CITY OF FOLSOM PARKS AND RECREATION DEPARTMENT 50 NATOMA STREET FOLSOM, CALIFORNIA 95630



PROJECT MANUAL FOR

FOLSOM ZOO PERIMETER FENCE 403 STAFFORD STREET FOLSOM, CA 95630

FOR PRE-BID INFORMATION, CONTACT:
BRAD NELSON
BNELSON@FOLSOM.CA.US
916-461-6633

BIDS TO BE RECEIVED BEFORE 2:00 PM THURSDAY, JUNE 22, 2023 CITY CLERK'S OFFICE CITY OF FOLSOM 50 NATOMA STREET, FOLSOM CA 95630

NOTICE TO CONTRACTORS

Sealed Proposals will be received by the City Clerk's Office for the City of Folsom at 50 Natoma Street, 2nd Floor, Folsom, California 95630 up to the hour of **2:00 P.M. on Thursday, June 22, 2023** and opened at **2:05 P.M**, or as soon thereafter as business allows, in the office of the Department of Parks and Recreation for construction of:

Folsom Zoo Perimeter Fence Project

In accordance with the Contract Documents issued by the City of Folsom. Bids must be submitted on printed forms supplied by the Department of Parks and Recreation enclosed in an envelope marked:

SEALED PROPOSALS FOR: FOLSOM ZOO PERIMETER FENCE PROJECT

Copies of the Sealed Proposal forms and accompanying documents (specifications and drawings) are available on-line on at the following:

www.Folsom.Ca.US (search for "Bid Notices")

www.CIPLIST.com

Contractor's License: B – General Building

C-13 – Fencing Contractor

Requests for technical information or clarification shall be directed to the City's representative, Brad Nelson <u>BNelson@Folsom.CA.US</u> or (916) 461-6633.

City affirmatively identifies this project as a "public work" as that term is defined by Labor Code Section 1720, and the project is, therefore, subject to prevailing wages under Labor Code Section 1771.

Contractor and its subcontractors shall fully comply with all the provisions of the California Labor Code governing the performance of public works contracts including, but not limited to, payment of prevailing wages, limitations on time worked, compliance with apprentice requirements, maintenance of payroll records, posting of wages at the job site and prohibitions against discrimination. The prevailing rates so determined are on file with the City Clerk and they are available for public inspection. They may also be obtained on the internet at http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm. Those prevailing wage rates hereby are incorporated in this Contract and made a part hereof. (See General Provisions, Article 6, Section 6.01)

June 2023 Notice to Contractors

As of March 1, 2015 Contractors (and sub-contractors) wishing to bid on public works contracts shall be registered with the State Division of Industrial Relations and certified to bid on Public Works contracts. Please register at:

https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm

Pursuant to California Public Contracts Code, any contract awarded pursuant to this invitation for bid shall include a provision permitting the substitution of securities for any moneys withheld to ensure performance under the contract. The terms of such provisions shall be according to the requirements of the Public Contracts Code Section 22300.

Each bid must be accompanied by security consisting only of cash, California Bank Cashier's Check, Certified Check, California Bank Money Order, or bid bond made payable to the "City of Folsom" in the sum of ten percent (10%) of the sum of the proposal.

The Contract will be awarded to the lowest responsive responsible Bidder based on any combination of Base Bid and Alternates as determined by the City. This process is conducted by the City in a "blind selection" format, i.e., without knowledge of the identity of any of the Bidders before ranking of all Bidders from lowest to highest has been determined. All awards will be made in the City's best interest.

The right to reject any and all bids, or waive any informality in any bid received is reserved by the City Council.

Kelly Gonzalez Parks and Recreation Director

June 2023 2 Notice to Contractors

CITY OF FOLSOM

SEALED PROPOSAL

(MUST BE SIGNED BY BIDDER)

Sealed Proposals will be received not later than **2:00 P.M.** on Thursday, June 22, 2023, at the City of Folsom City Clerk's Office, 50 Natoma Street, Folsom, California and opened at **2:05 P.M.**, or as soon thereafter as business allows in the Department of Parks and Recreation, 50 Natoma Street, Folsom, California.

TO THE HONORABLE CITY COUNCIL:

The undersigned hereby proposes and agrees to furnish any and all required labor, material, transportation, and services for

Folsom Zoo Perimeter Fence Project

in the City of Folsom, County of Sacramento, California.

The work is to be done in strict conformity with the Contract Documents, at the following Lump Sum and/or Unit Prices:

ITEN <u>NO.</u>	M <u>ITEM</u>	<u>QTY</u>	<u>UNIT</u>	UNIT <u>PRICE</u>	<u>TOTAL</u>
1.	General Conditions (NTE 3%)	1	LS	\$	\$
2.	Mobilization (NTE 2%)	1	LS	\$	_ \$
3.	Site Protection, Construction Fencing	1	LS	\$	\$
4.	Site Demolition & Clearing	1	LS	\$	\$
<u>MAI</u> 5.	<u>IN ENTRY</u> Main Entry Pergola	1	LS	\$	\$
6.	Electrical at Main Entry	1	LS	\$	\$
7.	Cantilevered Security Gate	1	EA	\$	\$
8.	Metal Swing Gate	1	EA	\$	\$
9.	Painting of Existing Wood Fence	1	LS	\$	\$
10.	Fence Segment 13 (Metal, Solid)	50	LF	\$	\$
11.	Fence Segment 14 (metal, transparent)	50	LF	\$	\$

12.	Concrete	210	SF	\$	\$
DEN	CD) C				
13.	<u>CING</u> Chain Link Vehicular Gate – 12'	2	EA	\$	\$
14.	Chain Link Vehicular Gate – 16'	1	EA	\$	_\$
15.	Add Privacy Screen on Existing Gate	2	EA	\$	\$
16.	Add Welded Wire Mesh on Existing Gate	2	EA	\$	\$
17.	1" Chain Link Mesh, 7' + 1' Barbed Wire With Privacy Screen	845	LF	\$	\$
18.	1" Chain Link Mesh, 8.5' + 1' Barbed Wire With Privacy Screen	10	LF	\$	\$
19.	1" Chain Link Mesh, 7' + 1' Barbed Wire	375	LF	\$	\$
20.	New Barbed Wire on Existing Fence	180	LF	\$	\$
21.	New Privacy Screen on Existing Metal Fenc	e 180	LF	\$	\$
TOTAL BASE BID \$					
Tota	l Project Bid, Item Nos. 1 through 21, shall be	e (spell out) <u></u>			Dollars.
ADD	ITIVE ALTERNATE #1 REPLACE CHA	IN LINK F <i>i</i>	ABRIC IN	SECTION F	5
Repl	ace Chain Link Fabric in Section F5	90	LF	\$	\$
	AL ADDITIVE ALTERNATE #1 BID Additive Alternate #1, shall be (spell out)				\$ Dollars.
ADD	ITIVE ALTERNATE #2 REPLACE CHA	IN LINK FA	ABRIC IN	SECTION F	7
Repl	ace Chain Link Fabric in Section F7	180	LF	\$	\$
TOT.	AL ADDITIVE ALTERNATE #2 BID				\$

Folsom Zoo Perimeter Fence Project Sealed Proposal

ADDITIVE ALTERNATE #3 ---- REPLACE CHAIN LINK FABRIC IN SECTION F8

Replace Chain Link Fabric in Section F8	200	LF	\$ \$	
TOTAL ADDITIVE ALTERNATE #3 BID			\$	
Total Additive Alternate #3, shall be (spell out)				Dollars.

If awarded the contract, the undersigned shall execute said Contract and furnish the necessary bonds within ten (10) calendar days after the Notice of Award of said Contract and begin work within ten (10) calendar days from and after receipt of written Notice to Proceed from City to Contractor

In determining the amount bid by each bidder, the City of Folsom (City) shall disregard mathematical errors in addition, subtraction, multiplication, and division that appear obvious on the face of the Proposal. When such a mathematical error appears on the Proposal, the City shall have the right to correct such error and to compute the total amount bid by said bidder on the basis of the corrected figure or figures.

When an item price is required to be set forth in the Proposal, and the total for the item set forth separately does not agree with a figure which is derived by multiplying the item price times the Engineer's estimate of the quantity of work to be performed for said item, the item price shall prevail over the sum set forth as the total for the item unless, in the sole discretion of the City, such a procedure would be inconsistent with the policy of the bidding procedure. The total paid for each such item of work shall be based upon the item price and not the total price. Should the Proposal contain only a total price for the item and the item price is omitted, the City shall determine the item price by dividing the total price for the item by Engineer's estimate of the estimated quantities of work to be performed as items of work.

If the Proposal contains neither the item price nor the total price for the item, then it shall be deemed incomplete and the Proposal shall be disregarded.

It is understood that this bid is based upon completion of the work within a period of **75 calendar days**, commencing on the day the Notice to Proceed is issued.

The amount of the liquidated damages to be paid by the Contractor for failure to complete the entire work by the Completion Date (as extended, if applicable) will be \$250 (Two Hundred Fifty Dollars) for each calendar day, continuing to the time at which the work is completed. Such amount is the actual cash value agreed upon as the loss to the City resulting from Contractor's default.

The undersigned represents and warrants that the undersigned has examined the location of the proposed work and is familiar with the local conditions at the place where the work is to be done, and the undersigned has reviewed and understands the plans, specifications and other contract documents, and the undersigned is satisfied with all conditions for the performance of the work.

The undersigned has checked carefully all of the above figures and understands that the City of Folsom will not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

The contractor shall initial below that he has received the appropriate addenda and has incorporated the addenda into his bid.

Addenda	Received and Ack	nowledged	
	No. 1		-
	No. 2		-
	No. 3		-
	No. 4		-
	No. 5		-

BID DEPOSIT ENCI	LOSED IN THE FOLLOWING I	FORM: (if bid exceeds \$25,000)	
\$	not less than ten percent (10%) of amount bid.		
☐ CERTIFIED CH	ECK		
☐ MONEY ORDER	R		
CASHIER'S CH	ECK		
☐ BID BOND			
		CONTRACTOR	
	<u>-</u>		
	Ву: _	Signature	
	Address: _		
	-		
	Email: _		
	Telephone No.:		
shall be registered w contracts. Please reg	with the State Division of Indust ister at:	ontractors) wishing to bid on public works contracts rial Relations and certified to bid on Public Works n=displayPWCRegistrationForm	
Div. Ind. Relations C	Certification No.		
License Required:	B- General Building C-13 – Fencing Contractor		
Valid Contractor's Li	cense No	is held by the bidder.	
The Expiration date is	S	·	
Representations conta	nined within this bid are made und	der penalty of perjury.	

CERTIFICATE OF AUTHORIZATION

(If Bidder is a Corporation or a Limited Liability Corporation)

STATE OF CALIFORNIA	
COUNTY OF	_
I HEREBY CERTIFY that at a meeting of laws of the State of California, held onduly passed and adopted:	the Board of Directors of the, a corporation existing under the, 20, the following resolution was
authorized to execute the Bid dated Folsom and this Corporation and t	resident of the Corporation, be and is hereby d, 20, to the City of hat his/her execution thereof, attested by the with the Corporate seal fixed, shall be the ation."
I further Certify that said resolution is now	in full force and effect.
IN WITNESS WHEREOF, I have hereur Corporation this day	nto set my hand and affixed the official seal of the of, 20
	Secretary
	Corporate Officer
(seal)	Corporate Address

CERTIFICATE OF AUTHORIZATION

(If Bidder is a Partnership)

STATE OF CALIFORNIA	
COUNTY OF	
I HEREBY CERTIFY that at a meeting of the of the State of California, held on passed and adopted:	ne Partners of the, a partnership existing under the laws, 20, the following resolution was duly
Partnership and that his/he Partnership." I further Certify that said resolution is now in	he Partnership, be and is hereby authorized, 20, to the City of Folsom and er execution thereof, attested by the shall be the official act and deed of this day of
	Managing Partner
	Partnership Address

CERTIFICATE OF AUTHORIZATION

(If Bidder is a Joint Venture)

STATE OF CALIFORNIA	
COUNTY OF	
I HEREBY CERTIFY that at a meeting the laws of the State of California, held	ng of the Principals of the, a joint venture existing under on, 20, the following resolution
was duly passed and adopted:	
"RESOLVED, that	
as authorized to execute the Bid date Folsom and this Joint Venture and Venture."	of the Joint Venture, be and is hereby ed, 20, to the City of that his/her execution thereof, attested by the shall be the official act and deed of this Joint
I further Certify that said resolution is now	v in full force and effect.
IN WITNESS WHEREOF, I have hereun Venture this day of _	to set my hand and affixed the official seal of the Joint, 20
	Managing Principal
(seal)	Joint Venture Address

SUB-BIDDER FORM

As of March 1, 2015 Contractors (and sub-contractors) wishing to bid on public works contracts shall be registered with the State Division of Industrial Relations and certified to bid on Public Works contracts. Please register at:

https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm

In accordance with Section 4104 of the Public Contract Code of the State of California, as amended, the following information is required for each subcontractor who will perform work amounting to more than one half of one percent (0.05%) of the Total Cost Base Bid. In addition, this form will be used to determine if the bidder is responsive to Section 2.08 of the General Provisions.

Name of Sub-Bidder	Street Address of Shop, Mill, or Office (Shall be completed within 2 working days of bid opening by apparent low bidder)	License Type and Number	Dept. of Ind. Relations Reg. No.	Portion of Work to be Done by Specification Section	Percentage of Total Work

§ 7103.5. Unfair business practices claims; assignment to awarding body

- (a) As used in this section:
- (1) "Public works contract" means a contract awarded through competitive bids by the state or any of its political subdivisions or public agencies, on whose behalf the Attorney General may bring an action pursuant to subdivision (c) of Section 16750 of the Business and Professions Code, for the erection, construction, alteration, repair, or improvement of any structure, building, road, or other improvement of any kind.
- (2) "Awarding body" means the state or the subdivision or agency awarding a public works contract.
- (b) In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the 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. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.
- (c) Subdivision (b) shall be included in full in the specifications for the public works contract or in the general provisions incorporated therein and shall be included in full in the public works contract or in the general provisions incorporated therein.

Formerly § 7103, added by Stats.1990, c. 694 (A.B.3416), § 5. Renumbered § 7103.5 and amended by Stats.1991, c. 1091 (A.B.1487), § 121.

Government Code former § 4551, added by Stats.1978, c. 414, § 1.

§4552. Assignment by bidder to purchasing body of rights under federal law arising from purchases pursuant to bid

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing 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. Sec 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid, Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

The preceding provisions of this section shall be included in full in any specifications for the public purchase and shall be included in full in the bid agreement or general provisions incorporated into the bid agreement.

Added Stats 1978 Ch 414 § 1.

NONCOLLUSION AFFIDAVIT

To be Executed by Bidder and Submitted with Bid

STATE OF CALIFORNIA		
COUNTY OF		
that he or she is the party making the forgoing Bid that the I undisclosed person, partnership, company, is genuine and not collusive or sham; that conspired, connived, or agreed with any be anyone shall refrain from bidding; that B	association, organization, or corporation; to the Bidder has not directly or indirectly bidder or anyone else to put in a sham E	nalf of, any hat the Bid of colluded, Bid, or that
sought by agreement, communication, or Bidder or any other bidder, or to fix any over that of any other bidder, or to secure and contract of anyone interested in the propose are true; and further, that the Bidder has not or any breakdown thereof, or the content thereto, or paid, and will not pay, any fee to organization, bid depository, or to any mem Bid.	conference with anyone to fix the bid p werhead, profit, or cost element of the bid p my advantage against the public body awased contract; that all statements contained t, directly or indirectly, submitted his or he to any corporation, partnership, company a	rice of the price, or of rarding the in the Bid price at a relative association,
	Signed:	
	Title:	
	Subscribed and sworn to before me this	
	day of	_, 20
(seal)	Notary Public	

CALIFORNIA CODE SECTIONS

Public Contracts Code §7103.5. Unfair business practices claim; assignment by contractor to awarding body

- (a) As used in this section:
- (1) "Public works contract" means a contract awarded through competitive bids by the state or any of its political subdivisions or public agencies, on whose behalf the Attorney General may bring an action pursuant to subdivision (c) of Section 16750 of the Business and Professions Code, for the erection, construction, alteration, repair, or improvement of any structure, building, road, or other improvement of any kind.
- (2) "Awarding body" means the state or the subdivision or agency awarding a public works contract.
- (b) In entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, the 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. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.
- (c) Subdivision (b) shall be included in full in the specifications for the public works contract or in the general provisions incorporated therein and shall be included in full in the public works contract or in the general provisions incorporated therein.

Added Stats 1978 Ch 414 § 1.

Government Code §4552. Assignment by bidder to purchasing body of rights under federal law arising from purchases pursuant to bid

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing 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. Sec 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid, Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

The preceding provisions of this section shall be included in full in any specifications for the public purchase and shall be included in full in the bid agreement or general provisions incorporated into the bid agreement.

Added Stats 1978 Ch 414 § 1.

BIDDER'S BOND

City of Folsom Department of Parks and Recreation

We,		
THE CONDITION OF THIS OB	LIGATION IS SUCH	, THAT:
WHEREAS, the Principal i	s submitting a bid to the	e obligee, for
(Copy here the exact descrip	otion of work, including	location, as it appears on the proposal)
for which; bids are to be opened at 1	Folsom, CA on	(Insert date of bid opening)
		V I &
required under the specification, af a written contract, in the prescrib Obligee, one to guarantee faithful	ter the prescribed formed ed form, in accordance performance of the co	I the contract and within the time and manner is are presented to him for signature, enters into e with the bid, and files two bonds with the intract and the other to guarantee payment for tion shall be null and void; otherwise, it shall
In the event suit is brought shall pay all costs incurred by the by the court.	upon this bond by the Obligee in such suit, in	Obligee and judgment is recovered, the Surety cluding a reasonable attorney's fee to be fixed
Dated:, 20		
	By:	
	Principal:	
APPROVED AS TO FORM:	Surety:	
	Address:	
	Telephone:	
City Attorney	Attorney in Fact:	
	<i></i>	

NOTICE:

A CERTIFICATE OF ACKNOWLEDGMENT IN ACCORDANCE WITH THE PROVISIONS OF CIVIL CODE SECTION 1189 MUST BE ATTACHED FOR EACH PERSON EXECUTING THIS AGREEMENT ON BEHALF OF CONTRACTOR AND SURETY.

WORKERS' COMPENSATION INSURANCE CERTIFICATION

TO THE CITY OF FOLSOM:

The undersigned does hereby certify that Bidder is aware of the provisions of Section 3700 et seq. of the Labor Code which require every employer to be insured against liability for workmen's compensation claims or to undertake self-insurance in accordance with the provisions of said Code, and that Bidder will comply with such provisions before commencing the performance of work on this contract.

Bidder:	
_	
Address.	
Date:	

PLEASE READ CAREFULLY BEFORE SIGNING

To be signed by authorized corporate officer or partner or individual submitting the bid. If bidder is: (example)

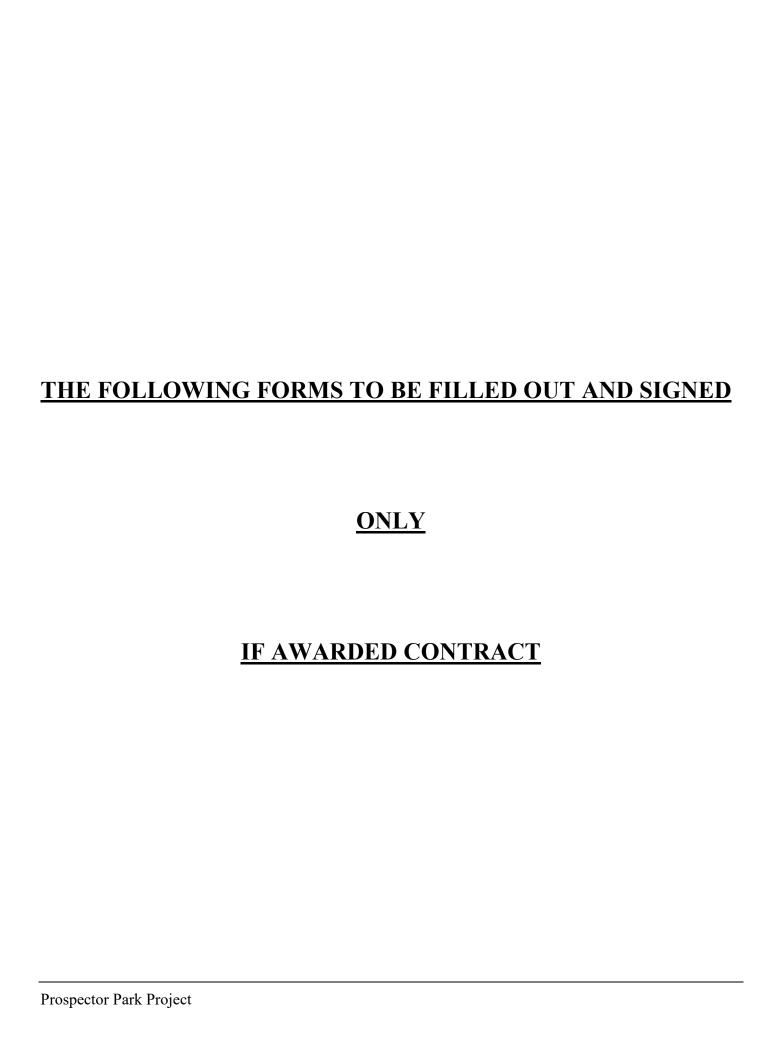
- 1. An individual using a firm name, sign: "John Doe, an individual doing business as Blank Company."
- 2. An individual doing business under his/her own name, sign your name only.
- 3. A co-partnership, sign: "John Doe, and Richard Doe, co-partners doing business as Blank Company, by, John Doe, Co-Partner."
- 4. A corporation, sign: "Blank Company, by John Doe, Secretary." (or other title).

RESOLUTION OF DISPUTES REGARDING THE BIDDING PROCESS

The lack of a prompt procedure to resolve disputes regarding the bidding process would impair the City's ability to carry out its purpose of constructing this project in a timely manner. Therefore, to the maximum extent authorized by law and notwithstanding any other procedures specified in documents referenced herein, all disputes and/or protests regarding the bidding process shall be subject to the following procedure. In submitting a bid to the City for this project, the bidder agrees to comply with and to be bound by this procedure.

- 1. Within five days after the opening of bids, bidder shall provide a written notice to the City of any and all mistakes regarding the bid for which a bidder requests relief. The City shall not consider any requests for relief due to mistake if notice is not received within the specified time period.
- 2. All bidders shall be provided with notice of the date and time of the City Council meeting at which the award of the contract for this project shall be considered. All bidders will be provided with an opportunity to bring to the City Council's attention disputes and/or protests regarding the bidding process. No bidder may bring any action or proceeding challenging the bidding process unless the alleged grounds for the dispute and/or protest are presented to the City Council before or during the meeting referenced above, and before action by the City Council on award of the contract.
- 3. Any bidder complying with the above procedure may bring an action within sixty (60) days from the action of the City Council, in accordance with Section 860 of the California Code of Civil Procedure, to determine the validity of the City Council's action on the award of the contract. The City shall be a defendant and shall be served with the summons and complaint in the action in the manner provided by law for the service of a summons in a civil action. In any such action the summons shall be in the form prescribed in Section 861.1 of the California Code of Civil Procedure except that in addition to being directed to "all persons interested in the matter of [specifying the matter]," it shall also be directed to the City. if the bidder bringing such action fails to complete the publication and such other notice as may be prescribed by the court in accordance with Section 861 of the California Code of Civil Procedure and to file proof thereof in the action within 60 days from the filing of his complaint, the action shall be dismissed on the motion of the City unless good cause for such failure is shown by the bidder.

Contractor		
Date		
Signature		





CONSTRUCTION AGREEMENT

THIS AGREEMENT, dated for identification as of municipal corporation, (hereinafter called "City"), and , (hereinafter called "Contractor").

The parties hereto mutually agree to the terms and condition set forth herein.

1. CONTRACT DOCUMENTS

- A. The Contract Documents referred to herein are incorporated herein by reference as if set forth in full in this Agreement. Work called for in any one Contract Document and not mentioned in another is to be performed and executed as if mentioned in all Contract Documents.
- B. The Contract Documents shall include the Notice to Contractors, the completed Proposal Form submitted by Contractor, this Agreement, the Bid Bond, the Performance Bond, the Payment Bond, the Standard Construction Specifications, the General Provisions, the Special Provisions, Exhibits, the Contract Drawings and Plans, the Technical Specifications, any project-specific specifications or documents, all duly issued Addenda, Interpretations, Field Instructions, Written Directives, Supplemental Drawings, the Contractor's Guarantee and Bond, the Contract Schedule, Storm Water Pollution Prevention Plan (whether prepared by the City or the Contractor) and any and all supplemental agreements amending or extending the Work contemplated and which may be required to complete the Work in an acceptable manner. Supplemental agreements are written agreements covering alterations, amendments or extensions to the Contract Documents and include Change Orders.
- C. The Standard Specifications shall mean and refer to the current Standard Construction Specifications of the City of Folsom, which are incorporated herein by this reference as if set forth herein.

2. AGREEMENT CONTROLS

In the event of a conflict between the terms and conditions as set forth in this Agreement and the terms and conditions set forth in other Contract Documents, the terms and conditions set forth in this Agreement shall prevail. Unless otherwise specifically provided herein, all works and phrases defined in the Standard Specifications shall have the same meaning and intent in this Agreement.

3. SCOPE OF CONTRACT

Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor and material and transportation necessary to perform and complete in a good and workman like manner to the satisfaction of City, all the work called for, and in the manner designated in, and in strict conformity with the Project entitled:

4. CONTRACT AMOUNT AND PAYMENTS

City agrees to pay and Contractor agrees to accept, in full payment for the above work, **DOLLARS (\$**) as the stipulated sum price which Contractor bid in his Proposal Form.

5. PROGRESS AND FINAL PAYMENTS

Progress and final payments shall be in accordance with the Standard Specifications.

6. RETENTION OF SUMS CHARGED AGAINST CONTRACTOR

When, under the provisions of this Contract, City is authorized to charge any sum of money against Contractor, City may deduct and retain the amount of such charge from the amount of the next succeeding progress estimate, or from any other moneys due or that may become due to the Contractor from City. If, on completion or termination of the Contract, sums due contractor are insufficient to pay City's charges against him, City shall have the right to recover the balance from Contractor or his sureties.

7. TIME OF COMPLETION

- A. The entire work shall be brought to completion in the manner and within the time period provided for in the Contract Documents, commencing on the date of issuance of the Notice to Proceed.
- B. Failure to complete the entire work by the completion date and in the manner provided for by the Contract Documents shall subject Contractor to liquidated damages as hereinafter provided in this Agreement. Time is of the essence in these Contract Documents.

8. INSURANCE

Contractor shall maintain in full force and effect at all times during the term of the Agreement, at its sole expense, policies of insurance in accordance with the Contract Documents, including, but not limited to, Exhibit A, attached hereto and incorporated herein by reference.

9. NO WAIVER OF REMEDIES

- A. Neither the inspection by City or its agents, nor any order or certificate for the payment of money, nor any payment for, nor acceptance of the whole or any part of the work by City, nor any extensions of time, nor any position taken by City or its agents shall operate as a waiver of any provision of this Agreement or of any power herein reserved to City or any right to damages herein provided, nor shall any waiver of any breach of the Agreement be held to be a waiver of any other or subsequent breach.
- B. All remedies provided in this Agreement shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided, and City shall have any and all equitable and legal remedies which it would in any case have.

10. DETERMINATION OF DAMAGES

A. The actual fact of the occurrences of damages and the actual amount of the damages which City would suffer if the work were not completed within the specified times set forth are dependent upon many circumstances and conditions and, it is impracticable and extremely difficult to fix the actual damages. Damages which City would suffer in the event of delay include loss of the use of the project, and, in addition, expenses of prolonged employment of an architectural and engineering staff; costs of administration, inspection, and supervision; and the loss suffered by the public within the City of Folsom by reasons of the delay in the completion of the project to serve the public at the earliest possible time.

B. Accordingly, the parties hereto agree, and by execution of this Agreement, Contractor acknowledges that he understands, has ascertained and agrees, that the amounts set forth herein as liquidated damages shall be presumed to be that amount of damages sustained by the failure of Contractor to complete the entire work within the times specified.

11. LIQUIDATED DAMAGES

- A. The amount of the liquidated damages to be paid by Contractor to City for failure to complete the entire work in the specified number of Working or Calendar Days (as extended, if applicable) will be (\$) for each Calendar Day, continuing to the time at which the work is completed.
- B. Such amount is the actual cash value agreed upon as the loss to City resulting from Contractor's delay.

12. TERMINATION AFTER ALLOTTED WORKING OR CALENDAR DAYS

- A. In addition to any rights it may have, City may terminate this Contract at any time after the allotted number of Working or Calendar Days as adjusted by any extensions of time for excusable delays that may have been granted.
- B. Upon such termination, Contractor shall not be entitled to receive any compensation for services rendered by him before or after such termination, and he shall be liable to City for liquidated damages for all periods of time beyond such termination date until the work is completed.

13. CONTRACTOR BANKRUPT

- A. If Contractor should commence any proceeding under the Bankruptcy Act, or if contractor be adjudged a bankrupt, or if Contractor should make any assignment for the benefit of creditors, or if a receiver should be appointed on account of Contractor's insolvency, then the City Council may, without prejudice to any other right or remedy, terminate the Contract and complete the work by giving notice to Contractor and his surety according to the provisions of Article 5 of the General Provisions.
- B. City shall have the right to complete, or cause completion of the work, all as specified in the General Provisions of the Standard Specifications.

14. PERFORMANCE AND PAYMENT BONDS

- A. The Contractor shall, before beginning said work, file two bonds with the City, each made payable to the City. These bonds shall be issued by a Surety Company authorized to do business in the State of California, and shall be maintained during the entire life of the Contract at the expense of the Contractor.
 - 1. One bond shall be in the amount of one hundred percent (100%) of the Contract and shall guarantee the Faithful Performance of the Contract.
 - 2. The second bond shall be the Payment Bond required by Part 4, Title 15, Chapter 7, Division Three of the Civil Code of the State of California and shall be in the amount of one hundred percent (100%) of the Contract.
- B. Any alteration or alterations made in any provision of this Contract shall not operate to release any surety from liability on any bond required hereunder and the consent to make such alterations is hereby given, and any surety on said bonds hereby waives the provisions of Section 2819 of the Civil Code.
- C. Bonds shall only be accepted from an "Admitted surety insurer," which means an insurer to which the Insurance Commissioner has issued a certificate of authority to transact surety insurance in this state. **Contractor must submit** the original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws or other instrument entitling or authorizing

the person who executed the bond to do so.

- D. All bonds submitted shall include the following:
 - 1. Full name and address of the Contractor Surety, and the City;
 - 2. Contract Date:
 - 3. Exact Contract Sum;
 - 4. Project Name and Address;
 - 5. Signature of the Contractor
 - 6. Corporate Seal, if applicable;
 - 7. Signature of Authorized Surety Representative;
 - 8. Notarization of the Contractor and Surety;
 - 9. Power of Attorney; and
 - 10. Local contact for surety, with name, phone nmber, and address to which legal notices may be sent.

15. SUBSTITUTION OF SECURITIES OF MONEY WITHHELD

- A. At any time prior to final payment, Contractor may request substitution of securities for any money withheld by the City to ensure performance of the Contract.
- B. At the expense of the Contractor, securities equivalent to the money withheld may be deposited with the City or with an approved financial institution as escrow agent according to a separate Security Agreement.
- C. Securities eligible for substitution shall include those listed in Section 16430 of the Government Code or bank or savings and loan certificates of deposit. A fee set by the City Council shall be charged for such substitution.

16. LABOR CODE AND PUBLIC CONTRACT CODE COMPLIANCE

- A. City affirmatively identifies this project as a "public work" as that term is defined by Labor Code section 1720, and the project is, therefore, subject to prevailing wages under Labor Code section 1771.
- B. Contractor and its subcontractors shall fully comply with all the provision of the California Labor Code governing the performance of pubic works contracts including, but not limited to, <u>payment of prevailing wages</u>, limitations on time worked, compliance with apprentice requirements, maintenance of payroll records, <u>posting of wages at job site</u> and prohibitions against discrimination.
- C. Notice: This project may be subject to the skilled and trained workforce requirement under Public Contract Code section 2600. A "skilled and trained workforce" is defined by Public Contract Code section 2601(d).

17. UNFAIR COMPETITION

The following provision in included in this agreement pursuant to California Public Contract Code §7103.5.

"In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assigning 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. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the

awarding body tenders final payment to the contractor, without further acknowledgment by the parties."

18. GENERAL LIABILITY OF CONTRACTOR

Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, light, heat, utilities, transportation and other facilities and services necessary for the execution and completion of the Work in accordance with the Contract Documents and any applicable code or statute, whether or not specifically described herein, as long as same is reasonably inferable therefrom as being necessary to produce the intended results, whether temporary or permanent, and whether or not incorporated or to be incorporated in the Work. The mention of any specific duty or liability of Contractor and, any reference to any specific duty or liability shall be construed to be for the purpose of explanation.

19. AUTHORITY OF THE CITY

- A. The City will decide all questions regarding the quality and acceptability of materials furnished, work performed, and rate of progress of the Work. The City will decide all questions regarding the interpretation and fulfillment of the Contract on the part of the Contractor, and all questions as to the rights of different prime contractors involved with the Work. The City will determine the amount and quality of the Work performed and materials furnished for which payment is to be made under the Contract.
- B. The City will administer its authority through a duly designated representative identified at the pre-construction conference. The Contractor and the City's designated representative (the Owner's Representative) shall make good faith attempts to resolve disputes that arise during the performance of the Work.
- C. Any order given by the City not otherwise required by the Contract to be in writing shall be given or confirmed by the City in writing at the Contractor's request. Such request shall state the specific subject of the decision, order, instruction, or notice and, if it has been given orally, its date, time, place, author and recipient.
- D. Any plan or method suggested to the Contractor by the City, the Architect or Consulting Engineer, or the Owner's Representative, but not specified or required in writing, if adopted or followed in whole or in part by the Contractor, shall be used at the risk and responsibility of the Contractor. The City assumes no responsibility.

20. RESPONSIBILITY OF THE CONTRACTOR

- A. The Work shall be under the Contractor's responsible care and charge until completion and final acceptance, and the Contractor shall bear the entire risk of injury, loss, or damage to any part by any cause. The Contractor shall rebuild, repair, restore, and make good all injuries, losses or damage to any portion of the Work or the materials occasioned by any cause, and shall bear the entire expense.
- B. The mention herein of any specific duty or responsibility imposed upon the Contractor shall not be construed as a limitation or restriction of any other responsibility or duty imposed upon the Contractor by the Contract, said reference being made herein merely for the purpose of explaining the specific duty or responsibility.
- C. The Contractor shall do all of the work and furnish all labor, materials, tools, equipment, and appliances, except as otherwise herein expressly stipulated, necessary or proper for performing and completing the Work herein required, including any change order work or disputed work directed by the City in conformity with the true meaning and intent of the Contract Documents.

21. CORRECTION OF WORK

- A. The Contractor shall promptly correct all work rejected by the Owner's Representative, Project Inspector or the Architect or Consulting Engineer as defective or as failing to conform to the Contract Documents, whether observed before or after final completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected work including compensation for the Architect's, Consulting Engineer's Project Inspector's and the Owner's Representative's additional services.
- B. If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within three (3) days after receipt of written notice from the City to commence and continue correction of the default or neglect with diligence and promptness, the City may, without prejudice to any other remedy it may have, correct the deficiencies and may further elect to complete that portion of the Work through such means as the City may select, including the use of a new contractor. In such case, an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting the deficiencies, and any other appropriate costs, including compensation for the Architect's or Consulting Engineer's, the Project Inspector's and the Owner's Representative's additional services made necessary by the default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover that amount, the Contractor shall pay the difference to the City.
- C. If within two (2) years after the Date of Completion and acceptance of the Work or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct any or all such work, together with any other work which may be displaced in so doing, without expense to the City, promptly after receipt of a written notice from the City unless the City has previously given the Contractor a written acceptance of such condition. The City shall issue a correction notice promptly after discovering the condition. The Contractor shall notify the City upon completion of repairs. This obligation shall survive termination of the Contract with respect to work in place prior to termination.
- D. The Contractor shall bear the cost of making good work destroyed or damaged by such correction or removal.
- E. Nothing contained in this Section shall be construed to establish a period of limitation with respect to any other obligations which the Contractor might have under the Contract Documents or by operation of law. The establishment of the time period of two (2) years after the Date of Completion, or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents, relates only to the specific obligation of the Contractor to correct the Work and has no relationship to the time within which an action may be commenced to establish the Contractor's liability with respect to its obligations other than specifically to correct the work

22. GUARANTEE REQUIRED

A. In addition to any guarantees required elsewhere by the Contract Documents, the Contractor shall guarantee the Work for a minimum of two (2) years from and after the recordation of the Notice of Completion and completion of all contract obligations by the Contractor, including formal acceptance of the entire Project by the City. The Contractor specifically waives any right to claim or rely on the statutory definition of completion set forth in Civil Code section 3086. The

Contractor specifically acknowledges and agrees that completion shall mean the Contractor's complete performance of all Work required by the Contract Documents, amendments, change orders, construction change directives and punch lists, and the City's formal acceptance of the entire Project, without regard to prior occupancy, substantial completion doctrine, beneficial occupancy, or otherwise. Such guarantee shall be made on the form provided by the City.

- B. The guarantee period for corrected defective work shall continue for a duration equivalent to the original guarantee period.
- C. Such guarantee is in addition to, and not in lieu of, the City's rights to enforce this Contract in all respects.

23. NO CHANGES WITHOUT CONSENT

- A. No extra work shall be performed, and no change shall be made, except pursuant to a written Change Order or Proposed Change Order signed by the City, or by CCD signed by either the City or the Owner's Representative, stating that the extra work or change is authorized, and no claim for any addition to the Contract Sum or Contract Time shall be valid unless so authorized; provided, however, that nothing in this Article shall excuse the Contractor from proceeding with the prosecution of the work so changed. The Contractor shall, when required by the Owner's Representative, furnish an itemized breakdown of the quantities and prices used in computing the value of any change requested by the Contractor, or that may have been ordered by the City.
- B. Change Orders shall specify the cost adjustments associated therewith, and in no case shall the City pay or become liable to pay any sums different than those specified or those established under Sections 9.04 and 9.05.
- C. Substitutions are considered change orders.

24. CHANGE ORDERS

- A. Subject to legal requirements relating to competitive bidding, the City may require changes in, additions to, or deductions from the work to be performed or the materials to be furnished pursuant to the Contract Documents. Changes may be made pursuant to a written Change Order signed by the City, which shall state the agreement of the City, the Contractor, and the Architect or Consulting Engineer upon all of the following:
 - 1. The scope of the change in the Work
 - 2. The amount of the adjustment in the Contract Sum, if any; and
 - 3. The extent of the adjustment in the Contract Time, if any.
- B. All adjustments to the Contract Sum or the Contract Time must be approved by the City.
- C. Signature by the Contractor on the Change Order constitutes its agreement with and acceptance of the adjustments in the Contract Sum and Contract Time, if any, set forth in the Change Order as full and complete satisfaction of any direct or indirect additional cost and/or time incurred by the Contractor in connection with performance of the change work.

25. CONSTRUCTION CHANGE DIRECTIVE/CCD

Changes also may be made pursuant to a CCD, which shall direct a change in the Work and state a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. A CCD shall be used in the absence of total agreement on the terms of a Change Order, or when time does not permit processing of a Change Order prior to implementation of the change. CCD's shall be approved by the City and the Architect or Consulting Engineer, but need not be signed by the Contractor. Upon receipt of a CCD, the Contractor shall promptly proceed with the change in the work involved. It is the intent of the City that all CCD's will be converted into a

Change Order. When a CCD is used because time does not permit processing of a Change Order prior to implementation of the change, signature by the Contractor on the CCD constitutes its agreement with and acceptance of the adjustments in the Contract Sum and Contract Time, if any, set forth in the CCD as full and complete satisfaction of any direct or indirect additional cost and/or time incurred by the Contractor in connection with performance of the change work.

26. EXTENSIONS OF TIME; UNAVOIDABLE DELAYS

- A. The Contractor shall not be granted an extension of time except on the issuance of a Change Order by the City, upon a finding of good cause for such extension.
- B. As used herein, the following terms shall have the following meanings:
 - 1. "Excusable Delay" means any delay in completion of the Work beyond the expiration of the Contract Time caused by conditions beyond the control and without the fault or negligence of the Contractor. These events may include strikes, embargoes, fire, unavoidable casualties, national emergency, and stormy and inclement weather conditions in which the Owner's Representative and Project Inspector agree that work on the critical path cannot continue. The financial inability of the Contractor or any Subcontractor or supplier and any default of any Subcontractor, without limitation, shall not be deemed conditions beyond the Contractor's control. An Excusable Delay may entitle the Contractor to an extension of the Contract Time, in accordance with this Section, but shall not entitle the Contractor to any adjustment of the Contract Sum.
 - 2. "Compensable Delay" means any delay in the completion of the Work beyond the expiration date of the Contract Time caused solely by the wrongful acts of the City and which delay is unreasonable under the circumstances and not within the contemplation of the parties. A Compensable Delay may entitle the Contractor to an extension of the Contract Time, in accordance with this Section and/or an adjustment of the Contract Sum. Except as provided herein, the Contractor shall have no claim for damage or compensation for any delay, interruption, hindrance, or disruption.
 - 3. "Inexcusable Delay" means any delay in completion of the Work beyond the expiration of the Contract Time resulting from causes other than those listed in Subparagraphs A1 and A2, above. An Inexcusable Delay will not entitle the Contractor to an extension of the Contract Time or an adjustment of the Contract Sum.
- C. The Contractor may make a claim for an extension of the Contract Time, for an Excusable Delay or a Compensable Delay, subject to the following:
 - 1. If an Excusable Delay and a Compensable Delay occur concurrently, the maximum extension of the Contract Time shall be the number of days from the commencement of the first delay to the cessation of the delay which ends last. Any adjustment of the Contract Sum shall be in accordance with Article 9 and shall be based only on the non-concurrent portion of any Compensable Delay.
 - 2. If an Inexcusable Delay occurs concurrently with either an Excusable Delay and/or a Compensable Delay, the maximum extension of the Contract Time shall be the number of days, if any, by which the duration of the Excusable Delay and/or the Compensable Delay calculated in accordance with subparagraph B1, if applicable, exceeds the Inexcusable Delay. The duration of the concurrence is

non-compensable.

- D. Delays in the prosecution of parts or classes of the Work which do not prevent or delay the completion of the whole Work within the Contract Time are not to be considered Excusable or Compensable.
- E. Float or slack time is the amount of time between the earliest start date and the latest start date or between the earliest finish date and the latest finish date of activities on the Contract Schedule. No time extensions or delay costs will be allowed for delays caused by the City on paths of activities containing float, providing such delay does not exceed the float time per the latest updated version of the approved Contract Schedule.
- F. Whenever the Contractor foresees any delay in the prosecution of the Work, and in any event immediately upon the occurrence of any delay which the Contractor regards as good cause for an extension, the Contractor shall notify the Owner's Representative in writing of the delay. The notice shall specify with detail the cause asserted by the Contractor to constitute good cause for an extension together with a detailed schedule analysis showing the effect of the delay on the critical path of the Contract Schedule and a quantification of the length of the requested extension of time. Failure of the Contractor to submit such a notice within seven (7) Calendar Days after the initial occurrence of the event giving rise to the delay shall constitute a waiver by the Contractor of any request for extension, and no extension shall be granted as a consequence of such delay.
- G. The City shall have no obligation to consider any time extension request unless the Contractor has complied with the requirements of the Contract Documents, including, without limitation, giving the required seven (7) days' notice and submitting the detailed supporting schedule analysis. The City shall not be responsible or liable to the Contractor for any constructive acceleration due to failure of the City to grant time extensions under the Contract Documents, should the Contractor fail to comply with the submission and justification requirements of the Contract Documents for time extension requests. The Contractor's failure to perform in accordance with the Contract Schedule shall not be excused because the Contractor has submitted time extension requests, unless and until such requests are approved by the City.
- H. Upon receipt of a request for extension, the Owner's Representative shall conduct an investigation of the facts asserted by the Contractor to constitute good cause for an extension. The Owner's Representative shall report the results of this investigation, as well as the propriety of the time extension requested, to the Contractor in writing within ten (10) Calendar Days of receipt of the request and shall indicate whether it will recommend for or against the extension. Upon receiving the Owner's Representative's recommendation, the Contractor may either concur in the recommendation, or reject the recommendation and proceed with a notice of potential claim and claim as provided for in Article 9.

27. DISCRETIONARY TIME EXTENSIONS FOR BEST INTEREST OF THE CITY

- A. The City reserves the right to extend the time for completion of the Work if the City determines that such extension is in the best interest of the City. In the event that a discretionary extension is granted at the request of the Contractor, the City shall have the right to charge to the Contractor all or any part, as the City may deem proper, of the actual cost of construction management, engineering, inspection, supervision, incidental and other overhead expenses that accrue during the period of the extension, and to deduct all or any portion of that amount from the final payment for the Work.
- B. In the event a discretionary time extension is ordered over the objection of the Contractor, and the decision rests solely with the City and is not legally compelled for any cause, the Contractor shall be entitled to a contract change pursuant to Article 9 adjusting the price paid to reflect the actual costs incurred by the Contractor as a direct result of the delay, upon its written application therefor, accompanied with such verification of costs as the Owner's Representative requires. The decision of the City on any discretionary time extension and the costs thereof shall be final

28. TERMINATION FOR CONVENIENCE

- A. The City may at any time and for any reason, terminate, in whole or in part, Contractor's Work at the City's convenience. Termination shall be by written notice to Contractor. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue Contractor's work and the placing of orders for materials, facilities and supplies in connection therewith, and shall, if requested, make every reasonable effort to procure cancellation of all existing orders or contracts upon terms satisfactory to the City, or at the option of the City, the City shall have the right to assume those obligations directly, including all benefits to be derived therefrom. Contractor hereby assigns to the City all of its interest in said orders and/or contracts, and the assignment of said orders and/or contracts shall be effective upon notice of acceptance by the City in writing, and only as to those orders and/or contracts which the City designates in writing. Following receipt of notice of termination, Contractor shall thereafter do only such work as may be necessary to preserve and protect portions of its work already in progress and to protect materials and equipment on or in transit to the Project.
- B. Upon such termination, Contractor shall be entitled to payment only as follows: (1) Contractor's direct, actual cost of the Work allocable to the portion of the Work completed in conformity with the Contract, but in no event to exceed the amount of the Contract Sum allocable to the portion of the Work completed in conformity with the Contract; plus (2) previously unpaid costs of any items delivered to the Project Site which were fabricated for subsequent incorporation in the Work, but in no event to exceed the portion of the Contract Sum allocable to said items; plus (3) an allowance of ten percent (10%) of the foregoing costs for Contractor's overhead and profit; plus (4) any proven losses with respect to materials and equipment directly resulting from the termination; plus (5) reasonable demobilization costs. The costs referred to in this Section shall be calculated and documented as required for a Change Order under Article 9 of these General Provisions, except that markup shall be only as allowed by this Section. There shall be deducted from such sums the amount of any payments made to Contractor prior to the date of the termination of this Contract. Contractor shall not be entitled to any claim or claim of lien against the City for any additional compensation or damages in the event of such termination and payment beyond that provided for in this Section.
- C. In connection with any termination for convenience, Contractor shall allow the City and any of its authorized representatives to inspect, audit, or reproduce any records to the extent necessary for the City to evaluate and verify the costs incurred by Contractor in performing the Work, including direct and indirect costs such as overhead allocations. Contractor will make this material available upon 48-hours' written notice from the City. The City may inspect and copy, from time to time and at reasonable times and places, any and all information, materials and data of every kind and character (hard copy, as well as computer readable data if it exists), including without limitation, books, papers, documents, subscriptions, recordings, estimates, price quotations, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, superintendent reports, drawings, receipts, vouchers, monthly, quarterly, yearly or other financial statements, and any and all other information or documentation that may, in the judgment of the City have any bearing on or pertain to any matters, rights, duties, or obligations under or covered by the Contract Documents. Such records shall include but not be limited to, the following: accounting records, payroll records, job cost reports, job cost history, margin analysis, written policies and procedures, subcontract files (contracts, correspondence, change order files, including documentation covering negotiated settlements), backcharge logs and supporting documentation, general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends, and any other documents customarily maintained by contractors performing work on public works projects or that the City otherwise deems necessary to substantiate charges related to a Termination.
- D. If this Contract is terminated for default under Section 5.25, and if it is later determined that the

default was wrongful, such default termination automatically shall be converted to and treated as a termination for convenience under this Section. In such event, Contractor shall be entitled to receive only the amounts payable under this Section, and Contractor specifically waives any claim for any other amounts or damages, including any claim for consequential damages or lost profits.

29. TERMINATION FOR CAUSE

- A. The City may terminate the Contract, pursuant to the provisions of this Article, for the following causes:
 - 1. The Contractor is insolvent or has made a general assignment for the benefit of creditors, or a receiver has been appointed on account of the insolvency of the Contractor.
 - 2. The Contractor or any of Subcontractors violate any of the provisions of the Contract Documents or fail to perform the work within the time specified in the current Contract Schedule.
 - 3. The Contractor or any of its Subcontractors should fail to make prompt payment to Subcontractors or material suppliers for material or for labor as required by statute
 - 4. The Contractor or Subcontractor persistently disregards laws, ordinances, or the instructions of the Owner's Representative, Architect, Consulting Engineer or the City.
 - 5. The Contractor fails to abide by a Stop Work Notice or fails to correct rejected work or materials as required.
 - 6. The Contractor fails to provide and keep in full force and effect all required insurance, or fails to cause all Subcontractors to so comply.
 - 7. The Contractor fails to supply a sufficient number of properly skilled workers or proper materials.
 - 8. The Contractor commits any substantial violation of the terms and conditions of the Contract Documents which the City, in its sole discretion, finds to be a material breach of the Contract.
- B. The City The City may, without prejudice to any other right or remedy, give written notice to the Contractor and its surety or sureties of its intention to terminate the Contract.
- C. Unless within seven (7) Calendar Days of the delivery of such notice, the Contractor shall cease such violation and make satisfactory arrangements for a correction thereof, which arrangements are set forth in a written agreement signed by the Contractor and the City, the Contractor's right to complete the Work shall cease and terminate.
- D. In the event of any such termination, the City shall immediately give written notice thereof to the surety and to the Contractor and the surety shall have the rights and obligations set forth in the performance bond. If the City is forced to take over the Work, it may prosecute the same to completion by contract or by any other method it may deem advisable, for the account and at the expense of the Contractor, and the Contractor and its sureties shall be liable to the City for any excess costs, including management, supervision, and design support, occasioned thereby. In such event, the City may, without liability, take possession of and utilize in completing the Work, the Contractor's materials whether stored at the Site or elsewhere, that are necessary for completion. Contractor hereby assigns to the City all of its interest in orders and/or contracts existing at the time of termination. The assignment of said orders and/or contracts shall be effective upon notice of acceptance by the City in writing, and only as to those orders and/or contracts which the City designates in writing. Whenever the Contractor's right to proceed is terminated, the Contractor shall not be entitled to receive any further payment until the Work is finished.

30. TERMINATION AFTER CONTRACT TIME

- A. In addition to any rights it may have, the City may terminate this Contract at any time after the Contract Time, as adjusted by any extensions of time that the City may have granted.
- B. Upon such termination, in addition to the Contractor's obligations under Section 5.29 and the other provisions of the Contract Documents, the Contractor shall not be entitled to receive any compensation for services rendered before or after such termination until the Work is completed, and the Contractor shall be liable to the City for liquidated damages for all periods of time from such termination date until the Date of Completion, as well as for all losses incurred by the City in completing the Work.

31. INDEMNIFICATION

- A. The Contractor shall defend, indemnify and save harmless the City, the Owner's Representative, the Architect, the Consulting Engineer and any of their respective officers, officials, agents, and employees from any and all claims, demands, damages, costs, expenses, attorney's fees, or liability arising out of or in any way connected with the performance or attempted performance of the provisions hereof, or in any way arising out of or connected with this Contract, including but not limited to, inverse condemnation, equitable relief, or any acts or omissions, any wrongful act, or any negligent act or omission to act, whether active or passive, on the part of the Contractor or any of its agents, employees, independent contractors, Subcontractors or suppliers; provided, further, without limiting the foregoing, that the indemnity is intended to apply to any wrongful acts, or any actively or passively negligent acts or omissions to act, committed jointly or concurrently by the Contractor, the Contractor's agents, employees, independent contractors, Subcontractors or suppliers, and the City, its agents, employees, or independent contractors.
- B. The indemnity obligation expressly extends to and includes, but is not limited to, any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of damages to adjacent property caused by the conduct of the Work.
- C. The indemnity obligation expressly extends to and includes, but is not limited to, any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of the violation by the Contractor, the Contractor's agents, employees, or independent contractors, Subcontractors or suppliers of any provisions of federal, state or local law, including applicable administrative regulations.
- D. The indemnity obligation also expressly extends to and includes, but is not limited to, any claims, demands, damages, costs, expenses, or liability occasioned by injury to or death of any person, or any property damage to property owned by any person while on or about the Site or as a result of the Work, whether such persons are on or about the Site by right or not, whenever the Work is alleged to have been or may have been a contributing cause in any degree whatsoever.
- E. Nothing contained in the foregoing indemnity provisions shall be construed to require the Contractor to indemnify the City in contravention of Section 2782 of the Civil Code for the sole negligence or willful misconduct of the City or its agents, employees or independent contractors.
- F. In claims against any person or entity herein indemnified that are made by an employee of the Contractor or an employee of any of the Contractor's agents, independent contractors, Subcontractors or suppliers, a person indirectly employed by the Contractor or by any of the Contractor's agents, independent contractors, Subcontractors or suppliers, or anyone for whose acts the Contractor or any of the Contractor's agents, independent contractors, Subcontractors or suppliers may be liable, the indemnification obligation herein shall not be limited by any limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or the Contractor's agents, independent contractors, Subcontractors or suppliers

- under workers' compensation acts, disability acts, or other employee benefit acts.
- G. The indemnification obligations herein shall not be limited by any assertion or finding that the person or entity indemnified is liable by reason of a non-delegable duty.
- H. The indemnities set forth herein shall not be limited by the insurance requirements set forth in the Contract Documents.
- I. The indemnification requirements herein set forth shall extend to claims occurring after this Contract is terminated as well as while it is in force.

32. ASSIGNMENT

Neither this Agreement nor any rights herein of Contractor shall be assigned without the written consent of City first obtained.

33. AMENDMENTS

Any modification or amendment of any provision of this agreement shall be in writing and must be executed by both parties hereto.

34. INCIDENTAL BENEFICIARIES

It is expressly understood and agreed that the enforcement of these terms and conditions shall be reserved to City and Contractor. Nothing contained in the Agreement shall give or allow any claim or right of action whatsoever by any third person. It is the express intent of the City and Contractor that any such person or entity, other than City and Contractor, receiving services or benefits under this Agreement shall be deemed an incidental beneficiary.

35. MISCELLANEOUS PROVISIONS

- A. **Attorneys' Fees**: In the event an action or proceeding is instituted by either party for the breach or enforcement of any provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees according to law.
- B. This Agreement shall be deemed to be made in, and the rights and liabilities of the parties, and the interpretation and construction of the Agreement governed by and construed in accordance with the laws of the State of California. Any legal action arising out of this Agreement shall be filed in and adjudicated by a state court in the County of Sacramento. State of California.
- C. **Enforceability:** If any term or provision of this Agreement is found to be void, voidable, invalid or unenforceable by a court of competent jurisdiction under the laws of the State of California, any and all of the remaining terms and provisions of this Agreement shall remain binding.
- D. **Time:** All times stated herein or in any other contract documents are of the essence.
- E. **Binding:** This Agreement shall bind and inure to the heirs, devisees, assignees and successors in interest of Contractor and to the successors in interest of City in the same manner as if such parties had been expressly named herein.
- F. **Surviorship:** Any responsibility of Contractor for warranties, insurance, indemnity, record keeping or compliance with laws with respect to this Agreement shall not be invalidated due to the expiration, termination or cancellation of this Agreement.
- G. **Waiver:** In the event that either City or Contractor shall at any time or times waive any breach of this Agreement by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this Agreement, whether of the same or any other covenant, condition or obligation. Waiver shall not be deemed effective until and unless signed by the waiving party.

36. ENTIRE AGREEMENT

This instrument and any attachments hereto constitute the entire Agreement between the City and Contractor concerning the subject matter hereof and supersedes any and all prior oral and written communications between the parties regarding the subject matter hereof.

37. AUTHORITY TO EXECUTE

The person or persons executing this Agreement on behalf of the parties hereto warrants and represents that he/she/they has/have the authority to execute this Agreement on behalf of their entity and has/have the authority to bind their party to the performance of its obligations hereunder.

38. COUNTERPARTS

This agreement may be executed in one or more counterparts, each of which shall be deemed an original, and will become effective and binding upon the parties at such time as all of the signatories hereto have signed a counterpart of this Agreement. All counterparts so executed shall constitute one Agreement binding on all of the parties hereto, notwithstanding that all of the parties are not signatory to the same counterpart.

SIGNATURE PAGE IMMEDIATELY FOLLOWS

14

IN WITNESS WHEREOF, the parties hereto have signed the Agreement on the date set forth opposite their names.

CONTRACTOR:	(Must be signed by two officers of the corporation in compliance with Corporations Code section 313.)		
Date	Tax I.D. Number		
Signature	Signature		
Print Name	Print Name		
Title	Title		
CITY OF FOLSOM, A Municipal Corporation:			
Date	Elaine Andersen, City Manager		
ATTEST:	FUNDING AVAILABLE:		
Christa Freemantle, City Clerk Date	Stacey Tamagni, Finance Director Date		
ORIGINAL APPROVED AS TO CONTENT:	ORIGINAL APPROVED AS TO FORM:		
, Director Date	Steven Wang, City Attorney Date		

NOTICE: SIGNATURE(S) ON BEHALF OF CONSULTANT MUST BE NOTARIZED.

A certificate of acknowledgment in accordance with the provisions of California Civil Code section 1189 must be attached for each person executing this agreement on behalf of contractor. This section provides, at part (b): "Any certificate of acknowledgment taken in another place shall be sufficient in this state if it is taken in accordance with the laws of the place where the acknowledgment is made."

EXHIBIT A

INSURANCE

NOTE: The word "Contractor" in this Exhibit refers to either "Contractor" or "Contractor" as the term is used in the Agreement/Contract to which this Exhibit is attached.

A. During the term of this Agreement, Contractor shall maintain in full force and effect at all times during the term of the contract, at its sole cost and expense, policies of insurance as set forth herein:

1. General Liability:

- a. General liability insurance including, but not limited to, protection for claims of bodily injury and property damage liability, personal and advertising injury liability and product and completed operations liability.
- b. Coverage shall be at least as broad as Insurance Services Office Commercial General Liability coverage form CG 0001 (occurrence).
- c. Claims-made coverage is not acceptable.
- d. The limits of liability shall not be less than:

Each occurrence:

One Million Dollars (\$1,000,000)

Products & Completed Operations:

One Million Dollars (\$1,000,000)

One Million Dollars (\$1,000,000)

- e. If a general aggregate limit of liability is used, the minimum general aggregate shall be twice the 'each occurrence' limit or the policy shall contain an endorsement stating that the general aggregate limit shall apply separately to the project that is the subject of the contract.
- f. If a products and completed operations aggregate limit of liability is used, the minimum products and completed operation aggregate shall be twice the 'each occurrence' limit or the policy shall contain an endorsement stating that the products and completed operations aggregate limit shall apply separately to the project which is the subject of the contract.
- g. If the Contractor maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

2. Automobile Liability:

- a. Automobile liability insurance providing protection against claims of bodily injury and property damage arising out of ownership, operation, maintenance, or use of owned, hired, and non-owned automobiles.
- b. Coverage shall be at least as broad as Insurance Services Office Automobile Liability coverage form CA 0001, symbol 1 (any auto).
- c. The limits of liability per accident shall not be less than:

Combined Single Limit One Million Dollars (\$1,000,000)

d. If Automobile Liability coverage, as required above, is provided by the Commercial General Liability form, the General Liability policy shall include an endorsement providing automobile liability as required above.

3. Workers' Compensation

- a. Workers' Compensation Insurance, with coverage as required by the State of California (unless the Contractor is a qualified self-insurer with the State of California), and Employer's Liability coverage.
- b. Employer's Liability Coverage with a limit not less than \$1,000,000 per accident for bodily injury and disease.
- c. Contractor shall sign and file with the City department responsible for this Agreement/Contract the Worker's Compensation Certificate contained in the Project Manual.
- 4. Insurance Required in the Supplementary Conditions

Contractor shall be required to comply with all conditions as stipulated in the Standard Construction Specifications, any supplementary conditions and any special provisions as applicable.

5. Professional Liability Insurance

If required errors and omissions, malpractice or professional liability insurance with coverage of not less than \$1,000,000 per claim.

- 6. Other Insurance Provisions
 - a. The Contractor's General Liability and Automobile Liability policies shall contain, or be endorsed to contain, the following provisions:
 - i. The City, its officials, employees, agents and volunteers shall be covered and specifically named as additional insureds on a separate endorsement as respects liability arising out of activities performed by or on behalf of the Contractor, products and completed operations of the Contractor, premises owned, occupied, or used by the Contractor, or automobiles owned, leased, hired, or borrowed by the Contractor in a form acceptable to the City Attorney.
 - ii. The Endorsement requirement may be satisfied with express provisions in the insurance policy(ies) which identifies any person or entity required to be included as an insured under the policy. A copy of the declarations page identifying the policy number, and pertinent provisions in the policy providing additional insured coverage shall be provided to the City.
 - iii. The policy shall contain no special limitations on the scope of coverage afforded to the City, its officials, employees, agents or volunteers.
 - b. For any claims related to the project, the Contractor's General Liability and Automobile insurance coverage shall be primary insurance in their coverage of the City and its officers, officials, employees, agents, or volunteers, and any insurance or self-insurance maintained by the City, its officers, officials, employees, agents or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting or other provisions of the policies on the part of the Contractor, including breaches of warranties, shall not affect coverage provided to the City, its officers, officials, employees, agents or volunteers.
 - d. The Contractor's Workers Compensation and Employer's Liability policies shall contain an endorsement that waives any rights of subrogation against the City, its

- officers, officials, employees, agents, and volunteers.
- e. Each insurance policy shall state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits, non-renewed, or materially changed except after 30 days prior written notice by certified mail has been given to the City. Ten days prior written notice by certified mail shall be given to the City in the event of cancellation due to nonpayment of premium.
- Acceptability of Insurers
 Insurance is to be placed with insurers with a Bests' rating of no less than A:VII.
- 8. The Contractor shall furnish the City with Certificates of Insurance and endorsements or insurance binders, signed by a person authorized by the insurer to bind coverage on its behalf, evidencing the coverage required by this section, the Standard Specifications, Special Provisions and/or any Supplementary Conditions. The Contractor shall furnish complete, certified copies of all required insurance policies, including original endorsements specifically required hereunder if requested.
- 9. The Contractor shall report, by telephone to the Project Manager within 24 hours, and also report in writing to the City within 48 hours, after Contractor or any Subcontractors or agents have knowledge of, any accident or occurrence involving death of or serious injury to any person or persons, or damage in excess of Ten Thousand Dollars (\$10,000) to property of the City or others, arising out of any work done by or on behalf of the Contractor as part of the contract.
- 10. Such report shall contain:
 - a. the date and time of the occurrence,
 - b. the names and addresses of all persons involved, and
 - c. a description of the accident or occurrence and the nature and extent of the injury or damage.
- 11. The City, at its discretion, may increase the amounts and types of insurance coverage required hereunder at any time during the term of the contract by giving 30 days written notice.
- 12. If the Contractor fails to procure or maintain insurance as required by this section, the Standard Specifications, and any Supplementary Conditions, or fails to furnish the City with proof of such insurance, the City, at its discretion, may procure any or all such insurance. Premiums for such insurance procured by the City shall be deducted and retained from any sums due the Contractor under the contract.
- 13. Failure of the City to obtain such insurance shall in no way relieve the Contractor from any of its responsibilities under the contract.
- 14. The making of progress payments to the Contractor shall not be construed as relieving the Contractor or its Subcontractors of responsibility for loss or direct physical loss, damage, or destruction occurring prior to final acceptance by the City.
- 15. The failure of the City to enforce in a timely manner any of the provisions of this section shall not act as a waiver to enforcement of any of these provisions at any time during the term of the contract.
- 16. In the event Contractor carries Excess Liability Coverage, the Excess Liability Coverage shall apply to any and all claims related to the project on a primary and non-contributory basis, and the City's insurance or self-insurance coverage shall be excess to the Contractor's Excess Liability Coverage.

PAYMENT BOND

BOND NO.:
PREMIUM:
City of Folsom
KNOW ALL PERSONS BY THESE PRESENTS: THAT WHEREAS, the CITY OF FOLSOM (hereinafter referred to as "CITY") has awarded to
WHEREAS, the work to be performed by Principal is more particularly set forth in the Contract Documents for the Project dated, (hereinafter referred to as the "Contract"), the terms and conditions of which are expressly incorporated herein by reference; and
WHEREAS, said Principal is required to furnish a bond in connection with said Contract providing that if Principal or any of its subcontractors shall fail to pay for any materials, provisions, or other supplies, or terms used in, upon, for or about the performance of the Work contracted to be done, or for any work or labor done thereon of any kind the Surety on this bond will pay the same together with a reasonable attorney's fee in case suit is brought on the bond.
NOW, THEREFORE, we, the undersigned Principal and
THE CONDITION OF THIS OBLIGATION IS SUCH that if the Principal, his or its subcontractors, heirs, executors, administrators, successors, or assigns, shall fail to pay for any materials, provisions, or other supplies or machinery used in, upon, for or about the performance of the Work contracted to be done, or for work or labor thereon of any kind, or fail to pay any of the persons named in California Civil Code Section 9100, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Principal and his subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to such work and labor, and all other applicable laws of the State of California and rules and regulations of its agencies, then said Surety will pay the same in or to an amount not exceeding the sum specified herein. In case legal action is required to enforce the provisions of this bond, the prevailing party shall be entitled to recover reasonable attorneys' fees in addition to court costs, necessary disbursements and other consequential damages. In addition to the provisions hereinabove, it is agreed that this bond will inure to the benefit of any and all persons, companies and corporations

entitled to make claims under Section 9100 of the California Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

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

IN WITNESS WHEREOF,	e have hereunto set our hands and seals this	day of
, 2015, then	names and corporate seals of each corporate party being	g hereto
<u> </u>	signed by its undersigned representative, pursuant to the a	uthority
of its governing body.	Principal:	
	By:	
	Surety:	
APPROVED AS TO FORM	Address:	
City Attorney	Telephone:	
	Attorney in Fact:	

(Attach Attorney-In-Fact Certificate, Corporate Seal and Surety Seal. This bond must be accompanied by a current Power of Attorney Appointing the Attorney-in-Fact)

NOTICE:

A CERTIFICATE OF ACKNOWLEDGMENT IN ACCORDANCE WITH THE PROVISIONS OF CIVIL CODE SECTION 1189 MUST BE ATTACHED FOR EACH PERSON EXECUTING THIS AGREEMENT ON BEHALF OF PRINCIPAL AND SURETY.

PERFORMANCE BOND

BOND NO.:
PREMIUM: City of Folsom
KNOW ALL PERSONS BY THESE PRESENTS: THAT WHEREAS, the CITY OF FOLSOM (hereinafter referred to as "CITY") has awarded to, hereinafter designated as the "Principal" a contract for the Folsom Zoo Perimeter Fence Project (hereinafter referred to as the "Project").
WHEREAS, the work to be performed by Principal is more particularly set forth in the Contract Documents for the Project dated, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and
WHEREAS, said Principal is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.
NOW, THEREFORE, we, the undersigned Principal and as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the CITY in the sum of
THE CONDITION OF THIS OBLIGATION IS SUCH, that, if said Principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the two-year guarantee of all materials and workmanship; and shall indemnify and save harmless the CITY, its officers and

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

agents, as stipulated in said Contract Documents, then this obligation shall become null and void;

The obligations of Surety hereunder shall continue so long as any obligation of Principal remains. Nothing herein shall limit the CITY's rights or Principal's or Surety's obligations under

otherwise it shall be and remain in full force and effect.

the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

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

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

Surety expressly agrees that the CITY may reject any design-builder, contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by Principal. Surety shall not utilize Principal in completing the Project nor shall Surety accept a bid from Principal for completion of the Project if the CITY, when declaring Principal in default, notifies Surety of the CITY's objection to Principal's further participation in the completion of the Project.

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

IN WITNESS WHEREOF, we	have hereunto set our hands and seals this	day of
, 2015, then na	mes and corporate seals of each corporate p	arty being hereto
affixed and these presents duly si	gned by its undersigned representative, pursua	nt to the authority
of its governing body.	Principal:	
	By:	

	Surety:	
APPROVED AS TO FORM	Address:	
City Attorney	Telephone:	
	Attorney in Fact:	

(Attach Attorney-In-Fact Certificate, Corporate Seal and Surety Seal. This bond must be accompanied by a current Power of Attorney Appointing the Attorney-in-Fact)

NOTICE:

A CERTIFICATE OF ACKNOWLEDGMENT IN ACCORDANCE WITH THE PROVISIONS OF CIVIL CODE SECTION 1189 MUST BE ATTACHED FOR EACH PERSON EXECUTING THIS AGREEMENT ON BEHALF OF PRINCIPAL AND SURETY.

GUARANTEE FORM

hereby unconditionally guarantees that the Work performed for the (Folsom Zoo Perimeter Fence Project), has been done in accordance with the requirements of the Contract therefore and further guarantees the Work of the Contract to be and remain free of defects in workmanship and materials for a period of two (2) years from and after the recordation of the Notice of Completion of the Project and completion of all Contract obligations by the Contractor, including formal acceptance of the entire Project by the City of Folsom, unless a longer guarantee period is called for by the Contract Documents, in which case the terms of the longer guarantee shall govern. The Contractor specifically waives any right to claim or rely on the statutory definition of completion set forth in Civil Code section 3086. The Contractor specifically acknowledges and agrees that completion shall mean the Contractor's complete performance of all Work required by the Contract Documents, amendments, change orders, construction change directives and punch lists, and the City of Folsom's formal acceptance of the entire Project, without regard to prior occupancy, substantial completion doctrine, beneficial occupancy, or otherwise. The Contractor hereby agrees to repair or replace any and all Work, together with any adjacent Work which may have been damaged or displaced in so doing, that may prove to be not in accordance with the requirements of the Contract or that may be defective in its workmanship or materials within the guarantee period specified, without any expense whatsoever to the City of Folsom, ordinary wear and tear and unusual abuse and neglect only excepted. The Contractor has provided contract bonds, which will remain in full force and effect during the guarantee period.

The Contractor further agrees that within ten (10) calendar days after being notified in writing by the City of Folsom of any Work not in accordance with the requirements of the contract or any defects in the Work, it will commence and prosecute with due diligence all Work necessary to fulfill the terms of this guarantee, and to complete the Work within a period of time stipulated in writing. In the event it fails to so comply, Contractor does hereby authorize the City of Folsom to proceed to have such Work done at the Contractor's expense and it will pay the cost thereof upon demand. The City of Folsom shall be entitled to all costs, including reasonable attorneys' fees, necessarily incurred upon the Contractor's refusal to pay the above costs.

The guarantee period for corrected defective work shall continue for a duration equivalent to the original guarantee period.

Notwithstanding the foregoing paragraph, in the event of an emergency constituting an immediate hazard to the health or safety of the employees of the City of Folsom, or its property or licensees, the City of Folsom may undertake at the Contractor's expense without prior notice, all Work necessary to correct such hazardous condition when it was caused by the Work of the Contractor not being in accordance with the requirements of

this contract, or being defective, and to charge the same to the Contractor as specified in the preceding paragraph.

The guarantee set forth herein is not intended by the parties, nor shall it be construed, as in any way limiting or reducing the City of Folsom's rights to enforce all terms of the Contract referenced hereinabove or the time for enforcement thereof. This guarantee is provided in addition to, and not in lieu of, the City of Folsom's rights on such contract.

ONTRACTOR'S SIGNATURE	
RINT NAME	

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entere	ed into by and between
whose address is	,
hereinafter called Owner,	whose address is
	, hereinafter called Contractor, and
7	whose address is,
, herein	after called Escrow Agent.
For the consideration hereinafter set forth, follows:	the Owner, Contractor, and Escrow Agent agree as
Contractor has the option to deposit securi	f the Public Contract Code of the State of California, ities with Escrow Agent as a substitute for retention r pursuant to the Construction Contract entered into the amount of)
dated	(hereinafter referred to as
the "Contract"). Alternatively, on written payments of the retention earnings directly the securities as a substitute for Contract within ten (10) days of the deposit. The substitution shall be at least equal to the caunder the terms of the Contract between the	request of the Contractor, the Owner shall make to the escrow agent. When the Contractor deposits earnings, the Escrow Agent shall notify the Owner market value of the securities at the time of the ash amount then required to be withheld as retention Owner and Contractor. Securities shall be held in the and shall designate the Contractor as the beneficial

- 2. The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.
- 3. When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.
- 4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.
- 5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of the Contractor and shall be

subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

- 6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- 7. The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days' written notice to the Escrow Agent from the owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.
- 8. Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities and payments of fees and charges.
- 9. Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.
- 10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:	On behalf of Contractor:	
Title	Title	
Name	Name	
Signature	Signature	
Address	Address	

On behalf of Escrow Agent:	
Title	-
Name	_
Signature	-
Address	-
At the time the Escrow Account is opened, to Agent a fully executed counterpart of this Agent a fully executed counterpart of the Agent as fully executed	he Owner and Contractor shall deliver to the Escrow greement.
IN WITNESS WHEREOF, the parties have the date first set forth above.	executed this Agreement by their proper officers on
Owner:	Contractor:
Title	Title
Name	Name
Signature	Signature

SUPPLEMENTARY CONDITIONS FOR FOLSOM CITY ZOO SANCTUARY PERIMETER FENCE PROJECT

1. Summary

- A. The following modifies and supplements the City of Folsom Department of Public Works Standard Construction Specifications, which are a part of this Contract. The above named General Conditions are modified as follows:
 - 1) Where any part of the General Conditions is modified or deleted, unaltered provisions shall remain in effect.

2. Specifications

- A. The work to be performed under this contract shall be done in accordance with the Supplementary Conditions contained herein. In these Supplementary Conditions, <u>reference is made to the most current editions of</u>:
- B. City of Folsom Standard Construction Specifications referred to herein as Standard Specifications, and
- C. California Building Code 2016 Edition as adopted by the City of Folsom effective January 2017 including but not limited to Chapter 1609.5 and Chapter 33.
- D. State Specifications, State of California.
- E. The Proposal Specifications shall govern first, followed by the Plans, Supplementary Conditions, Standard Specifications and State Specifications respectively.

3. List of Subcontractors

A. The Contractor shall perform, with the Contractor's own organization and with workers under the Contractor's immediate supervision, work of a value not less than 25 percent of the value of all work embraced in the contract. All other requirements of **Section 2.05** of the General Provisions shall remain in effect as a part of this Contract.

4. Completion Time

A. The time limit for the completion of all work is 75 (Seventy-Five) calendar days from the Notice to Proceed.

5. Interpretation of Contract Documents

- A. No oral representations or interpretation will be made to any bidder as to the meaning of the contract documents.
- B. Requests for interpretation shall be made in writing and delivered to the City <u>at least five (5)</u> days before the time announced for opening the proposals.
- C. Interpretation, where necessary, will be made by the City in the form of an addendum to the contract documents and, when issued, will be sent as promptly as is practicable to all parties to whom the bid documents have been issued. All such addenda shall become part of the contract.
- D. Requests for information regarding this procedure or other similar information shall be directed to Brad Nelson, Project Manager/Parks & Recreation Department, 50 Natoma Street, Folsom CA 95630, 916-461-6633 / email BNelson@folsom.ca.us.
- E. It shall also be the bidder's responsibility to call to the attention of the Project Manager any missing pages or drawings in the contract documents including the addenda. These items shall be brought to the attention of the Project Manager at least one (1) week prior to the bid opening date.

- F. The Contractor will be furnished, free of charge, five (5) copies of Project Manuals for execution of the Work.
- G. Any work called for in the Drawings and not mentioned in the specifications, or vice versa, shall be performed as though fully set forth in both.
- H. Work not particularly detailed, marked, or specified shall be the same as similar parts that are detailed, marked or specified.
- I. In case of conflict between the Drawings and Specifications, the Drawings shall govern in matters of quantity, the Specifications in matters of quality.
- J. The general character of the detail work is shown on the Contract Drawings.
 - 1) The Contractor will furnish shop drawings and additional details, if necessary, to more fully explain the work and it shall be considered a part of the Contract.
 - 2) Any work executed before receipt of such details, if not in accordance with it, shall be removed and replaced, or adjusted, as directed, without expense to the Owner.
 - a. Should any detail submitted later than the Contract Drawings, be in the opinion of the Contractor, more elaborate than the Contract Drawings and the Specifications indicate, written notice thereof shall be given to the Owner within five days of receipt of same.
 - b. The claim will be considered, and, if justified, said detail drawings will be amended or the extra work authorized; non-receipt of such notice shall relieve the Owner of any claim.

6. Review of Contractor's Information (Submittals)

- A. When review and checking for acceptance is required of any drawing, or information regarding materials and equipment, the Contractor shall prepare or secure, and submit for review, three (3) copies.
- B. Deliver submittals to City of Folsom Parks & Recreation Department at 50 Natoma Street, Folsom, California 95630. Attention: **Brad Nelson, Project Manager**. Submittals may also be sent electronically to BNelson@folsom.ca.us.
- C. The Project Manager, after taking appropriate action, will return one (1)-marked copy to the Contractor. The City of Folsom submittal review is performed to determine that the Submittal is in conformance with the design intent.
 - 1) "Design intent" and "design concept" shall mean the general purpose of the design or plan.
 - 2) It shall not encompass particular calculations, dimensions, quantities, or other means by which the Contractor intends to carry out the plan."
- D. Transmit each item under City of Folsom accepted form. Bind submittals with index tabs. Identify:
 - 1) Project
 - 2) Contractor
 - 3) Subcontractor
 - 4) Drawing sheet and detail number submittal refers to
 - 5) Specification section number, as appropriate
 - 6) Deviations from Contract Documents
 - 7) Provide space for City of Folsom review stamps
- E. Product Data Submittals: Each copy of product data shall be marked to identify:
 - 1) Applicable products, models, options, which bid item the submittal is related to
 - 2) Performance data
 - 3) Information unique to the Work

- 4) Manufacturers' installation instructions
- 5) Major supplier
- 6) Manufacturers' samples of standard colors, textures, and patterns for City of Folsom's selection (City of Folsom shall make selection of colors)

7. Substitutions

- A. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
 - 1) Request constitutes a representation 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 at no additional cost to the City.
 - d. Waives claims for additional costs and/or contract time which may subsequently become apparent.
- B. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals without separate written request, or when acceptance will require substantial revision of Contract Documents.
- C. City of Folsom will determine acceptability of proposed substitution.
 - 1) If, upon City of Folsom review of a substitution, it is determined by the City of Folsom that the substitution is not acceptable, for whatever reason, the Contractor shall supply the specified product or products.
- D. The City of Folsom can, at its option, require as a condition of acceptance of a substitution that the Contractor provide a credit to the City of Folsom for the difference in cost of product(s) or components, or systems proposed as a substitution.

8. Schedule of Values

- A. The Schedule of Values shall be submitted to the Project Manager along with the signed Agreement.
- B. <u>Project Manager may request copies of all Subcontractor contracts to substantiate the Schedule of Values as submitted by the Contractor.</u>
- C. Include sufficient detail under each specification section to identify materials and quantities; use additional sections as required to address items not identified under sections listed.
- D. The schedules shall be revised, as the project progresses, to list change orders, for each application for payment.

9. Shop Drawings:

- A. Before submission of each Shop Drawing or sample, the Contractor shall determine and verify all:
 - 1) Calculations
 - 2) Quantities
 - 3) Dimensions
 - 4) Specified performance criteria
 - 5) Installation requirements
 - 6) Materials
 - 7) Catalog numbers
 - 8) Similar data with respect thereto

- B. Contractor shall review or coordinate each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the work and contract documents.
- C. Contractor will stamp his approval on each sheet of Shop Drawings and verify the review in writing.
- D. At the time of each submission, the Contractor shall give the City of Folsom specific written notice of each variation, deviation, or change that the Shop Drawings or samples may have made from the requirements of the Contract Documents and, in addition, shall note specifically every variation on each Shop Drawing submitted to the City of Folsom for review and approval.

10. Review of Shop Drawings:

- A. Shop Drawings will not be checked for exactness, accuracy or correctness.
- B. The City of Folsom is entitled to rely on the Shop Drawings submitted by the Contractor as exact, accurate, and correct drawings.
- C. The City of Folsom review of Shop Drawings for deviation, variations and changes shall be limited to the deviations, variations and changes of which the Contractor has notified the City of Folsom in writing.
- D. <u>Such deviation</u>, variation and changes shall be shown on the Shop Drawings by means of a cloud or darkening of the area requiring review.
- E. Absent written notice and clouding, City of Folsom shall have no liability for review of any deviation, variation, or changes reflected in the Shop Drawings.

11. Record Drawings

- A. The Contractor shall maintain a neatly and accurately marked set of record drawings showing the final locations and layout of all mechanical, electrical, and instrumentation equipment; piping and conduit; structures; and other facilities.
- B. Drawings shall be kept current weekly, with all work instructions and change orders; mechanical, electrical, and instrumentation equipment accommodations; and construction adjustment.
- C. Drawings shall be subject to the inspection of the Project Manager at all times and progress payments, or portions thereof, may be withheld if drawings are not accurate and current.
- D. The Contractor will supply one (1) set of Record Drawings on screened mylars to the City. The Contractor is responsible for the cost of this and any additional sets.
- E. Prior to acceptance of the Record Drawings, the Contractor shall deliver to the Project Manager two (2) blue print sets of neatly marked record drawings accurately showing the information required above. All markings shall be neatly drafted using mylar pencil or indelible ink; smudgable or smearable pencil or pen marks will not be accepted. The City shall review for completeness and accuracy, comment / approve, and return to the Contractor for revisions if necessary to the final mylar Record Drawings. Submit final Record Drawings prior to receipt of final payment.

12. Materials and Equipment

- A. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- B. The City of Folsom may reject as non-complying such material and products that do not bear identification satisfactory to the Project Manager as to manufacturer, grade, quality, and other pertinent information.
- C. <u>Storage</u>: Except as otherwise approved by the Project Manager, determine and comply with manufacturer's recommendations on product handling, storage and protection with seals and labels intact and legible until time of use.

- 1) Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- 2) For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.
- 3) Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.
- 4) To facilitate efficient construction progression, as well as ordering and delivery of materials, the City may pay for stored materials with each progress payment under this contract. Discretion for this decision shall lie with the Park Planning Superintendent.
- D. In event of damage, promptly make replacements and repairs to the approval of the City of Folsom and at no additional cost to the City of Folsom.
- E. Promptly remove damaged materials and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the City of Folsom.
- F. Additional time required to secure replacements and to make repairs will not be considered by the City of Folsom to justify an extension in the Contract Time of Completion.
- G. After installation, provide coverings to protect products from damage from traffic and construction operations, remove when no longer needed.
- H. Maintain finished surfaces clean, unmarred, and suitably protected until accepted by the City of Folsom.

13. Manufacturer's Directions

- A. Manufactured articles, material, and equipment shall be applied, installed, connected, erected, adjusted, tested, used, cleaned, and conditioned as recommended by the manufacturer unless specified to the contrary.
- B. Copies of the manufacturer's installation instructions and procedures shall be submitted prior to the installation of manufacturer's articles, material and equipment.

14. Maintaining Existing Buildings and Access

- A. The Animal Food Prep building, located at 403 Stafford Street, Folsom CA 95630, is a building that operates 8 hours a day, 7 days a week. As such, the contractor shall not interfere with that operation at any time during the construction of this project. Contractor is responsible for executing all work without compromising the operation of the Animal Food Prep building (no loud noises, no vibration, etc.)
- B. The Contractor shall maintain all public and City employee entrances to the Folsom City Zoo Sanctuary. All entrances shall be maintained to allow for safe travel under the work zone and shall use measures necessary to protect pedestrian and vehicle traffic from falling debris, tools, materials, and any other hazards.
- C. The Contractor shall submit a plan for safe travel through the public and employee access points to the Project Manager 5 Days before commencing any work above entrances.

15. Protection of Existing Improvements

A. Existing improvements, utilities and adjacent property shall be protected from damage resulting from the Contractor's operations.

- B. All trees, shrubbery, fences, walls and other improvements including roof areas not a part of this project, existing pavements and sidewalks, shall be protected from damage by the Contractor throughout the construction period.
- C. All painted or other disfiguring markings on the pavement, sidewalk or gutters shall be removed by the Contractor before acceptance of the work.
- D. The cost for protection of existing improvements shall be included with those bid items the bidder deems appropriate; the Contractor shall be liable for costs of repairing damage to existing improvements and roof area not a part of this project.

16. Construction Facilities and Temporary Controls

- A. The Contractor shall provide and maintain the following facilities throughout the construction of the project:
- B. Provide <u>construction fencing</u> as required to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
 - 1) The contractor shall provide for public access around the perimeter of the area at all times
 - 2) Equipment/vehicular and pedestrian gates with keyed locks; provide keys to the City of Folsom Project Inspector and Project Manager.
 - 3) All gates and fences shall be securely locked, or securely attached at the conclusion of each day's work. Provide high visibility fence around trees and plants designated to remain.
 - 4) Protect against vehicular traffic, dumping, chemically injurious materials and puddling or continuous running water.
 - 5) Contractor shall maintain security at all times until project acceptance by the City.
- C. Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work involved in providing construction facilities and temporary controls shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefore.

17. Temporary Electricity

A. The Contractor is responsible for providing portable, temporary electrical power as required to perform the proposed work if existing electrical power is unavailable.

18. **Temporary Water**

A. Temporary water connections for construction: Including connection to existing hose bibs so that water is available by use of hoses. City of Folsom will pay for water used.

19. Project Closeout

- A. The Contractor shall comply with procedures stated in General Specifications and General Provisions of the Project Manual prior to issuance of Certificate of Substantial Completion.
- B. When Contractor considers Work has reached final completion, submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Project Manual and ready for City of Folsom inspection.
- C. In addition to submittals required by the conditions of the Project Manual, provide submittals required by governing authorities, and submit a final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.
- D. Final cleaning, per Section 7.27 of the General Provisions, shall be complete prior to final inspection.
 - 1) Clean equipment and fixtures to a sanitary condition, clean or replace filters on mechanical equipment. Clean roof drainage systems.
 - 2) Clean site; sweep paved areas, rake clean other surfaces.

- 3) Remove waste and surplus materials, rubbish, and construction facilities from the Project and from the site.
- 4) Remove temporary materials, equipment, services and construction prior to Substantial Completion inspection.
- 5) The Contractor shall clean and repair damage caused by installation or use of temporary facilities.
- 6) Restore existing facilities used during construction to specified, or to original, condition.
- E. Record drawings shall be provided, in accordance with paragraph VI-E of these general requirements, with transmittal letter containing date, Project title, Contractor's name and address, list of documents, and signature of Contractor.
- F. Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work involved in project closeout shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefore.

20. Construction and Demolition Debris

- A. The Contractor shall insure compliance with City of Folsom Ordinance No. 1056.
- B. The Contractor shall contract with a single City-approved and permitted Construction and Debris Hauler.
- C. The Construction and Debris Hauler is responsible for the payment of Construction and Demolition Debris Administrative Fees with the City of Folsom Utilities Department.

END SUPPLEMENTARY CONDITIONS

TECHNICAL SPECIFICATIONS

SECTION 05 50 00

METAL FABRICATIONS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for furnishing and installing metal fabrications made from steel shapes, plates, bars, strips, tubes, pipes and castings not a part of structural steel or specified in other Sections, including but not limited to the following items:
 - 1. Metal Fence
 - 2. Metal Swing Gate
 - 3. Cantilevered Security Gate
 - 4. Chain Link Fence
 - 5. Chain Link Gates
 - 6. Barbed Wire on Existing Fences
 - 7. Welded Wire Mesh Patch on Existing Gates
 - 8. Main Entry Purlins
 - 9. Miscellaneous angles, plates, bars, rods and other items not specified in other Sections but shown or required to complete the work.

1.02 SUBMITTALS

- A. Product Data: Include information on manufactured products, paint products, and ancillary materials, including grout and/or concrete mixes.
- B. Shop Drawings: Include plans, elevations and details of metal fabrications and their connections. Show anchorage and accessory items. Furnish templates for anchors and bolts installed under other Sections.

Item	Product Data	Shop Drawings	Color Sample
Metal Fence	X	X	Privacy Screen
Metal Swing Gate	X	X	
Metal Security Gate	X	X	
Chain Link Fence	X	X	Privacy Screen
Chain Link Gates	X	X	Privacy Screen
Barbed Wire on Existing Fences	Х	X	
Welded Wire Mesh Patch on Existing Gates	Х	Х	

1.03 QUALITY ASSURANCE

- A. Fabricator Qualifications: Firm experienced in successfully producing metal fabrications similar to that indicated for this Project, with sufficient production capacity to produce required units without causing delay in the work. Installer shall have a minimum three (3) years' experience installing similar fencing.
- B. Welding Qualifications: Qualify welding processes and welding operators in accordance with AWS D1.1, D1.2, and D1.3 as applicable. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved.

METAL FABRICATIONS

SECTION 05 50 00 - 1

C. C Referenced Standards:

- 1. ASTM International (ASTM):
 - a. A47, Ferritic Malleable Iron Castings.
 - b. A48, Gray Iron Castings.
 - c. A153, Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - d. A242, High-Strength Low-Alloy Structural Steel.
 - e. A500, Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
 - f. A510, General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel.
 - g. A588, High-Strength Low-Alloy Structural Steel with 50 ksi Minimum Yield Point to 4in. Thick.
 - h. A1011, Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
 - i. F626, Standard Specification for Fence Fittings.
 - j. F900, Standard Specification for Industrial and Commercial Swing Gates.
 - k. F2589 Ornamental Fences Employing Steel Tubular Pickets.
 - F2814 Standard Guide for Design and Construction of Ornamental Steel Picket Fence

1.04 ENVIRONMENTAL QUALITY ASSURANCE

A. Galvanizing repair paint shall have a maximum VOC content of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997.

1.05 PROJECT CONDITIONS

A. Field Measurements: Check actual locations of walls, existing fences and gates, and other construction to which metal fabrications must fit, by accurate field measurements before fabrication. Show recorded measurements on shop drawings. Coordinate fabrication schedule to avoid delay of work.

1.06 SEQUENCING AND SCHEDULING

A. Painting: Items specified in this Section as having a shop applied prime coat will be job painted as specified in Section 09 91 00, unless otherwise noted.

PART 2 - PRODUCTS

2.01 FERROUS METALS

- A. General: For fabrication of metal work which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, seam marks, roller marks, rolled trade names and roughness.
- B. Steel Plates, Shapes and Bars: ASTM A36.
- C. Steel Tubing: Cold formed, ASTM A500; or hot-rolled, ASTM A501.
- D. Structural Steel Sheet: Hot-rolled, ASTM A570; or cold-rolled ASTM A611, Class 1.
- E. Galvanized Structural Steel Sheet: ASTM A653, galvanized in accordance with ASTM A525, G90 coating designation.

METAL FABRICATIONS

SECTION 05 50 00 - 2

- F. Steel Pipe: ASTM A53; type and grade selected by fabricator; black finish unless galvanizing is indicated or specified; standard weight, schedule 40, unless otherwise indicated.
- G. Gray Iron Castings: ASTM A48, Class 30.
- H. Malleable Iron Castings: ASTM A47, grade selected by fabricator.

2.02 ALUMINUM

- A. Extrusions: ASTM B221, alloy 6063-T6.
- B. Sheet: ASTM B209, alloy 5005-H15.
- C. Bars, Rods and Wires: ASTM B211.
- D. Drawn Seamless Tubing: ASTM B210.
- E. Castings: ASTM B26 or B108, alloy 214 unless otherwise recommended by aluminum producer or finisher.

2.03 FASTENERS

- A. Bolts and Nuts: Regular hexagon-head bolts, ASTM A307, Grade A, with hex nuts, ASTM A563, and flat washers.
- B. Machine Screws: ANSI B18.6.3.
- C. Lag Bolts: ANSI B18.2.1.
- D. Wood Screws: Flat head, carbon steel, ANSI B18.6.1.
- E. Plain Washers: Round, carbon steel, ANSI B18.22.1.
- F. Lock Washers: Helical, spring type, carbon steel, ANSI B18.21.1.
- G. Expansion Anchors: Anchor bolt and sleeve assembly with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry and equal to 4 times the load imposed when installed in concrete, determined in accordance with ASTM E448.

2.04 PAINT

- A. Metal Primer: SSPC 20, Type 2.
 - 1. Exposed to view items to be field painted shall be primed with a primer compatible with final finish coats specified in Section 09 91 00.
- B. Galvanizing Repair Paint: High zinc dust content paint for regalvanizing welds in galvanized steel.

2.05 METAL FENCE, METAL SWING GATE, CANTILEVERED SECURITY GATE

- A. Design:
 - 1. Pressed point (spear shape) security fence.
- B. Height: 96 inches (96"), 8 feet (8').
- C. Comply with ASTM F2589 and A588/A242, for industrial application (class) unless otherwise indicated.
- D. Interior surface of tubes formed from uncoated steel sheet shall be hot dip zinc coated.
- E. Posts:
 - 1. End and Corner Posts: Square tubes, 3 by 3 inches formed from 0.105-inch (2.66 mm) nominal-thickness, 12 GA.

METAL FABRICATIONS

SECTION 05 50 00 - 3

2. Swing Gate Posts: Square tubing, 4 by 4 inches formed from 0.105-inch (2.66 mm) nominal-thickness. 12 GA.

F. Post Caps:

1. Pre-fabricated per manufacturer.

G. Pickets:

- 1. Square tubes.
- 2. Size:
 - a. 1 inch by 1 inch (0.25 by 0.25-mm).
 - b. Minimum wall thickness: 12 GA tubing.
 - c. Extend pickets beyond top rail as indicated for security. Press flat and trim to produce spear point shape.
 - d. Picket Spacing: 4 inches.
- 3. Fasteners: Manufacturer's standard tamperproof, corrosion-resistant, color-coated fasteners matching fence components with resilient polymer washers.
- 4. Rails: Rails shall be a minimum 1.75" x 1.75", min. 12 GA.
- H. Metal Swing Gate:
 - 1. Gate Configuration: Double leaf.
 - 2. Gate Frame Height: 8'.
 - 3. Gate Opening Width: as indicated on plans.
 - 4. Frames and Bracing: Fabricate members from square tubing 2 by 2 inches (51 by 51 mm) with 1/8-inch (3.2mm) wall thickness.
 - 5. Frame Corner Construction: Welded.
 - 6. Additional Rails: Provide as indicated, complying with requirements for fence rails.
 - 7. Picket Size, Configuration, and Spacing: Comply with requirements for adjacent fence.
 - 8. Hardware:
 - a. General: Utilize items that suit the shape and size of gate / post framing members.
 - b. Locking Mechanism: Install 3/8" diameter, 24" long, cold rolled steel drop rod round stock in ground for each gate.
 - c. Hinges: Heavy Duty Exterior Grade
 - 9. Support Posts: Type I pipe; minimum 4 inch OD.
 - Finish exposed welds to comply with NOMMA Guideline 1, Finish #4 -good-quality, uniform undressed weld with minimal splatter.
- I. Cantilevered Security Gate:
 - 1. Gate Configuration: Cantilevered
 - 2. Gate Frame Height: 8'.
 - 3. Gate Opening Width: as indicated on plans.
 - 4. Frames and Bracing: Fabricate members from square tubing 2 by 2 inches (51 by 51 mm) with 16 Ga. wall thickness.

- 5. Frame Corner Construction: Welded.
- 6. Additional Rails: Provide as indicated, complying with requirements for fence rails.
- 7. Picket Size, Configuration, and Spacing: Comply with requirements for adjacent fence.
- 8. Hardware:
 - a. General: Utilize items that suit the shape and size of gate / post framing members.
 - b. Locking Mechanism: provision for padlock
 - c. Hinges: Heavy Duty Exterior Grade
 - d. Support Carriage Torry Assemblies: post mount bracket configuration
- 9. Finish exposed welds to comply with NOMMA Guideline 1, Finish #4 -good-quality, uniform undressed weld with minimal splatter.
- 10. Support Posts: Type I pipe; minimum 4 inch OD.

2.06 CHAIN LINK FENCE AND GATES

- 1. Line Posts: 3 inch NPS steel pipe.
- 2. Corner and Terminal Posts: 4 inch NPS steel pipe.
- 3. Gate Posts: 4 inch NPS steel pipe.
- 4. Top and Bottom Rail: 2 inch NPS, plain end, sleeve coupled steel pipe.
- 5. Fabric: 1" inch diamond mesh steel wire, interwoven, 9 gage thick, top selvage barbed, bottom selvage knuckled closed.
- 6. Barbed Wire: double strand, 4 spike at 5" o.c.
- Caps: Cast steel or malleable iron, galvanized; sized to post dimension, set screw retained.
- 8. Fittings: Sleeves, bands, clips, rail ends, tension bars, fasteners and fittings: Steel.
- 9. Tension Wire: per plan
- 10. Swinging Gates: Constructed of tubular members welded at all corners in conformance with ASTM F900 and the following:
- 11. Gate Posts: 3 inch NPS steel pipe for gates up to 6 foot for a single gate or a single leaf of a double gate. 4 inch NPS steel pipe for gates over 6 foot in width.
- 12. Gate Frames: 1-1/4 inch NPS steel pipe, for welded fabrication with vertical intermediate brace at maximum 6 foot spacing and horizontal brace on all gates.
- 13. Privacy Screen: 8 oz. vinyl coated polyester mesh, with heat sealed hems, grommets spaced every 18" o.c., color per plans.
- 14. Gate Hardware: Fork type latch with gravity drop and provision for padlock; three 180 degree gate hinges per leaf.
- 15. FINISHES
 - a. Galvanized: ASTM F1234; 1.8 oz/sq ft coating for schedule 40 pipe. ASTM A90; 1.0 oz/sq ft coating for Class 1A pipe.
 - b. Accessories: Same finish as framing.

2.07 WELDED WIRE MESH PATCH

A. Square 2x2, 121/2 ga.

METAL FABRICATIONS

SECTION 05 50 00 - 5

- B. Galvanized steel, hot dipped, welded, trimmed.
- C. Angle iron: per plan

2.08 MISCELLANEOUS METAL FABRICATIONS

- A. Loose Bearing and Leveling Plates: Provide for steel items bearing on masonry or concrete construction, made flat, free from warps or twists, and of required thickness and bearing area. Drill to receive anchor bolts and for grouting as required. Galvanize after fabrication.
- B. Miscellaneous Framing and Supports:
 - 1. Provide miscellaneous framing and supports not a part of structural steel framework, as required to complete work.
 - 2. Fabricate to sizes, shapes and profiles shown or required.
 - 3. Fabricate from structural steel shapes and plates and steel bars of welded construction using mitered joints for field connection.
 - 4. Cut, drill and tap units to receive hardware and similar items.
 - 5. Furnish integrally welded anchors for casting into concrete or building into masonry.
 - 6. Finish: Galvanize exterior frames and supports, shop prime interior frames and supports.
- C. Fence posts: Fabricate from galvanized steel tubing of size and height indicated. Embed in concrete footings, and close top end by welding a 1/4-inch steel plate in place.

D. Gates:

- 1. Fabricate from steel tubing of sizes and configurations indicated. Tubing gauges shall be as recommended by fabricator but not less than specified herein.
- 2. each intermediate vertical member shall be solidly welded to top and bottom rails. Exposed welds shall be ground smooth, flush and imperceptible.
- 3. Finish: Galvanized for exterior gates, including tubing, fittings, brackets, fasteners and other ferrous components.
- E. Bollards: Fabricate from galvanized steel pipe of size and height indicated. Embed in concrete footings, fill with concrete or grout and round over top to form a cap with positive drainage. Do not allow slop to contact or mar the post finish.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as concrete inserts, sleeves, anchor bolts and miscellaneous items having integral anchors.
- B. Stake locations of fence lines, gates, and terminal posts.
 - 1. Indicate locations of trees for removal, trees to be pruned, proposed fence line, utilities, sprinkler system, underground structures, benchmarks, and property monuments.
 - 2. Prior to any digging, installation, etc, locations shall be approved by the Parks and Rec Dept.

3.02 GENERAL

A. Workmanship:

- Use materials of size and thickness indicated or required to produce strength and durability in finished product for use intended.
- Work to dimensions indicated.

METAL FABRICATIONS

SECTION 05 50 00 - 6

- 3. Form exposed work true to line and level with accurate angles and surfaces and straight, sharp edges.
- 4. Ease exposed edges to a radius of approximately 1/32-inch, unless otherwise indicated.
- 5. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- 6. Weld corners and seams continuously, complying with AWS recommendations. At exposed connections, grind exposed welds smooth and flush to match and blend with adjoining surfaces. Welds shall be imperceptible in the finished work.
- 7. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use Phillips flat- head countersunk screws or bolts for exposed fasteners, unless tamperproof security screws are indicated.
- 8. Cut, reinforce, drill and tap miscellaneous metal work as indicated to receive finish hardware and similar items.
- B. Galvanizing: All ferrous metal fabrications exposed to view or moisture shall be hot-dipped galvanized. Provide zinc coating for items indicated or specified to be galvanized, as follows:
 - 1. ASTM A153 for galvanizing iron and steel hardware.
 - ASTM A123 for galvanizing both fabricated and unfabricated iron and steel products made of uncoated rolled, pressed, and forged shapes, plates, bars, and strip 0.0299-inch thick and heavier.
- C. Fabricate joints exposed to the weather to exclude water or provide weep holes.
- D. Shop Painting:
 - Shop paint miscellaneous metal work, except members or portions of members to be embedded in concrete or masonry, surfaces and edges to be field welded, and galvanized surfaces.
 - Remove scale, rust and other deleterious materials before applying shop coat. Clean off heavy rust and loose mill scale in accordance with SSPC SP-2, SP-3, or SP-7.
 - 3. Remove oil, grease and similar contaminants in accordance with SP-1.
 - 4. Brush or spray on primer in accordance with manufacturer's instructions, at a rate of 2.0-mils thickness for each coat.
 - Apply one shop coat to fabricated metal items, except apply 2-coats to inaccessible surfaces after assembly or erection. Change color of second coat to distinguish from the first.
 - 7. Primer on exposed to view items to be field painted shall be smooth and suitable for application of final finish coats specified in Section 09 91 00.
 - 8. Apply a heavy coat of bituminous paint, compounded for application in 30-mil coat, to metal surfaces in contact with concrete, masonry and dissimilar metals. Do not apply on exposed surfaces.
- E. Cutting, Fitting and Placement:
- a. Perform cutting, drilling and fitting required for installation of miscellaneous METAL FABRICATIONS SECTION 05 50 00 7 23014

metal fabrications.

- b. Set work accurately in location, alignment and elevation, plumb, level, true and free of rack, measured from established lines and levels.
- c. Provide temporary bracing or anchors in formwork for items to be built into concrete, masonry or similar construction.
- 3. Fit exposed connections together forming tight hairline joints.
 - Weld connections not shop welded.
 - b. Grind exposed joints smooth and imperceptible, and touch-up shop paint coat.
 - c. Do not weld, cut or abrade the surfaces of exterior units which have been hot-dip galvanized after fabrication, and intended for bolted or screwed field connections.
- Field Welding: Comply with AWS for procedures of manual shielded metal-arc welding, appearance and quality of welds, and methods used in correcting welding work.
- 5. Install prefabricated items in accordance with manufacturers' instructions.

F. Setting Loose Plates:

- Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve surface bond. Clean bottom surface of bearing plates.
- 2. Set loose leveling and bearing plates on wedges, or other adjustable devices.
- 3. Tighten anchor bolts after the bearing members have been positioned and plumbed.
- 4. Cut-off protruding ends of wedges flush with the edge of the bearing plate before packing with grout.
- 5. Use metallic non-shrink grout in concealed locations where not exposed to moisture; use non-metallic non-shrink grout in exposed locations.
- 6. Pack grout solidly between bearing surfaces and plates to ensure no voids remain.
- G. Gates: Fit hardware accurately and hang gates to operate freely without sticking or binding.

3.02 INSTALLATION

- A. Install in accordance with the Manufacturer's instructions. Lines and grades shown on detail drawing with posts plumb and vertical.
- B. Do not start fence installation before final grading is complete and finish elevations are established.
- C. Concrete Footings:
 - 1. Drill holes in firm, undisturbed or compacted soil, not less than three inches (3") deeper than bottom of posts.
 - 2. Set posts in concrete footings with crowned, steel-troweled tops. Top of crown shall be one inch (1") above finished grade.
 - 3. Minimum Footing Sizes:
 - a. Line, corner and terminal posts: 36" deep
 - b. Gate posts: 42" deep
- D. Attach rails to posts by welding.
 - 1. Align rails in a consistent manner.
 - 2. Place fence such that bottom of rails are two inches (2") above finished grade.
- E. Space line posts at equal intervals not exceeding 8 feet OC.
- F. Install post cap top at each post.
- G. Gates:
 - Install gates according to Manufacturer's written instructions, level, plumb, and secure for full opening without interference.
 - 2. Attach hardware using tamper-resistant or concealed means.
 - 3. Install ground-set items in concrete for anchorage
 - 4. Adjust hardware for smooth operation and lubricate where necessary.
 - 5. Provide rigid, weatherproof joints.
 - 6. Assure correctly aligned level and plumb.
 - 7. Fully conceal anchor bolts in finished installation.
- H. Privacy Screen:
 - 1. Attach privacy screen to fence/gate by grommets or other tamperproof method recommended by manufacturer.

3.03 FIELD QUALITY CONTROL

- A. Field Tolerances:
 - 1. Post to post spacing: +/-1/2"
 - 2. Plumbness of Posts: +/-1/8"
 - 3. Visual Alignment of Posts and rails: Fencing which is visibly misaligned will not be accepted, and shall be corrected.
 - 4. Consistency of picket alignment: +/-1/8"

3.04 ADJUST AND CLEAN

- A. Touch-Up Painting: Clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material used for shop painting. Apply by brush or spray to provide a minimum dry film thickness of 2.0-mils.
- B. Galvanized Surfaces: Clean field welds, bolted connections and abraded areas and spot prime with specified primer applied to a minimum dry film thickness of 2.5-mils.
- C. Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range.
- D. Confirm that latches and locks engage accurately and securely without forcing or binding.

END OF SECTION 05 50 00

SECTION 06 10 63

EXTERIOR WOOD CONSTRUCTION

PART 1 - GENERAL

1.01 SUMMARY OF WORK

- A. Exterior heavy and light (dimensional) wood construction
- B. Main Entry

1.02 RELATED DOCUMENTS AND REFERENCES

- A. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references thereto. If the requirements of any of the following referenced standards and the specifications conflict with each other, the more stringent requirement shall prevail.
 - Redwood Inspection Service (RIS) Standard Specifications for Grades of California Redwood Lumber, Latest Edition (including supplements)
 - 2. PS 20 American Softwood Lumber Standard US Department of Commerce, National Institute of Standards and Technology.
 - 3. ASTM E 84: Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 4. California Building Code Chapter 7A: Materials and Construction Methods for Exterior Wildfire Exposure.
 - 5. Western Wood Products Association (WWPA) Grading Rules, latest edition

1.03 SUBMITTALS

- A. As listed in Division 1 or other portions of the contract documents.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Include plans, elevations and details of main entry and connections. Show anchorage and accessory items.
- D. Color Sample: Finished wood

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Handle materials to avoid damage.
- C. Store on a level surface with blocking to keep boards off the ground and provide uniform and adequate support.
- D. Redwood timbers contain water soluble extractives (tannins) which can stain concrete or other masonry. If stored over concrete, cover the concrete with a tarp to prevent staining in the event of rain.

1.05 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under

environmental conditions outside manufacturer's recommended limits.

1.06 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable manufacturer: Humboldt Redwood, 3700 Old Redwood Hwy. Suite 200; Santa Rosa, CA 95403; Tel: 707-764-4472; email: jhewitt@medoco.com; web: www.getredwood.com
- B. Substitutions: as approved.

2.02 LUMBER

- A. Material:
 - 1. Redwood
- B. Grade:
 - 1. Redwood: Clear heart, kiln-dried or better
- C. Surface:
 - 1. Sand and round-over (1/8"-1/4" radius) all exposed surfaces of the work (but not required where one board dabuts another)
- D. Sizes:
 - 1. Per plans
- E. Finish:
 - 1. Penetrating, water repellant, transparent to semi-transparent, UV resistant modified natural oil finish.
 - a. Natural color
 - b. Low VOC (less than 100g/L)
 - c. Recommended for minimum 4 year protection
 - 2. Acceptable Products include: Penofin Architectural Grade TMF Hardwood.

2.03 FASTENERS

- A. For all pre-manufactured connections and systems, fasteners shall be as specified by the manufacturer.
- B. For direct bolted connections, fasteners shall be stainless steel 302, hot-dip galvanized steel, or malleable iron, as specified on the drawings.

PART 3 - EXECUTION

- 3.01 EXAMINATION
 - A. Do not begin installation until substrates have been properly prepared.
 - B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- 3.02 PREPARATION
 - A. Clean surfaces thoroughly prior to installation.
 - B. Prepare surfaces using the methods recommended by the manufacturer for achieving the

best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Make all cuts straight and true to surface, without overcuting. All cuts shall be made to assure a neat, snug (surface to surface) fit.
- B. Holes and cut-outs shall be bored true and without splintering the opposite face. Holes for through-bolts shall be bored 1/16" larger than the bolt shaft, or for bolts larger than 1/2" in diameter, holes shall be bored 1/8" larger than the bolt shaft.
- C. Install and finish all manufactured items accordance with manufacturer's instructions.
- Use only corrosion resistant fasteners. Acceptable are stainless steel or hot-dipped galvanized.

3.04 SEALANTS AND PRESERVATIVES

A. Apply oil-based protective coating to all sides, including cut, bored, or notched areas, of all exposed wood members, prior to assembly.

3.05 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 06 10 63

SECTION 32 13 10

CAST IN PLACE CONCRETE

PART 1 - GENERAL

- 1.01 **GENERAL REQUIREMENTS**
 - A. Requirements of Division 1 apply to all Work of this Section.
- 1.02 SCOPE
 - A. Furnish, place and finish cast in place concrete for all horizontal and vertical surfaces and related work as indicated on the Drawings and specified here.
 - 1. Install miscellaneous metal and other items furnished by other trades to be installed in concrete work.

QUALITY ASSURANCE 1.03

- A. Standards and References: (Latest Edition unless otherwise noted)
 - 1. California Building Code (CBC).
 - 2. American Concrete Institute (ACI)
 - a. ACI 117 "Standard Tolerances for Concrete Construction and Materials"
 - b. ACI 211.1 "Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete"
 - c. ACI 224 "Joints in Concrete Construction"
 - d. ACI 302 "Guide for Concrete Floor and Slab Construction"
 - e. ACI 305R "Hot Weather Concreting" f. ACI 306R "Cold Weather Concreting"

 - g. ACI 360 "Design of Slabs-On-Ground"
 - 3. American Society for Testing and Materials (ASTM)
 - a. ASTM C31 "Making and Curing Concrete Test Specimens in the Field"
 - b. ASTM C33 "Concrete Aggregates"
 - c. ASTM C39 "Compressive Strength of Cylindrical Concrete Specimens"
 - d. ASTM C94 "Ready-Mixed Concrete"
 - e. ASTM C109 "Test of Hydraulic Cement Concrete"
 - f. ASTM C143 "Slump of Hydraulic Cement Concrete"
 - g. ASTM C150 "Portland Cement"
 - h. ASTM C172 "Sampling Freshly Mixed Concrete by the Volumetric Method"
 - i. ASTM C192 "Making and Curing Concrete Test Specimens in the Laboratory"
 - j. ASTM C260 "Air-Entraining Admixtures for Concrete"
 - k. ASTM C494 "Chemical Admixtures for Concrete"
 - I. ASTM C618 "Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete"
 - m. ASTM C685 "Volumetric Batching and Continuous Mixing"
- B. Submittals: (Submit under provisions of Section 01 33 00)
 - 1. Concrete mix designs. See "Mix Design" below. Include results of test data used to establish proportions.
 - 2. Certificates of Compliance from Manufacturer
 - a. Cement certificates
 - b. Aggregates
 - c. Admixtures.
 - 3. Data regarding hardeners and sealers.
 - 4. Layout drawings for construction, control and expansion joints.

- 5. Transit-mix delivery slips:
 - a. Keep record at the job site showing time and place of each pour of concrete, together with transit-mix delivery slips certifying contents of the pour.
 - b. Make the record available to the Landscape Architect for his inspection upon request.
 - c. Upon completion of this portion of the work, deliver the record and the delivery slips to the Landscape Architect.

C. Tests and Inspections:

- 1. The following tests shall be made by a recognized testing laboratory selected by the Owner and approved by the Agency Having Jurisdiction (AHJ). All tests shall be in accordance with the previously mentioned standards and ACI 318 Section 5.6. A complete record of all tests and inspections shall be kept per CBC Section 1903.1.
 - a. Compressive Strength: Make and cure in accordance with ASTM C-31. Test in accordance with ASTM C-39 and ACI 318 Section 5.6.
 - A record shall be made of time and of locations of concrete from which samples were taken.
 - 2.) Four identical cylinders shall be taken from each pour of 150 cubic yards or 5000 square feet or part thereof, being placed each day per ACI 318 Section 5.6.2. One cylinder shall be tested at age 7 days, and two at age 28 days unless otherwise specified. Preserve remaining cylinder for future use.
 - b. Concrete consistency (slump) shall be tested in accordance with ASTM C143.
 - c. Concrete air entrainment shall be tested in accordance with ASTM C233.
 - d. Concrete temperature shall be tested in accordance with ASTM C1064.
- 2. Provide full time inspection where required by CBC Section 1705 during the taking of test specimens and during the placing of all concrete and embedded steel.
- 3. Provide concrete batch plant inspections per ASTM C685.

PART 2 - PRODUCTS

2.01 GENERLAL

- A. Portland Cement: ASTM C 150, Type II or Type V. One brand of cement shall be used throughout to maintain uniform color for all exposed concrete.
- B. Concrete Aggregate: Fine and coarse aggregates shall be regarded as separate ingredients. Each size of coarse aggregate, as well as combination of sizes when two or more are used, shall conform to grading requirements of appropriate ASTM Standards and ACI 318.
 - 1. Concrete Aggregates for Standard Weight Concrete: ASTM C 33. Aggregate shall be crushed granite or Perkins type.
- C. Water: Clean and free from injurious amounts of oil, acids, alkali, organic matter and other deleterious substances; suitable for domestic consumption.
- D. Admixtures shall be subject to prior approval by the Landscape Architect, in accordance with ACI 318 Section 3.6. Calcium Chloride is not permitted. Contractor shall supply alternate admixture design as required to meet marine site conditions.
 - 1. Water Reducing
 - a. ASTM C494 Type A for use in cool weather.
 - b. ASTM C494 Type D for use in hot weather.
 - 2. Air Entraining
 - a. Conform to ASTM C 260
 - 3. Fly Ash
 - a. Conform to ASTM C 618
 - 4. Mid-Range Water-Reducers
 - a. Master Builders "Polyheed" or approved equal.

CAST IN PLACE CONCRETE

SECTION 32 13 10 - 2

- 5. Fly Ash Pozzolan
 - a. Conforming to ASTM A-618 Class F
- E. Sand: Clean, dry, well graded.
- F. Abrasive aggregate for non-slip finish: Fused aluminum oxide grits, graded 12/30. Use factory-graded rustproof and non-glazing material that is unaffected by freezing, moisture and cleaning materials.
- G. Expansion Joint Filler:
 - 1. Joint fill shall be a preformed non-extruded resilient filler, saturated with bituminous materials and conforming to ASTM D 1751. Products shall be equivalent to Burke "Fiber Expansion Joint", W.R. Meadows "Fibrated Expansion Joint Filler", or approved equal.
- H. Bonding Agent: Sonneborn "Sonobond"; the Euclid Chemical Company "Euco-Weld"; Larsen Products Corp., "Weld-Crete" or approved equivalent.
- I. Micro-Fiber Reinforcement (for shrinkage control and impact protection), consisting of virgin homopolymer polypropylene multifilament fibers in multiple lengths. Fibermesh 150, as manufactured by Sika Corporation, PSI Fiberstrand 150 as manufactured by Euclid Chemical Company, or equal.
 - a. Conform to ASTM C1666.

2.02 CONCRETE MIXES

A. Pedestrian Concrete (including slab on grade, curbs, and walkways):

Strength: 3000lbs. per square inch at 28 days.

Maximum Aggregate Size: 3/4 inch.

Cement Content: As required by mix design (ACI 318 Section 5.3).

5.0 sacks per yard minimum.

Maximum Water to Cement Ratio: 0.58

Admixture: Water Reducing.

Micro-Fiber Reinforcement: 1 pound per cubic yard.

Weight: 505 lbs. per cubic vd

B. Concrete for Walls and Footings:

Strength: 3000 lbs. per square inch at 28 days.

Maximum Aggregate Size: 3/4 inch.

Minimum Cement Content: As required by mix design (ACI 318 Section 5.3).

5.0 sacks per yard minimum.

Maximum Water to Cement Ratio: 0.58

Admixture: Water reducing.

Micro-Fiber Reinforcement: not required.

Weight:505 lbs. per cubic vd.

- C. Consistency of Concrete: Concrete slump, measured in accordance with ASTM C 143, shall fall within following limits.
 - 1. For General concrete placement: 5 inch plus or minus 1 inch.
 - 2. Concrete slump shall be taken at point of placement. Use water reducing admixtures as required to provide a workable consistency for pump mixers. Water shall not be added at the jobsite without written review by the structural engineer.
- D. Mix Design:
 - Initial mix design shall be prepared for all concrete in accordance with ACI 318 Section 5.3. Mix proportions shall be determined in accordance with ACI 318 Section 5.3 or Section 5.4. In the event that additional mix designs are required due to depletion of aggregate sources, aggregate not conforming to Specifications or at request of

- Contractor, these mixes shall be prepared as above.
- Contractor shall notify the Testing Laboratory and Landscape Architect and Owner of intent to use concrete pumps to place concrete so that mix designs can be modified accordingly.
- 3. Fly ash shall not exceed fifteen percent of the total cementitious material.
- 4. Provide 6% air entrainment typical for exterior concrete exposed to freeze-thaw cycles.
- 5. Contractor's testing laboratory shall review all mix design before submittal.
- 6. Mixes shall follow Geotechnical Report recommendations.

E. Mixing:

- 1. Equipment: All concrete shall be machine mixed. Provide adequate equipment and facilities for accurate measurement and control of materials.
- 2. Method of Mixing:
 - a. Transit Mixing: Comply with ASTM C 94. Ready mixed concrete shall be used throughout, except as specified below.
 - b. On-Site Mixing: Use only if method of storing material, mixing of material and type of mixing equipment is approved by Landscape Architect. Approval of site mixing does not relieve Contractor of any other requirements of Specifications.
 - c. Mixing shall be in accordance with ACI 318 Section 5.8.
- 3. Mixing Time: After mix water has been added, concrete shall be mixed not less than 1-1/2 minutes nor more than 1-1/2 hours. Concrete shall be rejected if not deposited within the time specified.

4. Admixtures:

- a. Air entraining and chemical admixtures shall be charged into mixer as a solution and shall be dispensed by an automatic dispenser or similar metering device. Powdered admixtures shall be weighed or measured by volume as recommended by manufacturer. Accuracy of measurement of any admixture shall be within plus or minus 3%.
- b. Two or more admixtures may be used in same concrete, provided such admixtures are added separately during batching sequence, and provided further that admixtures used in combination retain full efficacy and have no deleterious effect on concrete or on properties of each other.

5. Retempering:

- a. Concrete shall be mixed only in quantities for immediate use. Concrete which has set shall be discarded, not retempered.
- b. Indiscriminate addition of water to increase slump is prohibited.
- c. When concrete arrives at project with slump below that suitable for placing, water may be added only if neither maximum permissible water-cement ratio nor maximum slump is exceeded. Water shall be incorporated by additional mixing equal to at least half of total mixing time required. Any addition of water above that permitted by limitation of water-cement ratio shall be accompanied by a quantity of cement sufficient to maintain proper water-cement ratio. Such additions shall only be used if approved by Landscape Architect. In any event, with or without addition of cement, not more than 2 gallons of water per cubic yard of concrete, over that specified in design mix, shall be added.
- 6. Cold Weather Batching: When average of the highest and lowest air temperature falls below 40 degrees F for more than three consecutive days, provide adequate equipment for heating concrete materials. No frozen materials or materials containing ice shall be used. When placed in forms, concrete placed in these temperatures shall have a minimum temperature based on dimensions of concrete sections placed per ACI 301.
- 7. Hot Weather Batching: Concrete deposited in hot weather shall have a placing temperature below 90 degrees F per ACI 301. If necessary, ingredients shall be cooled to accomplish this.

PART 3 - EXECUTION

3.01 PLACEMENT

- A. Stake limit of concrete for approval by City prior to beginning concrete work.
- B. Before any concrete is placed, the following items of work shall have been completed in the area of placement.
 - 1. Utility boxes and other embedded items raised to grade and to match slope, oriented perpendicular or parallel to other work.
 - 2. Forms shall have been erected, adequately braced, cleaned, sealed, lubricated if required, and bulkheaded where placing is to stop. Form ties shall be spaced both vertically and horizontally. Rows of ties shall be level.
 - 3. Any wood forms other than plywood shall be thoroughly water soaked before placing any concrete. The wetting of forms shall be started at least 12 hours before concreting.
 - 4. Reinforcing steel shall have been placed, tied and supported.
 - 5. Embedded work of all trades shall be in place in the forms and adequately tied and braced.
 - 6. The entire place of deposit shall have been cleaned of wood chips, sawdust, dirt, debris, hardened concrete and other foreign matter. No wooden ties or blocking shall be left in the concrete except where indicated for attachment of other work.
 - 7. Reinforcing steel, at the time the concrete is placed around it, shall be cleaned of scale, mill scale or other contaminants that will destroy or reduce bond.
 - 8. Concrete surfaces to which fresh concrete is to be bonded shall be brush cleaned to remove all dust and foreign matter and to expose the aggregate, and then coated with the bonding adhesive herein specified.
 - 9. Prior to placing concrete for any slabs on grade, the moisture content of the subgrade below the slabs shall be adjusted to at least optimum moisture.
 - 10. No concrete shall be placed until formwork and reinforcement has been approved by Landscape Architect, or owner's representative. Clean forms of all debris and remove standing water. Thoroughly clean reinforcement and all handling equipment for mixing and transporting concrete. Concrete shall not be placed against reinforcing steel that is hot to the touch.
- C. Conveying: Handle concrete from mixer to place of final deposit by methods which will prevent separation or loss of ingredients. Deposit concrete in forms as nearly as practicable at its final position in a manner which will insure that required quality is obtained. Chutes shall slope not less than 4 inches and not more than 6 inches per foot of horizontal run.
- D. Depositing: Deposit concrete into forms in horizontal layers at a uniform rate and consolidating into previous pour. In no case shall concrete be poured into an accumulation of water ahead of pour, nor shall concrete be flowed along forms to its final place of deposit. Fresh concrete shall not be permitted to fall from a height greater than 6 feet without use of adjustable length pipes or, in narrow walls, of adjustable flexible hose sleeves. Concrete shall be scheduled so that placing is a continuous operation for the completion of each section between predetermined construction joints. If any concreting operation, once planned, cannot be carried on in a continuous operation, concreting shall stop at temporary bulkheads, located where resulting construction joints will least impair the strength of the structure.
 - 1. Consolidation: Concrete shall be thoroughly compacted and worked to all points with solid continuous contact to forms and reinforcement to eliminate air pockets and honeycombing. Power vibrators of approved type shall be used immediately following pour. Spading by hand, hammering of forms or other combination of methods will be allowed only where permitted by Structural Engineer. In no case shall vibrators be placed against reinforcing steel or used for extensive shifting of deposited fresh concrete. Provide and maintain standby vibrators, ready for immediate use.
 - 2. Hot Weather Concreting: Unless otherwise directed by the Landscape Architect, perform all work in accordance with ACI 305 when air temperature rises above 75 degrees F and

the following:

- a. Mixing Water: Keep water temperature as low as necessary to provide for the required concrete temperature at time of placing. Ice may be required to provide for the design temperature.
- b. Aggregate: Keep aggregate piles continuously moist by sprinkling with water.
- c. Temperature of Concrete: The temperature of the concrete mix at the time it is being placed in the forms shall not exceed 90 degrees F per ACI 301. The method employed to provide this temperature shall in no way alter or endanger the design mix or the design strength required.
- d. Dampen subgrade and formwork before placing concrete. Remove all excess water before placing concrete. Keep concrete continuously wet when air temperature exceeds 85 degrees F for a minimum of 48 hours after placing concrete. For slab on grade construction, see Section 3.1.E.
- e. Protection: Minimize evaporation from concrete in place by providing shade and windbreaks. Maintain such protection in place for 14 days minimum.
- 3. Cold Weather Concreting: Follow recommended ACI 306 procedures when average of the highest and lowest air temperature falls below 40 degrees F for more than three consecutive days, as approved by Landscape Architect and Contracting Officer Representative. Concrete placed in these temperatures shall have a minimum temperature based on dimensions of concrete sections placed as shown in ACI 301. No chemicals or salts shall be used to prevent freezing, and no accelerating agents shall be used without prior approval from Landscape Architect.
- E. Construction (Cold) Joints: Install only as indicated and noted on Drawings. Joints not indicated on Drawings shall be so located, when approved, as to least impair strength of structure, and shall conform to typical details. Construction joints shall have level tops, vertical sides. Horizontal construction joints shall be thoroughly cleaned and roughened by removing entire surface film and exposing clean aggregate solidly embedded in mortar matrix. Joints between concrete and masonry shall be considered construction joints. Vertical construction joints need not be roughened. See Drawings for doweling and required keys.
 - 1. Roughen construction joints by any of following methods:
 - a. By sandblasting joint.
 - b. By thoroughly washing joint, using a high-pressure hose, after concrete has taken initial set. Washing shall be done not less than 2 hours nor more than 4 hours after concrete has been poured, depending upon setting time.
 - c. By chipping and wire brushing.
 - 2. Just before starting new pour, horizontal and vertical joint surfaces shall be dampened (but not saturated).
 - 3. Before placing regular concrete mix, horizontal construction joint surfaces shall be covered with a layer of mortar composed of cement and fine aggregate of same proportions as that used in prescribed mix but omitting coarse aggregate.
- F. Concrete Slabs on Grade:
 - 1. Exterior concrete slabs on grade shall be poured as required under this Section. Base shall be accurately leveled and compacted prior to placing of concrete.
 - 2. Protect slab on grade subbase from moisture prior to placing concrete. Avoid wetting rock layer to allow adequate concrete curing and avoid future vapor transmission. If the subbase has been wet excessively, verify that water has been eliminated prior to placement of concrete.
- G. Control (Score) Jointing Slabs on Grade:
 - 1. Joints shall be in locations indicated on Drawings, or as directed by Landscape Architect and Structural Engineer.
 - 2. Control jointing in exterior paving slabs shall be laid out per plans; pour as described

- above, but with joint edges tooled to provide a uniform joint with 3/8-inch radius U.N.O.
- 3. Slab reinforcing need not be terminated at control joints.
- 4. Construction and expansion joints shall be counted as control joints.
- 5. Spacing shall not exceed ACI guidelines.
- 6. Control joints shall be 1/4 slab depth, minimum.

H. Expansion Joints:

- 1. Joints in exterior slabs on grade shall be installed where indicated on plans.
- 2. Edges of concrete at joints shall be edger finished to approximately 3/8-inch radius U.N.O.
- 3. Interrupt reinforcing at all expansion joints.
- 4. Expansion joint spacing not to exceed 60' in any direction
- I. Decorative markings on exterior slabs on grade shall be located as indicated. Where not indicated, mark slabs into rectangles of not less than 12 square feet nor more than 20 square feet using a scoring tool which will leave edges of score markings rounded.

3.02 CURING AND PROTECTION

A. Beginning immediately after placement, protect concrete from premature drying, from excessive hot or cold temperatures, and from mechanical injury. Maintain concrete with minimal moisture loss at relatively constant temperature for a period necessary for hydration of cement and hardening of concrete.

3.03 FINISHES

A. Flatwork:

- 1. Unless otherwise indicated or specified, flatwork shall have an integral monolithic finish.
- 2. Integral Monolithic Finish: Apply as soon as freshly poured concrete slabs will bear weight of workers. Pour slabs full thickness to finish floor elevations indicated. At proper time, tamp surface repeatedly with a wire mesh or grid tamper in a manner to force aggregate down below surface and to bring sufficient mortar to surface to provide for a smooth coating of cement mortar over entire surface. Allow surface mortar to partially set, then float with wooden floats and finish with one of following, as required.
 - a. Broom Finish: Steel trowel surface to a smooth dense surface free of lines, tool marks, cat faces and other imperfections. After troweling, and before final set, give surface a broom finish, brushing in direction noted on Drawings, or as directed. Broom finish shall be used typically on exterior flatwork except as otherwise indicated or specified and shall be "medium" texture as approved by Landscape Architect.

3. Tolerances:

- a. For tolerances not indicated, refer to ACI 117.
- b. Slabs on grade Comply with F_F & F_L as specified by Landscape Architect, or at a minimum shall be sufficiently even to contact a 10' long straightedge with a tolerance of 1/8 inch.
- B. Sacked Surfaces: Exposed surfaces that are unacceptable in appearance to the Landscape Architect shall be removed and replaced, or sacked, at the Landscape Architect's discretion.
 - Exposed surfaces that are unacceptable in appearance to the Landscape Architect shall be sacked.
 - 2. Seat walls with exposed vertical surfaces not permitted to be sacked/patched.

3.04 PATCHING

- A. Slabs on Grade: After entire slab is finished, shrinkage cracks that may appear shall be patched as follows:
 - 1. Where slab is exposed, and appearance is important, unsightly cracks shall be repaired in a manner satisfactory in appearance to Landscape Architect. If this cannot be

CAST IN PLACE CONCRETE

SECTION 32 13 10 - 7

accomplished, concrete shall be considered defective.

3.05 DEFECTIVE CONCRETE

- A. Defective concrete shall mean any of the following:
 - 1. Concrete not meeting 100 percent of the specified 28-day compressive strength.
 - 2. Concrete exhibiting rock pockets, voids, spalls, streaks, cracks, exposed reinforcing to extent that strength, durability, or appearance is adversely affected.
 - 3. Concrete significantly out of place, line, or level.
 - 4. Concrete not containing the required embedded items.
- B. Upon determination that concrete strength is defective:
 - Should cylinder tests fall below minimum strength specified, concrete mix for remainder
 of work shall be adjusted to produce required strength. Core samples shall be taken and
 tested from cast-in-place concrete where cylinders and samples indicate inferior concrete
 with less than minimum specified strength.
 - a. Cores of hardened concrete shall be taken and tested in accordance with ASTM C 42 and C 39. Number and location of such cores shall be subject to the approval of Landscape Architect.
 - b. Cost of core sampling and testing will be paid for by the Contractor.
 - c. "85 percent" reduction in ACI 318 Section 5.6.5.4 will not justify low cylinder tests.
- C. Upon determining that concrete surface is defective, Contractor may restore concrete to acceptable condition by cutting, chipping, pointing, patching, grinding, if this can be done without significantly altering strength of structure. Permission to patch defective areas will not be considered a waiver of the right to require removal if patching does not, in the opinion of the Landscape Architect and Structural Engineer and Contracting Officer Representative, satisfactorily restore quality and appearance.
- D. If core tests indicate that concrete is below the strength specified, or if patching does not restore concrete to specified quality and appearance, the concrete shall be deemed defective, and shall be removed and replaced without additional cost to the Owner.
- E. No repair work shall begin until procedure has been reviewed by the Landscape Architect and Structural Engineer and Contracting Officer Representative.

3.06 ADJUSTING AND CLEANING

A. Remove all debris, excess materials, tools and equipment resulting from or used in this operation at completion of this work.

END OF SECTION 03 30 00