

Chabot-Las Positas Community College District

BID No.: 08-24

**PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE
PROJECT, CHABOT COLLEGE**



BID OPENING DATE AND TIME: JUNE 26, 2008 at 2:00 P.M.

Facilities Planning & Management Department
District Office
5020 Franklin Drive
Pleasanton, California 94588

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BID No.: 08-24

PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE PROJECT, CHABOT COLLEGE

NOTICE IS HEREBY GIVEN that the Chabot-Las Positas Community College District (“District”), calls for sealed bids from AMAG Certified Bidders for **Priority One: Buildings & Parking Lot Security Upgrade Project, Chabot College, Bid No. 08-24** to be delivered to the Buyer, Purchasing and Warehouse Services Department, 5020 Franklin Drive, Pleasanton, California 94588 until June 26, 2008 at 2:00 p.m. at which time and place said bids will be opened. Faxed or emailed bids will not be accepted.

There will be a Mandatory, Pre-Bid Conference and Job Walk, Friday, June 13, 2008 at 10:00 a.m. on Chabot College Campus in the Maintenance and Operations Office, located in Building 3000, 25555 Hesperian Boulevard, Hayward, California, 94545. Campus maps are available at <http://www.chabotcollege.edu>.

Bids shall be presented in accordance with the specifications for the same, which are on file with the Buyer, Purchasing and Warehouse Services Department at the office address listed above. Bid specifications will be available at the Facilities Modernization Program Website at <http://www.clpccd.org/bond/BiddingProjectBusinessOpportunitiesRFB.php>.

Inquiries regarding this bid should be directed to office of the Buyer, Purchasing and Warehouse Services Department, Attn: David Bui. Phone: (925) 485-5229 or FAX: (925) 485-5253. Reference Bid No.08-24 on all inquiries.

The Board of Trustees reserves the right to reject any and all bids and any and all items of such bids. This bid shall also be subject to any and all applicable laws, regulations and standards.

Advertisements Published: May 29, 2008
June 5, 2008

NOTICE TO CONTRACTORS CALLING FOR BIDS

DISTRICT	CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT
PROJECT DESCRIPTION	BID NO. : 08-24, PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE PROJECT, CHABOT COLLEGE
LATEST TIME/DATE FOR RFI'S SUBMITTALS	Thursday, June 19 th , 2008; 2:00 P.M.
LATEST TIME/DATE FOR SUBMISSION OF BID PROPOSALS	Thursday, June 26 th , 2008; 2:00 P.M.
LOCATION FOR SUBMISSION OF BID PROPOSALS	Chabot-Las Positas Community College District 5020 Franklin Drive, Pleasanton, California 94588 Attn: David Bui, Buyer
LOCATION FOR OBTAINING BID AND CONTRACT DOCUMENTS	Chabot-Las Positas Community College District Facilities Planning & Management http://www.clpccd.org/bond/BiddingProjectBusinessOpportunitiesRFB.php

NOTICE IS HEREBY GIVEN that the above-named California Community College District, acting by and through its Board of Trustees, hereinafter "the District" will receive up to, but not later than the above-stated date and time, sealed Bid Proposals for the Contract for the Work generally described as: **BID NO.: 08-24, PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE PROJECT, CHABOT COLLEGE.**

1. **Submittal of Bid Proposals.** All Bid Proposals must be submitted on forms furnished by the District at or prior to the last time for submission of Bid Proposals and the District's opening of Bid Proposals. Bid Proposals will be accepted by the District only if the Bidder submitting the Bid Proposal with a Bid Bond, Subcontractors List, Non-Collusion Affidavit, Statement of Bidder's Qualifications and a Certificate of Pre-Bid Site Visit. The Bid Proposal of a Bidder who does not submit all the necessary and required above-mentioned documents will be rejected for non-responsiveness.
2. **Bid and Contract Documents.** The Bid and Contract Documents are available at the location stated above for a non-refundable payment of the cost of reprographics and shipping per set.
3. **Prevailing Wage Rates.** Pursuant to California Labor Code §1773, the Director of the Department of Industrial Relations of the State of California has determined the generally prevailing rates of wages in the locality in which the Work is to be performed. These determinations, entitled "PREVAILING WAGE SCALE" may be viewed and obtained by accessing the Division of Labor Standards Enforcement databases at <http://www.dir.ca.gov/dir/databases.html>. The Contractor awarded the Contract for the Work shall post a copy of all applicable prevailing wage rates for the Work at conspicuous locations at the Site of the Work. The Contractor and all Subcontractors performing any portion of the Work shall pay not less than the applicable prevailing wage rate for the classification of labor provide by their respective workers in prosecution and execution of the Work.
4. **Contractors License Classification.** Bidders must possess the following classification(s) of California Contractors License at the time that the Contract for the Work is awarded: C-7 or C-10. The Bid Proposal of any Bidder not duly and properly licensed in accordance with the foregoing shall be

rejected as non-responsive and the Bidder shall be subject to all penalties imposed by law as a result of not being properly licensed at the time of submitting its Bid Proposal. No payment shall be made for the Work unless and until the Registrar of Contractors verifies to the District that the Bidder awarded the Contract is properly and duly licensed for the Work.

5. **Bid Security.** Each Bid Proposal shall be accompanied by Bid Security in an amount not less than ten percent (10%) of the maximum amount of the Bid Proposal, inclusive of any additive Alternate Bid Item(s). Failure of any Bid Proposal to be accompanied by Bid Security in the form and in the amount required shall render such Bid Proposal to be non-responsive and rejected by the District.
6. **No Withdrawal of Bid Proposals.** Bid Proposals shall not be withdrawn by any Bidder for a period of thirty (30) days after the opening of Bid Proposals. During this time, all Bidders shall guarantee prices quoted in their respective Bid Proposals.
7. **Job-Walk.** The District will conduct a **Mandatory Pre-Bid Conference and Job-Walk on Friday, June 13, 2008, beginning at 10:00 A.M. Bidder must attend the Mandatory Job Walk.** Bidders are to meet at **Chabot College, 25555 Hesperian Boulevard, Building 3000, Maintenance and Operations Building, Hayward, California 94545 (campus map available at www.chabotcollege.edu)** for the first portion of the Job Walk. The Job Walk is mandatory. If a Bid is submitted by a Bidder whose representative(s) did not attend the entirety of the Mandatory Job Walk, such bid will be rejected by the District as being non-responsive.
8. **Award of Contract.** Pursuant to Resolutions adopted by the District's Board of Trustees, the Contract for the Work, if awarded, will be by action of the District's Vice Chancellor, Facilities Planning and Management, and the Vice Chancellor, Business Services to the responsible Bidder submitting the lowest priced responsive Bid Proposal. If the Bid Proposal requires Bidders to propose prices for Chabot College and Las Positas College and/or any Alternate Bid Items, the District's selection of either one College campus or both College campuses, plus any Alternate Bid Items, if any, for determination of the lowest priced Bid Proposal and for inclusion in the scope of the Contract to be awarded shall be in accordance with the Instructions for Bidders. The District reserves the right to reject any or all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding.

[END OF SECTION]

INSTRUCTIONS FOR BIDDERS

1. Preparation and Submittal of Bid Proposal. All information required by the bid forms must be completely and accurately provided. Numbers shall be stated in both words and figures where so indicated in the bid forms; conflicts between a number stated in words and in figures are governed by the words. Partially completed Bid Proposals or Bid Proposals submitted on other than the bid forms included herein are non-responsive and will be rejected. Bid Proposals shall be submitted in sealed envelopes bearing on the outside the Bidder's name and address and identification of the Work for which the Bid Proposal is submitted. Bidders are solely responsible for timely submission of Bid Proposals to the District at the place designated in the Call for Bids. The District will place a date/time stamp machine in a conspicuous location at the place designated for submittal of Bid Proposals. A Bid Proposal is submitted only if the outer envelope containing the Bid Proposal is stamped by the District's date/time stamp machine. The date/time stamp is controlling and determinative as to the date and time of the Bidder's submittal of its Bid Proposal. The foregoing notwithstanding, whether or not Bid Proposals are opened exactly at the time fixed in the Call for Bids, no Bid Proposals shall be received or considered by the District after it has commenced the public opening and reading of Bid Proposals; Bid Proposals submitted after such time are non-responsive and will be returned to the Bidder unopened. Any Bidder may withdraw or modify its Bid Proposal by written request actually received by the District prior to the scheduled closing time for the receipt of Bid Proposals and the District's public opening and reading of Bid Proposals.

2. Bid Security. Each Bid Proposal shall be accompanied by Bid Security in the form of: (a) cash, (b) a certified or cashier's check made payable to the District or (c) a Bid Bond, in the form and content attached hereto, in favor of the District executed by the Bidder as a principal and a Surety as surety (the "Bid Security") in an amount not less than the percentage of the maximum amount of the Bid Proposal set forth in the Call for Bids. Any Bid Proposal submitted without the required Bid Security is non-responsive and will be rejected. If the Bid Security is in the form of a Bid Bond, the Bid Bond must be in the form and content included herein and the Surety is an Admitted Surety Insurer under Code of Civil Procedure §995.120.

3. Modifications. Changes to the bid forms which are not specifically called for or permitted may result in the District's rejection of the Bid Proposal as being non-responsive. Bid Proposals must not contain any erasures, interlineations or other corrections unless the same are suitably authenticated by affixing in the margin immediately opposite such erasure, interlineation or correction the surname(s) of the person(s) signing the Bid Proposal. Any Bid Proposal not conforming to the foregoing may be deemed by the District to be non-responsive. If any Bid Proposal or portions thereof, is determined by the District to be illegible, ambiguous or inconsistent, whether by virtue of any erasures, interlineations, corrections or otherwise, the District may reject such a Bid Proposal as being non-responsive.

4. Examination of Site and Contract Documents. Each Bidder shall at its sole cost and expense inspect the Site to become fully acquainted with conditions affecting the Work and carefully review the Contract Documents; submission of a Bid Proposal is prima facie evidence of such action by the Bidder. The failure of a Bidder to receive or examine any of the Contract Documents or to inspect the Site shall not relieve such Bidder from any obligation under the Contract Documents.

5. Interpretation of Drawings, Specifications or Contract Documents. If the Bidder is in doubt as to the true meaning of any part of the Contract Documents; finds discrepancies, errors or omissions therein; or finds variances in any of the Contract Documents with applicable rules, regulations, ordinances and/or laws, a written request for an interpretation or correction thereof may be submitted to the District. Bidders are solely responsible for submitting to such request not less than seven (7) days prior to the

scheduled closing date for the receipt of Bid Proposals. Interpretations or corrections of the Contract Documents will be by written addendum issued by or on behalf of the District. No person is authorized to render an oral interpretation or correction of any portion of the Contract Documents to any Bidder, and no Bidder is authorized to rely on any such oral interpretation or correction. Failure to request interpretation or clarification of any portion of the Contract Documents pursuant to the foregoing is a waiver of any discrepancy, defect or conflict therein.

6. District's Right to Modify Contract Documents. Before the opening of Bid Proposals, the District may modify the Work, the Contract Documents, or any portion(s) thereof by the issuance of written addenda disseminated to all Bidders who have obtained the Contract Documents. If the District issues any addenda during the bidding, the failure of any Bidder to acknowledge such addenda in its Bid Proposal will render the Bid Proposal non-responsive and rejected.

7. Bidders Interested in More Than One Bid Proposal; Non-Collusion Affidavit. No person or entity shall submit or be interested in more than one Bid Proposal for the Work; provided, however, that a person or entity that has submitted a subproposal to a Bidder or who has quoted prices for materials to a Bidder is not thereby disqualified from submitting a subproposal, quoting prices to other Bidders or submitting a Bid Proposal for the Work. The form of Non-Collusion Affidavit included in the Contract Documents must be completed and duly executed on behalf of the Bidder; failure of a Bidder to submit a completed and executed Non-Collusion Affidavit with its Bid Proposal will render the Bid Proposal non-responsive.

8. Award of Contract.

1. **Award to Lowest Responsive Responsible Bidder.** The award of the Contract, if made by the District, will be to the responsible Bidder submitting the lowest priced responsive Bid Proposal on the basis of the Base Bid Proposal or the Base Bid Proposal and Alternate Bid Items, if any, selected in accordance with these Instructions for Bidders.

8.1 Alternate Bid Items Not Included in Award of Contract. Bidders are referred to the provisions of the Contract Documents permitting the District, during performance of the Work, add or delete from the scope of the Work any or all of the Alternate Bid Items with the cost or credit of the same being the amount(s) set forth by in the Alternate Bid Items Proposal.

9. Subcontractors. Each Bidder shall submit a list of its proposed Subcontractors whose work is valued at one-half of one percent (.05%) or more of the Bid Proposal amount. All Bidders are encouraged to disseminate all of the Contract Documents to all persons or entities submitting sub-bids to the Bidder. The omission of any portion or item of Work from the Bid Proposal or from the sub-bidders' sub-bids which is/are necessary to produce the intended results and/or which are reasonably inferable from the Contract Documents is not a basis for adjustment of the Contract Price or the Contract Time.

10. Qualification Application Information. Each Bidder shall complete, execute and submit with its Bid Proposal the Qualification Application Information included herewith. The District expressly reserves the right to verify information provided by the Bidder in its Qualification.

11. Workers' Compensation Insurance. Pursuant to California Labor Code §3700, the successful Bidder shall secure Workers' Compensation Insurance for its employees engaged in the Work of the Contract. The successful Bidder shall sign and deliver to the District the form of Workers Compensation Insurance included with the Contract Documents.

12. Bid Security Return. The Bid Security of three or more low Bidders, the number being solely at the discretion of the District, will be held by the District for ten (10) days after the period for which Bid Proposals must be held open (which is set forth in the Call for Bids) or until posting by the successful Bidder of the bonds, certificates of insurance required and return of executed copies of the Agreement, whichever first occurs, at which time the Bid Security of such other Bidders will be returned to them.

13. Forfeiture of Bid Security. If the Bidder awarded the Contract fails or refuses to execute the Agreement within five (5) days from the date of receiving notification that it is the Bidder to whom the Contract has been awarded, the District may declare the Bidder's Bid Security forfeited as damages caused by the failure of the Bidder to enter into the Contract and may thereupon award the Contract for the Work to the responsible Bidder submitting the next lowest Bid Proposal or may call for new bids, in its sole and exclusive discretion.

14. Job-Walk. The District will conduct Job-Walk(s) at the time(s) and place(s) designated in the Call for Bids. The District may, in its sole and exclusive discretion, elect to conduct one or more Job-Walk(s) in addition to that set forth in the Call for Bids, in which event the District shall notify all Bidders who have theretofore obtained the Contract Documents pursuant to the Call for Bids of any such additional Job-Walk. If the District elects to conduct any Job-Walk in addition to that set forth in the Call for Bids, the District shall, in its notice of any such additional Job-Walk(s), indicate whether Bidders' attendance at such additional Job-Walk(s) is/are mandatory. If the Job Walk is mandatory, the failure of any Bidder to have its authorized representative(s) present at the Mandatory Job-Walk or any additional Mandatory Job-Walk called by the District will render the Bid Proposal of such Bidder to be non-responsive. The District will reject the Bid Proposal of a Bidder who obtains the Bid and Contract Documents after the date of the Mandatory Job-Walk set forth in the Call for Bids.

15. Public Records. Bid Proposals and other documents responding to the Call for Bids become the exclusive property of the District upon submittal to the District. Upon the District's issuance of the Notice of Intent to award the Contract, all Bid Proposals and other documents submitted in response to the Call for Bids shall thereupon be considered public records, except for information contained in such Bid Proposals deemed to be Trade Secrets (as defined in California Civil Code §3426.1). A Bidder that indiscriminately marks all or most of its Bid Proposal as exempt from disclosure as a public record, whether by the notations of "Trade Secret" "Confidential" "Proprietary" or otherwise, may render the Bid Proposal non-responsive and rejected. The District is not liable or responsible for the disclosure of such records, including those exempt from disclosure if disclosure is deemed required by law, by an order of Court, or which occurs through inadvertence, mistake or negligence on the part of the District or its If the District is required to defend or otherwise respond to any action or proceeding wherein request is made for the disclosure of the contents of any portion of a Bid Proposal deemed exempt from disclosure hereunder, the Bidder submitting the materials sought by such action or proceeding agrees to defend, indemnify and hold harmless the District in any action or proceeding from and against any liability, including without limitation attorneys' fees arising therefrom. The party submitting materials sought by any other party shall be solely responsible for the cost and defense in any action or proceeding seeking to compel disclosure of such materials; the District's sole involvement in any such action shall be that of a stakeholder, retaining the requested materials until otherwise ordered by a court of competent jurisdiction.

16. Compliance with Immigration Reform and Control Act of 1986. The Bidder is solely and exclusively responsible for employment of individuals for the Work of the Contract in conformity with the Immigration Reform and Control Act of 1986, 8 USC §§101 et seq. (the "IRCA"); the successful Bidder shall also require that any person or entity employing labor in connection with any of the Work of the Contract shall so similarly comply with the IRCA.

17. Notice of Intent to Award Contract. Following the opening and reading of Bid Proposals, the District will issue to Bidders who have timely submitted a Bid Proposal, a Notice of Intent to Award the Contract, identifying the responsible Bidder submitting the lowest priced responsive Bid Proposal and to whom the District intends to award the Contract.

18. Bid Protest. Any Bidder submitting a Bid Proposal to the District may file a protest of the District's intent to award the Contract provided that each and all of the following are complied with:

- (i) The bid protest is in writing;
- (ii) The bid protest is filed and received by the District's Vice Chancellor, Facilities Planning and Management not more than five (5) calendar days following the date of issuance of the District's Notice of Intent to Award the Contract; and
- (iii) The written bid protest sets forth, in detail, all grounds for the bid protest, including without limitation all facts, supporting documentation, legal authorities and argument in support of the grounds for the bid protest; any matters not set forth in the written bid protest shall be deemed waived. All factual contentions must be supported by competent, admissible and creditable evidence. Any bid protest not conforming with the foregoing shall be rejected by the District as invalid. Provided that a bid protest is filed in strict conformity with the foregoing, the District's Vice Chancellor, Facilities Planning and Management or such individual(s) as may be designated by him/her, shall review and evaluate the basis of the bid protest. The District's Vice Chancellor, Facilities Planning and Management, or other individual designated by him/her shall provide the bidder submitting the bid protest with a written statement concurring with or denying the bid protest. The rendition of a written statement by the District's Vice Chancellor, Facilities Planning and Management (or his/her designee) and action by the District's Board of Trustees to adopt, modify or reject the disposition of the bid protest reflected in such written statement shall be express conditions precedent to the institution of any legal or equitable proceedings relative to the bidding process, the District's award of the Contract, the District's disposition of any bid protest or the District's decision to reject all Bid Proposals. In the event that any such legal or equitable proceedings are instituted and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising therefrom.

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NON-COLLUSION AFFIDAVIT

STATE OF CALIFORNIA
COUNTY OF _____

I, _____, being first duly sworn, deposes and says
(Typed or Printed Name)

that I am the _____ of _____,
(Title) (Bidder Name)

the party submitting the foregoing Bid Proposal ("the Bidder"). In connection with the foregoing Bid Proposal, the undersigned declares, states and certifies that:

2. The Bid Proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization or corporation.

3. The Bid Proposal is genuine and not collusive or sham.

4. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any other bidder or anyone else to put in sham bid, or to refrain from bidding.

5. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price, or that of any other bidder, or to fix any overhead, profit or cost element of the bid price or that of any other bidder, or to secure any advantage against the public body awarding the contract or of anyone interested in the proposed contract.

6. All statements contained in the Bid Proposal and related documents are true.

7. The bidder has not, directly or indirectly, submitted the bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any person, corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Executed this ____ day of _____, 20__ at _____.
(City, County and State)

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

Signature

(Address)

Name Printed or Typed

(City, County and State)

(_____) _____
(Area Code and Telephone Number)

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STATEMENT OF BIDDER'S QUALIFICATIONS

In accordance with specification Section 13701.1.10.f

Bidder's Organization

1.1 Form of entity of Bidder, i.e., corporation, partnership, etc. _____

1.1.1 If a corporation, state the following:

State of incorporation: _____

Date of incorporation: _____

President/Chief Executive Officer: _____

Secretary: _____

Treasurer/Chief Financial Officer: _____

1.1.2 If a partnership, state the following:

Type of partnership, i.e., general partnership, limited partnership: _____

Names of all general partners, if any of the general partners are not natural persons, provide the information for each such general partner requested by Paragraphs 1.1.1, 1.1.2 and 1.1.4 as appropriate: _____

1.1.3 If a proprietorship, state the names of all proprietors: _____

1.1.4 If a joint venture, state the following

Date of organization: _____

Names of all joint venture members. For each member of the joint venture, provide the information requested by Paragraphs 1.1.1, 1.1.2 and 1.1.3 for each joint venture member, as applicable: _____

1.2 Number of years your organization has been in business as a contractor: _____

1.3 Number of years your organization has conducted business under its present name:

1.4 If your organization has conducted business under a name or name style different than your organization's present name, identify all prior name(s) or name style(s):

1.5 Your organization's Federal Tax Identification Number: _____

Licensing

- 1.6 California Contractors License: Number: _____
 Expiration Date: _____
 Responsible Managing Employee/Officer: _____
 License Classification(s): _____
- 1.7 Has a claim or other demand ever been made against your organization's California Contractors License Bond? _____ Yes _____ No
 If yes, on a separate attachment, state the following: (i) the name, address and telephone number of each person or entity making claim or demand; (ii) the date of each claim or demand; (iii) the circumstances giving rise to each such claim or demand; and (iv) the disposition of each such claim or demand.
- 1.8 Has a complaint ever been filed against your organization's California Contractors License with the California Contractors State License Board? _____ Yes _____ No
 If yes, on a separate attachment, state the following for each complaint: (i) the name, address and telephone number of each person or entity making the complaint; (ii) the date of each complaint; (iii) the circumstances giving rise to each such complaint; and (iv) the disposition of each such complaint, including without limitation, any disciplinary or other action imposed or taken by the California Contractors State License Board as a result of any such complaint.

Experience

- 1.9 Categories of work (other than management/supervision) your organization typically performs with your own forces _____

- 1.10 On a separate attachment, list all construction project completed by your organization in the past two (2) years and for each project identified, state: (i) a general description of the work performed by your organization on the project; (ii) the dollar value of the work performed or to be performed by your organization; (iii) the project owner's name, name of the project owner's representative and the address and telephone number of the owner and the project owner's representative; and (iv) the project architect's name, address, telephone number and contact person.
- 1.11 On a separate attachment, list all construction project your organization has in progress and for each project listed, state: (i) a general description of the work performed by your organization on the project; (ii) the dollar value of the work performed or to be performed by your organization; (iii) the project owner's name, name of the project owner's representative and the address and telephone number of the project owner and the project owner's representative; (iv) the project architect's name, address, telephone number and contact person; (v) percent presently complete; and (vi) the current scheduled completion date.
- 1.12 On a separate attachment, list the certification and resumes of AMAG technicians, in accordance to specification Section 13701.1.10.c and 13701.1.10e.
- 1.13 On a separate attachment, provide supporting documentation that the Contractor is an AMAG authorized reseller/dealer, in accordance to specification Section 13701.1.10d.

Performance History

- 1.14 Claims and lawsuits (if you answer yes to any of the following, you must attach details).
 - 1.14.1 Have any lawsuits or other administrative, legal, arbitration or other proceedings, ever been brought or commenced against your organization or any of its principals,

officers or equity owners in connection with any construction contract or construction project? Yes No

If so, describe the circumstances, the amount demanded or other relief demand and the disposition of each such lawsuit or other proceeding.

1.14.2 Has your organization ever filed a lawsuit or commenced other administrative, legal or other proceedings in connection with any construction contract or construction project? Yes No

If so, describe the circumstances, the amount demanded or other relief demand and the disposition of each such lawsuit or other proceeding.

1.14.3 Are there any judgments, orders, decrees or arbitration awards pending, outstanding against your organization or any of the officers, directors, employees or principals of your organization? Yes No

If so, describe each such judgment, order, decree or arbitration award and the present status of the satisfaction or discharge thereof.

1.15 Has your organization ever refused to sign a construction contract awarded to it?

Yes No

If so, on a separate attachment, state the following: (i) describe each such contract; (ii) the owner's name, address, telephone number and contact person; and (iii) the circumstances of your refusal to sign such contract.

1.16 Has your organization ever failed to complete a construction contract? Yes No

If so, on a separate attachment, state the following: (i) describe each such contract; (ii) the owner's name, address, telephone number and contact person; and (iii) the circumstances of your failure to complete such contract.

1.17 Has your organization ever been declared in default of a construction contract?

Yes No

If so, on a separate attachment, state the following: (i) describe each such contract; (ii) the owner's name, address, telephone number and contact person; and (iii) the circumstances of each such declaration of default.

1.18 Has any construction contract to which your organization is a party been terminated for the convenience of the project owner? Yes No

If so, identify the project and project owner along with a description of the circumstances under which the convenience termination occurred.

1.19 Has a claim or other demand ever been asserted against any Bid Bond, Performance Bond, or Payment Bond posted by your organization in connection with any construction contract or your submittal of a bid proposal for a construction contract?

Yes No

If so, on a separate attachment, state the following: (i) the name, address, telephone number and contact person for each claimant; (ii) the date upon which each such demand or claim was made; and (iii) the disposition of each such demand or claim.

1.20 Has your organization or any predecessor to your organization been charged with a violation of the California False Claims Act or similar federal statute within the past ten (10) years?

Yes No

If yes, on a separate attachment, provide the following: (i) a detailed description of the circumstances upon which charges were based; (ii) the public agency involved, including name, address, telephone and email address of contact person(s) at such public agency; and (iii) disposition of such charges.

1.21 Has any individual or entity who owns ten percent (10%) or more of the equity interest of your organization been an equity owner of ten percent (10%) or more of the equity interest of any other entity or organization, within the past ten (10) years, which has been charged with a violation of the California False Claims Act or similar federal statute within the past ten (10) years?

_____ Yes _____ No

If yes, on a separate attachment, provide the following: (i) the name(s) of each such other entity or organization; (ii) a detailed description of the circumstances upon which charges were based; (iii) the public agency involved, including name, address, telephone and email address of contact person(s) at such public agency; and (iv) disposition of such charges.

1.22 Has any individual or entity who owns ten percent (10%) or more of the equity interest of your organization been charged with a violation of the California False Claims Act or similar federal statute within the past ten (10) years?

_____ Yes _____ No

If yes, on a separate attachment, provide the following: (i) the name of such individual(s) or entity(ies); (ii) a detailed description of the circumstances upon which charges were based; (iii) the public agency involved, including name, address, telephone and email address of contact person(s) at such public agency; and (iv) disposition of such charges.

References (Include name, contact person, telephone/telecopier and address for each reference provided):

1.23 Trade References (three (3) minimum)

1.24 Bank References

1.25 Public Works Inspectors of Record (K-12 or community college project)

1.26 Owner references (three (3) minimum, preferably California K-12 school districts and/or California community college districts)

Accuracy and Authority

The undersigned is duly authorized to execute this Statement of Bidders Qualifications under penalty of perjury on behalf of the Bidder. The undersigned warrants and represents that he/she has personal knowledge of each of the responses to this Statement of Bidder's Qualifications and/or that he/she has conducted all necessary and appropriate inquiries to determine the truth, completeness and accuracy of responses to this Statement of Bidder's Qualifications.

The undersigned declares and certifies that the responses to this Statement of Bidder's Qualifications are complete and accurate; there are no omissions of material fact or information that render any response to be false or misleading and there are no misstatements of fact in any of the responses.

Executed this ___ day of _____ 20__ at _____
(City and State)

I declare under penalty of perjury under California law that the foregoing is true and correct.

(Signature)

(Typed or written name)

CERTIFICATION OF PRE-BID SITE VISIT

The Honorable Board of Trustees
Chabot-Las Positas Community College District
5020 Franklin Drive
Pleasanton, California 94588

RE: Bid No.: 08-24, Priority One: Buildings & Parking Lot Security Upgrade Project -Chabot College

Ladies and Gentlemen:

In connection with submitting a Bid Proposal for the Work described as Priority One: Buildings & Parking Lot Security Upgrade Project -Chabot College, I visited the Site of the Work on Friday, June 13, 2008 at 10:00 a.m. on behalf of

Bidder Name

to inspect the Site of the proposed Work, which will be turned over to the Bidder, if awarded the Contract, in its present condition, with a representative of the Chabot-Las Positas Community College, in order to acquaint the Bidder with the proposed Work so that the Bidder fully understands the facilities, difficulties, and restrictions attendant to execution and completion of the Work. I have also reviewed on behalf of the Bidder, the as-built drawings and/or previous Contract Documents, site conditions and Bid Documents with Project Manager, Swinerton and District's Buyer, Chabot College.

I certify all conditions provided for my review and their effect on the Work as called for in the Contract Documents are included and accounted for in the Bid Proposal amounts submitted to the District.

I understand that a Bidder who fails to submit this Certification of Pre-Bid Site Visit, fully executed, with the Bidder's Bid Proposal form, will result in rejection of the Bid Proposal for non-responsiveness.

Name of Bidder

Authorized Signatory

Address

Phone Number

Date

[END OF SECTION]

BID BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT**, hereinafter "the Obligee," for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Obligee for the Work commonly described as the **BID No. 08-24, PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE PROJECT, CHABOT COLLEGE**

WHEREAS, subject to the terms of this Bond, the Surety is firmly bound unto the Obligee in the penal sum of **ten percent (10%)** of the maximum amount of the Bid Proposal submitted by the Principal to the Obligee, as set forth above.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for sixty (60) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefor, or if no period be specified, within five (5) days after the prescribed forms are presented to him for signature, enter into a written contract with the Obligee, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified for the holding open of the Bid Proposal or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Obligee the difference between the amount specified in said Bid Proposal and the amount for which the Obligee may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Obligee in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed thereunder, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

In the event suit or other proceeding is brought upon this Bond by the Obligee, the Surety shall pay to the Obligee all costs, expenses and fees incurred by the Obligee in connection therewith, including without limitation, attorneys fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20__ by their duly authorized agents or representatives.

(Principal's Corporate Seal)

(Principal Name)

By: _____

(Typed or Printed Name)

Title: _____

(Surety's Corporate Seal)

(Surety Name)

By: _____

(Signature of Attorney-in-Fact for Surety)

(Typed or Printed Name)

(Attach Attorney-in-Fact Certificate)

() _____
(Area Code and Telephone Number of Attorney-In-Fact for Surety)

Contact name, address, telephone number and email address for notices to the Surety

(Contact Name)

(Address)

(Telephone)

(Email address)

BID PROPOSAL

TO: **CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT**, a California community college district, acting by and through its Board of Trustees (“the District”).

FROM:

_____ (Name of Bidder)

_____ (Address)

_____ (City, State, Zip Code)

_____ (Telephone/Telecopier)

_____ (E-Mail Address of Bidder’s Representative(s))

_____ (Name(s) of Bidder’s Authorized Representative(s))

Bid Proposal

1.	Base Bid Amount	\$
2.	Owner’s Unspecified Allowance	\$ <u>60,000.00</u>
3.	Total Bid Proposal Amount (Line 1 plus Line 2)	\$

- 1.1 **Bid Proposal Amount.** The undersigned Bidder proposes and agrees to perform the Contract including, without limitation, providing and furnishing any and all of the labor, materials, tools, equipment and services necessary to complete in a workmanlike manner all of the Work and other obligations required by the Contract Documents for the sum of _____ Dollars (\$ _____) (Line 3 of Table above). The Bidder confirms that it has checked all of the above figures and understands that neither the District nor any of its agents, employees or representatives shall be responsible for any errors or omissions on the part of the undersigned Bidder in preparing and submitting this Bid Proposal. The Bidder confirms that the bid proposal includes the Owner’s Non-Specified Allowance in the amount of Sixty Thousand Dollars and No Cents (\$60,000.00).
- 1.2 **Owner’s Unspecified Allowance.** Bidder shall include in Bid Proposal the stipulated sum of Sixty Thousand Dollars (\$60,000.00) for unspecified work to be performed ONLY at the determination and direction of the District. Work performed at the determination and direction of the District under this Allowance shall be documented by Contractor and submitted to Construction Manager per the requirements specified in Article 9 of the General Conditions. Contractor shall include a separate line item in Contractor’s Schedule of Values as “Allowance” with the value of Sixty Thousand Dollars (\$60,000.00). At

closeout of Contract, any funds remaining in the Allowance shall be credited to Owner through a Change Order.

- 1.3 **Acknowledgment of Bid Addenda.** The Bidder confirms that this Bid Proposal incorporates and is inclusive of, all items or other matters contained in Bid Addenda issued by or on behalf of the District.

_____ **Addenda Nos.** _____ received, acknowledged
(initial) and incorporated into this Bid Proposal.

Alternate Bid Items. The Bidder's price proposal(s) for Alternate Bid Items is/are set forth in the form of Alternate Bid Item Proposal included herewith (Attachment A). Price proposal(s) for Alternate Bid Item(s) will not form the basis for the District's award of the Contract unless an Alternate Bid Item is incorporated into the scope of Work of the Contract awarded.

- 1 **Documents Accompanying Bid.** The Bidder has submitted with this Bid Proposal the following: (a) Bid Bond; (b) Subcontractors List; (c) Non-Collusion Affidavit; (d) Statement of Bidder's Qualifications; and (e) Certification of Pre-Bid Site Visit. The Bidder acknowledges that if this Bid Proposal and the foregoing documents are not fully in compliance with applicable requirements set forth in the Call for Bids, the Instructions for Bidders and in each of the foregoing documents, the Bid Proposal may be rejected as non-responsive.
- 2 **Award of Contract.** If the Bidder submitting this Bid Proposal is awarded the Contract, the undersigned will execute and deliver to the District the Contract for Labor and Materials in the form attached hereto within five (5) days after notification of award of the Contract. Concurrently with delivery of the executed Agreement to the District, the Bidder awarded the Contract shall deliver to the District: (a) Certificates of Insurance evidencing all insurance coverages required under the Contract Documents; (b) the Certificate of Workers' Compensation Insurance; and (c) the Drug-Free Workplace Certificate. Failure of the Bidder awarded the Contract to strictly comply with the preceding may result in the District's rescission of the award of the Contract and/or forfeiture of the Bidder's Bid Security. In such event, the District may, in its sole and exclusive discretion elect to award the Contract to the responsible Bidder submitting the next lowest Bid Proposal, or to reject all Bid Proposals.
- 3 **Contractor's License.** The undersigned Bidder is currently and duly licensed in accordance with the California Contractors License Law, California Business & Professions Code §§7000 et seq., under the following classification(s) _____ bearing License Number(s) _____, with expiration date(s) of _____. The Bidder certifies that: (a) it is duly licensed, in the necessary class(es), for performing the Work of the Contract Documents; (b) that such license shall be in full force and effect throughout the duration of the performance of the Work under the Contract Documents; and (c) that all Subcontractors providing or performing any portion of the Work shall be so properly licensed to perform or provide such portion of the Work.
- 4 **Acknowledgment and Confirmation.** The undersigned Bidder acknowledges its receipt, review and understanding of the Drawings, the Specifications and other Contract Documents pertaining to the proposed Work. The undersigned Bidder certifies that the Contract Documents are, in its opinion, adequate, feasible and complete for providing, performing and constructing the Work in a sound and suitable manner for the use specified and intended by the Contract Documents. The undersigned Bidder certifies that it has, or has available, all necessary equipment, personnel, materials, facilities and technical and financial ability to complete the Work for the amount bid herein within the Contract Time and in accordance with the Contract Documents.

(Corporate Seal)

By: _____
(Signature)

(Typed or Printed Name)

Title: _____

ATTACHMENT A

Alternate Bid Item Proposal

Bid Add Alternate Item No. 1: Replace security cameras in Campus Bookstore, Building B3800.

_____ Dollars (\$_____)

Bid Deductive Alternate Item No. 2: Library, Building B100.

_____ Dollars (\$_____)

Bid Deductive Alternate Item No. 3: Administration, Building B200.

_____ Dollars (\$_____)

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CONTRACT FOR LABOR AND MATERIALS

This Contract for Labor and Materials ("Contract") is entered into this _____ day of _____, 20____, in the City of Pleasanton, County of Alameda, State of California, by and between CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT ("District") and _____ ("Contractor") for the Work of the Project generally described as **BID No. 08-24, FURNISH & INSTALL SECURITY SYSTEM, CHABOT COLLEGE**. In consideration of the mutual covenants set forth herein, the Contractor and District agree as follows:

- A. In consideration of the payment of the sum of _____ Dollars (\$_____) ("the Contract Price"), the Contractor shall perform and complete the Work generally described as **BID No. 08-24, FURNISH & INSTALL SECURITY SYTEM, CHABOT COLLEGE**.
- B. Contractor shall commence the Work on the date indicated in the Notice to Proceed issued by or on behalf of the District and shall complete the Work within Seventy-Five (75) calendar days after the commencement date for the Work ("the Contract Time"). Failure to complete the Work within the Contract Time will subject the Contractor to Liquidated Damages at the rate of Two Hundred Fifty Dollars (\$250.00) until the Work is completed.
- C. The location of the Work is **25555 Hesperian Boulevard, Hayward, CA 94545** ("the Site").
- D. The Contract Documents consists of this Contract for Labor and Materials, the attached Contract Terms and Conditions, the Bid Proposal and other documents submitted by the Contractor to the District as a Bidder and the documents identified below. By executing this Contract, the Contractor acknowledges its receipt and review of the Contract Documents; based upon this review, the Contractor confirms that the Work can be completed for the Contract Price and within the Contract Time. The Contract Documents consist of:
- | | |
|---------------------------------------|--------------------------------------|
| Notice Calling For Bids | Labor and Materials Payment Bond |
| Instructions For Bidders | Certification of Pre-Bid Site Visit |
| Subcontractors List | Certificate of Worker's Compensation |
| Non-Collusion Affidavit | Insurance |
| Qualification Application Information | Drug-Free Workplace Certification |
| Bid Addenda, if any | Contract For Labor and Materials |
| Bid Proposal | Drawings |
| Bid Bond | Specifications |
| Performance Bond | |
- E. Authority to Execute: The individual(s) executing this Agreement on behalf of the Contractor is/are duly and fully authorized to execute this Agreement on behalf of Contractor and to bind the Contractor to each and every term, condition and covenant of the Contract Documents.

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STARE LICENSE BOARD. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 2600, SACRAMENTO, CALIFORNIA 95826

IN WITNESS WHEREOF, the District and Contractor have executed this Contract as of the date set forth above.

“DISTRICT”
Chabot-Las Positas Community College
District

“Contractor”
[Contractor Name]

By: _____
Date

By: _____

Mr. Lorenzo Legaspi
Vice Chancellor, Business Services

Title: _____

By: _____
Date

Mr. Jeffrey M. Kingston
Vice Chancellor,
Facilities Planning & Management

TERMS AND CONDITIONS OF CONTRACT FOR LABOR AND MATERIALS

- 1. Labor and Materials.** The Contractor shall furnish and pay for all labor, materials, equipment and services necessary to complete the Work in accordance with the Contract Documents. Unless otherwise expressly provided for in the Contract Documents, all materials, equipment and other items incorporated into the Work shall be new and of the most suitable grade and quality for the purpose intended. The Work is subject to tests/inspections as required by the Contract Documents. The Contractor shall afford the District, the Project Inspector, the Architect and test/inspection services with access to the Work, wherever located and whether in place or in progress. All of the Work shall conform to the requirements of the Contract Documents and applicable laws, ordinances, rules and regulations.
- 2. Submittals.** The Contractor shall submit to the District Representative or the Architect, as designated in the Contract Documents, shop drawings, product data and other submittals (collectively "Submittals") required by the Contract Documents promptly and in an orderly sequence while allowing sufficient time for review and comment. No portion of the Work requiring Submittals shall be performed until the required Submittals have been reviewed and accepted.
- 3. Construction Schedule.** If required by the District, the Contractor shall prepare a Construction Schedule in such form and format as directed by the District. The Construction Schedule shall reflect all activities necessary to complete the Work and shall be in such detail as required by the District. If a schedule is required, the Contractor shall update the schedule monthly or more frequently as directed by the District or required by the circumstances of the Work.
- 4. Changes.**

 - 4.1 Changes to the Work.** The District may, by written order, make Changes to the Work, issue additional instructions and to add to or delete from the Work. No Change may be made without the prior written approval and direction of the District. Adjustments of the Contract Price or the Contract Time on account of a Change authorized hereunder will only be made by written Change Order duly executed by the Contractor and the District Representative. Adjustments to the Contract Price for authorized Changes shall be limited to the actual costs of labor and materials necessary to complete the Change plus a mark-up of _____ percent (___%) of the actual costs of labor and materials; it being agreed that the mark-up represents all compensation due the Contractor for profit, overhead/administrative costs and impacts of an authorized Change. Changes approved by the District shall be reduced to Change Order in the form and substance as set forth in Attachment A hereto.
 - 4.2 Substitutions.** No substitution of any specified item, product, material or system ("Specified Items") will be considered unless the Contractor submits a request to substitute Specified Items along with data substantiating the equivalency of the proposed substitution with the Specified Items not more than thirty five (35) days after the date of award of the Contract to the Contractor. The Contractor shall reimburse the District for all costs and expenses incurred by the District to review a proposed substitution for Specified Items. The District's acceptance or rejection of a proposed substitution shall be final. No substitution accepted by the District shall increase the Contract Price or the Contract Time; provided, however, if the cost to furnish/install an approved substitution is less than the specified Item, the Contract Price shall be reduced by such cost difference. If any Specified Items are identified in any portion of the Contract Documents as "District Standard Materials/Equipment" "match existing in use" or similar words/phrases, in accordance with Public Contract Code §3400, the District shall be deemed to have made a

finding that such Specified Items are designated as “sole source” items designed to match existing and in use items. In accordance with Public Contract Code §3400, the District will not consider or accept alternatives or substitutions for any Specified Items so identified.

5. **Safety; Security.** The Contractor shall comply with all applicable laws, ordinances, rules, or regulations pertaining to safety at the Site, including without limitation, implementation and enforcement of safety programs. The Contractor shall implement and maintain safety measures such as fencing, barricades, signs, lights and other precautions to prevent injury or death to persons or damage to property, as required or appropriate by the circumstances or the nature of the Work. The Contractor is responsible for securing the Site and Work in place or in progress (including materials/equipment/tools situated at the Site) to prevent theft, loss or damage.
6. **Labor.**
 - 6.1 **Prevailing Wage Rates; Hours of Work.** The Contractor and all Subcontractors shall: (a) pay their respective workers wage rates not less than the prevailing wage rate established for the classification, trade or work performed by each worker; (b) maintain complete and accurate payroll records for workers engaged in the Work; and (c) if requested by the District, provide Certified Payroll records as required by applicable laws. The Contractor and Subcontractors shall not permit any worker to provide more than eight (8) hours of work per day or forty (40) hours per week without additional compensation as mandated by law. The Contractor shall be subject to all penalties and assessments provided by law or regulation for violation(s) of the prevailing wage rate or hours of work requirements.
 - 6.2 **Apprentices.** Apprentices, if any engaged in performing any portion of the Work shall be in strict conformity with applicable laws, rules and regulations, including without limitation, Labor Code §§1777.5 through 1777.7, which are incorporated herein by this reference.
 - 6.3 **Competency and Discipline.** The Contractor shall enforce strict discipline and good order among the Contractor's employees, the employees of any Subcontractor and all other persons performing any part of the Work at the Site. Personnel of the Contractor or any Subcontractor shall be subject to removal from the Site for violations of applicable law or District policies. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them and shall dismiss from its employ and direct any Subcontractor or Sub-subcontractor to dismiss from their employment any person deemed by the District to be unfit or incompetent to perform Work.
 - 6.4 **Superintendent.** The Contractor shall employ a Superintendent fluent in verbal and written English who shall be in attendance at the Site at all times during performance of Work at the Site. The Superintendent shall be deemed the Contractor's Representative for the Work; directions, instructions or other communications to or with the Contractor's Superintendent shall be deemed directions, instructions or communications to or with the Contractor.
7. **Subcontractors.** The Work of each Subcontractor shall be set forth in a written Subcontract agreement incorporating by reference this Contract; Subcontracts shall be made available to the District for review upon request of the District. The Contractor is responsible to the District for the acts, omissions and other conduct of Subcontractors. Each Subcontractor shall maintain Workers Compensation/Employers Liability Insurance and Commercial General Liability Insurance as required by the Contract for Labor and Materials.
8. **Non-Discrimination.** The Contractor and its Subcontractors shall not discriminate against any active or prospective employee based upon race, color, ancestry, national origin, religion, sex, age, sexual preference or marital status. The Contractor and its Subcontractors shall comply with

all applicable laws, ordinances, rules and regulations prohibiting workplace discrimination and/or discriminatory employment practices.

- 9. Payment of the Contract Price.** The District will make payment of the Contract Price upon completion of the Work, the Contractor's full performance of all other obligations under this Contract and the Contractor's submission of a properly itemized invoice. Upon receipt of the Contractor's invoice, the District Representative will promptly verify that the Work has been completed and that the Contractor has performed all other obligations hereunder. Within thirty (30) days of the District Representative's confirmation of the completion of Work and the Contractor's performance of other obligations hereunder, the District will make payment of the Contract Price. If the Contract Time is a duration of sixty (60) days or more, the Contractor may submit invoices on a monthly basis for the value of Work completed in the prior month, whereupon the District Representative will promptly verify that the Work has been completed as indicated in the Contractor's invoice. Within thirty (30) days of the date of such verification, the District will make payment equal to ninety percent (90%) of the value of the Work completed. Within sixty (60) days of completion of all Work and all other of the Contractor's obligations hereunder, amounts previously retained from prior invoices will be released to the Contractor. The District may, in its sole discretion, condition payment of the Contract Price, or any portion thereof, upon: (a) the Contractor's preparation of a Schedule of Values for review and acceptance by the District's Representative; (b) the submittal of executed Waivers and Releases (on Progress Payment or Final Payment, as applicable) for the Contractor and all Subcontractors receiving any portion of the Contract Price; and/or (c) delivery of Certified Payroll records of the Contractor and Subcontractors. The District may withhold payment of the Contract Price if: (a) there are claims or the probability of claims being submitted by Subcontractor, Material Suppliers or others in connection with the Work; (b) defective or non-conforming Work which is not remedied; or (c) there are any uncured Contractor defaults. Notwithstanding any provision of the Contract Documents to the contrary, no payment will be made to the Contractor upon completion of the Work unless the Contractor has completed and submitted the form of Asbestos and Other Hazardous Materials Certification set forth in Attachment B hereto.
- 10. Insurance.** The Contractor and its Subcontractors shall, at all times during the Work, maintain Workers Compensation, Employers Liability, and Commercial General Liability Insurance in the minimum coverage amounts set forth in the Contract. The Contractor's Commercial General Liability Insurance shall name the District as an Additional Insured. The Contractor shall maintain a policy of Builders Risk Insurance covering the full insurable value of the Work; if noted as a requirement in the Contract, the Builder's Risk Insurance shall include seismic coverage. All policies of insurance shall include provisions that the policy of insurance will not be materially modified, cancelled or allowed to expire without at least thirty (30) days advance notice to the District. Prior to commencing the Work, the Contractor shall deliver Certificates of Insurance of itself and its Subcontractors evidencing the required insurance coverages. No Work at the Site by the Contractor or any Subcontractor will be permitted unless the Contractor and Subcontractor, as applicable has/have submitted Certificates of Insurance evidencing the required insurance policies hereunder to the District Representative.
- 11. Indemnification.** Unless arising solely out of the active negligence or willful misconduct of the District, the Contractor shall indemnify, defend and hold harmless the District, the District's Board of Trustees and all members thereof and the District's employees, officers, agents and representatives from all claims, demands and liabilities, including without limitation, attorneys fees, which arise out of or related in any manner to this Contract or the Work. The Contractor's obligations hereunder include without limitation: (a) injury to, or death of, persons; (b) damage to property; (c) theft or loss of property; (d) Stop Notice claims; and (e) other losses, damages or

costs arising out of, in whole or in part, of the acts, omissions or other conduct of the Contractor or Subcontractors. The Contractor's obligations hereunder shall survive termination of the Contract and/or completion of the Work, and are deemed incorporated into and made a part of the obligations of the Surety issuing the Performance Bond.

- 12. District Right to Terminate.** The Contractor's failure to comply with any term or condition of the Contract Documents shall constitute default of the Contractor; in such event, the District may terminate the Contract upon seven (7) days written notice to the Contractor. Unless the Contractor shall have commenced, and diligently thereafter prosecute to completion, all required actions to cure such default(s), this Contract shall be deemed terminated without further action of the District; such termination shall be effective the seventh (7th) day after the date of the District's written notice. If the District terminates the Contract for default of the Contractor, the Contractor and the Performance Bond Surety shall be liable to the District for all losses, costs and damages arising out of the Contractor's default and costs to complete the Work which exceeds the remaining Contract Price at the time of termination. In addition to the preceding, the District may terminate this Contract at any time for the convenience of the District by written notice to the Contractor, in which case, the payment of the Contract Price shall be limited to the value of the Work in place or in progress at the time of the termination for the District's convenience.
- 13. Warranty.** If within one (1) year, or such other period set forth in the Contract Documents, any of the Work or workmanship is found defective or not in compliance with the Contract Documents, the Contractor shall upon the District's demand, promptly take all measures necessary to correct, repair or replace such Work or workmanship. If the Contractor fails to do so, the District may take necessary action to correct, replace or repair such Work or workmanship at the cost and expense of the Contractor. The surety issuing the Performance Bond shall be liable to the District for correction, repair or replacement of defective/non-conforming Work if the Contractor fails or refuses to perform in accordance with the preceding.
- 14. Tests/Inspections of the Work.** The Work shall be subject to tests/inspections as required by the Contract Documents. The Contractor shall be liable excessive costs of tests/inspections which result from the Work not being ready for tests/inspections or the failure of the Work to comply with the applicable test/inspection standards. If the Work is subject to the jurisdiction of the Division of State Architect ("DSA"), all of the Work shall be subject to inspection/observation by the Project Inspector retained by the District under DSA regulations. The Project Inspector shall have access at all times to the Work, whether in place or in progress; the Contractor shall provide such access without adjustment of the Contract Price or the Contract Time.
- 15. Project Coordination.**
- 15.1 Damage and Restoration.**
- A.** Damage to previously existing or newly placed facilities caused by movement of equipment or other operations, whether accidental or made necessary by reason of Contract requirements, shall be restored or replaced as specified or directed by Architect.
 - B.** Restoration shall be equal to the structural qualities or performance capacities of the original work, and finishes shall match the appearance of, as nearly as possible, like existing adjacent work. Restorations shall be subject to approval by Architect and shall be made as necessary at no added expense to Owner unless otherwise particularly provided for.
 - C.** Work not properly restored or where not capable of being restored as intended under these Specifications shall be removed and replaced as directed by Architect at no added expense to Owner.

- 16. Training.** Workers conducting disturbance of materials known or suspected to contain asbestos and/or lead must have either asbestos Class III training, lead action level training or both – as is appropriate for materials being disturbed. Only small scale short duration work that impacts asbestos or lead may be conducted by non-remediation contractors. Training of workers must be within the past twelve months and must be accompanied by a negative exposure assessment. If contractor does not have workers with the proper training, then this training may be obtained through Hazard Management Services, Inc. (HMS, Inc.) Attn: Michael Sharp, PO Box 576848, Modesto, CA 95357, as part of this project. If more than 100 square feet of asbestos material will be disturbed, the contractor must be a registered asbestos abatement contractor.
- 17. Miscellaneous.**
- 17.1 Disputes.** Each dispute or claim of \$375,000 or less arising out of this Contract shall be resolved in accordance with Public Contract Code §20104 et seq. A dispute or claim exceeding \$375,000 shall be resolved by binding arbitration conducted under the auspices of the American Arbitration Association and its Construction Industry Arbitration Rules in effect at the time that a Demand for Arbitration is filed, except as modified herein. The award rendered by the Arbitrator(s) (“Arbitration Award”) shall be final and binding upon the District and the Contractor only if the Arbitration Award is supported by applicable law and substantial evidence pursuant to California Code of Civil Procedure §1296 and includes findings of fact and conclusions of law in conformity with California Code of Civil Procedure §1296 and Rule R-43 of the AAA Construction Industry Arbitration Rules. Any Arbitration Award that does not conform to the foregoing shall be invalid and unenforceable. The District and Contractor hereby expressly agree that the Court shall, subject to California Code of Civil Procedure §§1286.4 and 1296, vacate the award if, after review of the award, the Court determines either that the Arbitration Award is not supported by substantial evidence or that it is based on an error of law. Notwithstanding any claim or dispute arising out of this Contract or the Work, the Contractor shall continue to diligently perform the Work and prosecute the same to completion.
- 17.2 Governing Law; Interpretation.** This Contract shall be governed by the laws of the State of California. This Contract shall be interpreted as a whole and not in favor of the District or the Contractor.
- 17.3 Successors.** This Contract shall be binding upon and inure to the benefit of the respective successors-in-interest of the District and the Contractor. The foregoing notwithstanding, the Contractor shall not assign this Contract, any right or obligation hereunder or any portion thereof.
- 17.4 Permits; Approvals.** Unless otherwise expressly provided in the Contract Documents, the Contractor shall obtain and pay for all fees, permits or approvals necessary to complete the Work.
- 17.5 Waiver of Consequential Special Damages.** Notwithstanding any right conferred by law or arising by operation of law, by executing the Agreement, the Contractor expressly waives and relinquishes any and all right or entitlement to assert or recover any damages, losses or liabilities from the District which are in the nature of special or consequential damages, losses or liabilities arising out of or related in any manner to the District’s breach or default of its obligations under the Contract Documents.
- 17.6 Days.** Unless otherwise stated in the Contract Documents, all references to “days” shall be deemed references to calendar days.
- 17.7 Severability.** If any term, condition or provision of this Contract is deemed invalid, illegal or unenforceable by a Court of competent jurisdiction, such term, condition or provision

shall be deemed severed herefrom, but all other terms, conditions and provisions hereof shall remain unaffected and in full force and effect.

- 17.8 Entire Agreement.** This Contract and the Contract Documents enumerated herein constitute the entire agreement and understanding of the District and the Contractor concerning the subject matter hereof.
- 17.9 Architect.** The term “Architect” within the Contract Documents shall be defined as “Consultant”.

**CHANGE ORDER FORM
(ATTACHMENT A TO CONTRACT)**

Project:		Change Order #:	
Date:		Contract #:	
Contractor:			

Pursuant to Paragraph 4.1 of the Contract, this Change Order Form shall be used for all Change Orders associated with the Work. No additions or deletions to this form shall be allowed, except with permission of the District.

You are hereby directed to provide the extra work necessary to comply with this Change Order.

DESCRIPTION OF CHANGE:

Contractor accepts the terms and conditions stated as full and final settlement of any and all claims arising from this Change Order. Contractor agrees to perform the above described work in accordance with the above terms and in compliance with applicable sections of the Contract Documents. The foregoing adjustment of the Contract Price and the Contract Time for the changes noted in this Change Order (the "Changes") represents the full and complete adjustment of the Contract Time and the Contract Price due the Contractor for providing and completing such Changes, including without limitation: (i) all costs (whether direct or indirect) for labor, equipment, materials, tools, supplies and/or services; (ii) all general and administrative overhead costs (including without limitation, home office, field office and Site general conditions costs) and profit; and (iii) all impacts, delays, disruptions, interferences, or hindrances in providing and completing the Changes. Contractor waives all rights, including without limitation those arising under Civil Code Section 1542, for any other adjustment of the Contract Price or the Contract Time on account of this Change Order or the performance and completion of the Changes. This Change Order is hereby agreed to, accepted and approved, all in accordance with the Contract Documents.

NOT VALID UNTIL SIGNED BY THE OWNER, ARCHITECT, AND CONTRACTOR

The original Contract Price was \$ _____

Net change by previously authorized Change Orders \$ _____

The Contract Price prior to this Change Order was. \$ _____

The Contract Price will be changed by this Change Order in the amount of. \$ _____

The new Adjusted Contract Price including this Change Order will be. \$ _____

The Contract Time will be (increased) (decreased) (unchanged) by. (_____) Days

The date of Substantial Completion as of the date of this Change Order therefore is: . . . ____/____/____

ARCHITECT

CONTRACTOR

OWNER

Chabot-Las Positas Community College District
5020 Franklin Drive
Pleasanton, CA 94588

By: _____

By: _____

By: _____

Date: _____

Date: _____

Date: _____

**ASBESTOS AND OTHER HAZARDOUS MATERIALS CERTIFICATION
(ATTACHMENT B TO CONTRACT)**

This Asbestos and Other Hazardous Materials Certification form is part of the Contract made by and between the Chabot-Las Positas Community College District ("District") and _____ ("Contractor") for the work of improvement commonly referred to as **BID NO. 08-24, PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE PROJECT, CHABOT COLLEGE** (hereinafter referred to as the "Project").

To the best of my knowledge, information and belief, in completing the Work of the Project, no materials, equipment or other items furnished, installed or incorporated into the Project contains, or in itself be composed of, any asbestos, polychlorinated biphenyl (PCB), any material listed by the federal or state EPA or federal or state health agencies as a hazardous material, or defined as being hazardous under federal or state laws, rules or regulations.

The undersigned is duly authorized to complete, execute and submit this Asbestos and Other Hazardous Materials Certification on behalf of the Contractor. The undersigned has personal knowledge of the substantive representations set forth hereinabove or has made appropriate diligent inquiry to ascertain that the substantive representations set forth hereinabove are complete, true and accurate and do not omit material facts rendering such representations to be false or misleading.

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

Executed on this _____ day of _____, 20__ at _____.

Name of Contractor (Print or Type)

By: _____
Signature

Print Name

Title

By: _____
Signature

Print Name

Title

Subscribed and sworn before me
this ____ day of _____, 200

Notary Public in and for the State of California

My Commission Expires:

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

I, _____ the _____ of
(Name) (Title)

_____, declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code §3700(a) and (b) provides:

“Every employer except the state shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.”

2. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

3. The following information pertains to the Workers Compensation Insurance policy:

Name of Insurer	
Policy No.	
Expiration Date	
Name, Address, Telephone, Fax and Email Address of contact for Insurer or Broker	

(Contractor Name)

By: _____
(Signature)

(Typed or printed name)

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DRUG-FREE WORKPLACE CERTIFICATION

I, _____, am the _____ of
(Print Name) (Title)

_____. I declare, state and certify to all of the following:
(Contractor Name)

1. I am aware of the provisions and requirements of California Government Code §§8350 et seq., the Drug Free Workplace Act of 1990.

2. I am authorized to certify, and do certify, on behalf of Contractor that a drug free workplace will be provided by Contractor by doing all of the following:

- A. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in Contractor’s workplace and specifying actions which will be taken against employees for violation of the prohibition;
- B. Establishing a drug-free awareness program to inform employees about all of the following:
 - (i) The dangers of drug abuse in the workplace;
 - (ii) Contractor’s policy of maintaining a drug-free workplace;
 - (iii) The availability of drug counseling, rehabilitation and employee-assistance programs; and
 - (iv) The penalties that may be imposed upon employees for drug abuse violations;
- C. Requiring that each employee engaged in the performance of the Contract be given a copy of the statement required by subdivision (A), above, and that as a condition of employment by Contractor in connection with the Work of the Contract, the employee agrees to abide by the terms of the statement.

3. Contractor agrees to fulfill and discharge all of Contractor’s obligations under the terms and requirements of California Government Code §8355 by, inter alia, publishing a statement notifying employees concerning: (a) the prohibition of any controlled substance in the workplace, (b) establishing a drug-free awareness program, and (c) requiring that each employee engaged in the performance of the Work of the Contract be given a copy of the statement required by California Government Code §8355(a) and requiring that the employee agree to abide by the terms of that statement.

4. Contractor and I understand that if the District determines that Contractor has either: (a) made a false certification herein, or (b) violated this certification by failing to carry out and to implement the requirements of California Government Code §§8355, the Contract awarded herein is subject to termination, suspension of payments, or both. Contractor and I further understand that, should Contractor violate the terms of the Drug-Free Workplace Act of 1990, Contractor may be subject to debarment in accordance with the provisions of California Government Code §§8350, et seq.

5. Contractor and I acknowledge that Contractor and I are aware of the provisions of

California Government Code §§8350, et seq. and hereby certify that Contractor and I will adhere to, fulfill, satisfy and discharge all provisions of and obligations under the Drug-Free Workplace Act of 1990.

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

Executed at _____ this ____ day of
(City and State)

_____, 20____.

(Signature)

(Handwritten or Typed Name)

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Principal, and _____ as Surety, are held and firmly bound unto CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT hereinafter "the Obligee", in the penal sum of _____ Dollars (\$ _____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as: **BID NO. 08-24, PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE PROJECT, CHABOT COLLEGE**

WHEREAS, the Principal, has entered into an agreement with the Obligee for performance of the Work; the Agreement and all other Contract Documents set forth therein are incorporated herein and made a part hereof by this reference.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond ensuring the Principal's prompt, full and faithful performance of the Work of the Contract Documents.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully perform each and all of the obligations and things to be done and performed by the Principal in strict accordance with the terms of the Contract Documents as they may be modified or amended from time to time; and if the Principal shall indemnify and save harmless the Obligee and all of its officers, agents and employees from any and all losses, liability and damages, claims, judgments, liens, costs, and fees of every description, which may be incurred by the Obligee by reason of the failure or default on the part of the Principal in the performance of any or all of the terms or the obligations of the Contract Documents, including all modifications, and amendments, thereto, and any warranties or guarantees required thereunder; then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The Surety, for value received, hereby stipulates and agrees that no change, adjustment of the Contract Time, adjustment of the Contract Price, alterations, deletions, additions, or any other modifications to the terms of the Contract Documents, the Work to be performed thereunder, or to the Specifications or the Drawings shall limit, restrict or otherwise impair Surety's obligations or Obligee's rights hereunder; Surety hereby waives notice from the Obligee of any such changes, adjustments of Contract Time, adjustments of Contract Price, alterations, deletions, additions or other modifications to the Contract Documents, the Work to be performed under the Contract Documents, or the Drawings or the Specifications.

In the event of the Obligee's termination of the Contract due to the Principal's breach or default of the Contract Documents, within twenty (20) days after written notice from the Obligee to the Surety of the Principal's breach or default of the Contract Documents and Obligee's termination of the Contract, the Surety shall notify Obligee in writing of Surety's assumption of obligations hereunder by its election to either remedy the default or breach of the Principal or to take charge of the Work of the Contract Documents and complete the Work at its own expense ("the Notice of Election"); provided, however, that the procedure by which the Surety undertakes to discharge its obligations under this Bond shall be subject to the advance written approval of the Obligee, which approval shall not be unreasonably withheld, limited or restricted. The insolvency of the Principal or the Principal's mere denial of a failure of

performance or default under the Contract Documents shall not by itself, without the Surety's prompt, diligent inquiry and investigation of such denial, be justification for Surety's failure to give the Notice of Election or for its failure to promptly remedy the failure of performance or default of the Principal or to complete the Work.

In the event the Surety shall fail to issue its Notice of Election to Obligee within the time provided for hereinabove, the Obligee may thereafter cause the cure or remedy of the Principal's failure of performance or default or to complete the Work. The Principal and the Surety shall be each jointly and severally liable to the Obligee for all damages and costs sustained by the Obligee as a result of the Principal's failure of performance under the Contract Documents or default in its performance of obligations thereunder, including without limitation the costs of cure or completion exceeding the then remaining balance of the Contract Price; provided that the Surety's liability hereunder for the costs of performance, damages and other costs sustained by the Obligee upon the Principal's failure of performance under or default under the Contract Documents shall be limited to the penal sum hereof, which shall be deemed to include the costs or value of any Changes to the Work which increases the Contract Price.

In the event suit or other proceeding is brought upon this Bond by the Obligee, the Surety shall pay to the Obligee all costs, expenses and fees incurred by the Obligee therewith, including without limitation, attorneys fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this ____ day of _____, 20__ by their duly authorized agent or representative.

(Principal's Corporate Seal)

(Principal Name)

By: _____

(Typed or Printed Name)

Title: _____

(Surety's Corporate Seal)

(Surety Name)

By: _____

(Signature of Attorney-in-Fact for Surety)

(Attach Attorney-in-Fact Certificate)

(Typed or Printed Name)

(_____) _____

(Area Code and Telephone Number of Attorney-In-Fact for Surety)

Contact name, address, telephone number and email address for notices to the Surety

(Contact Name)

(Address)

(Telephone)

(Email address)

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LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____ as Principal, and _____ as Surety, are held and firmly bound unto CHABOT-LAS POSITAS COMMUNITY COLLEGE DISTRICT hereinafter "the Obligee", in the penal sum of _____ Dollars (\$ _____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as: **BID NO. 08-24, PRIORITY ONE: BUILDINGS & PARKING LOT SECURITY UPGRADE PROJECT, CHABOT COLLEGE**

WHEREAS, the Principal, has entered into an Agreement with the Obligee for performance of the Work, the Agreement and all other Contract Documents set forth therein are incorporated herein by this reference and made a part hereof.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond for the prompt, full and faithful payment to any Claimant, as hereinafter defined, for all labor materials or services used, or reasonably required for use, in the performance of the Work.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully make payment to any Claimant for all labor, materials or services used or reasonably required for use in the performance of the Work then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The term "Claimant" shall refer to any person, corporation, partnership, proprietorship or other entity including without limitation, all persons and entities described in California Civil Code §3181, providing or furnishing labor, materials or services used or reasonably required for use in the performance of the Work under the Contract Documents, without regard for whether such labor, materials or services were sold, leased or rented. This Bond shall inure to the benefit of all Claimants so as to give them, or their assigns and successors, a right of action upon this Bond.

In the event suit is brought on this Bond by any Claimant for amounts due such Claimant for labor, materials or services provided or furnished by such Claimant, the Surety shall pay for the same and reasonable attorneys fees pursuant to California Civil Code §3250.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, deletion, addition, or any other modification to the terms of the Contract Documents, the Work to be performed thereunder, the Specifications or the Drawings, or any other portion of the Contract Documents, shall in any way limit, restrict or otherwise affect its obligations under this Bond; the Surety hereby waives notice from the Obligee of any such change, extension of time, alteration, deletion, addition or other modification to the Contract Documents, the Work to be performed under the Contract Documents, the Drawings or the Specifications of any other portion of the Contract Documents.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20__ by their duly authorized agent or representative.

(Principal's Corporate Seal)

(Principal Name)

By: _____
(Signature)

(Type or Print Name)

Title: _____

(Surety's Corporate Seal)

(Surety Name)

By: _____
(Signature of Attorney-in-Fact for Surety)

(Attach Attorney-in-Fact Certificate)

(Type or Print Name of Attorney-in-Fact)

() _____
(Area Code and Telephone Number of Attorney-In-Fact for Surety)

Contact name, address, telephone number and email address for notices to the Surety

(Contact Name)

(Address)

(Telephone)

(Email address)

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SECTION 13701

SECURITY GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.
- B. Chabot Las Positas Community College District – Cabling Infrastructure Standards (available on the Ford Graphics Planwell Site).

1.2 RELATED WORK NOT IN THIS SECTION

- A. General and specific provisions of these Specifications apply to the work specified in this Section, as well as:
 - 1. Security Materials and Methods (Section 13710)
 - 2. Security Management System Server (Section 13720)
 - 3. Security Management System Devices (Section 13721)
 - 4. Security Wire and Cable (Section 13746)
 - 5. Security Emergency Communication Stations (Section 13760)
 - 6. Security Closed Circuit Television System (Section 13780)

1.3 TERMINOLOGY

- A. Chabot Community College is referred to in the Specification Documents as the College, and the bid respondent is referred to as the Contractor.
- B. The terms “District” and “College” are used synonymously within this Section and Related Sections, as well as within the Drawings.
- C. The term “Documents” refers to all contract specifications and drawings.
- D. The terms “provide” and “furnish and install” shall be considered synonymous.

1.4 PERMITS AND INSPECTIONS

- A. Obtain and pay for all permits and inspections required for the work.
- B. Furnish materials and workmanship for this work in conformance with all applicable legal and code requirements.
- C. Perform all tests required herein, or as may be reasonably required to demonstrate conformance with the Specifications and a functioning operational security system or with

the requirements of any legal authority having jurisdiction.

1.5 DESCRIPTION OF WORK

- A. This contract is for providing and installing security system software, complete system programming and configuration, field hardware and devices, conduit and cabling, 120VAC power connections, trenching, boring, backfill, coring, patching and painting at the select buildings and site locations at the College. The Contractor shall be responsible for providing a complete “turnkey” system as defined within these documents.
- B. This Division requires the furnishing and installation of all items specified herein, indicated on the Drawings or reasonably inferred as necessary for safe and proper operation; including every article, device or accessory (whether or not specifically called for by item) reasonably necessary to facilitate each system’s functionality as indicated by the design and the equipment specified.
- C. Elements of the work include, but are not limited to, materials, labor, supervision, supplies, equipment, transportation, storage, utilities, and all required licenses.
- D. All work performed under this Project shall be in accordance with the Drawings and Specifications and subject to the terms and conditions of the Contract.
- E. All components and materials supplied under this Division shall be new, in their original manufacturer’s packaging, and purchased through the component manufacturer’s authorized distribution channels. Reconditioned or refurbished materials and components are not acceptable in any manner or under any circumstances. Any materials found to be installed as other than new will be replaced with new equipment at the expense of the Contractor for all components and labor. The Contractor will be charged damages for any lost production and construction schedule time due to materials that have been provided as other than new.

1.6 LOCATIONS AND SPACE REQUIREMENTS

- A. Contractor shall fully inform themselves regarding peculiarities and limitations of spaces available for installation of work under this Division. The Drawings indicate desired location and arrangement of equipment and other items, and are to be followed as closely as possible. Work specified and not clearly defined by the Drawings shall be installed and arranged in a manner satisfactory to the College’s authorized representative and the Consultant. The Contractor shall coordinate all locations and space requirements with the College.
- B. Verify all spaces, dimensions for all devices, equipment, panels, etc., furnished under this Division, and equipment furnished under other Sections.
- C. Obtain all necessary rough-in data and dimensions for all work to be performed under this Division.

- D. Maintain headroom clearances and accessibility, as well as ceiling heights. Maintain clear space directly above ceilings unless specifically approved by the College and the Consultant.
- E. Verify that suitable environmental conditions exist in equipment locations, prior to mounting security equipment. If necessary, notify the College and the Consultant if inadequate environmental conditions exist prior to installation of equipment.
- F. Prior to locating security devices, and all other items, obtain College approval as to exact location. Locations shall not be determined by scaling the Drawings. Devices shall be mounted at the height indicated on the Drawings. Contractor shall be responsible for costs of redoing work of trades necessitated by failure to comply with this requirement.
- G. Asbestos Abatement requirements: To be performed where required in coordination with the Campus Maintenance and Operations Department.

1.7 DRAWINGS AND SPECIFICATIONS

- A. General: The Drawings are schematic in nature and indicate approximate locations of the electrical systems, equipment, fixtures, and devices, except where specific locations are noted and dimensioned on the Drawings. All items are shown approximately to scale. The intent is to show how these items shall be integrated into the facility. Cooperate with other trades to ensure project completion, as indicated.
- B. The Drawings show, diagrammatically, the location of the various outlets and equipment. Exact locations of these outlets and equipment shall be determined by reference to the Drawings and to all detail Drawings, equipment Drawings, etc., and by measurements in the building. The College reserves the right to make any reasonable change in location of any outlet or device before installation, without additional cost to the College.

1.8 DISCREPANCIES

- A. Clarification: Clarification shall be obtained before submitting a proposal for the work under this Division as to discrepancies or omissions from the Drawings or questions as to the intent thereof.
- B. Detailed Instructions: Should it appear that the work hereby intended to be performed or any of the materials relative thereto, is not sufficiently detailed or explained in the Drawings or Specifications, then the Contractor shall apply to the College for such further Drawings or explanations as may be necessary, allowing a reasonable time for the College to provide them. The Contractor shall conform to them as a part of the Contract without additional cost to the College.
- C. Interpretations: Should any doubt or question arise respecting the true meaning of the Drawings or Specifications, reference shall be made to the College and the Consultant, whose written decision shall be final and conclusive. No alleged statement by the College or the Consultant will be accepted as an excuse for inferior work.
- D. Contractor Agreement: Consideration will not be granted for the misunderstanding of the amount of work to be performed. Tender of a proposal conveys full Contractor

agreement of the items and conditions specified, shown, scheduled, or required by the nature of the project.

1.9 QUALITY ASSURANCE

A. General

1. All materials, equipment, and parts comprising the units specified herein shall be new and unused, of current manufacturer and of highest grade.
2. Only products and applications listed in this Section may be used on the project.

1.10 CONTRACTOR QUALIFICATIONS

- A. Due to integration requirements with existing systems and infrastructure, and in accordance with College standards and the Chabot College Security Master Plan, all major Security Management System components shall be manufactured by AMAG Technology and/or must be operable by the AMAG Technology Pro-V6 server software, as specified in Section 13720 of this specification.
- B. All system components shall be installed by a Contractor of established reputation and experience, who has completed similar installations, utilizing the systems and devices specified for this project, for a period of at least three (3) years and who shall be able to refer to similar installations rendering satisfactory service.
- C. Contractor who will be performing services for the College shall maintain all current licenses and manufacturer certifications from AMAG Technology as required to provide the specific work efforts of this Contract. Additionally, Contractor is required to have at least one engineered certified on AMAG Enterprise Addition. The Contractor must agree that this certified System Engineer will be available and on-site for the duration of the project, supplying the support and programming responsibilities of this Project. Certifications and resumes of technicians must be included with the original bid.
- D. Contractor shall be an AMAG authorized reseller/dealer and shall provide supporting documentation of this fact with the original bid.
- E. Contractor shall only utilize installation and service technicians who are factory trained and certified by AMAG and who are capable of installing and maintaining the system and providing reasonable service time. Technician's AMAG Certifications, for all of the technicians performing work on this project, shall be submitted with the original bid.
- F. Failure to submit certification and Contractor qualification documentation with the original bid shall result in rejection of bid as non-responsive.

1.11 INSTALLATION

- A. Systems shall be installed by competent tradesmen, skilled in this class of installation.
- B. Contractor shall provide complete Shop Drawings for approval prior to fabrication and installation. Shop Drawings shall be submitted as detailed in Article 1.12.
- C. Contractor shall install systems in a manner that is consistent with the provisions and intent of the Specifications, the Drawings, and the referenced Codes and Standards, and in accordance with equipment manufacturers' written Specifications and instructions.
- D. All installation workmanship shall be accomplished in a neat and professional manner, meeting industry standards. This shall include, but not be limited to, furnishing proper grounding of data lines and devices, providing neat wire and cable routing, identification of cables and/or conductors by point numbers; providing secure wire termination's, splices, ease of access for maintenance and testing, plumb and level installation of devices, etc.
- E. Contractor shall use appropriate barricades and provide routing detours approved by the College around any and all areas of work that are accessible to public traffic so as to provide for the safety of both the public and the Contractor's employees.
- F. At the end of each work day, Contractor shall be responsible of cleaning the area of work. This includes removal of all equipment, devices, debris, trash, barricades, etcetera so as to leave the area suitable for public traffic as well as in a state that does not require additional janitorial burden to the College.
- G. Furnish and install all materials, equipment, sensors, devices, relays, wiring and connectors, etc., to all building systems and equipment, as necessary to provide a complete and in-place turn-key system.

1.12 SUBMITTALS

- A. In addition to the submittal requirements detail in the General Conditions, the Contactor shall submit Shop Drawings as detailed below.
- B. At a minimum, Shop Drawings shall include the following:
 - 1. The following shall be submitted for review and comment prior to the purchase and installation of equipment:
 - a. Manufacturer's Data: Specifications and installation instructions for each piece of equipment. Submit originals or laser printed white paper, no photo or facsimile copies.
 - b. Submit product data for all products furnished (sheet shall include manufacturer, part number, accessories & options selected, color (if applicable), and a brief product description (if available).
 - c. Submit product data sheets for all wire & cable (sheet shall include cable description, jacket rating, outside diameter of the overall wire or cable, manufacturer, and part number).

- d. Provide delivery dates for all equipment.
 2. Complete wiring (data and low voltage power) point-to-point diagrams for all systems and subsystems devices.
 3. Panel board diagrams (elevation view) showing configurations of all control equipment, power supplies, input/output devices, communications devices, and all other system control devices.
 4. Functional block diagrams showing integrated relationship of all equipment, cabling, and termination points on one (1) drawing.
- C. Materials installed or work performed without Shop Drawing approval shall be done at the risk of the Contractor and the cost of removal of such material or work that is determined to be unsatisfactory for any reason shall be at the expense of this Contractor.
- D. Shop Drawings shall be provided within the duration and in the quantity specified in the General Conditions of these Specifications.

1.13 MATERIAL SUBSTITUTIONS

- A. The equipment chosen for this project has been selected by the College and the Consultant, to be included in this project, based upon integration requirements throughout facilities and quality and performance of the product. Therefore, no substitutions will be accepted unless otherwise noted. Any substitutions must be submitted for approval prior to installation.

1.14 PROJECT SCHEDULING

- A. The Contractor shall develop a proposed project/installation schedule and submit said schedule to the College for approval and must be based on the milestone and target completion dates issued by the District.
- B. Project schedule shall include major and minor milestone dates as well as identify any specific areas of work that cannot be performed during normal working hours. The project schedule must be approved by the College prior to commencement of work.
- C. Project schedule must take into consideration that the Campus is open and classes will be in session. As such, Contractor shall schedule work around the District's Campus Schedule so as to minimize disruption to faculty, students and staff.

1.15 STANDARDS AND CERTIFICATIONS

- A. All work shall be in accordance with the latest edition of the Uniform Building Code (UBC), National Electric Code (NEC), California State Fire Marshal, and all other State and local codes and ordinances that may prevail.

1.16 WARRANTY

- A. All equipment, materials, and workmanship shall be guaranteed for a period of twelve (12) months from the date of final system acceptance at no expense to the College. This warranty shall include all materials provided to the College as part of this contract.

1. Any defects due to faulty materials, methods of installation, or workmanship within this

period shall be repaired or replaced under the work of this Division, within 24 hours of notification by the College, and at no expense to the College. When the defective part is repaired or replaced during this warranty period, the twelve (12) month warranty period will begin again on that device—thus providing the College with continuous one-year defect-free use of each piece of equipment.

2. Within four (4) hours of being contacted by the College for a warranty repair, the Contractor shall provide response to the College indicating when on-site service response will be provided with the understanding that all on-site service response on warranty items shall be within a maximum of one (1) calendar day of notification by the College, and shall be provided Monday through Friday (M-F), year-round, with holidays not excepted from service availability.
3. Warranty repairs shall only be made by technicians who are qualified and certified to repair those components that are defective.
4. It shall be understood that replacement parts or equipment, which require shipping/mailing to the Contractor, shall be shipped/mailed in the most expedient manner possible (i.e., overnight express mail) for next-day delivery and replacement.
5. No material substitutions shall be made which deviate from the original installation without prior written approval by the College.

1.17 POWER

- A. All devices, which have a relationship to the security system and require power to operate, shall be connected to the power source at power supplies, junction boxes, and receptacles. The Contractor shall provide wiring and connections to each component noted on these Drawings, including but not limited to, the following:
 1. All security device power supplies located throughout the facility.
 2. All control equipment, including processing panels.
 3. All security related low voltage locks provided under Section 13721.
- B. 120VAC power connections shall be provided by the at all locations designated by the Drawings and Specifications.
- C. Termination to existing 120VAC power circuits shall require strict coordination with the College.

1.18 GROUNDING

- A. In order to minimize problems resulting from improper grounding and to achieve maximum signal-to-noise ratios, the following grounding procedures shall be adhered to:
 1. Facilities Ground: The facilities ground shall be utilized at each power location.
 2. Secondary system grounding conductors shall be provided from all racks, ungrounded equipment, etc., as applicable, in each area to the primary facilities grounding point for that area.

3. All pair shields shall be grounded at one point only. Cables that originate from equipment in electrical rooms and serve field devices shall be grounded to the signal ground terminal in the electrical room.

1.19 SUPERVISION

- A. Contractor shall have a factory-trained engineer available to assist and supervise any and all system installation personnel throughout the course of this project.
- B. The Contractor shall also guarantee that a Project Manager and a Project Engineer shall be available, at the College's or the Consultant's request, at any time during installation, up to, and including, final acceptance testing.

1.20 REPLACEMENT

- A. Promptly replace components that are damaged beyond satisfactory field repair before their acceptance, with undamaged, new components, at no additional cost to the College.

1.21 CLEANING AND ADJUSTING

- A. The Contractor shall protect and, where necessary, cover all installed devices to protect from dust and debris during construction.
- B. After all general construction work has been substantially completed, clean devices, fixtures, panels, and any equipment, material, surface, whether a part of this scope of work or not, which has been soiled as a result of work by the Contractor. Remove all dust, dirt, grease, or other marks. Leave work in clean condition.

1.22 FLASHING AND SEALING

- A. The Contractor shall seal all penetrations through interior and/or exterior walls, ceilings, and floors. This sealing work shall be performed in accordance with applicable fire codes to maintain current fire ratings (where applicable), and shall be air and watertight.

1.23 BACKBOARD REQUIREMENTS

- A. Plywood backboards shall be provided, as necessary, by the Contractor at locations designated by the Drawings for mounting equipment panels, power supplies, etc.
- B. The following backboard requirements must be met:
 1. Backboards shall be 3/4" thick, fire resistant plywood with two (2) coats of painted finish on both sides.
 2. Plywood shall be installed with "A" side out. Plywood shall additionally be masked as required to allow visual verification of grade stamping.
 3. Mount backboard at +6" min. above floor, unless otherwise noted on the Drawings.

1.24 EQUIPMENT IDENTIFICATION

- A. Nameplates shall be installed on all control panels where control function is not self-

evident.

- B. Nameplate shall adequately describe the item and its function, or use of the particular equipment involved—do not use the word “SECURITY” in any nameplate nomenclature. Final labeling designations shall be coordinated with the Consultant.
- C. Nameplate material shall be laminated phenolic plastic, black front and back with white core, engraved and fastened with pop rivets.

1.25 TRAINING

- A. Contractor shall include operator training conducted by an AMAG trainer in the original bid. The AMAG trainer shall be an employee of AMAG Technology whose general job responsibility includes system training on the products configured and installed as part of this Contract.
- B. Training shall be scheduled to take place within ten (10) business days of the completion of Acceptance Testing.
- C. This training shall be for up to to twelve (12) personnel on the systems prior to system acceptance. Training shall be performed for two (2) operator levels, and shall include the following (including a minimum of 40 hours of on-site dedicated instructor time).
 - 1. Level 1: Basic data display and interrelation of addresses, device controls and displays, printouts requesting all data displays, and general system use.
 - 2. Level 2: Total System Programming. This level of training shall include installation of all other programs and program changes specified herein to be keyboard programmable. This training shall include a complete understanding of all application packages, the custom written data file and user programs, and the ability to write and change new and existing specified programs. Trainer shall review and use documentation, as specified.
- D. Contractor shall provide a training outline, developed by the AMAG trainer for approval by the College, one (1) month prior to commencement of training. In addition to training materials, Contractor shall provide student workbooks for each trainee. Workbook format and content shall also require approval by the College prior to the start of training sessions. Training past completion of contract (final payment) should be arranged between the College and the Contractor by separate agreement.
- E. The database for the project shall be utilized during training to give the users a project specific example to learn from.
- F. Contractor shall document all dates and times of training and submit a "sign in" sheet for individuals trained, as part of the close out documentation.
- G. Contractor shall offer retraining of the District's personnel as may be required for up to one (1) year after system acceptance. Contractor shall furnish a syllabus of all training courses and shall maintain a published schedule of training classes.

1.26 ACCEPTANCE TESTING AND COMMISSIONING

- A. System pre-testing:
 - 1. The Contractor shall perform 100% pre-testing of all systems and devices prior to scheduling Acceptance Testing and Commissioning.

2. Pre-testing shall include all of the testing procedures listed in Article B, 2 below.
 3. The Contractor shall provide a pre-testing report documenting that pre-testing was completed and that items that failed the testing were repaired or replaced and re-tested.
- B. On-Site Acceptance Testing and Commissioning Service:
1. The Contractor shall perform on-site Acceptance Testing with witness by the College and the Consultant, providing all personnel and equipment necessary to perform these tests. Should the system be unacceptable for testing (i.e. erroneous programming, numerous devices malfunctions, mis-terminated and/or un-terminated devices) the Acceptance Testing will be canceled and rescheduled. Any costs incurred by the College and the Consultant, as a result of canceling and rescheduling the Acceptance Testing, including time and reimbursable expenses incurred as part of the re-testing process, shall be the responsibility of the Contractor.
 2. In preparation for Acceptance Testing, the Contractor shall prepare and furnish a Test Form for each building that list each device to be tested, the type of test required for that device and columns for "Pass", "Fail" and "Comments."
 3. System Acceptance Testing shall include testing and verification of 100% of all device functionality, system reporting, GUI interface call-ups, systems integration requirements, system configuration, system program and conventions, system back-up and video archiving procedures, etcetera.
 4. The Contractor shall provide Draft Record Drawings (As-Built Drawings) to the Consultant, in accordance with paragraph 1.27, for verification ten (10) business days prior to acceptance testing.
 5. Upon completion of acceptance testing, the Consultant shall generate a punch list of deficient items. The Contractor shall have ten (10) business days, from receipt of the punch list, to resolve all items included in the punch list.
 6. Upon completion of acceptance testing, the Contractor shall have ten (10) business days to incorporate redline changes made to the Draft Record Drawings and to submit to the Consultant for verification in accordance with paragraph 1.28.
 7. Upon completion of punch list items the Contractor shall perform follow-up on-site acceptance tests with witness by the College. If there are deficiencies remaining after the follow-up testing that require further testing by the College, then the costs incurred by the College for the additional follow-up tests, including time and reimbursable expenses, shall be the responsibility of the Contractor.

1.27 RECORD DRAWINGS AND OPERATIONS AND MAINTENANCE MANUALS

- A. Site Prints: The Contractor shall maintain a set of clearly marked black line prints of the Shop Drawings at the job site that shall be used for recording the work details, final size, location, interrelation, and similar items of all work under this Section and related Sections. This set of Drawings shall be corrected daily as the work progresses and shall clearly indicate all changes to suit field conditions, including changes made by field order or

change order, accurate dimensions and precise locations of all buried or concealed work, locations of all concealed boxes, controls and devices and any deviations from the Shop Drawings.

- B. Site Print Verification: Contractor shall submit Site Prints to the Consultant for review and verification within ten (10) business days of submitting invoices for completed work to date. Payment will be contingent on Consultant's approval.

- B. Draft Record Drawings: Upon completion of work, the Contractor shall incorporate into AutoCAD all marks from the site prints and produce two (2) bond sets of Draft Record Drawings for use and verification during acceptance testing. The Draft Record Drawings shall utilize the latest Architectural background drawings and shall incorporate all modified drawings as outlined in Article 1.12 of this Section, or any other drawings which were developed by the Contractor during the installation process. Any changes required to the Draft Record Drawings as a result of acceptance testing shall be redlined on these sets during the acceptance testing.

- C. RECORD DRAWINGS: Upon completion of acceptance testing, the Contractor shall incorporate into AutoCAD all changes made during acceptance testing, and produce one (1) set of bond drawings for review and acceptance by the Consultant. Should the drawings be unacceptable for review (i.e., numerous errors, mis-terminated and/or un-terminated devices, etc.) the drawings will be rejected. Any costs incurred by the Consultant, as a result of rejected drawings, including time and reimbursable expenses incurred as part of the re-review process, shall be the responsibility of the Contractor. Upon Consultant acceptance of the Record Drawings, the Contractor shall produce three (3) set of full size clean Record Drawings on bond, one (1) set of Record Drawings burned to CD in full size Adobe PDF format and one (1) set Record Drawings burned to CD in AutoCAD 2008 format. The Record Drawings shall be clearly marked and signed on each sheet as follows:

CERTIFIED RECORD OF DRAWINGS

DATE: _____

(NAME OF CONTRACTOR)

BY: SIGNATURE

BY: PRINTED NAME

- D. Operations and Maintenance Manuals: Provide three (3) hard copies, and one (1) copy burned to CD in Adobe PDF single file format, of the complete Operations and Maintenance manuals for all systems 10 days prior to operator training. Manuals shall be contained in suitable loose-leaf binders with tabbed-dividers for the various sections. Include project identification on the manual cover. Manuals shall contain the following information:
1. Detailed, College specific, sequence of operations describing interrelationship of all field and control devices.
 2. All data specified in the Article 1.12 (SUBMITTALS) of this Section, in its final, as-built approved form.
 3. Operator's Manual with keyboard pictures and step-by-step procedures. This manual shall be indexed and shall have a separate tabbed section for each operator function. Submit originals only, no copies.
 4. Programmer's Manual with complete description of all keyboard-programming functions, including sample written programs. Manual shall include a complete description of the operating system, programming language, including system architecture, commands, diagnostic messages, and other programming procedures. Submit originals only, no copies.
 5. Report Manual with complete description detailing customized report generating methods. The Contractor shall develop specific customized reports in coordination with the College and the Consultant.
 6. Graphics of all systems equipment configurations, showing all system equipment locations, data point addresses and operator notations, where applicable.
 7. As-built interconnection wiring diagrams of the complete, field-installed system with complete, properly identified, point numbers of each system component and device.
 8. Maintenance instructions for all systems and components, including parts and spare parts list.

1.28 MAINTENANCE AGREEMENT

- A. The Contractor shall be responsible for maintenance of all installed equipment during the one (1) year warranty period following system acceptance at no expense to the College.
- B. Maintenance of the system shall include an annual cleaning of all equipment installed as part of this contract prior to expiration of the one (1) year warranty.
- C. Maintenance shall include a one (1) year Software Service Agreement for all AMAG software, including all software updates, patches, etcetera, from the date of final system acceptance.
- D. The Contractor shall not include in the base bid, any provisions for additional maintenance beyond the one (1) year warranty period.

PART 2 - PRODUCT

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION

SECTION 13710

SECURITY MATERIALS AND METHODS

PART 1 – GENERAL

1.29 RELATED DOCUMENTS

- A. Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.
- B. Chabot Las Positas Community College District – Cabling Infrastructure Standards (available on the Ford Graphics Planwell Site).

1.2 RELATED WORK NOT INCLUDED IN THIS SECTION

- C. General and specific provisions of these Specifications apply to the work specified in this Section, as well as:
 - 7. Security General Requirements (Section 13701)
 - 8. Security Management System Server (Section 13720)
 - 9. Security Management System Devices (Section 13721)
 - 10. Security Wire and Cable (Section 13746)
 - 11. Security Emergency Communication Stations (Section 13760)
 - 12. Closed Circuit Television System (Section 13780)

1.3 DESCRIPTION OF WORK

- A. The Contractor shall furnish and install all materials as required to complete the installation as defined in the Bid Documents and these Specifications.
- B. Provide conduit at locations throughout the facility, as required to provide a complete and functional system.
- C. All exposed conduit, fittings, screw heads, back boxes, junction boxes, etc. shall be power coated to match applicable surface. Coordinate power coating requirements with College Maintenance and Operations representative.

1.4 REGULATORY REQUIREMENTS

- A. Comply with National Electric Code (NEC) and local codes and ordinances which may

apply.

- B. Comply with the latest edition of the following applicable specifications and standards except as otherwise shown or specified:
1. Part 15 -Radio Frequency Devices & Radiation Limits
 2. National, State, Local and any other binding building and fire codes.
 3. Underwriter's Laboratories (UL): Applicable listing and ratings.
 - a. UL 294: Access Control System Units
 - b. UL 1076: Proprietary Burglar Alarm Units and Systems
 4. EIA testing standards.
 5. The Contractor shall have a copy of each reference document readily available during the course of construction including these Drawings and Specifications.
- C. Materials shall meet with approval of the Division of Industrial Safety, State of California and all governing bodies having jurisdiction.
- D. The Contractor shall provide all conduit and boxes to support the Access Control and Alarm Monitoring System (ACAMS), Emergency Communication Stations, and Closed Circuit Television (CCTV) system. All work by the Contractor must comply with applicable building codes.
- E. The Contractor will provide all 120VAC power and coordinate with the College Maintenance and Operations representative.

1.5 PRODUCT HANDLING

Deliver materials to job site in original, unbroken packages, properly tagged with U.L. label, size, type, and manufacturer indicated.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Unless otherwise noted, all materials and equipment shall be new, of the type, capacity, and quality specified and free from defects. Material shall bear the label of, or be listed by the Underwriters' Laboratories unless of a type for which label or listing service is not provided.
- B. For compatibility and ease of installation, materials shall be of same brand or manufacturer throughout for each class of material or equipment, wherever possible.
- C. All enclosures for all equipment shall be of metal throughout the system.

2.2 CONDUIT

A. Rigid conduit:

Shall have UL label, zinc coated exterior, either hot dip galvanized, sherardized, or metalized, and zinc enamel interior; use tapered-threaded fittings only.

B. Electrical Metallic Tubing (EMT):

Shall have UL label, zinc coated exterior and zinc or enamel interior; exterior and interior fittings for EMT shall be steel gland ring compression type.

C. Flexible Metallic Conduit:

1. UL label, zinc coated exterior and interior; fittings for flexible conduit shall be "JAKE" or Squeeze type, set screw connectors shall not be used.
2. Liquid-tight flexible conduit shall be Seal-Tite type U.A. with Appleton Series "ST" or Pyle-National Series "CT" connectors.

D. Racks and Trapeze hangers shall only be formed steel channels similar to Unistrut and suspended from threaded rod.

E. Vibration fittings shall be O.Z. Type DX.

F. Outlets and Junction Boxes:

1. Galvanized or sherardized, one-piece steel, knock-out type.
2. Size of each box shall be determined in accordance with NEC for number of conductors or number and size of conduits entering box, unless specified larger, but shall be not less than 4 inches square and 1-1/2 inches deep.
3. Outlet boxes: Minimum of 2-3/4 x 4-1/2 inches and 2-1/8 inches deep.
4. Exposed outlet boxes: Case metal with threaded or union hub, Crouse-Hinds type "FS" or "FD" with cast metal covers.

G. Pull Boxes:

1. In no case shall pull boxes be of lesser size or material thickness than required by governing electrical code.
2. General purpose sheet steel pull boxes shall be furnished with removable screw covers; manufacturer's standard baked enamel finish.
3. Weatherproof sheet steel pull boxes shall be fabricated of code gauge, hot-dipped galvanized steel and gasket weather-tight cover of same materials; manufacturer's standard baked exterior enamel finish.
4. Cast metal pull boxes shall be furnished with gasket covers and necessary drilled and

tapped conduit entries; screws shall be bronze or brass.

H. Powder Coating:

1. Coordinate and obtain approval of powder coated conduit, fasteners, fittings, junction boxes, cover plates, etcetera, with College Maintenance and Operations representative prior to installation.
2. Provide samples for approval prior to powder coating major lots.
3. Reject all powder coated shipments that arrive in scratched or damaged manner.
4. Touch-up paint all scratches, blemishes, screw heads, and all other areas otherwise exhibiting bare metal with a paint to exactly match the powder coated finish. Paint must be approved by the College Maintenance and Operation representative prior to commencement of work.

PART 3 - EXECUTION

3.1 INSTALLATION

1. Install materials and equipment in accordance with manufacturer's recommendations, instructions, and industry standards.

3.2 CONDUIT

A. Rigid Conduit:

1. Shall be used when installation in concrete slabs, encased in concrete below slabs, in concrete or masonry walls, exposed on building exterior, exposed in interior walls below 4'-0" above floor, or if containing power of > 120VAC.
2. Rigid conduit in concrete in contact with earth shall be encased 3 inches on all sides with red mixed concrete envelope. Concrete mix shall be 5.5 sack, using pea gravel as aggregate.
3. Rigid conduit may be used on roofs with specific approval by the College Maintenance and Operations representative for each location. Any roof penetrations must be done with approved roof jacks using Thaler Type MEF or approved equivalent. Roof jack sealing must be done according to current applicable Codes and Standards, and in a manner approved by the District. In all cases the conduit runs must be supported by approved roof supports at regular intervals using Thaler or MIRO type roof conduit supports, or equivalent as approved by the District.

- B. EMT:
1. Use only for concealed interior runs or exposed interior runs 4'-0" or greater above floor.
 2. EMT may not be used on roofs or under roofing.
 3. EMT may not be cast in concrete slabs or masonry walls.
 4. EMT may not be used underground.
- C. Non-metallic conduit shall be installed all underground locations and in duct-banks.
1. Use only for concealed interior runs or exposed interior runs 4'-0" or greater above floor.
- D. Provide secure mounting facilities for conduits. Wire or plumbers tape shall not be used for hanging of suspended conduit. Conduits shall not be secured to suspended ceiling hanger wires or to suspended ceiling structure.
- E. Provide junction or pull boxes to maintain less than 360° total bends and 300' of conduit runs.
- F. Provide expansion couplings wherever conduits cross expansion or seismic joints or for continuous straight runs in excess of 100 feet, except when embedded in concrete. Expansion fittings shall have bonding jumper or be of grounding type.
- G. Re-route conduit where necessary to clear structural and mechanical obstructions.
- H. Install long radius bends in all conduits containing coaxial cabling. Do not flatten or kink bends.
- I. Run exposed conduits at right angles or parallel to structural members, walls, floors, and ceilings. Secure conduits 1 inch and smaller with one-hole malleable iron straps. Secure 1-1/4 conduits and larger with conduit hangers or two-hole galvanized straps. Support suspended conduits with conduit hangers and 1/4 inch hanger-rods. Rack mount or suspend multiple conduit runs on trapeze hangers with 3/8 inch rods.
- J. Conduits installed in concrete, wet locations, exposed to weather, or underground shall have threads filled with red lead and oil before screwing into couplings and threaded fittings.
- K. Run conduits in spaces above suspended ceilings parallel to walls and floors.
- L. Where more than two conduits are installed in one common concrete envelope, separate conduits with conduit spacers.
- M. Provide 1/8" nylon pull cord with footage markings in all conduits 1" in size or larger for future cable pulls.
- N. General purpose sheet steel pull boxes shall be installed only in dry protected locations

and shall have removable screw covers.

O. Junction Boxes:

1. Outlet boxes shall be mounted at vertical center of block where mounted in masonry walls.
2. Outlet boxes shall be fastened to the structure.
3. Security junction boxes in concealed areas shall be color coded and labeled with an identifying label. Coordinate color and labeling scheme with the College and Consultant prior to the start of work.

P. Conduit for Fiber Optic Cable:

1. No section of conduit shall contain more than two 90° bends or cumulatively 180° of bend in any plane between pull points or pull boxes. Bends are defined as:
 - a. 90-Degree Bend: any radius bend in a piece of pipe that changes direction of the pipe 90-degrees.
 - b. Kick: a bend in a piece of pipe, usually less than 45-degrees, made to change the direction of the pipe.
 - c. Offset: two bends usually having the same degree of bend, made to avoid an obstruction blocking the run of the pipe.
 - d. 90-Degree Sweep: a bend that exceeds the manufacturer's standard size 90-degree bend.
 - e. Back-to-back 90-degree Bend: any two (2) 90-degree bends placed closer together than 10 feet in a conduit run.
2. If there is a reverse (U-shaped) bend in the section, a pull box shall be installed. Back-to-back 90-degree bends shall be avoided.
3. No bends greater than ninety (90) degrees are allowed.
4. Conduit bends must be installed with gradual sweeps according to the following bend radius guidelines:
 - a. For conduits greater than 2" in internal diameter, the bend radius must not be less than 10 times the diameter of the conduit.
 - b. Conduit sweeps shall accommodate the manufacturer's bend radius of the cables to be installed in the conduit.

3.3 FIELD QUALITY CONTROL

A. Tests:

1. Furnish necessary instruments and equipment required for making tests. Test all wiring for shorts, open circuits or grounding.
2. Immediately correct any defective work.
3. When entire installation has been completed, test out circuits and switching, and demonstrate that operation of system is in accordance with the Construction Documents.

3.4 ADJUSTING AND CLEANING

- A. Clean exposed parts of all equipment and interior of panels and cabinets of dirt, cement and plaster and other materials.
- B. Replace or refinish scratched or damaged materials.

END OF SECTION

SECTION 13720

SECURITY MANAGEMENT SYSTEM SERVER

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.
- B. Chabot Las Positas Community College District – Cabling Infrastructure Standards (available on the Ford Graphics Planwell Site).

1.2 RELATED WORK NOT IN THIS SECTION

- D. General and specific provisions of these Specifications apply to the work specified in this Section, as well as:
 - 13. Security General Requirements (Section 13701)
 - 14. Security Materials and Methods (Section 13710)
 - 15. Security Management System Devices (Section 13721)
 - 16. Security Wire and Cable (Section 13746)
 - 17. Security Emergency Communication Stations (Section 13760)
 - 18. Security Closed Circuit Television System (Section 13780)

1.3 DESCRIPTION OF WORK

- A. This contract is for providing and installing the base Access Control and Alarm Monitoring System (ACAMS)/Video head-end system for the Chabot College.
- B. The scope of work for this specification is the installation, programming, and testing of the system server, ACAMS/Video server software, network terminal server, terminal services software, “thick” client software, “thin” client software, and security network components for a new ACAMS/Video server.
- C. The Contractor shall be responsible for converting and programming ACAMS and Video Devices installed as part of the Building 800 Building Renovation and the Temporary Offices facility. Provide 16 hours of additionally programming time in the original bid.
- D. Provide, install, program, and test the ACAMS/Video server operating system (OS) software, all server applications software, client ACAMS/Video application software, network terminal server, and Terminal Services software. Computer server and workstation

computer hardware shall be provided by the District, with the standard District image and shall be installed in Building 300, Room 310B.

- E. Assemble, position, and locate the computing hardware as required by the Specifications and to the satisfaction of the District.
- F. Provide all labor, materials, equipment, services, etc., necessary to furnish and install complete and in place security control devices including, but not limited to:
1. Installation of new computing software and communications cabling which will operate, control, and monitor critical access points within the facility.
 2. Connection and programming of new controller's to the ACAMS/Video server via Ethernet TCP/IP network connections.
 3. Termination of 120VAC power sources as required for supplying proper voltage to security equipment power supplies.
 4. Programming of the ACAMS server including, but not limited to the following:
 - a. All hardware devices installed as part of this project.
 - b. All access and user defined authorization levels, as coordinated with the College.
 - c. Input of cardholder database information.
 - d. Input of all CCTV integration programming requirements as coordinated with the College.
 - e. Installation, configuration and programming of all Site and Building Maps, including but not limited to device placement, event programming, response notification, and map layering.
 - f. Badge template design and development as coordinated with the College and Consultant.
 - g. Alarm/Email Paging interface shall be configured so that critical alarm information is automatically forwarded to a Campus Safety Officer PDA. Coordinate email and configuration requirements with College IT representative and the Consultant.
- E. ACAMS/Video Server: The College will provide the Contractor with one (1) ACAMS/Video Server with operating system (OS) installed. The Contractor shall provide, install, configure and program the ACAMS/Video server software. The ACAMS/Video server shall communicate with the ACAMS/Video field components, ACAMS/Video Clients, and the College network.

- F. Terminal Services Server: The College will provide the Contractor with one (1) Terminal Services Server with operating system (OS) installed. The Contractor shall provide, install, configure and program the Terminal Services software.
- G. College shall provide the Contractor with one (1) 5TB NAS storage devices for archiving video captured by ENVS units. Contractor shall configure ENVS units to locally store video during normal operating hours and to download video incrementally after hours so as to minimize network interruptions during archiving.
- H. ACAMS/Video Clients: The College will provide the Contractor with workstation hardware. The Contractor shall provide, install, configure and program a minimum of one (1) Badge Client workstation, and two (2) Client workstation computers at locations as determined by the College. ACAMS/Video Client workstation computers shall be connected over a dedicated Ethernet TCP/IP network provided by the College.
- I. Web Clients: The Contractor shall provide, install, and test the functionality for up to five (5) web-based clients
- J. Contractor shall coordinate all Sever/NAS/Client/Web Client work with the College IT Representative and the Consultant.
- K. Contractor shall provide the installation and configuration of a Third-Party Alarm Dialer that shall be configured to contact a third-party, UL listed alarm monitoring company for monitoring of campus alarms when the Campus Safety and Security office is not staffed. Contractor shall include a one (1) year alarm monitoring contract with the bid.

1.4 DESCRIPTION OF OPERATIONS

- A. Work included: All labor, materials, appliances, tools, equipment, facilities, and services necessary for and incidental to performing all operations of this Section and related Sections, complete, as shown on the Drawings or specified herein.
- B. Access Control and Alarm Monitoring System and Video System Server
 - 1. The ACAMS/Video server computer shall be capable of running the ACAMS and Video Storage applications and manage the ACAMS database.
 - 2. The ACAMS/Video server shall connect to both web-based and standard clients via the District network. Clients can be individually programmed for their approved level of access as users or administrators.
 - 3. The ACAMS/Video server computer shall be provided by the College shall be mounted in a location directed by the Campus IT Department. Three workstation computers shall be provided by the District and located as follows. An ACAMS/Video Client workstation computer shall be located in the Campus Safety and Security Office; another ACAMS/Video Client workstation shall be located in the Security Director's office. The Badge Client workstation shall be located in the location directed by the Campus Safety and Security Director. The Contractor shall provide all ACAMS/Video application software, with all licenses assigned to the District.

4. The ACAMS/Video server shall provide all required ACAMS functionality and software as well as the future capacity to control, record, and store video from a maximum of 64 cameras
5. The ACAMS shall utilize a dedicated TCP/IP based network for connectivity between the server and all of the workstations supplied and installed by the College.
6. System report printer and badging printer are to be provided by Contractor and will be located in the Campus Safety and Security Office. The Contractor shall test the printers to confirm connectivity to the network and communication with the ACAMS/Video Server.
7. Proximity access control cards shall be provided by the Contractor is the quantity stated below.
8. The ACAMS/Video server shall have the capability to integrate seamlessly with the CCTV system, Edge Network Video Server (ENVS's) for event-based camera call-up, image retrieval, and PTZ camera preposition targeting.
9. During times when the Campus Safety and Security office is not staffed, ACAMS alarms shall be routed digitally through a third-party alarm dialer on a point by point basis to a UL listed third party alarm monitoring company.

C. Coordination Requirements

1. Provide a high level of coordination services to ensure the proper installation and functionality of the security system. Fully coordinate the installation of all components associated with the installation of the security system equipment which may include, but not be limited to: review of other contractor's shop drawings, attendance at meetings, providing samples for mockup, and preparation and distribution of written documentation.
2. Provide a high level of programming coordination services to ensure the proper functionality of the security system.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Material and equipment specified herein have been selected as the basis of acceptable quality and performance and have been coordinated to function as components of the included systems. Where a particular material, device, equipment or system is specified directly, the current manufacturer's specification for same is a part of these specifications, as if completely elaborated herein.

- B. All materials specified herein shall be new and shall be the manufacturer's latest design, permanently labeled with the manufacturer's name, model number and serial number.
- C. All auxiliary and incidental equipment necessary for the operation and protection of the systems specified in this section shall be furnished and installed if specified in full herein.
- D. System consists of specified components, controls, mounting brackets, transformers, accessories, and cabling.
- E. All systems and components shall have been thoroughly tested and proven in actual use.
- F. The Security System shall be installed with the full support of the manufacturer of the system components.
- G. All major components (ACAMS server and workstations) shall communicate via TCP/IP based 10/100/1000 Base-T networking.
- H. Provide RS-232, RS-485, or TCP/IP interfaces, where required, to give integration capabilities between different manufacturers of system components or between different components. If practical, the TCP/IP communications protocol is the preferred method of communication.

2.2 ACAMS/VIDEO SERVER HARDWARE & SOFTWARE

- A. ACAMS/Video Server Hardware shall be provided by the College and shall meet or exceed the following minimum configuration requirements:
 1. Dual Intel Xeon, 3.40 GHz, 2M Processors.
 2. 8 GB Total RAM (4 x 2GB) memory.
 3. Microsoft® Windows® Server 2003R2, Enterprise Edition, with a minimum of 10 Client Access Licenses (Pre-Installed), Licensed and programmed for Microsoft Terminal Services.
 4. MSDE or SQL Database Software,
 5. ProLiant Hot Plug PCI Riser – DL380G4.
 6. RAID 5 drive set with online spare, (5) HP 146.8 GB 10,000 RPM Ultra 320 SCSI universal hard drives.
 7. Embedded network NC7782 Dual Port Gigabit Network Card.
 8. Additional HPNC370T PCI-X MFN 10/100/1000T Adapter.
 9. SlimLine CD-RW/DVD-ROM 24x Combo Drive.
 10. Dual Hot-Swappable Power Supplies.

11. Primary Controller: Integrated Smart Array 6i Controller.
 12. Storage Controller.
 13. 1 x 8 Hot pluggable SCSI Hard Drive Backplane (Drives Configured Raid 5/1).
 14. 3.5" floppy disk drive.
 15. 24X CDRW/DVD-ROM drive.
 16. HP StorageWorks 448 Ultrium 2 LTO 2 Tape Backup Drive, 400GB, 173 GB/hr, Ultra 160 SCSI Interface.
 17. Symantec BackupExec tape back up software
 18. Two (2) serial, one (1) parallel ports
 19. Adaptec, 29160LP Ultra 160 64 Bit PCI Low Profile SCSI Card
 20. (1) HP 72.8GB 10,000 RPM Ultra 320 SCSI universal hard drive (spare)
 21. Manufacturer: Hewlett-Packard HP ProLiant DL380 G4 3.40GHz/2M High Performance Server.
 22. Server shall be provided, by the College, with one (1) 5-Terabyte NAS storage device for the sole purpose of video archival.
- B. Terminal Services Server Hardware shall be provided by the College and shall meet or exceed the following minimum configuration requirements:
1. Intel Pentium 4 2.8 GHZ or better.
 2. 512 MB RAM.
 3. 40 GB or greater IDE hard drive.
 4. Integrated: Intel DVMT video.
 5. Sound Blaster compatible sound card.
 6. 10/100/1000 network card.
 7. Microsoft 2003 Server with 5 Client Access Licenses.
 8. Manufactured by Hewlett Packard and compliant with District IT Standards
- C. Server Applications Software for ACAMS/Video: The Contractor shall provide, install, and program the ACAMS/Video server with AMAG Professional Edition-280 V6.1 including the flowing:
1. Three (3) client licenses.

2. 280 reader capacity.
3. Unrestricted cardholder capacity.
4. MSDE or SQL database engine – as coordinated with the College.
5. Video Badging Software.
6. Visitor Management Software.
7. AMAG Video Management Module – VD-MOD-064-V6.1 with Virtual Matrix Software, Video Replay, Compression Management.
8. AMAG Web Access Software with five (5) concurrent user licenses.
9. AMAG Software Service Agreement for a period of 12-months form the date of Final System Acceptance.

2.3 ACAMS WORKSTATION HARDWARE & SOFTWARE

- A. ACAMS/Video Workstation shall be provided by the College and shall meet or exceed the following minimum configuration requirements:
 1. The ACAMS client workstation hardware shall be provided by the District and shall have the following minimum configuration:
 - a. Intel Pentium 4 Processor, 660 3.6 GHz
 - b. 2GB, 533MHz, DDR2 SDRAM Memory, NECC
 - c. 160GB SATA II, 7200RPM NCQ HardDrive w/8MB DataBurst Cache™ w/out RAID
 - d. 3.5" floppy disk drive
 - e. 48X/32X CD-RW/DVD Combo w/ CyberLink PowerDVD
 - f. 20" SVGA monitor (1024 x 768 resolution)
 - g. Two (2) serial, one (1) parallel ports
 - h. PS/2 style mouse and standard keyboard
 - i. 10/100/1000 Ethernet Adapter
 - j. Sound card w/ speakers
 - k. 128MB PCIe x16 nVidia Quadro FX 1400, Dual Monitor DVI or VGA Capable
 2. Manufacturer: District-provided standard desktop which has been supplemented to meet specific configuration requirements listed above.

- B. Workstation Operating System Software for ACAMS/Video:
 - 1. The District shall provide the client workstations with the standard District Image including the following Operating System software:
 - a. Windows XP Professional SP2 Operating System
- C. ACAMS/Video Workstation Applications Software:
 - 1. The Contractor shall provide, install, and program the following applications software on the client workstations:
 - a. AMAG Client Software (includes):
 - b. AMAG Professional Client V6.1

2.5 PROXIMITY ACCESS CARDS

- A. The proximity access cards shall be multi-technology 125kHz format, with a non-formatted magnetic stripe.
- B. The proximity access cards shall be "Passive" (non-battery operated) proximity technology.
- C. The proximity cards shall be capable of having a photo or image printed directly onto the surface of the card with a direct print printer, available with multi-color custom graphics and the option of a slot punch on the short edge of the card for a vertical/portrait oriented photo.
- D. The Contractor shall assist the College with the creation and development of badge designs.
- E. The proximity cards shall be HID DuoProx II, Model Number 1336. Provide an initial quantity of 2500 cards.

2.6 BADGING PRINTER

- A. A badging printer shall be provided by the Contractor.
- B. Printer shall include all cables and network card required for connection to the District's supplied network.
- C. Printer shall include an Integrated High/Low Coercivity Mag Stripe Encoder.
- D. Coordinate final mounting location with the District.
- E. Printer shall be provided with 2 ribbon cartridges.

- E. Printer shall be provided with an extended, full service, three (3) year warranty.
- F. Manufacturer: Fargo Model DTC515.

2.7 BADGING CAMERA KIT

- A. Provide a color CCD camera badging kit compatible with the ACAMS.
- B. Manufacturer: VideoLabs Flex Cam.

2.7 REPORT PRINTER

- A. A LaserJet report printer shall be provided by the Contractor.
- B. Printer shall include all cables and network card required for connection to the Owner supplied network.
- C. Coordinate final mounting location with Owner.
- D. Manufacturer: HP Model 2420DN

2.8 ALARM DIALER

- A. The alarm dialer shall be connected serially to the ACAMS Server and shall be programmed to transmits point by point alarm information to a UL listed Third-Party Alarm Monitoring Station during times and conditions when both the Campus Safety and Security Office is un-staffed and when buildings are armed.
- B. Provide one (1) Alarm Dialer by Micro Seven, Inc., Model AP-15 (w/ CTS/RTS 9600 baud chip).
- C. Provide a one (1) year third-party alarm monitoring contract to commence on final System Acceptance.

2.9 ELECTRICAL REQUIREMENTS

- A. Unless otherwise noted on the Drawings, all 120 VAC emergency power wiring and associated conduit, outlets, services, etc. are to be provided by the Contractor.
- B. Check the adequacy of all power and wiring before making final connections and applying power to the equipment. If such wiring/service is not proper and/or adequate, notify the District and/or its representatives in writing, requesting specific correction of same. Should the Contractor fail to provide proper notification of wiring inadequacies to the District, he shall be bound to correct problems from such inadequacies with no cost to the District.
- C. All ACAMS/Video Server and Workstation computers shall be attached to College provided UPS systems..

PART 3 - EXECUTION

3.1 INSTALLATION

A. General

1. Perform this work in accordance with acknowledged industry and professional standards and practices and the procedures specified herein.
2. A complete, operating system shall be provided. Include all devices specified including basic components and accessories, interconnecting wiring and other equipment and installation devices necessary for a complete system as specified.

3.2 SOFTWARE CONFIGURATION

A. Prior to the completion of construction the Contractor shall schedule a meeting with the College to determine all of the programming criteria. The issues that shall be discussed are as follows:

1. Access card levels and door groups.
2. Alarm priority levels.
3. Schedules and time codes.
4. Holidays and holiday types (priorities).
5. Room, Door and Camera Numbering.
6. Action/responses from individual input points.
7. Standard and custom reports.
8. CCTV camera call-up & recording features (including video motion detection)
9. System Database back-ups.

B. The Contractor shall document the results of the meeting and perform all necessary programming to achieve the College's requests.

C. The Contractor is responsible for the entire programming and setup of the system such that no additional programming other than entering new access cards is required. Programming shall include the setup of all available features of the software.

D. The Contractor shall perform a full system back-up at completion of initial programming and deliver the copy to the College with a letter of Transmittal explaining information included in back-up and brief description of recovery procedures.

E. The Contractor shall perform field software changes after the initial programming session to "fine tune" operating parameters and sequence of operations based on any revisions to the College operating requirements.

END OF SECTION

SECTION 13721

SECURITY MANAGEMENT SYSTEM DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.
- B. Chabot Las Positas Community College District – Cabling Infrastructure Standards (available on the Ford Graphics Planwell Site).

1.2 RELATED WORK NOT IN THIS SECTION

- E. General and specific provisions of these Specifications apply to the work specified in this Section, as well as:
 - 19. Security General Requirements (Section 13701)
 - 20. Security Materials and Methods (Section 13710)
 - 21. Security Management System Server (Section 13720)
 - 22. Security Wire and Cable (Section 13746)
 - 23. Security Emergency Communication Stations (Section 13760)
 - 24. Security Closed Circuit Television System (Section 13780)

1.3 DESCRIPTION OF WORK

- A. The work of this contract is for the installation, connection, and programming of new intelligent field panels and access control and alarm monitoring equipment for the new Access Control and Alarm Monitoring System (ACAMS) at Chabot College. All new security system devices shall be configured for integration with the new AMAG Professional Edition System server. The Contractor shall deliver a complete, operating system as intended, shown, and specified.
- F. Provide all labor, materials, equipment, services, etc., necessary to furnish and install complete and in place security control devices including, but not limited to:
 - 1. Installation of new ACAMS/Video intelligent field controllers, card readers, card reader electronics panels, alarm input panels, door position switches, request-to-exit (REX) devices, associated control equipment, and communications cabling which will operate, control, and monitor critical access and alarm points within the facility.
 - 2. Connection and programming of all existing alarm monitoring points into the new ACAMS/Video intelligent field controllers, including installation and testing.

3. Programming of all building specific features to be represented within the Graphical Mapping Interface capabilities of the ACAMS software. The Contractor shall obtain and install acceptable import file formats from the College (Windows® Metafile – WMF/EMF, Bitmap – BMP, JPEG, or AutoCAD®) as the design basis for Graphical Mapping.
4. Connection and programming of new intelligent field controllers to the ACAMS server via Ethernet TCP/IP network connections.
5. Provide controller expansion boards, network boards, alarm input modules and output modules as necessary.
6. Installation of new cabling and termination of new cabling to new security devices and new electronic door hardware.
7. Installation of new cabling in new conduit where shown on the Drawings.
8. Installation of power supplies for all security devices and electric door hardware (excluding dedicated power boosters for exiting hardware – where applicable).
9. Tamper Monitoring
 - a. The Contractor shall provide additional monitor input points, per the drawings, using AMAG Technology (AMAG) monitoring input points, for monitoring the following:
 - i. Tamper switches located within each security equipment enclosure.
 - b. Supervision of power supplies and batteries (unsupervised inputs may be used for this purpose).
10. Contractor shall be responsible for installation and termination of all new lock assemblies, including testing to ensure proper installation and function of all electronic locking devices.
11. Termination of 120VAC power sources as required supplying proper voltage to security equipment power supplies and security system components.
12. Provide and install net Uninterruptible Power Supplies (UPS) for each existing network switches at the locations shown on the drawings.
13. Programming of the ACAMS server including, but not limited to the following:
 - a. All hardware devices installed as part of this project.
 - b. All access and user defined authorization levels, as coordinated with the College.
 - c. Input of cardholder database information.
 - d. Site and building specific Graphic Alarm Mapping, including programming of device icons showing card readers, door locks, alarm points, and CCTV cameras. Coordinate the appearance of the map, colors, text size, icon size, and placement with the Consultant and the Security Director.

- e. Command programming for keypads and card readers at the locations where they are used.
 - f. Input of alarm condition messages and alarm reporting text including contact point information as viewed by the central alarm station service provider.
 - g. Third Party Alarm monitoring through the existing UL interface.
 - h. Programming of CCTV integration.
 - i. Input of all other integrated programming requirements as coordinated with the College to provide a fully functional and operational ACAMS as Specified herein and shown on the Drawings.
- G. The finish and color of all equipment shall be standard manufacturer colors and finishes. Exact installation locations for each device will require coordination with the Consultant and the College prior to installation.
- H. These Specifications and the associated Drawings are not meant to be all-inclusive, and the Contractor shall make adjustments accordingly. Include in the original bid, all equipment, cabling, connectors, transformers, relays, etc., whether specified here or not, such that said bid fulfills the intent of these Specifications and renders these systems functional and fully operational.

1.4 DESCRIPTION OF OPERATIONS

- A. Work included: All labor, materials, appliances, tools, equipment, facilities, and services necessary for and incidental to performing all operations of this Section and related Sections, complete, as shown on the Drawings or specified herein.
- B. The System is designed to, upon receiving a signal from a reader, activated by an authorized card; activate an electronic opening device (i.e., electric lock) to allow access. Should an attempt be made to enter this system with an unauthorized card, the electronic device shall not be activated, thus denying entry. This system is also designed to provide for an override by the security system operator at a remote workstation to activate the electronic door device, thus allowing access for circumstances which are normally not programmed into the system. Each access or denial shall be recorded.
- C. All access controlled doors equipped with electric locks, shall be configured so that when a card is used at a reader, access shall be granted only if the access code is valid, the I.D. number is found, and it is authorized at that location for that

particular period. If all conditions are met, a signal shall be sent to the appropriate control hardware, the associated alarm contact shall be shunted, and the electric locking device shall be activated/deactivated.

- D. Intrusion detection devices shall be configured and programmed in alarm zones. Alarm zone information shall be coordinated with the College and the Consultant.
1. After-Hours Operation: The ACAMS shall be programmed so that a valid card read followed by a valid pin code shall momentarily unlock the associated door and shall disarm the associated zone. Upon exit, a valid card read followed by a valid pin code shall re-arm the zone.
 2. Business-Hours Operation: The ACAMS shall be programmed so that a valid card read followed by a valid pin code shall activate an event to unlock the door and disarm the associated zone.
 3. During the evening transition from business-hours to after-hours operation, the building will lock. Upon exit, a valid card read followed by a valid pin code shall arm the associated zone.
- E. Access Control System
1. The controllers shall be connected via the College Ethernet network to the ACAMS/Video server. The ACAMS/Video server computer runs the ACAMS and Video Storage applications and maintains the ACAMS database.
 2. Edge Network Video Server (ENVS) shall be supplied for event-based camera call-up, video storage and forwarding, image retrieval, and PTZ camera preposition targeting where PTZ is installed.
 3. Proximity card readers will be used on specified building perimeter doors and specific interior doors as indicated on the plan drawings. All proximity readers are wall mounted. These readers shall integrate seamlessly with the ACAMS and provide bi-directional communication with the ACAMS. Keypad equipped proximity readers will be installed at specific locations as indicated on the plan drawings.
 4. The Contractor will provide all surface mounted and recessed door position switches as required for complete, secure operation of the ACAMS.
 5. The ACAMS shall monitor all perimeter doors 24 hours per day. Activation of any perimeter door shall send an alarm directly to the ACAMS. The ACAMS shall interface with the CCTV system for camera call-up and alarm verification.
 6. The ACAMS shall include interface with the Emergency Communication Stations such that, upon activation of an Emergency Communications Station, an alarm signal shall be generated in the ACAMS. The ACAMS shall interface with the CCTV system for camera call-up of the camera associated with the Emergency Communications Station for alarm verification.

1.5 DEVICE HARDWARE REQUIREMENTS

- A. Enclosures: Provide security equipment enclosures at locations shown on the Drawings. Security equipment enclosures shall house the database units (DBU's), door controllers, expansion controllers, input modules, output modules, and any associated Panduit wire guides.
- B. Card Readers: Provide card readers at locations shown on the Drawings.
- C. Alarm Contacts/Tamper Switches:
 - 1. Provide magnetic alarm contacts at each monitored location shown on the Drawings to detect an unauthorized intrusion into the facility. If a door is illegally opened, the contact will send a signal to the ACAMS indicating an alarm condition
 - 2. The ACAMS shall be capable of shunting the alarm contacts from a request-to-exit (REX) device located at certain doors. When the ACAMS grants access at a controlled point, the alarm contact shall be shunted for a predetermined and programmable time, or until the door has opened and closed. The ACAMS shall also be capable of shunting the alarm contacts remotely from a system client workstation terminal.
 - 3. Tamper switches shall be provided on all security equipment enclosures and power supply enclosures as designated by the Drawings.
- D. Request-to-Exit (REX) switches: Provide REX switches included integral with electric door hardware.
- E. Electronic Locking Hardware: Provide new electric door hardware as defined within this Section and where shown on the Drawings. Provide termination and interface to existing electric door hardware as defined within this Section and where shown on the Drawings.

1.6 POWER SUPPLIES:

- A. 12VDC power supplies shall be utilized to provide power to field controllers. This power supply shall only be used to provide power to the controller and no other devices. Ancillary devices shall be powered utilizing a separate 12VDC power supply.
- B. 12VDC power supplies shall be utilized to provide power to ancillary devices (motion sensors, request-to-exit devices, door alarms, etc.).
- C. 12VDC power supplies shall be provided with internal power distribution boards and associated 12VDC battery backup.
- D. 24VDC power supplies shall be utilized to provide power to all ACAMS electronic locking hardware.

- E. 24VDC power supplies shall provide switched power to the electronic locking hardware through the associated reader module.
- F. UPS units shall be utilized to provide uninterrupted power to existing network switches to prevent system communication failures during short term power outages.

1.7 ENVIRONMENTAL CONDITIONS

- A. The following environmental conditions shall apply:
 - 1. Ambient temperature range (indoor): 10°C to 40°C;
 - 2. Ambient temperature range (outdoor): 0°C to 55°C;
 - 3. Relative humidity (indoor): 20% to 80% RH; and
 - 4. Humidity (outdoor): 0% to 95% @ 40°C.

PART 2 - PRODUCTS

2.1 GENERAL

- I. Material and equipment specified herein have been selected as the basis of acceptable quality and performance and have been coordinated to function as components of the included systems. Where a particular material, device, equipment or system is specified directly, the current manufacturer's specification for same is a part of these specifications, as if completely elaborated herein.
- J. All materials specified herein shall be new and shall be the manufacturer's latest design, permanently labeled with the manufacturer's name, model number and serial number.
- K. All auxiliary and incidental equipment necessary for the operation and protection of the systems specified in this section shall be furnished and installed if specified in full herein.
- L. System consists of specified components, controls, mounting brackets, transformers, accessories, and cabling.
- M. All systems and components shall have been thoroughly tested and proven in actual use.
- N. The Security System shall be installed with the full support of the manufacturer of the system components.
- O. All major components (ACAMS server and workstations) shall communicate via TCP/IP based 10/100/1000 Base-T networking.

- P. Provide RS-232, RS-485, or TCP/IP interfaces, where required, to give integration capabilities between different manufacturers of system components or between different components. If practical, the TCP/IP communications protocol is the preferred method of communication.

2.2 ACCESS CONTROL DEVICE HARDWARE REQUIREMENTS

C. ACCESS DATABASE CONTROLLER

The Access Database Controller shall include the following features:

1. Controller expansion capability for up to 16 card readers, 56 monitor points, 12 auxiliary outputs, 250,000 card-holder capacity.
3. Network interface card.
4. Self contained UL listed power supply and enclosure.
4. Back-up battery – 12 volt, 7 amp-hour sealed.
5. Manufacturer: AMAG Models M2100-8RDR-KIT-UL, M2000-4DCU-KIT, MN-NIC-3, MN-2100-ACU-KIT, MN-I/O, MN-CAB4+PSU-KIT, G4T-ENVS-011, MN-75-UL-TRANS, and MN_TRANS-150.
6. Contractor to utilize modules as required to control the devices applicable the given location.

B. WALL MOUNT PROXIMITY CARD READER

The Wall Mount Proximity Card Reader shall include the following features.

1. Card reader shall be capable of reading HID card format and communicating with the field controller in a secure, Pseudo-Random, bi-directional format.
2. All readers shall be wired back to a door control module in the access control unit directly. Readers shall not be daisy chained together.
3. Presenting a card to the reader shall initiate a single read. Thereafter the card must be removed from the reader's field and re-presented before it is again read by the system.
4. The card reader shall have a typical read range of up to 3.5" (87mm) when used with HID ProxCard II.
5. The card reader shall communicate with the door control module via 20mA current loop.
6. The card reader shall be a wall switch style as indicated by the door elevation details.
7. The card reader shall have a finish color of black, charcoal gray, or ash gray,

and shall be determined by coordination with the College and Consultant.

8. The card reader shall be available with an optional integral keypad that can be used for controlling ACAMS functions.
9. The card reader shall have a multi-color LED to indicate the status of the door.
 - a. Red status shall indicate that the door is secure (locked).
 - b. Green status shall indicate that the door is unsecured (unlocked).
 - c. Yellow status shall indicate the card reader is not functioning (off- line trouble) or is processing a read request.
 - d. The card reader shall produce an audible beep tone to indicate to the user the card was read and/or access was denied.
 - e. Exterior mounted readers shall be weatherproof.
10. The Wall Mount Proximity Card Reader shall be AMAG S820-CG.

D. WALL MOUNT PROXIMITY CARD READER WITH KEYPAD

1. Card reader shall be capable of reading HID card format and communicating with the field controller in a secure, Pseudo-Random, bi-directional format.
2. All readers shall be wired back to a door control module in the access control unit directly. Readers shall not be daisy chained together.
3. Presenting a card to the reader shall initiate a single read. Thereafter the card must be removed from the reader's field and re-presented before it is again read by the system.
4. The card reader shall have a typical read range of up to 5" (120mm) when used with HID ProxCard II.
5. The card reader shall communicate with the door control module via 20mA current loop.
6. The card reader shall be a mullion style as indicated by the door elevation details.
7. The card reader shall have an audible feedback to provide positive confirmation of card read and key press.
8. The card reader shall have a visual indication for card accepted, card rejected, and PIN prompt.
9. The card reader shall have a finish color of black, charcoal gray, or ash gray, and shall be determined by coordination with the College and Consultant.
10. The card reader shall be available with an optional integral keypad that can be

used for controlling ACAMS functions.

11. The card reader shall have a multi-color LED to indicate the status of the door.
 - a. Red status shall indicate that the door is secure (locked).
 - b. Green status shall indicate that the door is unsecured (unlocked).
 - c. Yellow status shall indicate the card reader is not functioning (off- line trouble) or is processing a read request.
 - d. The card reader shall produce an audible beep tone to indicate to the user the card was read and/or access was denied.
 - e. Exterior mounted readers shall be weatherproof.
12. Wall Mount Proximity Card Reader with Keypad shall be AMAG S840-KP-CG.

E. MULLION MOUNT PROXIMITY CARD READER

The Mullion Mount Proximity Card Reader shall include the following features.

1. Card reader shall be capable of reading HID card format and communicating with the field controller in a secure, Pseudo-Random, bi-directional format.
2. All readers shall be wired back to a door control module in the access control unit directly. Readers shall not be daisy chained together.
3. Presenting a card to the reader shall initiate a single read. Thereafter the card must be removed from the reader's field and re-presented before it is again read by the system.
4. The card reader shall have a typical read range of up to 2.5" (120mm) when used with HID ProxCard II.
5. The card reader shall communicate with the door control module via 20mA current loop.
6. The card reader shall be a mullion style as indicated by the door elevation details.
7. The card reader shall have an audible feedback to provide positive confirmation of card read and key press.
8. The card reader shall have a visual indication for card accepted, card rejected, and PIN prompt.
9. The card reader shall have a finish color of black, charcoal gray, or ash gray, and shall be determined by coordination with the College and Consultant.
10. The card reader shall be available with an optional integral keypad that can be used for controlling ACAMS functions.

11. The card reader shall have a multi-color LED to indicate the status of the door.
 - a. Red status shall indicate that the door is secure (locked).
 - b. Green status shall indicate that the door is unsecured (unlocked).
 - c. Yellow status shall indicate the card reader is not functioning (off- line trouble) or is processing a read request.
 - d. The card reader shall produce an audible beep tone to indicate to the user the card was read and/or access was denied.
 - e. Exterior mounted readers shall be weatherproof.
12. The Mullion Mount Proximity Card Readers shall be AMAG S830-CG.

F. MULLION MOUNT KEYPAD

The Mullion Mount Keypads shall include the following features.

1. Keypad shall be capable of 8 bit Word.
2. All keypads shall be wired back to a door control module in the access control unit directly.
3. Each position or key press will generate an 8-bit sequence.
4. The keypad shall be selectable 5 or 12 VDC.
5. The keypad shall communicate with the door control module via 20mA current loop.
6. The keypad shall be a thinline 2x6 style as indicated by the door elevation details.
7. The keypad shall have annunciator feedback to provide positive confirmation of each key press.
8. The keypad shall have a visual indication for code accepted and code rejected.
9. The keypad shall have a finish color of black with stainless steel overlay and shall be determined by coordination with the College and Consultant.
10. The keypad shall be capable of arming/disarming that can be used for controlling ACAMS functions.
11. The Mullion Mount Keypad shall be Essex Electronics Incorporated, Model KTP-162-SN. Provide and terminate each mullion mount keypad to an AMAG WIM2 or WIM4 Wiegand Interface Module.

G. RECESSED ALARM CONTACTS

1. Provide SPDT (single-pole double throw) alarm contacts as indicated on the Drawings.
2. Door position switches shall monitor the status of the door for intrusion and propping.
3. Intrusion and prop alarms shall be programmed to cause separate alarm conditions at the ACAMS server.
4. Each concealed door position switch shall be of the manufacturer's color that most closely matches the door frame where it shall be installed.
5. Manufacturer: Sentrol Model 1076C.

H. SURFACE MOUNT ALARM CONTACT

1. Provide DPDT (double-pole double throw) alarm contacts as indicated on the Drawings.
2. Door position switches shall monitor the status of the door for intrusion and propping.
3. Intrusion and prop alarms shall be programmed to cause separate alarm conditions at the ACAMS server.
4. Manufacturer: Sentrol Model 2507AD.

I. OVERHEAD DOOR ALARM CONTACT

1. Provide SPDT (single-pole double throw) alarm contacts as indicated on the Drawings.
2. Door position switches shall monitor the status of the door for intrusion and propping.
3. Intrusion and prop alarms shall be programmed to cause separate alarm conditions at the ACAMS server.
4. Each concealed door position switch shall be of the manufacturer's color that most closely matches the door frame where it shall be installed.
5. Manufacturer: Sentrol Model 2207AD.

J. WIRELESS ALARM CONTACT

1. Provide transmitters as indicated on the Drawings.
2. Shall monitor the status of the door for intrusion and propping.
3. Install in such a manner that it is not necessary to splice or add additional wire to original wire leads from alarm contacts.

4. Each universal transmitter shall be of the manufacturer's color that most closely matches the door frame where it shall be installed.
5. Manufacturer; Inovonics, Model ES1215

K TAMPER SWITCHES

1. Provide SPST (single-pole single throw) tamper switches on all enclosures.
2. Tamper shall monitor the status of the enclosure for intrusion.
3. Intrusion alarms shall be programmed to cause separate alarm conditions at the ACAMS server.
4. Manufacturer: Sentrol Model 3025T.

L. LIMIT SWITCHES

1. Provide and install new limit switches on existing doors equipped with automatic door operators.
2. Install, terminate and program the limit switch to function as a door position switch and to activate when ever the associated door is opened more than ½ inch.
3. Limit switches shall be Manufactured by Stanley Works.

M. CEILING FLUSH MOUNT MOTION DETECTOR

1. Shall be provided as indicated on the drawings.
2. Shall be provided with two (2) separate 180 degree mirrors that provide two (2) independent fields of view.
3. Shall be provided with 60ft diameter 360 degree coverage.
4. Shall have eighteen (18) 30ft full curtains with dual technology.
5. Operate on 12-24VDC.
6. Shall be by GE, Model AP669BP.

N. SURFACE / CORNER MOTION

1. Shall be provided as indicated on the drawings.
2. Shall be provided with 60ft to 90ft detection range.
3. Shall have dual technology precision controlled microwave and passive infrared.
4. Operate on 8-18 VDC.
5. Shall be by GE, Model RCR-90.

N. WIRED DURESS BUTTON

1. Shall be provided on drawings as indicated.
2. Shall be a mushroom push button switch on a stainless steel single gang plate.
3. Shall be momentary alternate action.
4. Shall be at 2- 3/8" diameter as required and approved by the College and/or Consultant.
5. Shall be flush wall mounted to standard recessed electrical box.
6. Shall be supplied with engraved, paint filled lettering "PANIC".
7. Shall be by Dortronics, Model 5216PP23PPRxE2.

O. WIRELESS TRANSMITTERS

1. Provide transmitters as indicated on the Drawings.
2. Shall monitor the status of the door for intrusion and propping.
3. Install in such a manner that it is not necessary to splice or add additional wire to original wire leads from alarm contacts.
4. Each universal transmitter shall be of the manufacturer's color that most closely matches the door frame where it shall be installed.
5. Manufacturer; Inovonics, Model ES1215

P. WIRELESS RECEIVERS

1. Provide receivers as indicated on the Drawings.
2. Receivers shall operate in the 902 – 928 MHz range and shall be utilized with both wireless duress buttons as well as with wireless alarm contacts.
3. Operating voltage 12VDC. At 400mA.
4. Wireless alarm contacts and wireless duress buttons shall be programmed to cause separate alarm conditions to the ACAMS input board.
5. Shall be by Inovonics, Model EN4216R.

2.3 DOOR HARDWARE DEVICES

B. STANDARD ELECTRIC STRIKES

1. Field verify locations and existing door hardware for applicability of standard electric strike locations.

2. Shall be used in conjunction with existing mechanical mortise and cylindrical locks.
3. Shall be cut into existing door frames.
4. Shall be 24VDC.
5. Shall be fail-secure.
6. Shall be provided with brushed stainless finish.
7. Shall be by Von Duprin, Model 6210.

C. RIM ELECTRIC STRIKES

1. Field verify locations and existing door hardware for applicability of rim electric strike locations.
2. Shall be used in conjunction with existing mechanical panic hardware.
3. Shall be cut into existing door frames.
4. Shall be 24VDC.
5. Shall be fail-secure.
6. Shall be provided with brushed stainless finish.
7. Shall be by Von Duprin, Model 6112.

D. ELECTRIC CYLINDRICAL LOCKS

1. Field verify locations and existing door hardware for applicability of standard electric cylindrical lock locations.
2. Shall replace existing mechanical cylindrical locks.
3. Doors shall be prepped with cable raceway between center hinge and lockset (provided by Contractor).
4. Shall be provided with internal request-to-exit switch.
5. Shall be 24VDC.
6. Shall be fail-secure.
7. Shall be provided with brushed stainless finish.
8. Shall be provided with an armored door cord mounted from the frame to the door to provide a wire pathway and shall be by Keedex Model K-DLA, or equal.
9. Shall be by Schlage, Model ND96PDEURHO626xN123-062.

E. REQUEST-TO-EXIT (REX) MOTION DEVICES

1. Shall be provided on drawings as indicated.
2. Detector shall be constructed of durable high impact ABS plastic.
3. Shall have selectable time delay with two (2) form C output relays
4. Operating voltage shall be 12-24VDC.
5. Detection pattern shall be adjustable with passive infrared and Doppler range controlled radar technology.
6. Each REX shall be of the manufacturer's color that most closely matches the door frame where it shall be installed.
7. On doors equipped with REX motion sensors that will be scheduled unlocked, a secondary output has been provided to disable the REX motion sensor during the unlock time schedule.
8. Shall be by Detection System (Bosch Security), Model DS-150.

F. REQUEST-TO-EXIT (REX) PUSH BUTTONS

1. Shall be provided on drawings as indicated.
2. Shall be a mushroom push button switch on a stainless steel single gang plate.
3. Shall be momentary alternate action.
4. Shall be at least 1-9/16" diameter as required and approved by the College and/or Consultant.
5. Shall be flush wall mounted to standard recessed electrical box.
6. Shall be supplied with engraved, paint filled lettering "PUSH TO EXIT".
7. Shall be by Dortronics, Model 5211MP23DAGxE1.

2.4 POWER SUPPLIES

A. Access Controllers:

1. Power supplies for the access control panels shall be provided integral with the cabinet enclosure.

B. Motion Detectors:

1. Where these devices are installed, their power supplies shall be by Altronix, Model AL600ULX-PD16, 6 AMP (12VDC) continuous supply current, transformer, enclosure, lock assembly, and tamper switch.

C. Electronic Locks:

1. Power supplies shall be by Altronix, Model AL600ULX-PD8, 6 AMP (24VDC) continuous supply current—with transformer, enclosure, lock assembly and tamper switch.

D. Uninterruptible Power Supply (UPS):

1. UPS shall be rack mountable and shall be installed in close proximity to the associated existing network switch.
2. UPS shall be by APC, Model Smart-UPS SUA1000RM2U.

2.5 ENCLOSURES

A. “J1” Security Junction Boxes and “J2” Security Equipment Enclosures:

1. Enclosure: Hoffman A-12N124, or equal.
2. Back Panel: Hoffman A-12N12MP, or equal.
3. Lock: Hoffman A-L12AR, or equal.

B. Security Equipment Enclosure:

1. Enclosure: Hoffman A-24N16ALP, or equal.
2. Back Panel: Hoffman A24N26MP, or equal.
3. Lock: Hoffman A-L12AR, or equal.

C. Batteries shall be Yuasa, Model NP&-12, 7AH and be provided at all power supplies.

2.6 ELECTRICAL REQUIREMENTS

- A. Unless otherwise noted on the Drawings, provide all 120 VAC power wiring, breakers and associated conduit, outlets, services, etc. Coordinate termination to existing circuits and panels with the Campus Maintenance and Operations Department.
- B. The Contractor shall check the adequacy of all power and wiring before making final connections and applying power to the equipment. If such wiring/service is not proper and/or adequate, Contractor shall notify the College and/or its representatives in writing, requesting specific correction of same. Should the Contractor fail to provide proper notification of wiring inadequacies to the College, the Contractor shall be bound to correct problems from such inadequacies with no cost to the College.
- C. Relays: All relays shall be by Idec, or equal.
- D. Terminal blocks: All terminal blocks shall be by Phoenix, or equal.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General

1. Perform this work in accordance with acknowledged industry and professional standards and practices and the procedures specified herein.
2. A complete, operating system shall be provided. Include all devices specified including basic components and accessories, interconnecting wiring and other equipment and installation devices necessary for a complete system as specified.
3. Provide wire, system cabinets, system devices, etc., shall be in accordance with
4. The control equipment and wiring shall be installed in a neat and workmanlike manner by trained technicians or electricians. All wiring and cable shall have identification tags/sleeves installed at each end, and at accessible points in junction boxes, pull boxes or intermediate device boxes.

B. Boxes, Panels, and Enclosures

1. Install all boxes, panels, and enclosures square and plumb. Set "flush mounted" units so that the face of the cover, bezel or escutcheon shall be in the same place as the surrounding finished surface. Mount boxes, panels and trim so that there are no gaps, cracks or obvious lines between the trim and the adjacent finished surface and ready them to receive final finish, as applicable.
2. Install insulating terminations in signal circuit boxes, panels, wire ways or enclosures of this section.

C. Components

1. General
 - a. Follow manufacturers recommended guidelines for installation.
2. Access Controllers
 - a. Place power supply and all associated hardware in same location.
 - b. Install supervisory and end of line resistors at the field device(s) as required.
3. Proximity Card Readers/Keypads
 - a. Install devices square and plumb. Set units so that the face of the cover, bezel or escutcheon shall be in the same place as the surrounding finished surface. Mount so that there are no gaps, cracks or obvious lines between the trim and the adjacent finished surface and ready them to receive final finish, as applicable.

- b. Specified proximity card readers and keypads shall be installed throughout the facility, based on the specific application of each card reader and keypad location.
 - 4. Alarm Contacts
 - a. Recessed Alarm Contacts
 - i. Install on protected (secured) side of door.
 - ii. Install 6" from leading edge at top of door.
 - iii. Concealed door position switches shall be installed per manufacturer instructions.
 - b. Surface Mounted Alarm Contacts
 - i. Install on protected (secured) side of door.
 - ii. Provide an armored cable into conduit body.
 - iii. Surface mounted door position switches shall be installed per manufacturer instructions.
- D. Painting
 - 1. The Contractor is responsible for custom painting all devices as indicated on the Drawings.

3.3 SECURITY DOOR CONTROL AND MONITORING DEVICES

- A. Controller shall be installed inside of security equipment enclosures in such a manner so that the wiring termination points are readily accessible. Associated modules shall also be installed so that their termination points are readily accessible.
- B. Provide and terminate electronic locking devices at locations shown on the Drawings.
- C. Power Supplies shall be mounted in close proximity to the associated controllers in a neat and unobtrusive manner.

3.4 SOFTWARE CONFIGURATION

- A. Prior to the completion of construction the Contractor shall schedule a meeting with the College to determine all of the programming criteria. The issues that shall be discussed are as follows:
 - 1. Access card levels and door groups.
 - 2. Alarm priority levels.
 - 3. Schedules and time codes.

4. Holidays and holiday types (priorities).
 5. Room, Door and Camera Numbering.
 6. Action/responses from individual input points.
 7. Standard and custom reports.
 8. CCTV camera call-up & recording features (including video motion detection)
 9. System Database back-ups.
- B. The Contractor shall document the results of the meeting and perform all necessary programming to achieve the College's requests.
- C. The Contractor is responsible for the entire programming and setup of the system such that no additional programming other than entering new access cards is required. Programming shall include the setup of all available features of the software.
- D. The Contractor shall perform a full system back-up at completion of initial programming and deliver the copy to the College with a letter of Transmittal explaining information included in back-up and brief description of recovery procedures.
- E. The Contractor shall perform field software changes after the initial programming session to "fine tune" operating parameters and sequence of operations based on any revisions to the College operating requirements.

END OF SECTION

SECTION 13746

SECURITY WIRE AND CABLE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.
- B. Chabot Las Positas Community College District – Cabling Infrastructure Standards (available on the Ford Graphics Planwell Site).

1.2 RELATED WORK NOT IN THIS SECTION

- A. General and specific provisions of these Specifications apply to the work specified in this Section, as well as:
 - 1. Security General Requirements (Section 13701)
 - 2. Security Materials and Methods (Section 13710)
 - 3. Security Management System Server (Section 13720)
 - 4. Security Management System (Section 13721)
 - 5. Security Emergency Communications Stations (Section 13760)
 - 6. Security Closed Circuit Television System (Section 13780)

1.3 DESCRIPTION OF WORK

- A. All labor, materials, appliances, tools, equipment, facilities, transportation, and services necessary for, or incidental to, performing all operations of the work of this Section, complete, as shown on the Drawings or specified herein. Work includes, but is not limited to, the following:
 - 1. Furnish and install all data/power cabling as required on the Drawings.
 - 2. Perform end-to-end tests of cable pairs, and verify assignments and terminations.
 - 3. The entire system shall be supported by engineering documentation in accordance with the provisions of these Specifications, specifically including:
 - a. Wiring diagrams showing all devices, terminations, and interconnections.
 - b. Connection diagrams showing interfaces between the devices, panels, and system head-ends.

- c. Cable assignments and terminations, showing all pair assignments and termination locations.
- d. Cable termination schedules and diagrams meeting the CLPCCD Cabling Infrastructure Design Standards.

1.4 REGULATORY REQUIREMENTS

- A. Comply with California Electric Code and local codes and ordinances that may prevail.
- B. Materials shall meet with approval of the Division of Industrial Safety, State of California and all governing bodies having jurisdiction.
- C. Where required, materials shall be listed by Underwriter's Laboratories (U.L.) and shall bear the U.L. Inspection Label.
- D. Where required, the Contractor shall use plenum rated cabling that conforms to NEC specifications.

1.5 PRODUCT HANDLING

- A. Deliver materials to job site in original, unbroken packages, properly tagged with U.L. label, size, type, and manufacturer indicated.

PART 2 - PRODUCT

2.1 MATERIALS AND EQUIPMENT

- A. Unless otherwise noted, all materials and equipment shall be new, of the type, capacity, and quality specified and free from defects. Material shall bear the label of, and be listed by, the Underwriters' Laboratories unless of a type for which label or listing service is not provided.
- B. Materials shall be of same brand or manufacturer throughout for each class of material or equipment, wherever possible.
- C. Wire and Cable of the following description and specification shall be used as indicated on the drawings:
 1. Signal Cabling – Type A: Unless otherwise specified, all signal cabling shall be plenum rated, 22 AWG, 2 conductor, twisted, non-shielded, West Penn Model 25221B, or approved equal.
 2. Signal/Power (24VAC/VDC) Cabling – Type B: Unless otherwise specified, all 24 VAC/VDC signal/power cabling shall be plenum rated, 2 conductor, 18 AWG twisted, non-shielded, West Penn Model 25224B, or approved equal.
 3. Data/Signal Cabling – Type C: Unless otherwise specified, all data/signal cabling shall be plenum rated, 6 conductor, 22 AWG, overall shielded, West Penn Model 253270B, or approved equal.
 4. Video Coax Cabling – Type D: Unless otherwise specified, all CCTV video signal

cabling shall be plenum rated coax, type RG-59, 20 AWG single solid conductor, foam Teflon insulation, bare-copper braid 95% coverage, West Penn Model 25815, or approved equal.

5. Category 6 (interior) – Type E: Unless otherwise specified, Category 6 (interior) cabling shall be plenum rated West Penn Model 254246, with yellow colored jacket, or equal
6. Data/Signal Cabling – Type F: Unless otherwise specified, all data/signal cabling shall be non-plenum 2 conductor 22 AWG non shielded, West Penn Model 221, or approved equal.
7. Signal/Power (12-24 VDC) – Type G: Unless otherwise specified, signal/power cabling shall be non-plenum 2 conductor 18 AWG non shielded, West Penn Model 224, or approved equal.
8. Data/Signal Cabling – Type H: Unless otherwise specified, all data/signal cabling shall be non-plenum, 6 conductor 22 AWG, overall shielded, West Penn Model 3270, or approved equal.
9. Video Coax Cabling – Type J: Unless otherwise specified, all CCTV video signal cabling shall be PVC coax, type RG-59, 20 AWG single solid conductor, foam polyethylene insulation, bare-copper braid 95% coverage, West Penn Model 815, or approved equal.
10. Category 6 (interior) – Type K: Unless otherwise specified, Category 6 (interior) cabling shall be non-plenum 4 pair West Penn Model 4246, with yellow colored jacket, or approved equal.
11. Data/Signal Cabling – Type L: Unless otherwise specified, all data/signal cabling shall be waterblocked construction, 2 conductor 22 AWG shielded, West Penn, Model AQC291 or approved equal.
12. Power/Signal Cabling – Type M: Unless otherwise specified, all power/signal cabling shall be waterblocked construction, 2 conductor 18 AWG shielded, West Penn, Model AQC293 or approved equal.
13. Category 6 (exterior) – Type N: Unless otherwise specified, Category 6 (exterior) cabling shall be waterblocked construction 4 pair shielded, West Penn Model AQC439, or approved equal.
14. Fiber Optic Cabling – Type P:
 - a. The contractor shall provide single mode fiber cable used for connections to devices greater than 250 feet away from a telecommunication room, The fiber will be 2-strand 8.3/125 micron, zero water peak, with matched cladding. The single mode fiber cable will be Indoor/Outdoor type with a central strength member. The required fiber type is Systimax TeraSPEED ZWP.
 - b. The single mode fiber cabling must comply with the TIA/EIA-568-B.3 standards for required attributes.
 - c. Single mode fiber cabling will have dual wavelength capabilities at 1310 nm and

1550 nm. The fiber must comply with the following maximum attenuation characteristics:

1. 0.34 dB/km @ 1310 nm
 2. 0.22 dB/km @ 1550 nm
- d. All fibers shall be color coded per TIA 598-C to facilitate individual fiber identification. The coating shall be mechanically strippable.
 - e. Cable Terminations: Field termination is required for all fiber strands. All connectors are to be LC field-installable connectors. Connectors must have a locking feature to the coupler to prevent optical disconnect.
 - f. Unless otherwise specified, fiber optic cabling shall be Indoor/Outdoor, 2 strand by Commscope Model: 5101 002A WPBK, or equal.
- D. Cable Labeling:
1. Labels shall be a self-laminating vinyl.
 2. Labels shall have a white background for printing and a clear tab to protect the printed text.
 3. Labels shall be a minimum of 1" wide and 1-1/4" long, the printed area shall be no less than 1/2" high.
 4. Generate labels using a handheld Brady I.D. Pro-plus labeler Model ID PRO-PLUS, or equal.
 5. Labels shall be by Brady, Model number WML-311-292, or equal.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. The Contractor shall be responsible for delivery, storage, protection, and placing of all equipment and materials.
- B. The Contractor shall install materials and equipment in accordance with manufacturer's recommendations, instructions, and industry standards.
- C. All cables shall be connected to terminal strips/blocks or to equipment via suitable factory-furnished or locally furnished connectors. Cable to rack-mounted equipment shall be long enough to allow complete removal of equipment, even if rear access is totally restricted.
- D. All intra-rack wiring shall be neatly strapped, dressed, and supported. Terminal blocks, boards, strips, or connectors shall be supplied for all cables which enter or leave racks, enclosures or equipment modules except for coaxial cables. Cables shall be grouped according to signals carried.
- E. Installation of Conductors:

1. Conductors shall be continuous between outlets or junction boxes and no splices shall be made except in outlet boxes, pull-boxes, panel board gutters, or hand-holes.
2. For wire training and clamping in cabinets and enclosures, use nylon cable ties, bundling no more than four (8) conductors per bundle to facilitate manual tracing of conductors.
3. Open cable runs shall be supported independently. Provide 12 gauge ceiling wires with "Caddy" type clips and/or bridle rings as required (10' maximum spacing.)
4. End of line resistors shall be installed at field device locations, as required.
5. All splices, taps, and end of line resistance shall be soldered connections.
6. Wire Pulling Lubricant shall be Minerallac "Pull-In" compound, Y-ER-EAS wire pulling lubricant, Ply-water, or other U.L. approved lubricant. Flax-soap, oil, or grease are not approved and are not permitted on this job.
7. Conductors shall not come in contact with earth or laid out on concrete slabs while being installed.
8. Swab conduits before installing cables, and exercise care in pulling to avoid damage or disarrangement of conductors, use approved grips.
9. Bundle and lace conductors neatly on panels, cabinets, and equipment.
10. Mounting facilities shall be provided by the Contractor for properly securing hanging fixtures, equipment, and outlets. Provide sleeves, inserts, expansion bolts, and all components required.
11. Tighten pressure type lugs on panels and equipment, and re-tighten 24 hours later.
12. Cable splices shall follow standard approved methods. Splices shall be located only in hand-holes, access boxes, or cabinets.
13. Splices in ground pull boxes or in areas subject to moisture shall be provided with re-entenable splice cases and compounds. Properly prepared wire splicing devices shall be according to manufacturer's recommendations.
14. The Contractor is responsible to see that all coaxial cables have been properly routed, dressed and secured to preclude stress and/or deformation. This includes insuring that the cable is run into the camera housing in a secured manner.

F. Category 6 Copper Testing:

1. Test Tools: The Contractor shall perform all tests and adjustments. The Contractor shall furnish all test equipment necessary and perform all work required to determine or modify performance of the system in accordance with these specifications. All pairs will be tested with a valid copper test tool that conforms to the specifications for Category 6 detailed in TIA/EIA 568-B.
2. Test Plan: 100% of the cable pairs will be tested. The Contractor shall use the

Permanent Link Test Configuration to verify the performance of the permanently installed cable. The test tool shall be configured for the specific manufacturer's test instructions, utilizing the latest firmware and software.

3. Test Types: Tests shall include wire map, length, insertion loss, NEXT loss, FEXT loss, PSNEXT loss, ELFEXT, PSELFEXT, return loss, propagation delay and delay skew.
4. Compliance: Any pairs not meeting the specifications for transmission performance shall be brought into compliance by the contractor, at no charge to CLPCCD.

G. Installation and Testing of Fiber Optic Cable

1. All fiber testing shall be performed on all fibers in the complete end-to-end system. Testing of Single mode fiber shall meet the requirements of TIA/EIA 526-7.
2. For Single mode fiber, the Contractor shall use Method A.1, including the loss within the cable plant, and two connection losses.
3. The Contractor shall also test the single mode fiber using OTDR Method B.
4. The system loss measurements shall be provided at both 1310 and 1550 for single mode fibers.
5. Preinstallation cable testing - The Contractor shall test all fiber cable prior to the installation of the cable. The Contractor shall assume all liability for the replacement of the cable should it be found defective at a later date. Test results shall be provided to CLPCCD as part of the final documentation.
6. Any link not meeting the requirements of the standard shall be brought into compliance by the Contractor, at no charge to CLPCCD.

H. Tagging of Conductors (Labeling):

1. Cable labeling shall be keyed to the Drawings, as approved by the Consultant, such that at each cable end, origination and destination can be quickly and clearly ascertained. Spare cables shall be so identified.
2. Label text shall be printed utilizing the "SMALL" text size setting.
3. Label text shall be printed on three lines utilizing the "WIRE" setting.
4. Label shall be affixed to cable jacket no more than 1" from where jacket is stripped back to allow ease of cable identification.
5. Label shall be affixed to cable jacket by adhering the white printed portion of the label directly to the jacketing and then wrapping the clear portion of the label around and over the white printed portion to protect the printed text of the label.
6. Label shall be positioned so that it can be easily read with out needing to adjust or reposition label or surrounding cabling.

3.2 FIELD QUALITY CONTROL

A. Tests:

1. Furnish all necessary instruments and equipment required for conducting tests. Test all wiring for shorts, open circuits or grounding.
2. When entire installation has been completed, test out circuits and demonstrate that operation of system is in accordance with the Drawings.
3. Perform bi-directional OTDR (Optical Time Domain Reflectometer) tests on each fiber of the fiber optic cabling system. Provide tests results to the Airport and Consultant for review. Consultant shall perform, in conjunction with the Contractor, random testing of the fiber optic cabling to ensure system accuracy.

END OF SECTION

SECTION 13760

SECURITY EMERGENCY COMMUNICATION STATIONS

GENERAL

a. RELATED DOCUMENTS

- 1) Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.
- 2) Chabot Las Positas Community College District – Cabling Infrastructure Standards (available on the Ford Graphics Planwell Site).

b. RELATED WORK NOT IN THIS SECTION

- 1) General and specific provisions of these Specifications apply to the work specified in this Section, as well as:

Security General Requirements (Section 13701)

Security Materials and Methods (Section 13710)

Security Management System Server (Section 13720)

Security Management System Devices (Section 13721)

Security Wire and Cable (Section 13746)

Security Closed Circuit Television (Section 13780)

c. DESCRIPTION OF WORK

- 1) All labor, materials, appliances, tools, equipment, facilities, transportation, and services necessary for, or incidental to, performing all operations of the work of this Section, complete, as shown on the Drawings or specified herein. Work includes, but is not limited to, the following:

Furnish and install emergency communication stations as required on the Drawings.

The entire system shall be supported by engineering documentation (Shop Drawings) in accordance with the provisions of Section 13701.

- 2) Elements of the work include, but are not limited to, materials, labor, supervision, supplies, equipment, transportation, storage, utilities, and all required licenses.

- 3) All work performed under this Project shall be in accordance with the Drawings and Specifications and subject to the terms and conditions of the Contract. For purposes of these Specifications, "provide" and "furnish and install" shall be synonymous.

d. DEVICE REQUIREMENTS

- 1) Emergency Communication Stations shall be designed so that a single push of the call button shall immediately dial a programmed telephone extension at the Chabot College Safety and Security Office. Simultaneously this activation shall start the blue strobe light flashing at no less than 60 times per second. The strobe shall continue to flash until the Office operator terminates the call.
- 2) Emergency Communication Stations shall utilize blue strobe/area lights to aid in identification of the nearest call station.
- 3) Each Emergency Communication Station shall terminate to the College's telephone punch down block located within various IDF closet locations throughout the facility. Coordinate termination and extension programming with the College.
- 4) Each Emergency Communication Station shall require termination to existing 120VAC power sources at the locations shown on the Drawings.
- 5) Each Emergency Communication Station shall additionally provide a dry contact closure for integration of camera call-up, through the ACAMS, upon activation of the Call Station.
- 6) This system shall be complete including Emergency Communication Stations, phones, paging command unit for IP-Based WEBS, voice over IP interface units, 10/100/1000 switch, blue strobe/area light, back-boxes, mounting brackets, power supplies and cabling necessary to provide a complete and operational system as specified herein.

e. REGULATORY REQUIREMENTS

- 1) Comply with National Electric Code (NEC) and local codes and ordinances.

f. PRODUCT HANDLING

- 1) Deliver materials to job site in original, unbroken packages, properly tagged with U.L. label, size, type, and manufacturer indicated.

PRODUCTS

g. MATERIALS AND EQUIPMENT

- 1) Unless otherwise noted, all materials and equipment shall be new, of the type, capacity, and quality specified and free from defects. Material shall bear the label of, and be listed by, the Underwriters' Laboratories unless of a type for which label or listing service is not provided.
- 2) Materials shall be of same brand or manufacturer throughout for each class of material or equipment.

h. EMERGENCY COMMUNICATION STATIONS

- 1) Emergency Communication Station – Type A shall be an Emergency Phone Tower with Wide Area Emergency Broadcast System (WEBS) Hardwire and Wireless and shall include but not be limited to the following;
 1. Concealed high power speakers providing 360 degree coverage.
 2. Integral combination area and high powered strobe light
 3. Capability to unlock Tower local command station and make on-site announcements.
 4. Safety blue with reflective lettering text “EMERGENCY” with reflective lettering color in white.
 5. One button emergency call phone with voice identification by Talk-A-Phone, Model: ETP-400V.
 6. Each unit shall be provided with one (1) communications module by Talk-A-Phone, Model: VOIP-CM-1.
 7. Each unit shall require 120VAC power, shall be supplied with a weather rated double duplex outlet, and shall be supplied with an internal Uninterruptible Power Supply (UPS) to provide a minimum 4-hours of backup operation.
 8. Where indicated on the drawings “WIRELESS” units shall additionally be provided with one (1) 2.4 GHz radio frequency interface units by Talk-A-Phone, Model: VOIP-RF.
 9. Where indicated on the drawings “WIRELESS” units shall additionally be provided with one (1) one (1) port voice over IP interface units by Talk-A-Phone, Model: VOIP-1.
 10. Emergency Communication Station – Type A with Wide Area Emergency Broadcast System shall be by Talk-A-Phone, Model WEBS-MT/R.
- 2) Emergency Communication Station “TYPE B” shall be an Emergency Phone Pedestal Mount with Wide Area Emergency Broadcast System (WEBS) and shall include but not be limited to the following;
 1. Concealed high power speakers providing 180 degree coverage
 2. Safety blue with reflective lettering text “EMERGENCY” with reflective lettering color in white.
 3. Faceplate with ultra bright LED’s.

4. Each unit shall require 120VAC power, shall be supplied with a weather rated double duplex outlet, and shall be supplied with an internal Uninterruptible Power Supply (UPS) to provide a minimum 4-hours of backup operation.
 5. One button emergency call phone with voice identification by Talk-A-Phone, Model: ETP-400V.
 6. Each unit shall be provided with one (1) communications module by Talk-A-Phone, Model: VOIP-CM-1.
 7. Emergency Phone Pedestal Mount with Wide Area Emergency Broadcast System shall be by Talk-A-Phone, Model WEBS-PM.
- 3) Emergency Communication Station "TYPE C" shall be an Emergency Phone Wall Mount with Wide Area Emergency Broadcast System (WEBS) and shall include but not be limited to the following;
1. Concealed high power speakers providing 180 degree coverage.
 2. Integral combination area and high powered blue strobe light behind a polycarbonate window.
 3. Safety blue with reflective lettering text "EMERGENCY" with reflective lettering color in white.
 4. Each unit shall require 120VAC power, shall be supplied with a weather rated double duplex outlet, and shall be supplied with an internal Uninterruptible Power Supply (UPS) to provide a minimum 4-hours of backup operation.
 5. One button emergency call phone with voice identification by Talk-A-Phone, Model: ETP-400V.
 6. Each unit shall be provided with one (1) communications module by Talk-A-Phone, Model: VOIP-CM-1.
 7. Emergency Phone Wall Mount with Wide Area Emergency Broadcast System shall be by Talk-A-Phone, Model WEBS-WM
- i. EMERGENCY COMMUNICATION DEVICES
- 1) This system shall require one (1) paging command unit for IP-Based WEBS stations by Talk-A-Phone, Model: WEBS-PCU. Provide one Uninterruptible Power Supply, per Section 13721 for the WEBS-PCU. WEBS-PCU to be installed in the Campus Safety and Security Office.
 - 2) This system shall require one (1) four port voice over IP Interface by Talk-A-Phone, Model VOIP-4 and one (1) 2.4 GHz radio frequency interface unit by Talk-A-Phone, Model: VOIP-

RF to be installed in Building 1400 to provide wireless WEBS connectivity to the "WIRELESS" Type A Emergency Call Stations.

- 3) The system will require one (1) one (1) port voice over IP interface units by Talk-A-Phone, Model: VOIP-1 to be installed in Building 1400 for each "WIRELESS" Type-A Emergency Call Station to down convert the EPT-400 signal to analog.
- 4) Where wireless units are used, provide one Viking Electronics Model LDB-2 Ring Loop Detector to monitor activation on the associated phone line. Terminate relay output to an available ACAMS supervised input.
- 5) This system shall require one (1) 10/100/1000 switch for integration between VOIP-RF units and VOIP-1 units by Cisco, Model Catalyst-3560-8TC to be installed in Building 1400. Provide a Hoffman enclosure, Per Section 13721, to house the system equipment installed in Building 1400.

EXECUTION

j. INSTALLATION

- 1) The Emergency Communication Stations shall be installed, in conformance with manufacturer's printed requirements.
- 2) Provide all connections, testing and certification required to complete the operation of the communication system.
- 3) Complete all system programming for communication with the Emergency Communication Stations, included automated camera call-up through the ACAMS.
- 4) All intra-rack wiring shall be neatly strapped, dressed, and supported. Terminal blocks, boards, strips, or connectors shall be supplied for all cables that enter or leave racks, enclosures or equipment modules. Cables shall be grouped according to signals carried.

k. MOUNTING

- 1) Coordinated excavating, cutting, trenching, concrete pours, power connections and preparation of the mounting plate, leveling pad and anchor bolts cast in place with the Campus Maintenance and Operations Department prior to commencement of work. Holes for emergency call station concrete bases will require hand digging where directed by the Campus Maintenance and Operations Department.
- 2) All units shall be mounted level and plumb.
- 3) The lenses unit shall be designed/installed in such a manner that it cannot be removed without opening the unit. The lens shall be completely sealed against water and/or insects with silicone sealant which shall neatly and completely surround the lens openings in the housing. The lens shall be similarly caulked, with silicone on the inside.

l. ELECTRICAL

- 1) All electrical components, including the 50 watt H.I.D. luminaire, the strobe light and the phone panel light shall have quick disconnect terminals which attach via plug and receptacle

attachments for easy service or removal. All wiring shall be concealed within the unit in such a way that it is not visible from outside the unit.

END OF SECTION

SECTION 13780

SECURITY CLOSED CURCUIT TELEVISION SYSTEM

PART 1 - GENERAL

1.30 RELATED DOCUMENTS

- A. Drawings and specific provisions of this Contract, including the General and Supplementary Conditions and Requirements, apply to the work specified in this section.
- B. Chabot Las Positas Community College District – Cabling Infrastructure Standards (available on the Ford Graphics Planwell Site).

1.31 RELATED WORK NOT IN THIS SECTION

- A. General and specific provisions of these Specifications apply to the work specified in this Section, as well as:
 - 1. Security General Requirements (Section 13701)
 - 2. Security Materials and Methods (Section 13710)
 - 3. Security Management System Server (Section 13720)
 - 4. Security Management System Devices (Section 13721)
 - 5. Security Wire and Cable (Section 13746)
 - 6. Security Emergency Communications Stations (Section 13760)

1.32 DESCRIPTION OF WORK

- A. The work of this contract shall be for the installation of a new Closed Circuit Television (CCTV) system, and Edge Network Video Server (ENVS) equipment and associated devices for the College. The Contractor shall deliver a new, complete, and operating system as intended, shown, and specified.
- B. Contractor shall perform a complete site inspection of each device location shown on the drawings to ascertain the extent of work completed under another contract. Contractor shall be responsible for taking a complete inventory of installed and stored equipment removed during the demolition process by others. Contractor shall re-use existing equipment wherever possible and shall supply new equipment at locations as required to provide a

complete and operational system.

- C. Provide all labor, materials, equipment, services, etc., necessary to furnish and install complete and in place, a CCTV system including, but not limited to:
1. Installation of new cameras and housings.
 2. Installation of new camera power supplies.
 3. Installation of new ENVS equipment.
 4. Termination of new cameras to new ENVS equipment.
 5. Installation of new network video storage device.
 6. Termination of new cameras to new power supplies.
 7. Installation of new conduit and cabling.
 8. Installation of other associated equipment as defined within this document.
 9. Configuration of ENVS local storage recording as well as video archiving to a College provided 5TB NAS, per Section 13720.
- D. These Specifications and the associated Bid Documents are not meant to be all inclusive, and the Contractor shall make adjustments accordingly. Include in the original bid, all equipment, software, cabling, connectors, transformers, relays, etc., whether specified here or not, such that said bid fulfills the intent of these Specifications and renders these systems functional and fully operational.

1.3 DESCRIPTION OF OPERATIONS

- A. Work included: All labor, materials, appliances, tools, equipment, facilities, and services necessary for and incidental to performing all operations of this Section, complete, as shown on the Drawings or specified herein. Work includes, but shall not be limited to, the following:
- B. CCTV Camera System
1. The CCTV camera system shall be comprised of color cameras, which may include any of the following types: Pan, Tilt, Zoom (PTZ) cameras, single camera fixed domes, and fixed position cameras in housings. All cameras shall be installed as indicated on the drawings.
 2. A combination of fixed and PTZ cameras shall be located at selected facility doors, building main entry/exits, and in selected site surveillance locations for parking lots and grounds.
 4. Video signals from all cameras shall be routed to centralized locations where they shall be connected to new ENVS panels. ENVS units will be mounted on wall panels as indicated in the Drawings and coordinated with the College. ENVS panels shall be configured to download data to a centralized mass storage solution located on the

College/District network.

5. ENVS panels shall be programmed at the basic level to record all video at a minimum of D1 resolution and 3.75 images per second on a time-lapse basis from each camera; and then increase the recording rate to record at 7 images per second per camera for all motion detected events.
6. All ENVS panels shall be programmed for "store and forward" operation. The video shall be stored on each ENVS for the maximum amount of time allowed by the frame-rate and resolution programming configuration, and then programmed to automatically forward the recorded video to the network storage device. The network storage device shall maintain the video data for a minimum of thirty (30) days before overwriting.

1.4 DEVICE HARDWARE REQUIREMENTS

- A. Wall Mount Pan Tilt Zoom (PTZ) dome cameras:
 1. Install wall mount PTZ cameras at locations as designated by the Drawings.
- B. Corner Mount Pan Tilt Zoom (PTZ) dome cameras
 1. Install corner mount PTZ cameras at locations as designated by the Drawings.
- C. Recessed Ceiling Mount Fixed dome cameras:
 1. Install recessed ceiling mount fixed dome cameras at locations as designated by the Drawings.
- D. Surface Mount Fixed dome cameras:
 1. Install surface mount fixed dome cameras at locations as designated by the Drawings.
- E. Edge Network Video Server (ENVS):
 1. Install ENVS panels at locations as designated by the Drawings.

1.5 POWER SUPPLIES

- A. 24 VAC power supplies shall be utilized to provide power to the CCTV cameras.

1.6 ENVIRONMENTAL CONDITIONS

- A. The following environmental conditions shall apply:
 1. Earthquake Loading: Zone 4, per UBC;
 2. Ambient temperature range (indoor): 10°C to 40°C;
 3. Ambient temperature range (outdoor): 0°C to 55°C;

4. Relative humidity (indoor): 20% to 80% RH; and
5. Humidity (outdoor): 0% to 95% @ 40°C.

1.7 ELECTRICAL POWER

- A. Existing electrical circuits shall be available to the Contractor at locations as designated on the Drawings.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Unless otherwise noted, all materials and equipment shall be new, of the type, capacity, and quality specified and free from defects. Material shall bear the label of, or be listed by the Underwriters' Laboratories (U.L.) unless of a type for which label or listing service is not provided.
- B. For compatibility and ease of installation, materials shall be of same brand or manufacturer throughout for each class of material or equipment, wherever possible.
- C. All enclosures for all equipment shall be of metal throughout the system, unless otherwise noted.

2.2 CAMERAS

- A. The Contractor shall provide surge and lightning protection for exterior cameras.
- B. The individual camera types, as defined by the Drawings, shall include the following camera and equipment:
 1. Type "A"– Wall Mount PTZ Environmental Dome, Color, Hi-Resolution 26x Day/Night Camera:
 - a. Camera: Bosch Model VG4-323-ECSOW
 - b. Lens: Bosch 3.5-91.0mm, F1.6 (2.3" to 55" FOV)
 - c. Dome: Polycarbonate clear bubble EnviroDome enclosure
 - d. Mount: Pendant arm with wall mount adapter bracket

2. Type "B"– Corner Mount PTZ Environmental Dome, Color, Hi-Resolution 26x Day/Night Camera:
 - a. Camera: Bosch Model: VG4-323-ECSOC
 - b. Lens: Bosch 3.5-91.0mm, F1.6 (2.3" to 55" FOV)
 - c. Dome: Polycarbonate clear bubble EnviroDome enclosure
 - d. Mount: Pendant arm with integrated power supply enclosure and corner mount adapter bracket
3. Type "C"– Recessed Mounted Fixed Dome, Color, Hi-Resolution Camera:
 - a. Camera: Bosch Model VG4 161-CC0
 - b. Lens: Bosch 2.7-13mm, F1.4 (Vari-focal w/auto iris)
 - c. Dome: Vandal resistant polycarbonate clear bubble
 - d. Mount: Indoor, In-ceiling housing plenum rated
4. Type "D"– Surface Mounted Fixed Dome, Color, Hi-Resolution Camera:
 - a. Camera: Bosch Model VG4-161-PC00W
 - b. Lens: Bosch 2.7-13mm, F1.4 (Vari-focal w/auto iris)
 - c. Dome: Vandal resistant polycarbonate clear bubble
 - d. Mount: Indoor, Pendant housing with wall mount adapter

2.4 CCTV DIGITAL RECORDING SYSTEM

- A. ENVS shall provide termination of up 4 camera channels.
- B. ENVS shall provide a recording rate of 120 images per second (IPS) across the 4 camera inputs. Recording rate for all cameras shall be initially set at 3.75 IPS per camera.
- C. ENVS shall have a minimum internal storage capacity of 80GB.
- D. ENVS shall store video locally and only forward over the network when required.

- E. ENVS shall be equipped with an on board 10/100/1000 base-T network interface card. Coordinate connection and configuration of ENVS to the network with the College.
- F. ENVS shall be fully integrated with the ACAMS system.
- G. ENVS shall include network accessible viewing software.
- H. ENVS units shall be provided in a quantity to support the total number of cameras as shown on the Drawings.
- I. ENVS shall utilize MPEG4 compression technology.
- J. Manufacturer shall be AMAG Model G4T-DVS-408, and be incorporated within the ACAMS field controller as detailed in the Security Management System Specification Section 13721-Field Hardware.

2.5 POWER SUPPLY

- A. Power Supply for Type A and Type B PTZ cameras are supplied integral with camera mounts.
- B. Power supply for Type C and Type D fixed cameras shall be mounted where indicated on the Drawings and shall have the following features:
1. 120VAC input and surge protection.
 2. 24VAC/300VA supply current.
 3. Eight (8) 1.56 amp/ 24 VAC isolated outputs.
 4. Class 2 Rated PTC power limited circuit protection.
 5. UL Listed.
 6. Manufacturer: Altronix, Model: ALTV248ULCBMI.
- C. 120VAC power to camera power supplies shall be provided per Division 16. Termination of 120VAC power shall be provided by the Contractor.

2.6 ELECTRICAL REQUIREMENTS

- A. Unless otherwise noted on the Drawings, terminate all equipment for this system to new 120VAC power sources provided under by the Contractor in coordination with the Campus Maintenance and Operations Department.
- B. The Contractor shall check the adequacy of all existing power and wiring before making final connections and applying power to the equipment. If such wiring/service is not proper and/or adequate, The Contractor shall notify the College and/or the Consultant in writing, requesting specific correction of same. Should the Contractor fail to provide proper notification of wiring inadequacies to the College, he shall be bound to correct problems from such inadequacies with no cost to the College.
- C. The Contractor shall be responsible for terminating all cameras and other equipment at existing 120VAC source locations.

PART 3 - EXECUTION

3.1 CAMERAS

- A. All vari-focal lenses shall be adjusted to provide the best field of vision.
- B. Each camera shall have the white balance level adjusted to provide the sharpest video image possible.
- C. Adjust AGC to provide the best image resolution at each location.
- D. Adjust vertical phase calibration to ensure stabilization of video image.
- E. Back focus shall be adjusted to optimize the focal range of each cameras viewing area.
- F. Test line voltage to ensure that the 24VAC current meets the cameras minimum or maximum operating range.
- G. Contractor shall provide for one (1) adjustment of each camera at no additional cost to the College

3.2 INSTALLATION

- A. General
 - 1. Perform this work in accordance with acknowledged industry and professional standards and practices and the procedures specified herein.
 - 2. A complete, operating system shall be provided. Include all devices specified including basic components and accessories, interconnecting wiring and other equipment and installation devices necessary for a complete system as specified.
- B. Components
 - 1. CCTV Cameras

- a. Provide outdoor housing and mounts for all exterior cameras.
 - b. Exact placement of cameras shall be field determined to ensure complete coverage.
 - c. Fixed camera lenses shall be field determined to ensure complete coverage.
2. Edge Network Video Server (ENVS)
- a. Locate ENVS units as shown on the Construction Drawings.
 - b. Coordinate with the College specific camera programming requirements including but not limited to:
 1. Camera title
 2. Camera frame rate.
 3. Camera motion activity.
 4. Video storage duration and location.
 5. Video archiving location.

3.3 POWER SUPPLIES

- A. Test 120 VAC incoming line voltage prior to termination of camera power supply.
- B. Test line voltage to ensure that the 24VAC output current meets the cameras minimum or maximum operating range.
- C. Mount camera power supply per manufacturer's recommendation.

END OF SECTION