aspect of grab sampling is to make sure that the sample best represents the entire runoff stream. Water quality samples should be collected in appropriate sample containers and be of adequate volume to conduct the required measurements or laboratory analyses. Typically, samples are collected by dipping the collection container in the runoff flow paths and streams as noted below. Note, however that depending upon the specific test that is required, some bottles may contain preservatives. These bottles should never be dipped in the stream, but filled indirectly from the collection container.

i. For small streams and flow paths, simply dip the bottle facing upstream until full

ii. For larger stream that can be safely accessed, collect and sample in the middle of the flow stream by directly dipping the mouth of the bottle. Once again making sure that the opening of the bottle is facing upstream as to avoid any contamination by the sampler

iii. Avoid collecting samples from ponded, sluggish or stagnant water

All sampling and sample preservation must be in accordance with the current edition of Standard Methods for the Examination of Water and Wastewater (American Public Health Association).

All samples must be maintained between 0-6 degrees Celsius during delivery to the laboratory. Samples must be kept on ice, or refrigerated, from sample collection through delivery to the laboratory. Shipped samples should be place inside coolers with ice. Make sure the sample bottles are well packaged to prevent breakage and secure cooler lids with packaging tape.

Ship samples that will be laboratory analyzed to the analytical laboratory right away. Many analytical methods have short hold-times before which the analysis must be started. Hold times are measured from the time the sample is collected to the time the sample is analyzed. The General Permit requires that samples be received by the analytical laboratory within 48 hours of the physical sampling (unless otherwise required by the analytical laboratory).

Most sites will require the use of some sort of field meter to measure turbidity and pH. Some field meters can be placed directly in the flow of water and gather instantaneous data. Meters with probes that can be directly placed into the flow are ideal, however low flow conditions may not allow for this type of measurement. In this case, grab samples can be collected and placed within the field meter's recording container. Section 7.0 of this guidance document provided step-by-step instruction using an example field meter.

All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) should be calibrated and maintained in accordance with

manufacturers' specifications to ensure accurate measurements. Many manufacturers provide step-by-step instructions for the use and calibration of their meters and these instructions should be followed.

If using field meters, pH and turbidity measurements should be conducted immediately (i.e. samples should not be stored for later measurements). Collect proper information regarding time and sampling conditions, appropriately label the bottles, and fill out the required chain of custody forms and field logs.

E. Analytical Methods, Laboratories, and Field Meters

All laboratory analyses must be conducted according to analytical procedures specified in 40 Code of Federal Regulations (CFR) Part 136, unless other analytical procedures have been specified in the General Permit or by the RWQCB. With the exception of field analyses conducted by the discharger for turbidity and pH, all analyses must be sent to and conducted by a state-certified analytical laboratory.

Analytical laboratories should be contacted and a contract should be worked out before the wet season to minimize potential disruptions during the critical sampling period. A laboratory should be chosen foremost by their accreditation, ability to perform the required samples in the desired turn-around-time, and then by their proximity for ease of sample delivery. Although with overnight mail delivery, proximity is less important, it may still be an important factor to avoid bottle breakage during shipment.

State-certified analytical laboratories can be found by using the Environmental Laboratory Accreditation Program's (ELAP) website at:
http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx.

The analytical method/protocol, minimum detection limits, and reporting units for the water quality constituents specifically identified in the General Permit are presented in Table 7.4-A.

Table 7.4-A Water Quality Constituent Analytical Method/Protocol, Minimum Detection Limits, Sample Size and container Requirements.

Parameter	Test Method/Protocol	Minimum Detection Limits	Minimum Sample Volume	Container Type
pH	Field meter/ probe with calibrated portable instrument or calibrated pH test kit	0.2 pH Units	100 mL	Polyprolylene
Turbidity	Field meter/probe with calibrated portable instrument	1 NTU	500 mL	Polypropylene or Glass

Non-visible pollutants may include a wide range of analytical methods. A list of potential non-visible pollutants based on common construction activities is shown in Table 7.4-B. This list is not meant to be inclusive but to provide general guidance for projects. Consult with the analytical laboratory or 40 CFR Part 136 to identify specific analytical methods, sample volume, and containers needed for the expected non-visible pollutants.

Dischargers can perform pH analysis on site with a calibrated pH meter, or pH test kit. Dischargers can perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on site or at an accredited analytical laboratory.

Many manufacturers offer single parameter meters of multiple parameter meters with various optional probes. Dischargers will need to determine the best type of meter for their individual situation. Any meter selected for field monitoring should have the ability to be calibrated, be accompanied by detailed operation instructions, and should be ruggedly designed for filed use and long term storage (you are unlikely to need it during the dry season).

Table 7.4-B Potential Non-Visible Pollutants based on Common Construction Activities

Activity	Potential Pollutant Source	Laboratory Analysis
Water line flushing	Chlorinated water	Residual chlorine
Portable toilets	Bacteria Disinfectants	Total/fecal coliform
Concrete & Masonry	Acid wash Curing compounds Concrete rinse water	pH pH, alkalinity, Volatile organic compounds (VOCs) pH
Painting	Resins Thinners Paint Strippers Solvents Adhesives Sealants	Semi-Volatile organic compounds (VOCs) Phenols, VOCs VOCs Phenols, VOCs Phenols, VOCs SVOCs
Cleaning	Detergents Bleaches Solvents	Methylene Blue Activated Substances (MBAS), phosphates Residual Chlorine VOCs
Landscaping	Pesticides/Herbicides Fertilizers Lime and gypsum	Check with analytical laboratory NO3/NH3/P Acidity/alkalinity

	Aluminum sulfate, sulfur	Total dissolved solids (TDS), alkalinity
Treated wood	Copper, arsenic, selenium	Metals
Soil amendments & dust control	Lime, gypsum Plant gums Magnesium chloride Calcium chloride Natural brines Lignosulfonates	pH biochemical oxygen demand (BOD) Alkalinity, TDS Alkalinity, TDS Alkalinity, TDS Alkalinity, TDS

7.5 Watershed Monitoring Option

This option is not applicable to this project.

7.6 Monitoring Exemptions

Dischargers are not required to physically collect samples or conduct visual observations during dangerous weather conditions (flooding, electrical storms, etc.) or outside of scheduled construction site business hours. An explanation must be provided in the annual Report is a project was unable to collect required samples or visual observations because of dangerous weather conditions.

7.7 Quality Assurance/Quality Control

An effective QA/QC plan will be implemented as part of the CSMP to ensure that analytical data can be used with confidence. QA/QC procedures to be initiated include the following:

- Field logs
- Clean sampling techniques
- Sample Chains of Custody (COCs) and
- Data verification

Each of these procedures is discussed in more detail in the following sections.

A. Field Logs

The purpose of field logs is to record sampling information and field observations during monitoring that may explain any uncharacteristic analytical results. Sampling information to be included in the field log include the date and time of water quality sample collection, sampling personnel, sample container identification numbers, and types of samples that were collected. Field observations should be noted in the field log for any abnormalities at the sampling location (color, odor, BMPs, etc.). Field measurements for pH and turbidity should also be recorded in the field log.

Field log to record visual inspections and sample collection and field measurements are provided in Appendix N.

B. Clean Sampling Techniques

Clean sampling techniques involve the use of certified clean containers for sample collection and clean powder-free nitrile gloves during sample collection and handling. As discussed previously, adoption of a clean sampling approach will minimize the chance of field contamination and questionable data results.

C. Sample Chain-of-Custody

The sample COC is an important documentation step that racks samples from collection through analysis to ensure the validity of the sample. Sample COC procedures include the following:

- Proper labeling of samples
- Use of COC forms for all samples and
- Prompt sample delivery to the analytical laboratory

Analytical laboratories usually provide COC forms to be filled out for sample containers.

D. Data Verification

After analytical results are received from the analytical laboratory, the data should be verified to ensure that it is complete, accurate, and the appropriate QA/QC requirements were met. Data should be verified as soon as the data reports are received.

The COC and laboratory reports need to be checked to make sure all requested analysis were performed and all samples are accounted for in the reports. Check laboratory reports to make sure hold times were met and that the reporting levels meet or are lower than the reporting levels agreed to in the contract. Check data for outlier values and follow up with the laboratory. Occasionally typographical errors, unit reporting errors, or incomplete results are reported and should be easily detected. These errors need to be identified, clarified, and corrected quickly by the laboratory. Attention should be paid to data that is an order of magnitude or more different than similar locations, or is inconsistent with previous data from the same location.

For laboratory analyses, EPA establishes QA/QC checks and acceptable criteria. These data typically reported along with the sample results. Data reviewers should evaluate the reported QA/QC data to check for contamination (look at method, field, and equipment blanks), precision (laboratory matrix spike duplicates), and accuracy (matrix spikes and laboratory control samples). When QA/QC checks are outside acceptable ranges, the laboratory must flat the data, and usually provides an explanation of the potential impact to the sample results.

Check the data set for outlier values and, accordingly, confirm results and re-analyze samples where appropriate. Sample re-analysis should only be undertaken when it appears that some part of the QA/QC resulted in a value out of the expected range. Initial data, even if outside the expected range may not be discounted unless the analytical laboratory identifies the required QA/QC criteria were not met. If this occurs, the project should obtain a written statement from the analytical laboratory regarding the validity of the sample result.

Similarly, field data needs to be checked as soon as possible to identify potential errors. Reported data and observations should be verified to ensure that it is complete and accurate and as soon as the field logs are received.

Field logs should be checked to make sure all required measurements were completed and appropriately documented. Crews may occasionally miss-record a value. Reported values that appear out of the typical range of inconsistent, should be followed up on immediately to identify potential reporting or equipment problems.

Equipment calibration notations should be verified for outlier data, and if appropriate equipment calibrations should be checked after sampling. Observations noted on the field logs can also help to identify potential interferences. Notations should be made of any errors and actions taken to correct the equipment or recording errors.

When using a field meters it is important to record the value and then make note of any possible meter failures or interferences that could have led to an exceedance. Some possible instrument problems may include the need to recalibrate; the need to replace the batter; problems with the sample container (such as scratches on glass or plastic optical sample cells or particles on the outside of the optical sample cells); or fouled probes.

7.8 Reporting and Records Retention

Most reporting will typically occur in the Annual Report. Additional reporting is required if NALs are exceeded. The requirements for NAL Exceedance Reports as well as records retention are discussed in the following sections.

A. Numeric Action Level Exceedance Report

In the event that the storm event average of the samples exceeds an applicable NAL, Risk Level 2 dischargers must electronically submit all storm event sampling results to the SWRCB's SMARTS no later than 10 days after the conclusion of the storm event. In addition, the RWQCBs may request the submittal of an NAL Exceedance Report. The discharger must certify each NAL Exceedance Report in accordance with the General Permit's Special Provisions for Construction Activity.

An NAL Exceedance Report must contain the following information:

- Analytical method(s), method reporting unit(s), and MDL(s) of each analytical parameter
- Date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation and
- Description of the current BMPs associated with the sample that exceeded the NAL and the proposed corrective actions taken

B. Annual Report

All dischargers are required to prepare and electronically submit an Annual Report no later than September 1 each year. The Annual Reports must be certified in accordance with the Special Provision in the General Permit. The Annual Report must include the following stormwater monitoring information:

- A summary an evaluation of all sampling and analysis results, including original laboratory reports
- The analytical method(s), method report unit(s), and MDLs) of each analytical parameter (analytical results that are less than the MDL must be reported as "less than the MDL" or <MDL")

- A summary of all corrective actions taken during the compliance year
- Identification of any compliance activities or corrective actions that were not implemented
- A summary of all violations of the General Permit
- The individual(s) who performed facility inspections, sampling, visual observation (inspections), and/or measurements
- The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge) and
- The visual observations and sample collection exception records and reports

C. Records Retention

Dischargers must retain records of all stormwater monitoring information and copies of all reports (including Annual Reports) for a period of at least three years from the date of submittal or longer if required by the RWQCB. ATS dischargers must retain all records for three years after the completion of the construction project. Records are to be kept on site while construction is ongoing. These records include:

- The date, place, and time of facility inspections, sampling, visual observations (inspections), and/or measurements, including precipitation
- The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and/or measurements
- The date and approximate time of analyses
- The individual(s) who performed the analyses
- A summary of all analytical results from the last three years, the method detection limits and reporting limits, and the analytical techniques or methods used
- Rain gauge readings from the site inspections
- QA/QC records and results
- Non-stormwater discharge inspections and visual observations (inspections) and stormwater discharge visual observation records
- Visual observation and sample collection exemption records
- NAL Exceedance Reports and NEL Violation Reports and
- The records of any corrective actions and follow-up activities that resulted from analytical results, visual observations (inspections), or inspections

Results of field measurements and laboratory analyses must be kept in the SWPPP. It is also recommended that training logs, COCs, and other documentation related to sampling analysis be kept with the project's SWPPP.

CSMP Attachment 1: Weather Reports

INSTRUCTIONS

Place printed NOAA weather forecasts in this Attachment.

CSMP Attachment 2: Monitoring Records

INSTRUCTIONS

Place completed BMP Inspection Forms, Visual Monitoring, Effluent Sampling and Receiving Water Field Logs, Monitoring Exceptions, and NAL/NEL Exceedance Reports in this Attachment.

CSMP Attachment 3: Example Forms

Rain Gauge Log Sheet				
Construction Site Name:				
WDID #:				
Date (mm/dd/yy)	Time (24-hr)	Initials	Rainfall Depth (Inches)	Notes:

Risk Level 1, 2, 3 ***Visual Inspection Field Log Sheet***						
Date and Time of Inspection:				Report Date:		
Inspection Type:	☐ Weekly	☐ Before predicted rain	☐ During rain event	☐ Following qualifying rain event	☐ Contained stormwater release	☐ Quarterly non-stormwater

Site Information	
Construction Site Name:	
Construction stage and completed activities:	Approximate area of exposed site:

Weather and Observations			
Date Rain Predicted to Occur:		Predicted % chance of rain:	
Estimate storm beginning: _____ (date and time)	Estimate storm duration:_____ (hours)	Estimate time since last storm: _____ (days or hours)	Rain gauge reading:_____ (inches)

Observations: If yes identify location		
Odors	Yes ☐	No ☐
Floating material	Yes ☐	No ☐
Suspended Material	Yes ☐	No ☐
Sheen	Yes ☐	No ☐
Discolorations	Yes ☐	No ☐
Turbidity	Yes ☐	No ☐

Site Inspections			
Outfalls or BMPs Evaluated		**Deficiencies Noted**	
(add additional sheets or attached detailed BMP Inspection Checklists)			
Photos Taken:	Yes ☐	No ☐	Photo Reference IDs:

Corrective Actions Identified (note if SWPPP/REAP change is needed)

Inspector Information

Inspector Name:	Inspector Title:
Signature:	Date:

Risk Level 2
Effluent Sampling Field Log Sheets

Construction Site Name:	Date:	Time Start:
Sampler:		

Sampling Event Type:	☐ Stormwater	☐ Non-stormwater	☐ Non-visible pollutant

Field Meter Calibration

pH Meter ID No./Desc.: Calibration Date/Time:	Turbidity Meter ID No./Desc.: Calibration Date/Time:

Field pH and Turbidity Measurements

Discharge Location Description	pH	Turbidity	Time

Grab Samples Collected

Discharge Location Description	Sample Type	Time

Additional Sampling Notes:
Time End:

NAL or NEL Exceedance Evaluation Summary Report	Page __ of __
Project Name	
Project WDID	
Project Location	
Date of Exceedance	
Type of Exceedance	**NAL Daily Average** ☐ **pH** ☐ **Turbidity** **NEL Daily Average** ☐ **pH** ☐ **Turbidity** ☐ **Other (specify) _____**
Measurement or Analytical Method	☐ **Field meter** **(Sensitivity: _____)** ☐ **Lab method (specify) _____** **(Reporting Limit: _____)** **(MDL: _____)**
Calculated Daily Average	☐ **pH _ pH units** ☐ **Turbidity __ NTU**
Rain Gauge Measurement	**_____ inches**
Compliance Storm Event	**_____ inches (5-year, 24-hour event)**
Visual Observations on Day of Exceedance	

NAL or NEL Exceedance Evaluation Summary Report	Page __ of __
Description of BMPs in Place at Time of Event	
Initial Assessment of Cause	
Corrective Actions Taken (deployed after exceedance)	
Additional Corrective Actions Proposed	
Report Completed By	_____ **(Print Name, Title)**
Signature	_____

CHAIN-OF-CUSTODY **DATE:** **Lab ID:**

DESTINATION LAB:							REQUESTED ANALYSIS				Notes:
ATTN:											
ADDRESS:											
Office Phone:											
Cell Phone:											
SAMPLED BY:											
Contact:											
Project Name											
Client Sample ID	**Sample Date**	**Sample Time**	**Sample Matrix**	**Container #**	**Container Type**	**Container Pres.**					

SENDER COMMENTS:	**RELINQUISHED BY**	
	Signature:	
	Print:	
	Company:	
	Date:	TIME:
LABORATORY COMMENTS:	**RECEIVED BY**	
	Signature:	
	Print:	
	Company:	
	Date:	TIME:

CSMP Attachment 4: Field Meter Instructions

INSTRUCTIONS

Place instructions for field meters that will be used by contractor personnel in this Attachment.

Appendix A: General Location Map

LOCATION MAP

Appendix B: Site Maps

LEGEND:

- DRAINAGE INLET/MANHOLE PROTECTION
- CONCRETE WASHOUT
- STABILIZED CONSTRUCTION ENTRANCE
- TIRE WASH AREA
- CONSTRUCTION FENCE W/ FILTER FABRIC
- FIBER ROLLS

PLANNED STORMWATER SAMPLING LOCATION

10' SEWER EASEMENT

Exist SHED

Exist BARN

KEEP ROAD OPEN FOR GARBAGE TRUCK ACCESS

CONSTRUCTION FENCE WITH FILTER FABRIC, TYP SEE DETAIL 1 ON SHEET C5

PROTECT Exist DRAIN INLET SEE DETAIL 6 ON SHEET C5

PROPOSED MATERIAL STORAGE AREA

Exist WALKWAY

Exist WALKWAY

Exist MILK BARN FF=334.17'

STRAW ROLLS, SEE DETAIL 2 ON SHEET C5

PROPOSED LOCATION OF TIRE WASH AREA

CONCRETE WASH DOWN AREA SEE DETAIL 4 ON SHEET C5

Exist PARKING LOT

Asphalt

STABILIZED CONSTRUCTION ENTRANCE/EXIT, SEE DETAIL 3 ON SHEET C5

PROTECT Exist SEWER MANHOLE

PROTECT Exist TREE SEE TREE NOTES ON SHEET C1.1

ELM

STRAW ROLLS, SEE DETAIL 2 ON SHEET C5

CONSTRUCTION FENCE WITH FILTER FABRIC, TYP SEE DETAIL 1 ON SHEET C5

CONSTRUCTION FENCE WITH FILTER FABRIC, TYP SEE DETAIL 1 ON SHEET C5

"PARK RULES" SIGN

MEDIAN ISLAND, SEE DEMOLITION NOTE No. 1 ON SHEET C1.1

"PED X-ING" SIGN

STOP

Exist RANCH HOUSE FF=340.19'

FF=340.16'

Exist NATURE MUSEUM FF=338.11'

Exist BLACKSMITH SHOP TO BE RELOCATED FF=338.68'

"PED X-ING" SIGN

10' SEWER EASEMENT

Dense Trees

(S 61°49'47" W) (296.20') (6)

MCCLELLAN ROAD

GRAPHIC SCALE

15 0 7.5 15 30

1" = 15'

Project Title:

City of Cupertino - McClellan Ranch Preserve Environmental Education Center

Design Firm:

SIEGEL & STRAIN Architects
1295 59th Street
Emeryville, CA 94608
510 / 547-8092
FAX 510 / 547-2604
Info@siegelstrain.com

Consultant:

MARK THOMAS & COMPANY, INC.
Providing Engineering, Surveying, and Planning Services
1960 Zanker Road
San Jose, CA 95112
(408) 453-5373

Stamp:

No.	Description	Date

Issue Note:

Construction Documents 07/22/2013

Project ID:	SJ-12123
File Name:	SJ12123-ECP-C4
Drawn by:	CCC
Checked by:	MF
Plot Date:	07/19/2013
Scale:	1"=15'

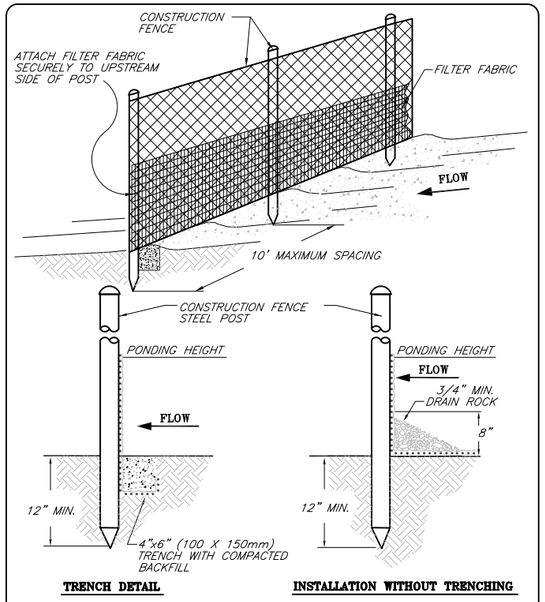
Sheet Title:

Erosion Control Plan

Sheet No.:

C4.0

7/23/2013 8:56:35 PM



TRENCH DETAIL **INSTALLATION WITHOUT TRENCHING**

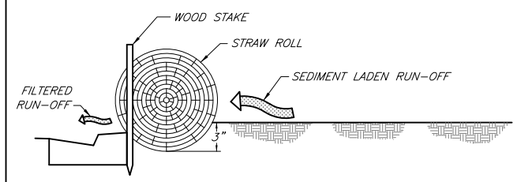
NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

CONSTRUCTION FENCE WITH FILTER FABRIC

SILT FENCE DETAIL (1)

N.T.S.



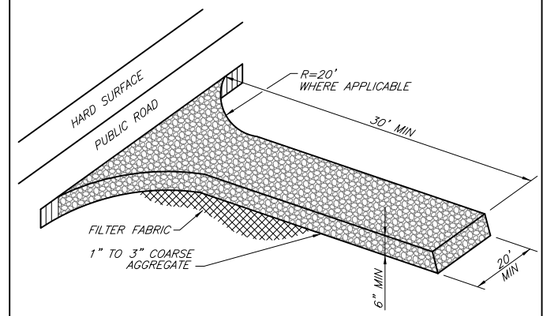
INSPECTION AND MAINTENANCE:

1. REPAIR OR REPLACE SPLIT, TORN, UNRAVELING OR SLUMPING STRAW ROLLS
2. INSPECT STRAW ROLLS WHEN RAIN IS FORECAST. FOLLOWING RAIN EVENTS AND AT LEAST DAILY DURING PROLONGED RAINFALL, PERFORM REQUIRED MAINTENANCE

STRAW ROLL

TYPICAL STRAW ROLL DETAIL (2)

N.T.S.



INSTALLATION/APPLICATION CRITERIA

- CONSTRUCT ON LEVEL GROUND WHERE POSSIBLE.
- STONES SHOULD BE 1-3 INCHES.
- MINIMUM DEPTH OF STONES SHOULD BE 6 INCHES OR AS RECOMMENDED BY SOILS ENGINEER.
- LENGTH SHOULD BE 30-FOOT MINIMUM, AND 20-FOOT MINIMUM WIDTH.
- PROVIDE AMPLE TURNING RADII AS PART OF ENTRANCE IF POSSIBLE

REQUIREMENTS

- MAINTENANCE
- INSPECT MONTHLY AND AFTER EACH RAINFALL.
- REPLACE GRAVEL MATERIAL WHEN VOIDS ARE VISIBLE.
- REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS WITHIN 24 HOURS.
- REMOVE GRAVEL AND FILTER FABRIC AT COMPLETION OF CONSTRUCTION.

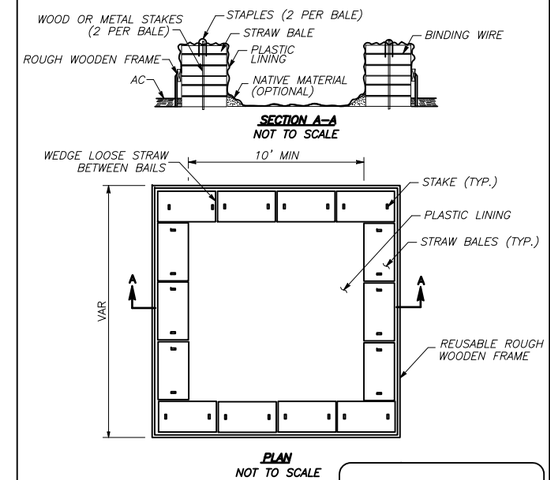
CONSTRUCTION ENTRANCE/EXIT

STABILIZED CONSTRUCTION ENTRANCE (3)

N.T.S.

STABILIZED WASTE STORAGE AREA
CONCRETE TRUCK WASH DOWN AREA

1) WHEN WASHING ON-SITE, USE DESIGNATED, BERMED WASH AREAS TO PREVENT WASHWATER CONTACT WITH STORM WATER, CREEKS, RIVERS, AND OTHER WATER BODIES. THE WASH AREA CAN BE SLOPED FOR WASH WATER COLLECTION AND SUBSEQUENT INFILTRATION INTO THE GROUND.
2) LOCATE WASHOUT AREA AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES. DO NOT ALLOW RUNOFF FROM THIS AREA BY CONSTRUCTING A TEMPORARY PIT OR BERMED AREA LARGE ENOUGH FOR LIQUID AND SOLID WASTE.
3) WASH OUT WASTES INTO THE TEMPORARY PIT WHERE THE CONCRETE CAN SET, BE BROKEN UP, AND THEN DISPOSED OF PROPERLY.



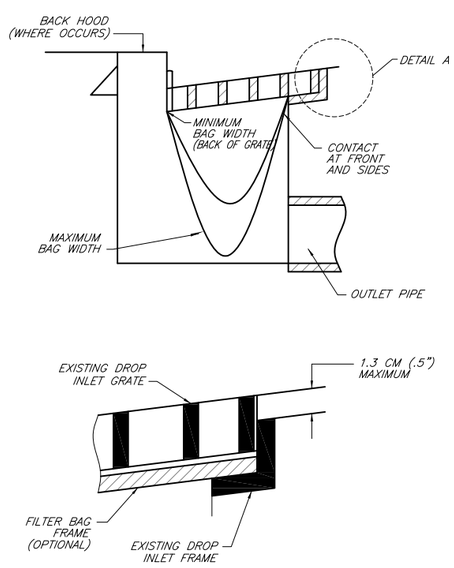
NOTE:

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.

CONCRETE WASH DOWN

TYPICAL CONCRETE WASH DOWN DETAIL (4)

N.T.S.



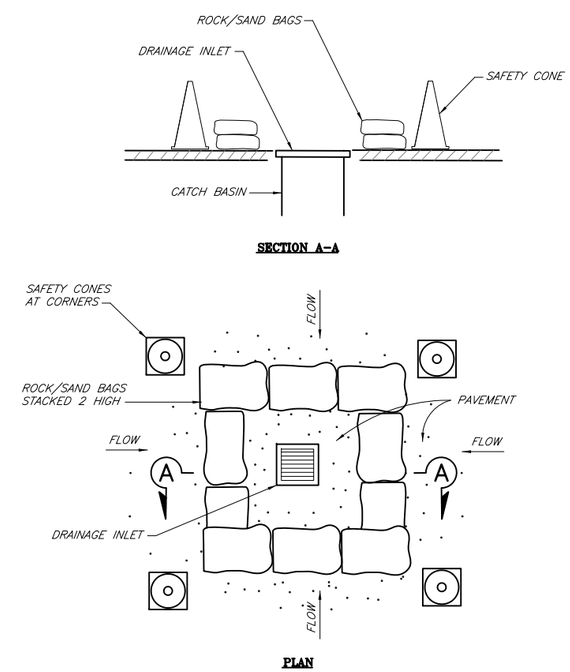
NOTES:

1. THE FILTER BAG SHALL BE MANUFACTURED FROM UV RESISTANT POLYPROPYLENE NYLON, POLYESTER, OR ETHYLENE FABRIC WITH A MINIMUM TENSILE STRENGTH OF 50 LBS PER LINEAL FOOT. AN EQUIVALENT OPENING SIZE NOT GREATER THAN A 20 SIEVE AND WITH A MINIMUM FLOW RATE OF 40 GALLONS/MINUTE/SQ. FT.
2. THE FILTER BAG MAY BE SUSPENDED FROM OR HELD IN PLACE BY EXISTING INLET GRATE (OR OTHER APPROVED METHOD). PROVIDING NO MODIFICATION OR DAMAGE SHALL BE DONE TO THE INLET GRATE OR FRAME. THE INLET GRATE SHALL NOT BE CAUSED TO REST MORE THAN 1.3 CM (.5") ABOVE THE INLET FRAME (SEE DETAIL A).
3. THE FILTER BAG MAY EXTEND TO THE BOTTOM OF THE INLET BOX PROVIDED THE OUTLET PIPE IS UNOBSTRUCTED.
4. INLET FILTER BAGS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL DURING THE WET SEASON AND MONTHLY DURING THE DRY SEASON. SEDIMENT AND DEBRIS SHALL BE REMOVED BEFORE ACCUMULATIONS HAVE REACHED ONE THIRD THE DEPTH OF THE BAG. BAGS SHALL BE REPAIRED OR REPLACED AS SOON AS DAMAGE OCCURS.

STORM DRAIN INLET FILTER BAG

STORM DRAIN INLET FILTER BAG DETAIL (5)

N.T.S.



DRAINAGE INLET PROTECTION

TYPICAL INLET PROTECTION DETAIL (6)

N.T.S.

Project Title:

City of Cupertino - McClellan Ranch Preserve
Environmental Education Center

Design Firm:

SIEGEL & STRAIN Architects
1295 59th Street
Emeryville, CA 94608
510 / 547-8092
FAX 510 / 547-2604
Info@slegelstrain.com

Consultant:

MARK THOMAS & COMPANY, INC.
Providing Engineering, Surveying, and Planning Services
1960 Zanker Road
San Jose, CA 95112
(408) 453-5373

Stamp:

No.	Description	Date

Issue Note:
Construction Documents
07/22/2013

Project ID:	SJ-12123
File Name:	SJ12123-ECDets-C5
Drawn by:	CCC
Checked by:	MF
Plot Date:	07/19/2013
Scale:	None

Sheet Title:

Erosion Control Details

Sheet No.:

C5.0

7/24/2013 8:56:35 AM

Appendix C: Permit Registration Documents

INSTRUCTIONS

- *Include Copies of Permit Registration Documents submitted to SMARTS, other than the SWPPP itself*
  - Notice Of Intent (NOI)
  - Risk Assessment
  - Signed Certification Statement
  - Post Construction Water Balance
  - Copy of Annual Fee Receipt
  - ATS Design Documents
  - Site Map, see Appendix B
- Include the project Waste Discharge Identification (WDID) confirmation

SWPPP Amendment No. _____

Project Name: **McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation**

Project Number: 2012-9133

Qualified SWPPP Developer's Certification of the

Stormwater Pollution Prevention Plan Amendment

"This Stormwater Pollution Prevention Plan and attachments were prepared under my direction to meet the requirements of the California Construction General Permit (SWRCB Order No. 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below."

QSD's Signature	Date
Jimmy W. Sims	21588
QSD Name	QSD Certificate Number
Vice President/Principal, Mark Thomas & Company, Inc.	(408) 453-5373
Title and Affiliation	Telephone
1960 Zanker Road, San Jose, CA 95112	jsims@markthomas.com
Address	Email

Appendix E: Submitted Changes to PRDs

Log of Updated PRDs

The General Permit allows for the reduction or increase of the total acreage covered under the General Permit when a portion of the project is complete and/or conditions for termination of coverage have been met; when ownership of a portion of the project is purchased by a different entity; or when new acreage is added to the project.

Modified PRDs shall be filed electronically within 30 days of a reduction or increase in total disturbed area if a change in permit covered acreage is to be sought. The SWPPP shall be modified appropriately, with revisions and amendments recorded in Appendix C. Updated PRDs submitted electronically via SMARTS can be found in this Appendix.

This appendix includes all of the following updated PRDs (check all that apply):

☐ Revised Notice of Intent (NOI);

☐ Revised Site Map;

☐ Revised Risk Assessment;

☐ New landowner's information (name, address, phone number, email address); and

☐ New signed certification statement.

Legally Responsible Person [if organization]	
Signature of [Authorized Representative of] Legally Responsible Person or Approved Signatory	Date
Name of [Authorized Representative of] Legally Responsible Person or Approved Signatory	Telephone Number

Appendix F: Construction Schedule

INSTRUCTIONS

- *Include a copy of construction schedule*

Appendix G: Construction Activities, Materials Used and Associated Pollutants

Table G.1 Construction Activities and Associated Pollutants

Phase	Activity	Associated Materials or Pollutants	Pollutant Category[1]
Grading and Land Development			
Streets and Utilities Phase			
Vertical Construction Phase			
Landscaping and Site Stabilization Phase			

[1] Categories per CASQA BMP Handbook (i.e., Sediment, Nutrients, Bacteria and Viruses, Oil and Grease, Metals, Synthetic Organics, Pesticides, Gross Pollutants, and Vector Production)

Appendix H: CASQA Stormwater BMP Handbook Portal: Construction Fact Sheets

- *Can be found at CASQA BMP Handbook*

Appendix I: BMP Inspection Form

BMP INSPECTION REPORT

Date and Time of Inspection:		Date Report Written:		
Inspection Type: (Circle one)	Weekly *Complete Parts I,II,III and VII*	Pre-Storm *Complete Parts I,II,III,IV and VII*	During Rain Event *Complete Parts I, II, III, V, and VII*	Post-Storm *Complete Parts I,II,III,VI and VII*

Part I. General Information

Site Information

Construction Site Name:			
Construction stage and completed activities:			Approximate area of site that is exposed:
Photos Taken: (Circle one)	Yes	No	Photo Reference IDs:

Weather

Estimate storm beginning: (date and time)	Estimate storm duration: (hours)
Estimate time since last storm: (days or hours)	Rain gauge reading and location: (in)

Is a "Qualifying Event" predicted or did one occur (i.e., 0.5" rain with 48-hrs or greater between events)? (Y/N)
If yes, summarize forecast:

Exemption Documentation (explanation required if inspection could not be conducted). Visual inspections are not required outside of business hours or during dangerous weather conditions such as flooding or electrical storms.

Inspector Information

Inspector Name:	Inspector Title:
Signature:	Date:

Part II. BMP Observations. Describe deficiencies in Part III.			
Minimum BMPs for Risk Level _____ Sites	Failures or other short comings (yes, no, N/A)	Action Required (yes/no)	Action Implemented (Date)
Good Housekeeping for Construction Materials			
Inventory of products (excluding materials designed to be outdoors)			
Stockpiled construction materials not actively in use are covered and bermed			
All chemicals are stored in watertight containers with appropriate secondary containment, or in a completely enclosed storage shed			
Construction materials are minimally exposed to precipitation			
BMPs preventing the off-site tracking of materials are implemented and properly effective			
Good Housekeeping for Waste Management			
Wash/rinse water and materials are prevented from being disposed into the storm drain system			
Portable toilets are contained to prevent discharges of waste			
Sanitation facilities are clean and with no apparent for leaks and spills			
Equipment is in place to cover waste disposal containers at the end of business day and during rain events			
Discharges from waste disposal containers are prevented from discharging to the storm drain system / receiving water			
Stockpiled waste material is securely protected from wind and rain if not actively in use			
Procedures are in place for addressing hazardous and non-hazardous spills			
Appropriate spill response personnel are assigned and trained			
Equipment and materials for cleanup of spills is available onsite			
Washout areas (e.g., concrete) are contained appropriately to prevent discharge or infiltration into the underlying soil			
Good Housekeeping for Vehicle Storage and Maintenance			
Measures are in place to prevent oil, grease, or fuel from leaking into the ground, storm drains, or surface waters			
All equipment or vehicles are fueled, maintained, and stored in a designated area with appropriate BMPs			
Vehicle and equipment leaks are cleaned immediately and disposed of properly			

Part II. BMP Observations Continued. Describe deficiencies in Part III.

Minimum BMPs for Risk Level _____ Sites	Adequately designed, implemented and effective (yes, no, N/A)	Action Required (yes/no)	Action Implemented (Date)
Good Housekeeping for Landscape Materials			
Stockpiled landscape materials such as mulches and topsoil are contained and covered when not actively in use			
Erodible landscape material has not been applied 2 days before a forecasted rain event or during an event			
Erodible landscape materials are applied at quantities and rates in accordance with manufacturer recommendations			
Bagged erodible landscape materials are stored on pallets and covered			
Good Housekeeping for Air Deposition of Site Materials			
Good housekeeping measures are implemented onsite to control the air deposition of site materials and from site operations			
Non-Stormwater Management			
Non-Stormwater discharges are properly controlled			
Vehicles are washed in a manner to prevent non-stormwater discharges to surface waters or drainage systems			
Streets are cleaned in a manner to prevent unauthorized non-stormwater discharges to surface waters or drainage systems.			
Erosion Controls			
Wind erosion controls are effectively implemented			
Effective soil cover is provided for disturbed areas inactive (i.e., not scheduled to be disturbed for 14 days) as well as finished slopes, open space, utility backfill, and completed lots			
The use of plastic materials is limited in cases when a more sustainable, environmentally friendly alternative exists.			
Sediment Controls			
Perimeter controls are established and effective at controlling erosion and sediment discharges from the site			
Entrances and exits are stabilized to control erosion and sediment discharges from the site			
Sediment basins are properly maintained			
Linear sediment control along toe of slope, face of slope an at grade breaks (Risk Level 2 & 3 Only)			
Limit construction activity to and from site to entrances and exits that employ effective controls to prevent offsite tracking (Risk Level 2 & 3 Only)			
Ensure all storm, drain inlets and perimeter controls, runoff control BMPs and pollutants controls at entrances and exits are maintained and protected from activities the reduce their effectiveness (Risk Level 2 & 3 Only)			
Inspect all immediate access roads daily (Risk Level 2 & 3 Only)			

Run-On and Run-Off Controls			
Run-on to the site is effectively managed and directed away from all disturbed areas.			
Other			
Are the project SWPPP and BMP plan up to date, available on-site and being properly implemented?			

Part III. Descriptions of BMP Deficiencies

Deficiency	Repairs Implemented: Note - Repairs must begin within 72 hours of identification and, complete repairs as soon as possible.	
	Start Date	Action
1.		
2.		
3.		
4.		

Part IV. Additional Pre-Storm Observations. Note the presence or absence of floating and suspended materials, sheen, discoloration, turbidity, odors, and source(s) of pollutants(s).

	Yes, No, N/A
Do stormwater storage and containment areas have adequate freeboard? If no, complete Part III.	
Are drainage areas free of spills, leaks, or uncontrolled pollutant sources? If no, complete Part VII and describe below.	
Notes:	
Are stormwater storage and containment areas free of leaks? If no, complete Parts III and/or VII and describe below.	
Notes:	

Part V. Additional During Storm Observations. **If BMPs cannot be inspected during inclement weather, list the results of visual inspections at all relevant outfalls, discharge points, and downstream locations. Note odors or visible sheen on the surface of discharges. Complete Part VII (Corrective Actions) as needed.**	
Outfall, Discharge Point, or Other Downstream Location	
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description

Part VI. Additional Post-Storm Observations. **Visually observe (inspect) stormwater discharges at all discharge locations within two business days (48 hours) after each qualifying rain event, and observe (inspect) the discharge of stored or contained stormwater that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Complete Part VII (Corrective Actions) as needed.**	
Discharge Location, Storage or Containment Area	**Visual Observation**

Part VII. Additional Corrective Actions Required. **Identify additional corrective actions not included with BMP Deficiencies (Part III) above. Note if SWPPP change is required.**	
Required Actions	**Implementation Date**

Appendix J: Project Specific Rain Event Action Plan Template

Rain Event Action Plan (REAP)			
Date of REAP		**BWDID Number:**	
Date Rain Predicted to Occur:		**Predicted % chance of rain:**	

Predicted Rain Event Triggered Actions

Below is a list of suggested actions and items to review for this project. Each active Trade should check all material storage areas, stockpiles, waste management areas, vehicle and equipment storage and maintenance, areas of active soil disturbance, and areas of active work to ensure the proper implementation of BMPs. Project-wide BMPs should be checked and cross-referenced to the BMP progress map.

Trade or Activity	Suggested action(s) to perform / item(s) to review prior to rain event
❑ Information & Scheduling	❑ Inform trade supervisors of predicted rain ❑ Check scheduled activities and reschedule as needed ❑ Alert erosion/sediment control provider ❑ Alert sample collection contractor (if applicable) ❑ Schedule staff for extended rain inspections (including weekends & holidays) ❑ Check Erosion and Sediment Control (ESC) material stock ❑ Review BMP progress map ❑ Other:_____ ❑ _____ ❑ _____
❑ Material storage areas	❑ Material under cover or in sheds (ex: treated woods and metals) ❑ Perimeter control around stockpiles ❑ Other:_____ ❑ _____ ❑ _____
❑ Waste management areas	❑ Dumpsters closed ❑ Drain holes plugged ❑ Recycling bins covered ❑ Sanitary stations bermed and protected from tipping ❑ Other:_____ ❑ _____ ❑ _____
❑ Trade operations	❑ Exterior operations shut down for event (e.g., no concrete pours or paving) ❑ Soil treatments (e.g.,: fertilizer) ceased within 24 hours of event ❑ Materials and equipment (ex: tools) properly stored and covered ❑ Waste and debris disposed in covered dumpsters or removed from site ❑ Trenches and excavations protected ❑ Perimeter controls around disturbed areas ❑ Fueling and repair areas covered and bermed ❑ Other:_____ ❑ _____ ❑ _____
❑ Site ESC BMPs	❑ Adequate capacity in sediment basins and traps ❑ Site perimeter controls in place ❑ Catch basin and drop inlet protection in place and cleaned ❑ Temporary erosion controls deployed ❑ Temporary perimeter controls deployed around disturbed areas and stockpiles ❑ Roads swept; site ingress and egress points stabilized ❑ Other:_____ ❑ _____ ❑ _____
❑ Concrete rinse out area	❑ Adequate capacity for rain ❑ Wash-out bins covered ❑ Other:_____ ❑ _____ ❑ _____
❑ Spill and drips	❑ All incident spills and drips, including paint, stucco, fuel, and oil cleaned ❑ Drip pans emptied ❑ Other:_____ ❑ _____ ❑ _____

Continued on next page.

❑ Other / Discussion / Diagrams	❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____	

Attach a printout of the weather forecast from the NOAA website to the REAP.

I certify under penalty of law that this Rain Event Action Plan (REAP) will be performed in accordance with the General Permit by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____Date: _____

Qualified SWPPP Practitioner (Use ink please)

Appendix K: Training Reporting Form

Trained Contractor Personnel Log

Stormwater Management Training Log and Documentation

Project Name: _____
WDID #: _____

Stormwater Management Topic: (check as appropriate)

☐ Erosion Control ☐ Sediment Control
☐ Wind Erosion Control ☐ Tracking Control
☐ Non-Stormwater Management ☐ Waste Management and Materials Pollution Control
☐ Stormwater Sampling

Specific Training Objective: _____

Location: _____ Date: _____

Instructor:_____ Telephone: _____

Course Length (hours): _____

Attendee Roster (Attach additional forms if necessary)

Name	Company	Phone

As needed, add proof of external training (e.g., course completion certificates, credentials for QSP, QSD).

Appendix L: Responsible Parties

Authorization of Approved Signatories

Project Name: **McClellan Ranch Preserve Environmental Education Center and Blacksmith Shop Relocation**

WDID #: _____

Name of Personnel	Project Role	Company	Signature	Date
Carmen Lynaugh	Project Manager	City of Cupertino		

_____ _____

LRP's Signature Date

Timm Borden,
Director of Public Works
City of Cupertino (408) 777-3354

_____ _____

LRP Name and Title Telephone Number

Identification of QSP

Project Name: _____

WDID #: _____

The following are QSPs associated with this project

Name of Personnel(1)	Company	Date

(1) If additional QSPs are required on the job site add additional lines and include information here

OPTIONAL

Authorization of Data Submitters

Project Name: _____

WDID #: _____

Name of Personnel	Project Role	Company	Signature	Date

_____ _____

Approved Signatory's Signature Date

_____ _____

Approved Signatory Telephone Number

Name and Title

Appendix M: Contractors and Subcontractors

Appendix N: Construction General Permit

INSTRUCTIONS

- *Include a copy of the General Permit, or reference permanent location of General Permit that is kept on the construction site.*

Appendix

City Supplied Reclaimed Lumber Information

City supplied reclaimed 2x wall framing lumber Certificate of Inspection and inventory of the material

Contractor will be allowed to view lumber only during the pre-bid meeting.

REDWOOD INSPECTION SERVICE	CERTIFICATE OF INSPECTION Whitewood	CERTIFICATE NUMBER 1236

A Division of California Redwood Association
818 Grayson Road, Suite 201, Pleasant Hill, CA 94523-2693
(925) 935-1499 Fax (925) 935-1496

This is to certify that ☑ I ☐ we HARRY R. DIBBLE

regularly appointed ☑ inspector ☐ inspectors of the REDWOOD INSPECTION SERVICE and at the time acting in that capacity,

have personally ☐ re-inspected ☑ inspected lumber at CUPERTINO invoiced as RECYCLED DOUGLAS-FIR

(PSEUDOTSUGA MENZIESII) said to be ☐ shipped ☐ for shipment via ON JOB SITE

by CITY OF CUPERTINO, at

to MCCLLELAN RANCH PRESERVE, at

22221 MCCLLELAN RANCH ROAD, and that ☑ I ☐ we find the following grades therein:

NO. 2 STRUCTURAL LIGHT FRAMING each piece ~~grade-marked~~ HAMMERBRANDED

NO. 2 JOISTS AND PLANKS each piece ~~grade-marked~~ HAMMERBRANDED

NO. 2 POSTS AND TIMBERS each piece ~~grade-marked~~ HAMMERBRANDED

Order No: NOT SPECIFIED

☐ Inspector's
☑ Mill tally shows the following amounts and descriptions:

654 BOARD FEET - 2"/4"X4" R/L - NO. 2 STRUCTURAL RECYCLED DOUGLAS-FIR, ROUGH DRY, PER WCLIB PARA. 124-C. (2X4 - 2/8', 60/10', 5/12', 5/14', 12/16', 1/18')(4X4 - 1/12')

2,863 BOARD FEET - 2"/4"X6"/10" R/L - NO. 2 STRUCTURAL RECYCLED DOUGLAS-FIR, ROUGH DRY, PER WCLIB PARA. 123-C. (2X6 - 2/10', 4/14', 3/22')(2X8 - 3/12', 1/20')(2X10 - 1/10', 4/12', 2/16', 2/20', 2/22', 16/24')(4X6 - 2/8', 1/10', 4/12', 6/14', 17/16')(4X8 - 1/10', 1/12', 2/16', 5/18')(4X10 - 1/10')(4X14 - 1/18', 2/24', 1/28')

588 BOARD FEET - 6"X6"/8" R/L - NO. 1 STRUCTURAL RECYCLED DOUGLAS-FIR, ROUGH DRY, PER WCLIB PARA. 131-B. (6X6 - 5/8', 6/10')(6X8 - 6/12')

ALL MATERIAL ROUGH DRY STANDARD SIZE
EACH PIECE INSPECTED AND HAMMERBRANDED RIS#5 ON ONE END.

This lumber was inspected according to the Standard Grading Rules for West Coast Lumber (WCLIB Rules No. 17) as approved by the Board of Review, ALSC, Inc., *effective on* 2004.

AUTHORIZED PERSON RESPONSIBLE FOR CERTIFICATION

NAME (Print)	SIGNATURE	TITLE	DATE
HARRY R. DIBBLE	Harry R. Dibble CJJ	CHIEF INSPECTOR	3/8/2013

AGENCY VALIDATION

AUTHORIZED SIGNATURE		TITLE	DATE
CHARLES J. JOURDAIN	Charles Jourdain	PRESIDENT	3/15/2013

8/07

REDWOOD INSPECTION SERVICE	CERTIFICATE OF INSPECTION Redwood	CERTIFICATE NUMBER 1264

A Division of California Redwood Association
818 Grayson Road, Suite 201, Pleasant Hill, CA 94523-2693
(925) 935-1499 Fax (925) 935-1496

This is to certify that ☑ I ☐ we HARRY R. DIBBLE

regularly appointed ☑ inspector ☐ inspectors of the REDWOOD INSPECTION SERVICE and at the time acting in that capacity,

have personally ☐ re-inspected ☑ inspected lumber at CUPERTINO invoiced as RECYCLED REDWOOD

(SEQUOIA SEMPERVIRENS) said to be ☐ shipped ☐ for shipment via ON JOB SITE

by CITY OF CUPERTINO, at

to MCCLLELAN RANCH RESERVE, at

22221 MCCLLELAN RANCH ROAD, and that ☑ I ☐ we find the following grades therein:

NO. 2 STRUCTURAL each piece ~~grade-marked~~ HAMMERBRANDED

each piece grade-marked

each piece grade-marked

Order No: NOT SPECIFIED

☐ Inspector's
☑ Mill tally shows the following amounts and descriptions:

2,133 BOARD FEET - 2"X8" RL - NO. 2 STRUCTURAL RECYCLED REDWOOD TONGUE & GROOVE DRY PER RIS PARA. 607. (2X8 - 11/8', 12/10', 14/12', 6/14', 39/16', 2/18', 24/20')

ALL MATERIAL DRY STANDARD SIZE.
EACH PIECE INSPECTED AND HAMMERBRANDED RIS#5 ON ONE END.

This lumber was inspected according to Standard Specifications for Grades of California Redwood Lumber as approved by the Board of Review, ALSC, Inc., *effective on* 2000 EDITION.

AUTHORIZED PERSON RESPONSIBLE FOR CERTIFICATION

NAME (Print)	SIGNATURE	TITLE	DATE
HARRY R. DIBBLE		CHIEF INSPECTOR	3/8/2013

AGENCY VALIDATION

AUTHORIZED SIGNATURE	TITLE	DATE
CHARLES J. JOURDAIN	PRESIDENT	3/15/2013

8/07