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

d. A Contractor or Subcontractor shall file a certified copy of the records enumerated in subsection a with the entity that requested such records within ten (10) days after receipt of a written request.

e. Any copy of records or payroll checks made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or the Subcontractor performing the Contract shall not be marked or obliterated.

f. The Contractor shall inform the District of the location of the records enumerated under subsection a, including the street address, city and county, and shall, within five (5) working days, provide a notice of a change of location and address.

g. The Contractor or Subcontractor shall have ten days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subsection a. In the event that the Contractor or Subcontractor fails to comply within the ten-day period, he or she shall, as a penalty to the state or the District, forfeit twenty-five dollars ($25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments otherwise due the Contractor hereunder in accordance with Section 6d hereof. The Contractor is not subject to a penalty assessment pursuant to this subsection (g) due to the failure of a Subcontractor to comply with this Section 61.

62. HOURS OF WORK

As provided in Article 3 (commencing at Section 1810), Chapter 1, Part 7, Division 2 of the California Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any work employed at any time by the Contractor or by any Subcontractor upon the Work, or upon any part of the Work contemplated by this Contract, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereinafter provided. Notwithstanding the provisions hereinabove set forth, Work performed by employees of the Contractor or any Subcontractor in excess of eight (8) hours per day and forty (40) hours during any one week shall be permitted upon this public work; provided that, compensation for all hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be at not less than one and one-half (1-1/2) times the basic rate of pay.

As provided in Section 1813 of the California Labor Code, the Contractor shall pay to the District a penalty of Twenty-Five Dollars ($25.00) for each worker

employed in the execution of this Contract by the Contractor or by any Subcontractor, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day or forty (40) hours in any one calendar week, in violation of the provisions of Article 3, (commencing at Section 1810), Chapter 1, Part 7, Division 2 of the Labor Code, unless compensation to the worker so employed by the Contractor is not less than one and one-half (1-1/2) times the basic rate of pay for all hours worked in excess of eight (8) hours per day or forty (40) hours per week, as applicable. The District may retain or withhold any such amounts from the Contract Price in accordance with Section 6d hereof.

Any work required to be performed after regular working hours or on Sundays or other holidays shall be performed without additional expense to the District.

63. APPRENTICES

Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

(1) The apprenticeship standards and apprentice agreements under which he or she is training.

(2) The rules and regulations of the California Apprenticeship Council.

When the Contractor or Subcontractor, in performing any of the work under the contract, employs workers in any apprentice-able craft or trade, the Contractor or Subcontractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor. A Contractor or Subcontractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program.

"Apprentice-able craft or trade," as used in this section, means a craft or trade determined as an apprentice-able occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council.

Prior to commencing work on a contract for public works, the Contractor or Subcontractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District if so requested. Within 60 days after concluding work on the contract, each Contractor and Subcontractor shall submit to the District, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

The apprenticeship program that can supply apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates where the contractor agrees to be bound by those standards, but, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The Contractor or Subcontractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the Contractor or Subcontractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Chief of the Division of Apprenticeship Standards, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

A Contractor or Subcontractor covered by this section that has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or that has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio.

Upon proper showing by a Contractor or Subcontractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of

labor performed by journeymen, the Chief of the Division of Apprenticeship Standards may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent; or

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5; or

(3) There is a showing that the apprentice-able craft or trade is replacing at least one-thirtieth (1/30) of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis; or

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

When an exemption is granted to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors will not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

A Contractor or Subcontractor, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprentice-able craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A Contractor or Subcontractor may take as a credit for payments to the council any amounts paid by the Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The Contractor or Subcontractor may add the amount of the contributions in computing his or her bid for the contract.

At the conclusion of the 2003-04 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Division of Apprenticeship Standards for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The funds shall be distributed as follows:

(A) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(B) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and geographic area for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices registered in each program.

(C) All training contributions not distributed under subparagraphs (A) and (B) shall be used to defray the future expenses of the Division of Apprenticeship Standards.

All training contributions received shall be deposited in the Apprenticeship Training Contribution Fund, which fund is hereby created in the State Treasury. Notwithstanding Section 13340 of the Government Code, all money in the Apprenticeship Training Contribution Fund is hereby continuously appropriated for the purpose of carrying out this subdivision and to pay the expenses of the Division of Apprenticeship Standards.

The responsibility of compliance with California Labor Code Section 1777.5 and this Section for all apprentice-able occupations is with the Contractor.

This Section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars ($30,000).

All decisions of an apprenticeship program under this section are subject to Section 3081.

Pursuant to Section 1777.6 of the California Labor Code, it shall be unlawful for an employer or a labor union to refuse to accept otherwise qualified employees as registered apprentices on any public works on the grounds of the race, religious creed, color, national origin, ancestry, sex or age of such employee (except as provided in Section 3077 of the California Labor Code).

Pursuant to California Labor Code Section 1777.7, upon a determination by the Chief of the Division of Apprenticeship Standards that the Contractor or any Subcontractor has knowingly committed a serious violation of any of the provisions of this Section or Section 1777.5 of the California Labor Code, the Chief may deny to the Contractor or Subcontractor, both individually and in the name of the business entity under which the Contractor or Subcontractor is doing business, the right to bid on, or to receive, any public works contract for a period of up to one (1) year for the first violation and for a period of up to three (3) years for the second and subsequent violations. Each period of debarment shall run from the date the determination of noncompliance by the Chief becomes final order of the Administrator of Apprenticeship.

A Contractor or Subcontractor who knowingly violates Labor Code Section 1777.5 or this Section shall forfeit as a civil penalty the sum not exceeding one hundred dollars ($100) for each full calendar day of noncompliance. The amount of this penalty may be reduced by the Chief if the amount of the penalty would be disproportionate to the severity of the violation. Notwithstanding Labor Code Section 1727, upon receipt of a determination that a civil penalty has been imposed by the Chief, the awarding body shall withhold the amount of the civil penalty from Contract progress payments then due or to become due pursuant to Section 6d. In lieu of such penalty, the Chief may for a first-time violation and with the concurrence of an apprenticeship program as described in Labor Code Section 1777.7(d), order the Contractor or Subcontractor to provide apprentice employment equivalent to the work hours that would have been provided for apprentices during the period of noncompliance.

If a Subcontractor is found to have violated this Section or Section 1777.5 of the California Labor Code, the Contractor is not liable for any penalties unless the Contractor had knowledge of the Subcontractor's failure to comply with the provisions of the Section or unless the Contractor fails to comply with any of the following requirements:

(1) The contract executed between the Contractor and Subcontractor or the performance of work on the public works project shall include a copy of the provisions of Sections 1771, 1775, 1776, 1777.5, 1813, and 1815.

(2) The Contractor shall continually monitor a Subcontractor's use of apprentices required to be employed on the public works project pursuant to subdivision (d) of Section 1777.5 of California's Labor Code, including, but not limited to, periodic review of the certified payroll of the Subcontractor.

(3) Upon becoming aware of a failure of the Subcontractor to employ the required number of apprentices, the Contractor shall take corrective action, including, but not limited to, retaining funds due the Subcontractor for work performed on the public works project until the failure is corrected.

(4) Prior to making the final payment to the Subcontractor for work performed on the public works project, the Contractor shall obtain a declaration signed under penalty of perjury from the Subcontractor that the Subcontractor has employed the required number of apprentices on the public works project.

Any funds withheld by the District pursuant to this Section and Section 1777.5 of the California Labor Code shall be deposited in the general fund of the District.

The interpretation and enforcement of Section 1777.5 and Section 1777.7 of the California Labor Code shall be in accordance with the rules and procedures of the California Apprenticeship Council.

64. ASSIGNMENT OF ANTITRUST CLAIMS

In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the California Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgment by the parties.

If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with Section 4550) of Division 5 of Title 1 of the California Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

Upon demand in writing by the assignor, the District shall, within one year from such demand, reassign the cause of action assigned pursuant to this Section if the assignor has been or may have been injured by the violation of law for which the cause of action arose, and (a) the District has not been injured thereby, or (b) the District declines to file a court action for the cause of action.

65. ATTENDANCE AT JOB START MEETING

The Contractor and all Subcontractors should attend the Job Start Meeting (Pre-Job Conference) that shall be conducted by the District in accordance with Section 1771.5 of the California Labor Code. For major projects, multiple Job Start Meetings may be held before each significant phase of the Work.

At that meeting the District representatives shall discuss the Federal and State labor law and District requirements applicable to the public works contract, including a checklist of prevailing wage requirements, the recordkeeping responsibilities, the requirement for the reporting of certified payroll records to the District, and the prohibition against discrimination in employment. The Contractor and all Subcontractors will then be required to sign the checklist.

66. FAIR EMPLOYMENT PRACTICES

a. The following provisions pertaining to fair employment practices are incorporated into this Contract. All references to "contractor" in this Section 66 shall be deemed to refer collectively to the Contractor named herein and all Subcontractors of any tier performing Work on the Project.

b. In connection with the performance of the Work under this Contract, each contractor agrees as follows:

(i) During the performance of the Contract, contractor will not unlawfully discriminate against, or deny the Contract's benefits to, any person on the basis of religion, color, ethnic group identification, sex, age, physical or mental disability, nor shall contractor discriminate unlawfully against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, mental disability, medical condition, marital status, age (over 40) or sex. Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination.

(ii) The contractor shall comply with the provisions of the Fair Employment and Housing Act (Cal. Gov. Code, Section 12900, et seq.), the regulations promulgated there-under (Cal. Admin. Code, Tit. 2, Sections 7285.0 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Tit. 2 of the Government Code (Cal. Gov. Code, Sections 11135-11139.5), and the regulations or standards adopted by the District to implement such article.

(iii) The contractor shall give written notice of their obligations under this Section 66 to labor organizations with which the contractor has a collective bargaining or other agreement.

(iv) The contractor agrees to post at the Project Premises in conspicuous places, available to employees and applicants for employment, notices to be provided by the District setting forth the provisions of this Section 66.

(v) In all advertisements for labor or other personnel, or requests for employment of any nature, the contractor shall encourage persons of all races and ethnic groups to apply and state the intention of the company to hire qualified minority and female applicants.

(vi) The contractor shall permit access by representatives of the Department of Fair Employment and Housing and the District upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours notice, to such of its books, records, accounts, other sources of information and its facilities as said Department or the District shall require to ascertain compliance with this Section 66.

(vii) The contractor's commitment to specific goals for minority and female utilization, as herein required, shall constitute a commitment to make every good faith effort to meet such goals. If the contractor fails to meet the established goals, a determination of good faith in achieving

those goals will be based in part upon those efforts used to broaden the recruitment base.

(viii) Following the award, but within ten (10) days after issuance of the Notice to Proceed, the contractor shall meet the following standards for affirmative action compliance, and shall ensure that each Subcontractor of every tier will meet these requirements within ten (10) days after receiving a notice to proceed from the contractor, unless the District provides for a greater time period:

(A) Provide evidence, as required by the District, that all Subcontractors of every tier, the contractor's supervisors, and other personnel have been notified, in writing, of the content of this Fair Employment Practices section and their responsibilities under it by posting notices in conspicuous places, including, without limitation, the Project Premises, the contractor's offices, and in other places available to supervisors and other personnel; and

(B) Provide evidence, as required by the District, that all sources of employee referrals (including, but not limited to, unions, employment agencies, and the State Employment Development Office) have been notified of the content of the Fair Employment Practices provisions set forth herein.

(ix) After a determination by the District that a contractor has knowingly committed a violation of Fair Employment Practices as set forth herein or of the California Fair Employment and Housing Act (if a State funded project), or of any applicable federal law or executive order concerning equal employment practices, the District shall cause written notice to be served on the contractor and to any Subcontractor of any tier involved in such violation. The notice shall set forth the nature of the violation. Upon the District's request, the contractor shall meet with representatives of the District in order to determine the means of correcting the violation and the time period within which the violation shall be corrected. If within ten (10) days the parties are unable to agree upon a means of remedying the violation or upon the time period within which said remedy shall be effected, the District shall serve a second written notice upon the manner in which the violation shall be corrected. If the contractor has not corrected the violation in the manner prescribed by the District within fifteen (15) days after receipt of the second notice, the District may impose any or all of the following penalties:

(A) Determine the contractor not to be a responsible bidder for any future contract until such time as the contractor has satisfied the District that the requirements of this Section 66 have been met;

(B) Terminate the entire Contract, in which case the District shall not be liable for any further payments there-under, or for any damages to the contractor caused by such termination, except as provided in subsections (xii) and (xiii) below;

(C) Terminate and cancel any portion of the Contract or Work hereunder, or require the contractor to terminate and cancel (or cause to be terminated and cancelled) the subcontract of any offending Subcontractor, which is related to the violation in which case the District shall not be liable for any further payments as to said portion of the contract or for any damages caused by such termination, except as provided by subsections (xii) and (xiii) below, and may engage another contractor or Subcontractors to perform said Work; or

(D) Assess as liquidated damages payable as provided by law the penalties provided in California Labor Code Sections 1777.5 and 1775, for each calendar day, or portion thereof, for each person who was denied employment as a result of such violation.

(x) Nothing contained in these Fair Employment Practices provisions shall be construed so as to prevent the District from pursuing any other remedies that may be available to it at law or in equity.

(xi) The contractor shall include the provisions of this Section 66 in every first tier subcontract and require each Subcontractor to bind each further Subcontractor with whom a contract exists to such provisions so that such provisions will be binding upon every Subcontractor of every tier who performs any of the Work required by the Contract.

(xii) Should the termination, under the provisions of subparagraph (b)(ix) above, of part or all of any contract be finally determined by a court of law to have been improper and unauthorized, the District shall compensate each employee of any affected contractor who was actually working on the Project Premises at the time of the contract termination for wages that such employee would have received had such contract not been so terminated, less any wages the employee earned or had the opportunity to earn during the time the employee otherwise would have been employed on the Project Premises.

(xi) Should the termination, under subparagraph (b)(ix) above, of part or all of any contract be finally determined be a court of law to have been improper and unauthorized, then the District shall reimburse the contractor for all direct damages which it may have incurred by reason of such termination.

(xii) The District shall have the right, but not the obligation unless requested in writing by the contractor within three (3) days of service of any summons and complaint or other pleading, to defend the contractor against any legal action which may be brought by reason of any action that the District may have taken under the provisions of subparagraphs (b)(ix)(B) or (b)(ix)(c) above. In the event a dispute arises between the District and the contractor as to whether or not the contractor was acting

upon District direction, the decision of the matter by the District, made by and through the Assistant Superintendent, Business Services, shall be final.

67. CONTRACTOR NOT A PARTNER, OFFICER, EMPLOYEE OR AGENT OF THE DISTRICT

While engaged in carrying out and complying with the terms and conditions of the Contract, the Contractor is an independent contractor and not a partner, officer, employee or agent of the District, and the District shall not be liable for any of the Contractor's acts, omissions, liabilities or other obligations as such.

68. ATTORNEYS' FEES

In the event of any dispute between the District and the Contractor relating to the Work, the Project or this Contract, the prevailing party (as determined by the court or arbitrator, as applicable) shall be entitled to recover from the other party its reasonable attorneys' fees, costs and expenses incurred in connection with the prosecution or defense of such dispute and the dispute resolution proceedings resulting there-from. For purposes of this Contract, the term "attorneys' fees" or "attorneys' fees, costs and expenses" shall mean the fees and expenses of counsel to the parties hereto, which may include printing, photo-stating, duplicating and other expenses, air freight charges, and fees billed for law clerks, paralegals and other persons not admitted to the bar but performing services under the supervision of an attorney, and the costs and fees incurred in connection with the enforcement or collection of any judgment obtained in any such proceeding, at rates customary in the Project locality and shall include, specifically, all fees, costs and expenses of expert witnesses. FOR PURPOSES OF THE CONTRACT DOCUMENTS, IF EITHER PARTY MAKES A SETTLEMENT OFFER TO THE OTHER PARTY IN CONNECTION WITH A DISPUT, THEN THE TERM "PREVAILING PARTY" SHALL BE DEEMED TO INCLUDE AND CONSTITUTE A PREVIALING PARTY AS DEFINED IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 998, WHETHER OR NOT SUCH SETTLEMENT OFFER WAS MADE UNDER AND/OR PURSUANT TO SAID SECTION 998 OF THE CALIFORNIA CODE OF CIVIL PROCEDURE, AND THE PREVAILING PARTY IN SUCH EVENT WILL BE PERMITTED TO RECOVER ALL OF ITS ATTORNEYS' FEES, COSTS AND EXPENSES, AND NOT ONLY ITS LITIGATION COSTS OR ITS ATTORNEYS' FEES, COSTS AND EXPENSES INCURRED FROM AND AFTER THE DATE OF THE SETTLEMENT OFFER. FOR EXAMPLE, IF PARTY A MAKES A SETTLEMENT OFFER OF $100,000 TO PARTY B AND PARTY B REJECTS SUCH SETTLEMENT OFFER, AND PARTY B SUBSEQUENTLY RECOVERS $85,000 IN THE ARBITRATION OR LITIGATION, AS THE CASE MAY BE, THEN PARTY A WILL BE DEEMED FOR ALL PURPOSES HEREUNDER TO BE THE

"PREVAILING PARTY," AND PARTY A SHALL BE ENTITLED TO RECOVER FROM PARTY B ALL OF PARTY A's ATTORNEYS' FEES, COSTS AND EXPENSES INCURRED IN CONNECTION WITH THE DISPUTE (INCLUDING, WITHOUT LIMITATION, THOSE ATTORNEYS' FEES, COSTS AND EXPENSES INCURRED PRIOR TO THE DATE THAT PARTY A COMMUNICATED SUCH SETTLEMENT OFFER TO PARTY B). The provisions of this Section 68 shall survive the entry of any judgment, and shall not merge, or be deemed to have merged, into any judgment.

69. CHANGE IN NAME OR NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the District in order that proper steps may be taken to have the change reflected on the Contract Documents.

70. ASSIGNMENT

The Contractor shall not assign or transfer, by operation of law or otherwise, any or all of its rights, burdens, duties or obligations under this Contract, under any of the Contract Documents, or any part hereof or thereof without the prior written consent of the Surety(ies) on the Payment Bond and Performance Bond and the District, which may be given or withheld in their sole and absolute discretion. Should the Contractor request an assignment of monies under the Contract, the District shall be entitled to assess against the Contractor the reasonable costs for processing such assignment. Any assignment of monies due or to become due under this Contract shall be subject to (i) prior lien and stop notice rights for services rendered or materials supplied for performance of the Work called for under this Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials (including, without limitation, Subcontractors and Material-men) to the extent that claims are filed pursuant to the California Civil Code, the California Code of Civil Procedure or the California Government Code and (ii) deductions for liquidated damages if liquidated damages have been assessed against the Contractor as specified in Section 7 herein.

71. NOTICE AND SERVICE THEREOF

All notices, requests, demands, consents, instructions or other communications hereunder shall be in writing (which shall include telex, telegram or telecopy) and shall be deemed to have been duly given or made upon transmittal thereof by telex, answer back received, if transmitted on a business day, otherwise on the first business day after transmittal, or on the date of confirmed dispatch if sent by telecopy on a business day, otherwise on the first business day thereafter, or upon the delivery thereof to the telegraph office if sent by telegraph on a business day, otherwise on the first business day thereafter, or three (3) business days after deposit in the mails if sent by certified mail, postage prepaid, return receipt requested, or on the next business day if sent by overnight personal delivery, in each case addressed to the party to which such notice is requested or permitted to be given or made hereunder, at the address and

numbers set forth underneath such party's signature line to the General Contract, or at such other address and number of which such party shall have notified in writing the party giving such notice.

72. WAIVER

No action or failure to act by the District, the Architect or any other District representative, or by the Contractor, shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of, or acquiescence in, a breach there-under, except as may be specifically agreed in writing.

73. ENTIRE AGREEMENT; AMENDMENT

The Contract Documents represent and constitute the entire and integrated agreement between the parties hereto with respect to the matters set forth therein and supersede all prior negotiations, representations or agreements, either written or oral. The Contract Documents may be amended or modified only by a writing executed by both parties hereto or by a written Change Order issued in accordance with the terms and provisions hereof or otherwise as expressly provided herein (including, without limitation, by the issuance of an Architect/Engineer Field Directive).

74. E-RATE AND PAYMENT FUNDING CONSIDERATIONS

The successful bidder(s) will be responsible for seeking and procuring their E-Rate payback directly from the appropriate agencies. When using E-Rate funding discounts, the District will only issue purchase orders for, and pay the District portion of the amounts after the E-Rate discounts are applied in accordance with all legal requirements.

The District may use this bid to issue purchase orders and pay for items on a purchase order that are not eligible for E-RATE discounts. The District will pay the vendor using District funds for these purchases.

75. PROJECT FUNDING

There are several sources of funding that may be used for this project including E-rate discounts. Purchase of items or service is contingent upon funding, including but not limited to E-rate discounts. The District may use E-rate funding discounts or other District funds, or any combination of funds for any or all purchase.

76. NON-AVAILABILITY OF FUNDS

Purchase is contingent upon availability of funds. The District is not responsible, nor will it be penalized, for canceling or extending this project due to lack of funding or E-rate discounts.

The bidder agrees to stop work upon notification by the District. In accordance with the bid documents, the District will issue payment for the portion of work, product or service received. If funds to effect such continued payment are not appropriated, successful bidder agrees to take back any affected equipment or materials furnished under this contract, terminate any services supplied to the SBCUSD under this contract, and relieve the SBCUSD of any further obligation therefore.

SBCUSD agrees that if the provisions of this bid section are invoked, equipment shall be returned to Contractor in substantially the same condition in which it was delivered to the SBCUSD, subject to normal wear and tear. SBCUSD further agrees to pay for packing, crating, transportation to Contractor's nearest facility and for reimbursement to the Contractor for expenses incurred for their assistance in such packing and crating.

The SBCUSD may terminate this agreement under the provisions of this request for bid.

77. QUALIFIED E-RATE BIDDER

The District desires to seek leverage funding through the Federal Universal Service Administration's E-Rate Program. Technology pieces will be awarded in accordance with E-Rate procurement laws and respondent vendors/s should have a SPIN number and be prepared to bill the SLD directly for the discounted portion of the award.

The bidder will be responsible for providing a valid SPIN number and tax ID number upon submission of the bid documents. Instructions for obtaining a Service Provider Identification Number (SPIN) can be found at http://form498.universalservice.org/form498web/PDF/form498.pdf. It is necessary to allow for processing time when completing this form. The submission of a bid without a valid SPIN number will be considered non-responsive.
The bidder will be responsible for providing a valid FCC RN. You can apply online for an FCC RN from the FCC web site at http://www.fcc.gov. Follow the link to the "FCC Registration Number Commission Registration System (CORES)" on the left hand side of the screen. Follow the link to "Register" under "Register and Receive your FRN". We strongly encourage you to apply online. However, you can also file a paper copy of the CORES Registration Form. This form can also be faxed to you by contacting the FCC Registration Number Helpline at 1.877.480.3201. The instructions to the Form 160 include directions for filing. Should you have questions about filing on paper, contact the

FCC Registration Number Helpline. The submission of a bid without a valid FCC RN will be considered non-responsive.

78. PRICE DECREASES

Bidders are required to update the list pricing schedules provided against their original bids and pass list price reductions immediately through to the SBCUSD as market prices drop for these products throughout the duration of the contract or any extensions. The District reserves the right to purchase any item covered under this bid from the successful bidder at the decreased price.

79. PRICE ESCALATION

After the initial year of the contract term, prices may increase in accordance with the terms of this price escalation clause. The successful bidder shall provide written notification to the District of an annual increase, if any, by means of an in advance 90 days written notice.

A maximum price increase of no more than 5% per contract year, or in accordance with the San Bernardino area PPI for the item purchased, may be negotiated subject to the existing market conditions and approval by the District.

The successful bidder must substantiate such price increases by providing documentation that is acceptable and to the complete satisfaction of the District in order to justify the increase.

Bidders are required to update the list pricing schedules provided with their original bids to the SBCUSD at the time of the agreed upon increase for these products.

EXHIBIT A
FORM OF ARCHITECT/ENGINEER FIELD DIRECTIVE

EXHIBIT B

FORM OF CONTRACTOR PAYMENT REQUEST

EXHIBIT C

FORM OF PAYMENT BOND

PAYMENT BOND

WHEREAS, by General Contract dated _____, by and between SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT, and _____, hereinafter designated as the "Principal", Principal has been employed for the work described as follows:

WHEREAS, said Principal is required by SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT to furnish a bond in connection with said contract;

NOW THEREFORE, _____ of _____, City of _____, State of _____, as Principal, and _____, a corporation organized and existing under the laws of the State of _____, legally doing business in California as an admitted surety insurer at _____ _____ City of _____, State of California, as Surety, are indebted to SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT, hereinafter called the "District", in the sum of _____ Dollars ($_____) for which payment Principal and Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION is that if the Principal, his, hers or its subcontractors, heirs, executors, administrators, successors, or assigns, shall fail to pay any person or persons named in California Civil Code Sections 3110 and 3181 or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the contractor and subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor that the sureties will pay for the same, and also, in case suit is brought upon the bond, reasonable attorneys' fees to be fixed by the Court.

This bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under Sections 3110 or 3181 of the California Civil Code so as to give a right of action to them or their assigns in any suit brought upon this bond.

Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond by any change, alteration or modification in or of the contract, any plans, specifications or agreements pertaining or relating to any schedule or work of improvement or pertaining or relating to the furnishing of labor, materials, or equipment therefore under the contract, nor by any change or modification of any terms of payment or extension of time for any payment pertaining or relating to any scheme or work of improvement under the contract, nor by any rescission or attempted rescission of the contract or bond, nor by any conditions precedent or subsequent in the bond, express or implied, attempting to limit the right of recovery of claimants otherwise entitled to recover under the contract or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on the _____ day of _____, _____.

Principal

(corporate seal)

By:
Name: _____

Title: _____

Surety _____

(corporate seal)

By:
Name: _____

Title: _____

(Attach Attorney-in-Fact Certificate)

EXHIBIT D

FORM OF PERFORMANCE BOND

PERFORMANCE BOND
100%

WHEREAS, by General Contract dated _____, by and between SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT and _____, hereinafter designated as the "Principal", Principal has been employed for the work described as follows:

WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the faithful performance of said contract,

NOW, THEREFORE, _____ of _____, City of _____, State of _____, as Principal, and _____, a corporation organized and existing under the laws of the State of _____, legally doing business in California as an admitted surety insurer at _____ _____ City of _____, State of California, as Surety, are indebted to SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT, hereinafter called the "District", in the sum of _____ Dollars ($_____) for which payment Principal and Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION is that if the Principal, his, hers or its heirs, executors, administrators, successors or assigns, shall fully and faithfully keep and perform the covenants, conditions and agreements in the contract and any alteration thereof on his, hers, its or their part, to be kept and performed at the times and in the manner therein specified, and in all respects according to their intent and meaning, and shall indemnify and save harmless the District, its board, and their officers, agents, and employees, as therein stipulated, then this obligation shall become null and void; otherwise, it shall be and remain in full force.

In the event suit is brought upon this bond by the District and judgment is recovered, the Surety shall pay all costs incurred by the District in such suit, including reasonable attorneys' fees to be fixed by the Court.

Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond by any change, alteration or modification in or of the contract, any plans, specifications or agreements pertaining or relating to any schedule or work of improvement or pertaining or relating to the furnishing of labor, materials, or equipment therefore under the contract, nor by any change or modification of any terms of payment or extension of time for any payment pertaining or relating to any scheme or work of improvement under the contract, nor by any rescission or attempted rescission of the contract or bond, nor by any conditions precedent or subsequent in the bond, express or implied, attempting to limit the right of recovery of claimants otherwise entitled to recover under the contract or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on the _____ day of _____, _____.

_____

Principal

(corporate seal)

By:
Name: _____

Title: _____

_____
Surety

(corporate seal)

By:
Name: _____

Title: _____

(Attach Attorney-in-Fact Certificate)

EXHIBIT E

FORM OF REQUEST FOR INFORMATION

EXHIBIT F

FORM OF BULLETIN

EXHIBIT G

FORM OF CONTRACTOR'S SUBSTITUTION REQUEST

EXHIBIT H

FORM OF DAILY REPORT

EXHIBIT I

FORM OF RECORD DRAWING REVIEW LOG

EXHIBIT J

FORM OF FINAL INSPECTION CERTIFICATION

EXHIBIT K

FORM OF SUBCONTRACTOR/MATERIALMAN GUARANTEE

EXHIBIT L

CONSTRUCTION CLAIMS RESOLUTION PROCEDURES

I. CLAIMS; REQUIREMENTS; TORT CLAIMS EXCLUDED. For any Construction Claim, the following requirements apply:

A. The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment under the Contract. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by the Contract for the filing of claims.

B(1) For claims of less than fifty thousand dollars ($50,000), the District shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim that the District may have against the Contractor.

(2) If additional information is thereafter required, it shall be requested and provided pursuant hereto, upon the mutual agreement of the District and the Contractor.

(3) The District's written response to the claim, as further documented, shall be submitted to the Contractor within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

C(1) For claims of over Fifty Thousand Dollars ($50,000) and less than or equal to Three Hundred Seventy-Five Thousand Dollars ($375,000), the District shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim that the District may have against the Contractor.

(2) If additional information is thereafter required, it shall be requested and provided pursuant hereto, upon the mutual agreement of the District and the Contractor.

(3) The District's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

D. If the Contractor disputes the District's written response, or the District fails to respond within the time prescribed, the Contractor may so notify the District, in writing, either within 15 days of receipt of the District's response or within 15 days of the District's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the District shall schedule a meet and confer conference within 30 days for settlement of the dispute.

E. Following the meet and confer conference, if the claim or any portion remains in dispute, the Contractor may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision A until the time that the claim is denied as a result of the meet and confer process, including any period of time utilized during the meet and confer process.

F. These procedures do not apply to tort claims and nothing in this Exhibit is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.

II. CIVIL ACTION PROCEDURES; MEDIATION AND ARBITRATION; TRIAL DE NOVO; WITNESSES. The following procedures are established for all civil actions filed to resolve Construction Claims subject to this Exhibit.

A. Within 60 days, but no earlier than 30 days, following the filing of responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15 day period, any party may petition the court to appoint the mediator.

B(1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes hereof shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to the payment of costs and fees under that chapter, pay the attorneys' fees of the other party arising out of the trial de novo.

C. The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

III. PAYMENT ON UNDISPUTED PORTION OF CLAIM; INTEREST ON ARBITRATION AWARD OR JUDGMENTS.

A. The District shall not fail to pay money as to any portion of a Construction Claim which is undisputed except as otherwise provided or permitted in the Contract.

B. In any suit filed under Section II above, the District shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

School Site Locations of Possible Work
(Including all departments within these locations)

ELEMENTARY SCHOOLS

Alessandro Elementary – 670 Ramona Ave.
San Bernardino, 92411

Allred Child Care Center – 303 S. K St.
San Bernardino, 92410

Anderson T.M.R. School – 24302 E. 4th St.
San Bernardino, 92410

Anton ES – 850 Gilbert St.
San Bernardino, 92410

Arrowhead Elementary – 3825 Mt. View Ave.
San Bernardino, 92405

Barton Elementary – 2214 Pumalo St.
San Bernardino, 92404

Belvedere Elem. – 2501 Marshall Blvd.
Highland, 92346

Bradley Elementary – 1300 Valencia Ave.
San Bernardino, 92404

Burbank Elementary – 198 W. Mill St.
San Bernardino, 92408

Carmack O.H. School – 4777 State St.
San Bernardino, 92407

Cole Elementary – 1331 Cole Ave.
Highland, 92346

Cypress Elementary – 26825 Cypress St.
Highland, 92346

Davidson Elementary – 2844 Davidson Ave.
San Bernardino, 92405

Del Rosa Elementary – 3395 N. Mountain Ave.
San Bernardino, 92404

ELEMENTARY SCHOOLS (continued)

Eliot Child Care – 2350 N. E. St.
San Bernardino, 92407

Emmerton Elementary – 1888 Arden Ave.
San Bernardino, 92404

Fairfax Elementary – 1362 Pacific St.
San Bernardino, 92404

Harmon D.C.H. School – 4865 State St.
San Bernardino, 92407

Highland Pacific Elementary – 3340 E. Pacific St.,
Highland, 92346

Hillside Elementary – 4975 N. Mayfield Ave.
San Bernardino, 92407

Hunt Elementary – 1342 Pumalo St.
San Bernardino, 92404

Inghram Elementary – 1695 W. 19th St.
San Bernardino, 92411

Kendall Elementary – 4951 State St.
San Bernardino, 92407

Kimbark Elementary – 18021 W. Kenwood Ave.
San Bernardino, 92407

Lankershim Elementary – 7499 Lankershim St.
Highland, 92346

Lincoln Elementary – 255 W. 13th St.
San Bernardino, 92405

Lytle Creek Elementary – 275 S. K St.
San Bernardino, 92410

Manuel A. Salinas Elementary – 2699 N. California St.
San Bernardino, 92407

Marshall Elementary – 3288 N. G. St.
San Bernardino, 92405

ELEMENTARY SCHOOLS (continued)

Monterey Elementary – 794 Monterey St.
San Bernardino, 92410

Mt. Vernon Elementary – 1271 W. 10th St.
San Bernardino, 92411

Muscoy Elementary – 2119 W. Blake St.
San Bernardino, 92407

Newmark Elementary – 4121 N. Third Ave.
San Bernardino, 92407

North Park Elementary – 5378 N. H. St.
San Bernardino, 92407

North Verdemont Elementary – 3555 Meyers Rd.
San Bernardino, 92407

Oehl (Bonnie) Elementary – 2525 Palm Ave.
Highland, 92346

Palm Avenue Elementary – 6565 Palm Ave.
San Bernardino, 92407

Parkside Elementary – 3775 N. Waterman Ave.
San Bernardino, 92404

Riley Elementary – 1266 N. G. St.
San Bernardino, 92405

Rio Vista Elementary – 1451 California St.
San Bernardino, 92411

E. Neal Roberts Elementary – 494 E. 9th St.
San Bernardino, 92410

Roosevelt Elementary – 1554 N. Garner Ave.
San Bernardino, 92411

Thompson Elementary – 7401 Church Ave.
Highland, 92346

Urbita Elementary – 771 S. J St.
San Bernardino, 92410

ELEMENTARY SCHOOLS (continued)

Vermont Elementary – 3695 Vermont St.
San Bernardino, 92407

Warm Springs Elementary – 7497 Sterling Ave.
San Bernardino, 92410

Wilson Elementary – 2894 Belle St.
San Bernardino, 92404

MIDDLE SCHOOLS

Arrowview Middle School – 2299 N. G. St.
San Bernardino, 92305

Cesar E. Chavez M.S. – 66550 N. Magnolia Ave.
San Bernardino, 92407

Curtis Middle School – 1472 E. 6th St.
San Bernardino, 92410

Del Vallejo M.S. – 1885 E. Lynwood Dr.
San Bernardino, 92404

Golden Valley M.S. – 3800 Waterman Ave.
San Bernardino, 92404

Martin Luther King M.S. – 1250 N. Medical Center Dr.
San Bernardino, 92411

Richardson Prep High School – 455 S. K St.
San Bernardino, 92410

Serrano M.S. – 3131 Piedmont Dr.
Highland, 92346

Shandin Hills M.S. – 4301 Little Mountain Dr.
San Bernardino, 92407

HIGH SCHOOLS

Arroyo Valley High School – 1881 W. Base Line St.
San Bernardino, 92411

Cajon High School – 1200 Hill Dr.
San Bernardino, 92407

HIGH SCHOOLS (continued)

Pacific High School – 1020 Pacific St.
San Bernardino, 92404

San Andreas High School – 3232 Pacific St.
Highland, 92346

San Bernardino High School – 1850 N. E. St.
San Bernardino, 92405

San Gorgonio High School – 2299 Pacific St.
San Bernardino, 92404

Sierra High School – 570 E. 9th St.
San Bernardino, 92410

OTHER SITES
Board of Education – 777 N. F. St.
San Bernardino, 92410

Building Services – 956 W. 9th St.
San Bernardino, 92411

Nutrition Services – 1257 Northpark Blvd.
San Bernardino, 92407

SAGES Building
Adult Education – 1200 N. E St.
San Bernardino, 92405

School Police – 536 W. Baseline
San Bernardino, 92410

S.M.A.R.T. Building – 793 N. E. St.
San Bernardino, 92410

Warehouse – 871 J. St.
San Bernardino, 92410

W.H.A.A. Bldg. – 1535 W. Highland Ave.
San Bernardino, 92411

Enrollment Center – 1525 W. Highland Ave.,
San Bernardino, CA 92411

Transportation Dept – 909 J St.,
San Bernardino, CA 92411

OTHER SITES (continued)

Pal Academy – 2450 Blake St.,
San Bernardino, CA 92407

ASA Learning Center – 4050 E. Pacific St.,
San Bernardino, CA 92404

YWCA Academy Community Day-588 W 6th Street
San Bernardino, CA 92408

NEW SCHOOLS

Juanita Blakely Jones ES –700 N. "F" Street
San Bernardino, 92410

SPECIFICATION SECTION 16760
DATA SYSTEM AND RELATED NETWORK INFRASTRUCTURE

1. PART 1 – GENERAL

1.1 SCOPE OF WORK

A. The work under this section includes all labor, materials, equipment and accessories required to furnish and install a complete Data Cabling System as indicated on the drawings and as specified herein.

1.2 APPLICABLE DOCUMENTS

A. The system design described in this document and depicted in the attached drawing package is derived in part from recommendations made in industry standard documents. The list of documents below are incorporated by reference:

1. This Technical Specification
2. ANSI/EIA/TIA-568-B series of standards
   ANSI/EIA/TIA-568-B-1 Commercial Building Telecommunications Cabling Standard – April 2001.
   ANSI/EIA/TIA-568-B-2 Commercial Building Telecommunications Cabling Standard - April 2001
   ANSI/EIA/TIA-568-B-3 Optical Fiber Cabling Components Standard – April 2000
3. ANSI/EIA/TIA-568 Commercial Building Wiring Standard - July 1991, and Standards Proposal No. 2840-A, Proposed Revision of EIA/TIA-568 Commercial Building Cabling Standard (published as TIA/EIA-568-A)
4. EIA/TIA-TSB-36 Technical Systems Bulletin, Additional Cable Specifications for Unshielded Twisted-Pair Cables - November, 1991
5. TIA/EIA-TSB-40 Telecommunications Systems Bulletin, Additional Transmission Specifications for Unshielded Twisted-Pair Connecting Hardware - January, 1994
6. TIA/EIA-TSB-75 Telecommunications Systems Bulletin, Additional Transmission Specifications for Unshielded Twisted-Pair consolidation points and cabling - January, 1997
7. ANSI/EIA/TIA-569 Commercial Building Standard for Telecommunications Pathways and Spaces - October 1990
8. ANSI/EIA/TIA-606 Administration Standard for the Telecommunications Infrastructure of Commercial Buildings - February 1993
9. ANSI/TIA/EIA-607 Commercial Building Grounding and Bonding Requirements for Telecommunications - August, 1994
10. Building Industries Consulting Services, International (BICSI)Telecommunications Distribution Methods Manual (TDMM) - 1996
11. National Fire Protection Agency (NFPA) - 70, National Electrical Code (NEC) -1997

B. If a conflict exists between applicable documents then the order in the list above shall dictate order of precedence in resolving conflicts. This order of precedence shall be maintained unless lesser order document has been adopted as code by local, state or federal entity, and is therefore enforceable as law by local, state or federal inspection agency.

C. If this document and any of the documents listed above are in conflict, then the more stringent requirement shall apply. It is important to note, that all documents listed above are believed to be the most current releases of the standards at the time of this writing, however, the vendor is totally responsible for determining and adhering to the most recent cable standards when developing the proposal for installation.

D. Contractors bidding on District projects shall have as a minimum, the following qualifications:

1. Contractor must be a CommScope/Systimax Value Added Reseller (VAR) or Equal at the time of the initial contract. Bidder must include a current certificate or letter of authorization upon request from the District.
2. Contractor must also be a Cisco Gold, Silver, or Premier partner. Bidder must submit a current certificate of partnership with bid response.
2. Must have a current and in good standing, California C10 and C-7 contractors license.
3. Must have completed at least 10 projects of equal size and scope for public entities within the past 3 years.
4. Contractor must be able to accommodate existing patch panels for wiring for compatibility.

2. PART 2 - PRODUCTS

2.1 ASSOCIATED REFERENCES

A. This document describes a system to be installed in accordance with recognized telecommunications industry cabling standards. Although the intent of the standard is to provide an application independent cable system, one or more of the following documents, describing specific network types and topologies, may be pertinent to the overall operation of the system and should be considered associated reference materials.
1. ISO/IEC 8802-3 (IEEE 802.3)
2. ISO/IEC 8802-5 (IEEE 802.5)
3. ANSI ANSI X3T9.5 Fiber Distributed Data Interface (FDDI) Physical Medium Dependent (PMD)
4. ANSI ANSI X3T9.5 Twisted Pair Physical Medium Dependent (TP-PMD)

2.2 CABLING SYSTEM

All components of the copper horizontal system and entire fiber optic cabling system shall be of the same manufacturer or manufacturer partnered system in order to provide one single product component and cabling system performance warranty direct from a single point of contact to the San Bernardino City Unified School District. The factory warranties must include a product component warranty and a system performance warranty to the Category 5e standard and revision in force at the time the system is installed. The factory warranty period shall be not less than 20 years or better.

2.3 CABLE TYPES

A. The planned cable system shall utilize the following cable types for horizontal distribution. Each cable shall meet or exceed the mechanical and electrical performance characteristics listed below.
1. Horizontal Distribution Cable--Unshielded Twisted Pair Cable: construction shall be 24 AWG, 4-pair, Category 5 Enhanced, with a bandwidth of not less than 350mhz.
2. 50/125 multi-mode optical fiber cable with dual bandwidth minimums of 850nm and 1300nm at 500mhz. Optical fiber cable shall provide a maximum attenuation of 3.5 dB/km @ 850 nm and 1.5 dB/Km @ 1300 nm.

2.4 COPPER SYSTEM

A. JACKS AND PATCH PANELS
1. Eight-wire, eight-position modular jacks shall be used for all telecommunications outlets. Each jack shall be fed by a separate four pair cable sheath. All four (4) pair shall be wired to the jack using TIA/EIA-568-B wiring scheme. The jacks shall employ PC board mounted (110 or IDC) contacts for termination of the wire.
2. The jacks shall be matched to the Category rating of the attached horizontal distribution cable which will all be enhanced category 5 compliant or better.
3. Patch panels supporting Category 5 enhanced cabling shall be 24 or 48 ports as needed. Panels shall be factory assembled with eight-wire, eight-position modular jacks that employ PC board mounted (110 or IDC) contacts for termination of the wire. Panels shall be wired to the TIA/EIA-568-B wiring scheme.

B. TELECOMMUNICATIONS OUTLET PLATE

1. The outlet shall be configured so that the interconnect couplings are at an acute angle to, or parallel with, the wall surface.
2. The outlet plate shall be affixed to an in-wall or surface mount box with two screws, which match the color of the outlet plate, or a previously installed floor mount device.

3. To meet district standards faceplates shall be two port, four port, six port or duplex mounting straps as required in any floor box or surface raceway application.

C. OUTLET INSTALLATION

1. All outlets shall be installed in the following manner:
a. Wall mount boxes shall be attached to (box eliminators, 4"X4" boxes, old work boxes) provided by the (contractor providing raceway and boxes).
b. Wall mount boxes shall be installed with the center of the plate at (15" IAW ADA requirements or match existing) above finished floor (AFF). The faceplates shall be installed in a horizontal or vertical orientation.
c. Any unused faceplate positions shall be covered/filled with a blank insert made of the same or compatible material as the faceplate and shall be molded in the same color. Blank spaces shall be incorporated between populated positions on the faceplate.

d. Cables shall be coiled in the in-wall or surface-mount boxes. In hollow wall installations where box-eliminators are used, excess wire can be stored in the wall.
e. No more than 12" of slack shall be stored in an in-wall box, modular furniture raceway, or insulated walls. Excess slack for these situations shall be neatly coiled in the ceiling above drop location. The amount of cable slack in the ceiling is not to exceed 4 feet per horizontal run. Enough slack must be provided, however, for at least one jack re-termination at the outlet plate.

D. HORIZONTAL DISTRIBUTION CABLE

1. Horizontal distribution cables shall be installed from the MDF and IDF to the designated locations in the Work Area Information Outlet (IO). Horizontal distribution cables shall be manufactured in compliance with the mechanical and electrical specifications detailed in the TIA/EIA-568-B document, as applicable. Cables not supported under the current revision of the standard shall be of recent design and manufacture and be capable of supporting the application (e.g., broadband coaxial, baseband coaxial).
2. All cables shall be furnished by the contractor in full, factory packaged reels or pull boxes. The packages shall be marked with the respective cable part number and lot number by the manufacturer. Upon request by the Owner, the contractor shall provide manufacturer's proof of compliance with the required manufacturing guidelines presented in the aforementioned standards. Each reel shall be visually inspected upon receipt and prior to installation to ensure that no damage was incurred during shipment. Any damaged cable shall be returned to the vendor/manufacturer for replacement of the entire reel. The cost for replacement cable shall be borne by the contractor. Any residual cable, in lengths greater than 500 feet, shall be delivered to the Owner and the Owner shall decide the disposition of the cable.

D1 HORIZONTAL DISTRIBUTION CABLE SHALL BE INSTALLED AND TERMINATED AS BELOW

1. 100 Ω Unshielded Twisted Pair—Jacks/Patch Panels
2. Cables shall be dressed and terminated in accordance with the recommendations made in the TIA/EIA-568-B document, manufacturers' recommendations and/or best industry practices.
3. Pair untwist at the termination shall not exceed one-half an inch.
4. Bend radius of the cable in the termination area and at any point along the distribution path shall not exceed four (4) times the outside diameter of the cable.
5. The cable jacket shall be maintained as close as possible to the termination point.
6. All modular jacks shall be oriented with the locking tab slot towards the floor.
7. Voice jacks shall be located in the top or top left position of each faceplate. In instances where there is more than one voice jack per faceplate, then the second shall occupy the top right or second position, continuing top to bottom or left to right. Voice jacks in horizontally oriented faceplates shall occupy the left-most position. Modem jacks shall be considered the last voice jack in the sequence.
8. Data jacks that are in surface metal/plastic raceway (Panduit/Wiremold) shall be mounted in the proper termination plate compatible with manufacturer of the raceway to ensure that the District receives a professional end installation. <u>These termination plates and trim are to be provided by the electrical contractor installing the raceway and power outlets to ensure that all outlets and trim will match. The mounting straps shall be provided by the data contractor.</u>
9. Cable raceways shall not be filled greater than the NEC maximum fill for the particular raceway type. Conduit sizing shall be a minimum of 3/4 inch conduit for each outlet with no more than two outlets fed by one 1" homerun. If two outlets are fed by one homerun the conduit shall be 1" to the IDF or MDF and ¾ inch to the end box. For conduits feeding a multiple outlet surface raceway the sizing shall be as follows: 1" for raceways 6' long and under, 1 ¼" for raceways 6' to 18' long and multiple conduits to meet this pattern for lengths greater than 18'. These specifications shall take precedence over conduit routing shown on the plans that deviate from this method. The data contractor shall bring any discrepancies to the attention of the owner before bid time.
10. Cables shall be installed in continuous lengths from origin to destination (no splices) unless specifically addressed in this document.
11. Where cable splices are allowed, they shall be in accessible locations and housed in an enclosure intended and suitable for the purpose.
12. Maximum pulling tension shall not exceed 25 pounds for a single cable or for a cable bundle.
13. When not installed in conduit, (per the plans and electrical specifications requirements), all horizontal cables shall be supported at a maximum of four-foot intervals. At no point shall cable(s) rest on acoustic ceiling grids or panels, nor shall they be attached to ceiling grid wires. Horizontal distribution cables shall be bundled in groups not greater than 48 cables. Bundles shall be supported by cable tray, conduit, trapezes, or multiple support strap made by Erico, Caddy part # CAT21 and CAT32. Saddle supports are not allowed. Plenum rated cable is to be installed in plenum rated areas and non-plenum cable to be installed in non-plenum areas.
14. The cable system shall not be attached to the fire sprinkler system or any ancillary equipment or hardware. The cable system and support hardware shall be installed so that it does not obscure any valves, fire alarm conduit, boxes or other control devices.
15. Cables shall not be attached to ceiling grid or lighting support wires. Where light support style wires for drop cable legs are required, the contractor shall install clips to support the cabling.
16. Any cable damaged or exceeding recommended installation parameters during installation shall be replaced by the contractor prior to final acceptance at no cost to the Owner.

17. Cables shall be identified by a computer generated, permanent, self-adhesive label in accordance with the System Documentation Section of this specification. The cable label shall be applied to the cable behind the faceplate on a section of cable that can be accessed by removing the cover plate.

2.5 FIBER OPTIC SYSTEM

A. FIBER OPTIC CONNNECTORS

1. Fiber optic connectors shall be SC-style.
2. Connectors shall incorporate zircona ceramic ferrules. The same type shall be used throughout the installation.
3. All connectors provided by Contractor shall be of same manufacturer and termination method throughout this contract.
4. Fiber optic connectors shall be rated for a mean loss not greater than 0.3 dB per mated pair.

B. OPTICAL FIBER COUPLERS

1. Multimode optical fibers shall be terminated with (duplex SC -style) connectors and attached to (duplex SC, duplex SC to duplex SC) feed-through couplers.
2. Single-mode optical fibers shall be terminated with (duplex SC) connectors and attached to (duplex SC) feed-through couplers.
3. All fiber optic terminations shall be installed in boxes with bend limiting provisions for fiber slack storage.

C. FIBER TERMINATION PANELS

1. Fiber termination panels shall be capable of handling a minimum of 24 fiber optic connectors with the appropriate number of connector panels and couplers. All unused locations shall be filled with blank panels.
2. Fiber termination panels shall be 19" rack mountable.
3. Fiber termination panels shall be hinged to provide complete access to connectors and slack storage from the front.
4. Fiber termination panels shall be complete with 12 SC-style interconnect couplers.
5. Fiber termination panels shall be equipped with cable strain relief brackets.
6. Fiber termination panels shall provide ample storage and handling for up to 36" of slack per fiber strand.
7. Fiber termination panels shall protect both the installed cable and patch cord cable interface when the panel is in the closed position.
8. Fiber termination panels must be of the same manufacturer as the fiber cable and SC connectors, as well as the horizontal cabling system to ensure the owner will not have any coordination problems in the future.

D. FIBER OPTIC CABLE

The optical fiber cable construction shall meet or exceed the requirements of the EIA/TIA-568-A Standard specification

1. Optical fiber cables used outside shall be housed in an OSP loose tube, gel-filled, construction jacket configuration. Inside fiber shall be riser or plenum tight buffered.
2. Inside/outside gel-filled construction shall be used if entering a building more than 50 feet outside of EMT or IMC conduit.
3. Use OFNR construction if used as a riser cable.
4. Use Plenum construction if used in an air plenum of any kind.
5. Optical fiber shall be rated a minimum of 100 Mbps.
6. Each optical fiber component shall be surrounded by an individual aramid yarn strength member.
7. The optical fiber cable construction shall meet or exceed the requirements of the EIA/TIA-568-B Standard specification
8. Optical fiber cable shall withstand a minimum short term tensile load of 105 pounds without damage to the optical fiber
9. Optical fiber cable shall be able to withstand a minimum bend radius of 45 millimeters (mm) during installation without damage to the optical fiber elements
10. Optical fiber cable shall have a minimum crush resistance of 200 N/cm
11. Optical fiber shall be rated a minimum of 100 Kpsi.
12. Optical fiber cable shall withstand a minimum short term tensile load of 448 pounds without damage to the optical fiber
13. Optical fiber cable shall be able to withstand a minimum bend radius of 128 mm during installation without damage to the optical fiber elements
14. All fiber optic cable shall be installed per industry standards. This includes using a proper break-away swivel and sealing the end of all cables before pulling through any conduit system. 10 feet of slack cable shall be left at each end of the cable run for future maintenance purposes.
15. OSP, loose-tube cables shall be properly prepared and protected per industry standards. All cables shall be properly cleaned. The cable ends shall be terminated through a breakout unit and a 900 micron buffer

tube for each fiber strand. Each cable OSP buffer tube shall be labeled for strand counts contained therein. Provide proper break out kits as manufactured by AT&T, Corning, or equal.

16. When distribution style fiber cable is installed, strength members shall be mechanically secured to the outlet box and distribution enclosure.
17. A minimum of 12-inches of slack shall be stored at the drop end and 36-inches shall be stored at the TC termination enclosure.
18. Where 250-micron coated cable is field terminated, breakout kits that build up the fiber to a minimum of 900 microns shall be used.
19. Any splices, fusion only, shall be housed in fiber trays and an enclosure with splice tray organizers.

2.6 BACKBONE CABLING SUBSYSTEM

A. The backbone cable subsystem is comprised of all cable, connecting hardware, pathways and cable management hardware required to form a continuous path from the Telecommunications Entrance Facility (EF) to the Equipment Room, from the ER (MDF) to each TC (IDF), and between TCs (IDFs) on the same floor.

B. BACKBONE CABLE

1. Backbone cables will be installed between the locations described in the scope of work and on the plans. An inner-duct shall be pulled in all backbone conduits along with the fiber-optic cable. This inner-duct shall be left with only a pull rope for future use and shall be of the size and quantity called out in other areas of this specification. All conduits shall be plugged with snug plugs and duct seal after inner-duct installation is completed.
2. All cables shall be furnished by the contractor in full, factory packaged reels. The reels shall be marked with the respective cable part number and lot number by the manufacturer. Upon request by the Owner, the contractor shall provide manufacturers' proof of compliance with the required manufacturing guidelines presented in the aforementioned standards. Each reel shall be visually inspected upon receipt and prior to installation to ensure that no damage was incurred during shipment. Any damaged cable shall be returned to the vendor/manufacturer for replacement. The cost for replacement cable shall be borne by the contractor. Any residual cable, in lengths greater than 500 feet, shall be delivered to the Owner and the Owner shall decide the disposition of the cable.

C. BACKBONE CABLE INSTALLATION: All backbone cables shall be installed in the following manner:

1. Backbone cables shall be installed separately from horizontal distribution cables.
2. Where cables are housed in conduits, the backbone and horizontal cables shall be installed in separate conduits or in separate inner-ducts within conduits.
3. Where cables are installed in an air return plenum, the cable shall be installed in conduit, or plenum cable shall be installed in a plenum inner-duct to provide protection to the cable
4. Where backbone cables and distribution cables are installed in a cable tray or wire-way, backbone cables shall be installed first and bundled separately from the horizontal distribution cables.
5. Backbone fiber cable shall consist of a six (6) strand count unless specified differently on the plans and in the scope of work. These cables shall emanate from the MDF to each IDF. These cables shall be of the same manufacturer of all the other fiber and copper cabling system and terminations. These cables shall be FDDI+ grade per EIA/TIA standards.
6. All backbone conduit shall have (1) 3/4" inner-duct with pull ropes if in a 2" conduit, (2) 1" inner-duct with pull ropes if in a 3" conduit, and (4) 1" inner-duct with proper "Jack-moon" plugs if installed in a 4" conduit. This inner-duct will be for future use in the 2" and 3" conduits and one or as many as necessary will be utilized in the 4" conduit leaving the remainder for future use. All unused inner-duct shall have a rubber snug plug with rope tie off installed and all inner-duct occupied with cable shall have the appropriate cable seal.

D. HORIZONTAL CROSS-CONNECT TERMINATION HARDWARE

1. The backbone side of the horizontal cross-connect, and the main cross connect shall be terminated in the same termination panels as the horizontal cables. The backbone fibers shall be maintained in separate termination panels from the horizontal distribution fiber cables. The backbone termination panels shall be installed in the double swing enclosed rack. Termination details and rack elevations for fiber panel placement shall be provided in the contractor submittals.
2. The contractor shall be required to install, secure and ground the racks. The Contractor shall only be required to install those fiber termination panels to fully terminate all newly installed fiber strands unless otherwise noted. Placement of the enclosures shall be detailed in the contractors working drawings.
3. Each fiber optic cable shall be terminated in the telecommunications closet in a 12, 24, 48, or 72 fiber port rack mounted patch panel enclosure providing protection to the terminated fibers. The enclosures shall provide a strain relief bracket for attaching the optical fiber cable and support slack storage of a minimum of 36" per fiber cable. The enclosure shall provide a minimum of 12 ports for fiber terminations and fully enclose both the hardwired cable and the patch cord terminations when the shelf is closed.
4. Products for this installation shall be furnished in new and factory packaged condition. Each product shall be inspected by the Contractor to ensure completeness and that no damage was incurred during shipping. The contractor shall return to the manufacturer, any product found to be deficient. The cost of the return and replacement product shall be borne by the Contractor.

2.7 RACKS/CABINETS

A. The products supplied shall meet the following specifications:
1. All MDF racks/cabinets shall be an APW or equivalent 7' open relay rack or a 6' enclosed cabinet manufactured by APW or equal.
2. A cable trough shall be supplied at the bottom of each open rack to support patch cord routing between racks.
3. Server Racks (minimum one per campus) shall be floor-mounted racks with (2) peripheral shelves, server sliding shelf (150lb capacity), and monitor and keyboard shelf all as manufactured by APW or equal.
4. Inter-bay and end-cap cable managers shall be a single piece full height unit supporting front and rear cable routing and attachment.
5. The inter-bay manager shall have integral routing and slack storage loops supporting a 1.5" minimum bend radius.
6. Inter-bay and end-cap management panels shall be supplied with adjustable routing guides.
7. Both inter-bay and end-cap units shall have removable covers secured with 1/4 turn fasteners.
8. Inter-bay and end-cap cable managers shall securely attach to the rear rail of the rack with #12-24 screws.
9. All IDF locations shall be 2', 3' or 4' wall-mount enclosures manufactured by APW or equal. Size of IDF cabinet shall depend on the number of switches, cabling connectivity, and cable management devices for IDF, or as stated on plans and in scope of work. Each cabinet is to provide space for 25% equipment growth. Cabinets shall:
    a. Be a minimum of 24" and a maximum of 30" deep
    b. Be double-swing design and 3-piece construction
    c. Provide in-field door hinge reversing
    d. Shall include louvered sides
    e. Shall include a solid metal door
10. All cabinets shall be keyed alike.
11. All cabinets shall provide a minimum of two cooling fans in the top cover.
12. Cabinets that are mounted to the wall must be submitted for DSA approval prior to installation.

B. CABLE MANAGEMENT

1. Horizontal cable management shall be provided in each rack. A minimum of two front wire- management panels shall be provided in each rack. One combination front and rear horizontal wire management shall be provided for each fiber termination box, for each 24 ports of RJ45 panels, and each 24 ports of switches. Cable dressing at all racks/enclosures shall utilize Velcro straps. The use of cable ties is not permitted. All cables and their termination on each end shall be labeled per EIA/TIA administration standards. All labeling schemes and label designations shall be reflected on the CAD drawings at the end of the project and in the submittals.

C.RACK MOUNTING AND HARDWARE

1. Vertical wire management shall be supplied for all open racks.
2. A TGMB ground buss shall be provided at the MDF and a TGB ground buss shall be provided at each IDF. All racks shall be grounded to the telecommunications ground bus bar. <u>The buss bars will be installed by an electrical contractor and not part of the scope of work in this specification section.</u>
3. Floor mount open racks shall be securely attached to the concrete floor using 3/8" hardware and a minimum of 3 feet and a maximum of 10 feet away from the most adjacent wall. The contractor shall install a 12" wide ladder tray system, as manufactured by APW or equal, from the most adjacent wall to the rack. Appropriate wall and rack mounting from the same manufacturer shall be installed as well.
4. Rack mount screws (#12-24) not used for installing fiber panels and other hardware shall be bagged and left with the rack upon completion of the installation.
5. Inter-bay and end-cap managers shall be installed to the rear mounting rail of the rack using all available mounting holes.
6. Inner-ducts and cables shall be securely fastened to the cable managers.
7. Cable feeds shall alternate left and right to minimize congestion at the top of the rack.
8. Wall mounted racks shall be installed with a minimum of six 5/16" lag bolts or masonry anchors into structural building members.
9. Racks that are mounted to the wall must be submitted for DSA approval prior to installation.

2.8 OTHER NETWORK CABLING NOTES

A. Data cabling shall not occupy the same conduits as other low-voltage systems to ensure the data network can be up-graded and expanded in the future without disturbing the other critical communications systems.
B. Each RJ45 workstation outlet shall be provided with one (1) 3' patch cord for the rack location and one (1) 7' workstation cord for the future computer. These patch cords shall be of the same manufacturer as the cabling system. Patch cord shall be factory assembled and include snagless color-coded strain relief boot. No field assembled patch cords allowed.

2.9 ACTIVE COMPONENTS

CONTRACTOR MUST BE A CISCO GOLD, SILVER, OR PREMIER PARTNER. NO SITE CERTIFICATIONS ARE ALLOWED

A. MDF GENERAL REQUIREMENTS "CORE" SWITCHES

1. Will be comprised of the Cisco Catalyst 4500 Series Chassis at Elementary and Middle Schools and the Catalyst 6500 Series chassis at High Schools.
2. A true on-line battery backup UPS system shall be provided for each Core switch installed and shall provide a minimum of 60 minutes run time, and shall include a SNMP module with alert notification software as manufactured by TrippLite or APC.
3. Core-switch will contain modules capable of providing gigabit Ethernet to each of the IDF's it supports.
4. Core-switch will provide one (1) gigabit link for each (96) drops supported by the respective IDF.
5. Contractor to supply and install all required patch cords as needed to fully support all Edge switches newly installed in order to facilitate a fully operational system. Fiber optic patch cords are to be 1 or 2 meters in length as required. The cords are to be Duplex SC style connectors on 50/125 multimode fiber optic zip-cord style cable as manufactured by Systimax, AMP, Panduit. or equal Cords must be the same manufacturer as the cabling system being installed. No field terminated cords are allowed.
6. A 1U (1.75") front wire management panel shall be installed for every 48-ports of electronics with no less than one for each rack location as manufactured by Systimax, AMP, Panduit or equal.

B. IDF GENERAL REQUIREMENTS "EDGE" SWITCHES

1. Will be comprised of the Cisco Catalyst 3700 Series SMI (Standard Multilayer Image) switch.
2. Each switch at the IDF will be a minimum of twenty-four (24) 10/100Base-TX ports.
3. All IDF switches will be the Enterprise Edition switch.
4. (1) 1000BaseSX GBIC module will support no more than 96 drops before adding a subsequent 1000BaseSX GBIC modules in the IDF for additional gigabit links to the MDF.
5. Contractor to supply and install all required patch cords as needed to fully support all Edge switches newly installed in order to facilitate a fully operational system. Fiber optic patch cords are to be 1 or 2 meters in length as required. The cords are to be Duplex SC style connectors on 50/125 multimode fiber optic zip-cord style cable as manufactured by Systimax, AMP, Panduit or equal, Cords must be the same manufacturer as the cabling system being installed. No field terminated cords are allowed.
6. A 1U (1.75") front wire management panel shall be installed for every 48-ports of electronics with no less than one for each rack location as manufactured by Systimax, AMP, Panduit or equal.
7. A true on-line battery backup UPS system shall be provided for each Edge switch installed and shall provide a minimum of 30 minutes run time and shall include an SNMP module with alert notification software as manufactured by TrippLite, APC.or equal.

C. SERVER RACKS GENERAL REQUIREMENTS (minimum one per campus)

1. Data contractor will provide one (1) enclosed 7ft server cabinet which will be provided with proper shelving and ventilation (2 fans minimum) to support a minimum of two file servers (see rack specifications section).
2. A true on-line battery backup UPS system shall be provided for each server installed and shall provide a minimum of 60 minutes run time, and shall include an SNMP module with alert notification software, as manufactured by TrippLite, APC or equal.
3. The server rack shall be complete with a server, 104-key key-board, 3-button Logitech mouse, 17" .28 NI SVGA color monitor. The server shall have 512MB of RAM, (6) 18GB SCSI hard-drives (RAID 5), dual Intel 1000Mhz Pentium III processor, 512KB pipeline burst cache, 32X CD-ROM drive, (1) INTEL 100BASETX Dual Port PCI NIC, 3 ½" floppy drive, 8MB AGP video card, and a full size tower for future expansions. The server shall be completely modular as manufactured by Dell or equal.
4. The data contractor or OEM shall provide Network Monitoring (SNMP) software for Windows 2003 as manufacturer by Castlerock or equivalent
5. The data contractor or OEM shall provide a copy of Windows 2003 Server with 200 Client Access licenses on the new server.
6. The data contractor shall configure all switches with IP addresses and user labeling in the SNMP software and fully test the network for proper operation.
7. The data contractor shall provide 24 hours of user training on the network with the customer provided computers. Any training or customer provided computer configuration beyond this shall be outside the contract and negotiated as a service contract.
8. All computer labs on campus shall be autonomous with their own server, SWE 456P rack (or equivalent) with two slide out shelves, hubs and patch panels. The server shall have a 104-key key-board, 3-button Logitech mouse, 17" .28 NI SVGA color monitor. The server shall have 512MB of RAM, (6) 18GB SCSI hard-drives (RAID 5), an Intel 1000Mhz Pentium III processor, 512KB pipeline burst cache, 32X CD-ROM drive, INTEL 100BASETX PCI NIC, 3 ½" floppy drive, 8MB AGP video card, and a full size tower for future expansions and shall be rack mounted. Servers shall be completely modular and manufactured by Dell or other manufacturer as designated by the district.
9. All the servers shall be true servers (not a PC) and shall be completely modular in design with hot-swappable components as manufactured by Dell or manufacturer specified by the district.

B. ROUTER

The Data contractor shall provide a Cisco 3700 Series router, or superceded product from Cisco, with a minimum of two (2) Fast Ethernet connections and four (4) IMA (Inverse multiplexing over ATM) T1 connections. Contractor shall coordinate the installation of the pre-designated number of T1 lines from the serving utility company and configure the router as needed for a complete and operational WAN connection to the district's network.

3. PART 3 - EXECUTION

3.1 CABLE SYSTEM TESTING

A. All cables and termination hardware shall be 100% tested for defects in installation to verify cable performance under installed conditions. All conductors of each installed cable shall be verified useable by the contractor prior to system acceptance. Any defect in the cable system installation including but not limited to cable, connectors, feed-through couplers, patch panels and connector blocks shall be repaired or replaced in order to ensure 100% useable conductors in all cables installed.

B. Copper: Each cable shall be tested for continuity on all pairs and/or conductors. Coaxial cables shall be tested for continuity, opens shorts and resistance using a volt/ohm meter (VOM) and installed length using a Time Domain Reflectometer (TDR). Twisted-pair voice cables shall be tested for continuity, pair reversals, shorts, and opens using a "green light" type test set. Twisted-pair data cables shall be tested for the all of the above requirements, plus tests that indicate installed cable performance. All category 5e cables shall be tested to ensure the category 5e standard performance to 100Mhtz is complied with. All tests shall be printed out in hard copy in the quantity called out in the general specifications for Maintenance & Operations turn-over documents as well as one CD copy for the owner's use. These data cabling links shall be tested with a Level III cable analyzer utilizing bi-directional swept frequency testing procedures.

C. Continuity: Each pair of installed multi-conductor inter-building phone cable shall be tested using a "green light" test set that shows opens, shorts, polarity and pair-reversals. Shielded/screened cables shall be tested with a device that verifies shield continuity in addition to the above stated tests. The test shall be recorded as pass/fail as indicated by the test set in accordance with the manufacturers recommended procedures, and referenced to the appropriate cable identification number and circuit or pair number. Any faults in the wiring shall be corrected and the cable re-tested prior to final acceptance.

D. Length: Category 5e unshielded twisted pair (UTP) data cable shall be tested for installed length using a TDR type device. The cables shall be tested from patch panel to patch panel, block to block, patch panel to outlet or block to outlet as appropriate. The cable length shall conform to the maximum distances set forth in the TIA/EIA-568-B Standard. Cable lengths shall be recorded, referencing the cable identification number and circuit or pair number. For multi-pair cables, the longest pair length shall be recorded as the length for the cable.

E. Performance Verification: Category 5e unshielded twisted pair (UTP) data cable shall be performance verified using an automated test set. This test set shall be capable of testing for the continuity and length parameters defined above, and provide results for the following tests:
   1. Near End Cross-Talk (NEXT)
   2. Attenuation
   3. Ambient Noise
   4. Attenuation to Cross-Talk Ratio (ACR)
   5. Test results shall be automatically evaluated by the equipment, using the most up-to-date criteria from the TIA/EIA Standard, and the result shown as pass/fail. Test results shall be printed directly from the test unit or from a download file using an application from the test equipment manufacturer. The printed test results shall include all tests perfomed, the expected test result and the actual test result achieved.

F. Fiber: All fiber terminations shall be visually inspected with a minimum 200 X microscope to ensure that no surface imperfections exist after final polishing. This step is not necessary of factory pre-polished connectors are installed. In addition, each fiber strand shall be tested for attenuation with an optical power meter and light source. Cable length and splice attenuation shall be verified and documented using an OTDR.

G. Attenuation:
   1. Horizontal distribution multimode optical fiber attenuation shall be measured at either 850 nanometers (nm) or 1300 nm using an LED light source and power meter. Backbone multimode fiber shall be tested at both 850 nm and 1300 nm in one direction. Test set-up and performance shall be conducted in accordance with ANSI/EIA/TIA-526-14 Standard, Method B. One 2-meter patch cord shall be used for the test reference and two 2-meter patch cords shall be used for the actual test. This test method uses a one jumper reference--two jumper test to estimate the actual link loss of the installed cables plus the loss of two connectors. This measurement is consistent with the loss which network equipment will see under normal installation and use. Test evaluation for the panel to panel (backbone) or panel to outlet (horizontal) shall be based on the values set forth in the EIA/TIA-568-A Annex H, Optical Fiber Link Performance Testing.
   2. Where concatenated links are installed to complete a circuit between devices, the Contractor shall test each link from end to end to ensure the performance of the system. After the link performance test has been successfully completed, each link shall be concatenated and tested. The test method shall be the same used

for the test described above. The evaluation criteria shall be established between the Owner and the Contractor prior to the start of the test.

3. Single-mode optical fiber attenuation shall be measured at 1310 nm and 1500 nm using a laser light source and power meter. Tests shall be performed at both wavelengths in one direction on each strand of fiber. The set-up and test shall be performed in accordance with EIA/TIA-526-7 Standard, Method 1A. Two meter patch cords shall be used as test references and for the actual test. This test method utilizes a one jumper reference, two jumper test to estimate the actual link loss of the install cable plus two patch cords.
4. Test evaluation for the panel to panel (backbone) shall be based on the values set forth in the EIA/TIA-568-A Annex H, Optical Fiber Link Performance Testing.
   *For this application, the length based on cable length measurements marked on the jacket, will be suitable. OTDR testing is to be performed in accordance with 8.2.2, then the actual measured length shall be used. Conversion from metric to US Standard measurement shall use 3.2808 as a constant with the result rounded to the next highest whole number.
   **The testing for this project is measuring the loss over the installed cable plus two jumpers which accounts for three mated pairs of connectors. Subtract one mated pair for the equipment interface to arrive at a total of two mated pairs under test.

H. Length and Splice Loss
1. Each cable shall be tested with an Optical Time Domain Reflectometer (OTDR) to verify installed cable length and splice losses. The OTDR measurements for length shall be performed in accordance with EIA/TIA-455-60. The measurements to determine splice loss shall be performed in accordance with manufacturers' recommendations and best industry practices. These tests shall be employed on all cables after installation and in addition where one or more of the following conditions exist.
2. OTDR and power meter testing is specifically requested by the Owner.
3. Each strand shall be tested on all outside plant and tight-buffered cables and/or where splices exist.
4. A representative strand of each fiber cable shall be tested to verify length if the estimated cable length is within 10% of the maximum length specified, respective to cable function, in the TIA/EIA-568-B Standard.

3.2 FIRESTOP SYSTEMS

A. A firestop system is comprised of: the item or items penetrating the fire rated structure; the opening in the structure and the materials and assembly of the materials used to seal the penetrated structure. Firestop systems comprise an effective block for fire, heat, vapor and pressurized water stream.

B. All penetrations through fire rated building structures (walls and floors) shall be sealed with an appropriate firestop system. This requirement applies to through penetrations (complete penetration) and membrane penetrations (through one side of a hollow fire rated structure). Any penetrating items i.e., riser slots and sleeves, cables, conduit, cable tray, and raceways, etc. shall be properly firestopped.

C. Firestop systems shall be UL Classified to ASTM E814 (UL 1479) and shall be approved by a qualified Professional Engineer (PE), licensed (actual or reciprocal) in the state where the work is to be performed. A drawing showing the proposed firestopped system, stamped/embossed by the cognizant PE shall be provided to the Owner's Technical Representative prior to installing the firestop system.

D. All firestop systems shall be installed in accordance with the manufacturer's recommendations and shall be completely installed and available for inspection by the local inspection authorities prior to cable system acceptance.

3.3 GROUNDING AND BONDING

<u>All grounding and bonding work is to be completed by an electrical contactor and not part of this scope of work. This information is placed here for reference only.</u>

A. The facility shall be equipped with a Telecommunications Bonding Backbone (TBB). This backbone shall be used to ground all telecommunications cable shields, equipment, racks, cabinets, raceways, and other associated hardware that has the potential for acting as a current carrying conductor. The TBB shall be installed independent of the buildings electrical and building ground and shall be designed in accordance with the recommendations contained in the TIA/EIA-607 Telecommunications Bonding and Grounding Standard.

1. The main entrance facility/equipment room in each building shall be equipped with a telecommunications main grounding bus bar (TMGB). Each telecommunications closet shall be provided with a telecommunications ground bus bar (TGB). The TMGB shall be connected to the building electrical entrance grounding facility. The intent of this system is to provide a grounding system that is equal in potential to the building electrical ground system. Therefore, ground loop current potential is minimized between telecommunications equipment and the electrical system to which it is attached.

B. Product Specifications
1. All racks, metallic backboards, cable sheaths, metallic strength members, splice cases, cable trays, etc. entering or residing in the TC or ER shall be grounded to the respective TGB or TMGB using a minimum #6 AWG stranded copper bonding conductor and compression connectors. Where metallic panels attached to the rack to not have sufficient metal to metal contact to provide an adequate path to ground, they shall be bonded to the rack using a minimum #14 AWG copper conductor. The copper conductor size shall be

upgraded based on the largest power conductor feeding any rack mount equipment. The conductor shall be continuous, attaching all isolated components in a daisy chain fashion from top to bottom and bonded to the rack using the appropriate compression connector.

2. All wires used for telecommunications grounding purposes shall be identified with a green insulation. Non-insulated wires shall be identified at each termination point with a wrap of green tape. All cables, and buss-bars shall be identified and labeled in accordance with the System Documentation Section of this specification.

C. Ground System Installation

1. The TBB shall be designed and/or approved by a qualified PE, licensed (actual or reciprocal) in the state that the work is to be performed. The TBB shall adhere to the recommendations of the TIA/EIA-607 standard, and shall be installed in accordance with best industry practices. Installation and termination of the main bonding conductor to the building service entrance ground, at a minimum, shall be performed by a licensed C10 electrical contractor.

3.4 SYSTEM DOCUMENTATION

A. The following section describes the installation, administration, testing, and as-built documentation required to be produced and/or maintained by the contractor during the course of the installation. The documentation required will allow the owner to create a TIA/EIA 606 compliant administration system.

B. Cable System Labeling

1. The contractor shall develop and submit for approval a labeling system for this cable installation. At a minimum, the labeling system shall clearly identify all components of the system: racks, cables, panels and outlets. The labeling system shall designate the cables origin and destination and a unique identifier for the cable within the system. Racks and patch panels shall be labeled to identify the location within the cable system infrastructure. All labeling information shall be recorded on the as-built drawings and all test documents shall reflect the appropriate labeling scheme.
2. All label printing will be machine generated using indelible ink ribbons or cartridges. Self laminating labels will be used on cable jackets, appropriately sized to the OD of the cable, and placed within view at the termination point on each end. Outlet labels will be the manufacturer's label provided with the outlet assembly.

C. As-Built Drawings

1. The installation contractor will be provided with as-built drawings (where applicable) at the start of the project. One set will be designated for the central location to document all as-built information as it occurs throughout the project. The central set will be maintained by the Contractor's Foreman on a daily basis, and will be available to the Technical representative upon request during the course of the project. Anticipated variations from the building drawings may be for such things as cable routing and actual outlet placement. No variations will be allowed to the planned termination positions of horizontal and backbone cables, and grounding conductors unless approved in writing by the Owner. Contractor shall also redraw the site and floor plans showing all fiber, copper, racks, and information outlets as well as the labeling scheme for all items. These CAD drawings shall be on 8 1/2" x 11" sheets of paper and be turned over to the owner with the O&M manuals.
2. The Contractor shall provide the central drawing set to the owner at the conclusion of the project. The marked up drawing set will accurately depict the as-built status of the system including termination locations, cable routing, and all administration labeling for the cable system. In addition, a narrative will be provided that describes any areas of difficulty encountered during the installation that could potentially cause problems to the telecommunications system.

D. Test Documentation

1. Test documentation shall be provided in a three ring binder(s) within three weeks after the completion of the project. The binder(s) shall be clearly marked on the outside front cover and spine with the words "Test Results", the project name, and the date of completion (month and year). The binder shall be divided by major heading tabs, Horizontal and Backbone. Each major heading shall be further sectioned by test type. Within the horizontal and backbone sections, scanner test results (Category 3, 4, or 5), fiber optic attenuation test results, OTDR traces, and green light test results shall be segregated by tab. Test data within each section shall be presented in the sequence listed in the administration records. The test equipment by name, manufacturer, model number and last calibration date will also be provided at the end of the document. Unless a more frequent calibration cycle is specified by the manufacturer, an annual calibration cycle is anticipated on all test equipment used for this installation. The test document shall detail test method used and specific settings of the equipment during the test.
2. Scanner tests shall be printed on 8-1/2" x 11". Hand written test results (attenuation results and green light results) shall be documented on an Excel spreadsheet. OTDR test results shall be printed or attached and copied on 8-1/2" x 11" paper for inclusion in test documentation binder.
3. When repairs and re-tests are performed, the problem found and corrective action taken shall be noted, and both the failed and passed test data shall collocated in the binder.

3.5 WARRANTY AND SERVICES

A. The contractor shall provide a system warranty covering the installed cable system against defects in workmanship, components, and performance, and follow-on support after project completion.

B. Installation Warranty: In addition to facilitating the manufacturers 20 year system warranty or better (see Section 3.5 (C)), the contractor shall also warrant the cabling system against defects in workmanship for a period of one year from the date of system acceptance. The warranty shall cover all labor and materials necessary to correct a failed portion of the system and to demonstrate performance within the original installation specifications after repairs are accomplished. These warranties shall be provided at no additional cost to the Owner.

C. Cable System Warranty: The contractor shall facilitate a warranty between the manufacturer and the Owner that provides coverage of the installed cabling system to a minimum of 20 years or better. An extended component warranty shall be provided which warrants functionality of all components used in the system for a minimum of 20 years or better from the date of acceptance. All fiber cable, copper cable, fiber termination hardware and housings, copper termination hardware and trim shall be of one manufacturer to ensure the owner can establish one relationship for the warranty. A performance warranty in excess of 20 years or better shall also be provided which warrants the installed 100 MHz horizontal copper (HC to WA) and for both the horizontal and the backbone optical fiber (HC to WA, or cross-connect to cross-connect) portions of the cabling system. Copper links shall be warranted against the link performance minimum expected results defined in the TIA/EIA 568-B and/or TIA/EIA 568-A. Fiber optic links shall be warranted against the link and segment performance minimum expected results defined in the TIA/EIA 568-B and/or TIA/EIA 568-A. All fiber and copper cabling, termination components, and ancillary devices shall be of one manufacturer to insure no disputes can arise between different manufacturers if performance problems arise. Installers shall be factory trained technicians with a factory trained supervisor overseeing the project. Certificates of factory training by the manufacturer, or authorized representative, of the cabling system being installed must be made available if requested by the District or District's representative.

3.6 CABLE SYSTEM ACCEPTANCE

A. The Owner's Technical Representative will make periodic inspection of the project in progress. One inspection will be performed at the conclusion of cable pulling, prior to closing of the false ceiling, to inspect the method of cable routing and support, and the fire-stopping of penetrations. A second inspection will be performed at completion of cable termination to validate that cables were dressed and terminated in accordance with TIA/EIA specifications for jacket removal and pair untwist, compliance with manufacturer's minimum bend radius, and that cable ends are dressed neatly and orderly.

B. Final Inspection: Upon completion of the project, the Owner's Technical Representative will perform a final inspection of the installed cable system with the Contractor's Project Foreman. The final inspection will be performed to validate that all horizontal and backbone cables were installed as defined in the drawing package, and that the installation meets the aesthetic expectations of the District.

C. Test Verification: Upon receipt of the test documentation, the Owner reserves the right to perform spot testing of a representative sample of the cabling system to validate test results provided in the test document. Owner testing will use the same method employed by the contractor, and minor variations will be allowed to account for differences in test equipment. If significant discrepancies are found, the Contractor will be notified for resolution.

D. System Performance: During the three-week period between final inspection and delivery of the test and as-built documentation, the Owner will activate the cabling system as a validation of operation.

E. Final Acceptance: Completion of the installation and in-progress and final inspections, receipt of the test and as-built documentation, and successful performance of the system for a two-week period will constitute acceptance of the system.

MDF/IDF Locations for SBCUSD Sample Sites
E-Rate Round 9

Board of Education Building – Diagram file BOE_1.dwg
MDF: Telephone Room
IDF 1: Benefits Office
IDF 2: Board Room Rear Closet
IDF 3: P-2
Lincoln Elementary School – Diagram file Lincoln_1.dwg
MDF: Rear Admin Office
IDF 1: D-1
IDF 2: D-8
IDF 3: D-16
IDF 4: Pre-School PS-5
Arrowview Middle School – Diagram files Arrowview_1.dwg, and Arrowview_2.dwg
MDF: Outside A-17
IDF 1: Admin Reception Area – Ethernet Connected to MDF
IDF 2: T-2
IDF 3: Between C-23/C-24
IDF 4: D-1
IDF 5: Between B-2/B-3
IDF 6: Y-1
Pacific High School – Diagram files Pacific_1.dwg and Pacific_2.dwg
MDF: Admin Staff Room
IDF B: B-5
IDF B: B-10.5
IDF C: Library Closet
IDF D: D-5
IDF E: E-6
IDF F: F-7
IDF G: G-1
IDF G: G-3 - Ethernet Connected to G-1
IDF H: H-5
IDF I: I-3
IDF L: Cafeteria
IDF M: M-1
IDF Z: Z-2
IDF Z: Z-6 – Fiber-Connected through Switch in Z-2

Fiber Runs
Fiber runs less than 800 ft should be labeled green at both IDF and MDF patch panels, and they should be **multimode** fiber.
Fiber runs greater than 800 ft but less than 1800 ft should be labeled **blue** at both IDF and MDF patch panels, and they should be **multimode** fiber.
Fiber runs greater than 1800 ft should be labeled **red** at both IDF and MDF patch panels, and they should be **single-mode** fiber.

All fiber lengths should noted on any physical cable diagrams generated as a result of all future installed fiber.

Site trenching Maximums:
Administrative Sites – 1500 feet per location
High School Sites – 2000 feet per location
Middle School Sites -1500 feet per location
Elementary School Sites – 1000 feet per location
Total number of drops:
Administrative Sites –100 drops per location
High School Sites – 200 drops per location
Middle School Sites – 1500 drops per location
Elementary School Sites – 100 drops per location

Use Blue Cable for data
Use White/Grey cable for voice
Use Yellow cable for video

Schedule of values, bidder is to submit a complete unit price breakdown of work and materials for completion of project for the representative sample sites. Example: Trenching – Dirt/Concrete, Dirt/Dirt, and Dirt/Asphalt, etc. Coring Per Foot – Concrete, Drywall, and Wood, etc.

Bidder is required to obtain a dig permit from the District Building Services Department for any trenching work being performed.

Further, No new conduit in any breezeways, bidder is to use existing pathways on breezeways if available without charging for trenching.

Bidder to use clusters of four (4)2" conduit for large cable pulls and all new pathways.

There will be no conduit on any roof. No exposed wires in any room, service provider is to avoid the use of wire mold raceways.

Current fiber within the District is Multimode Fiber at 62.5 microns.

In a classroom the teacher location will have a face plate it will have one data, one voice and one video jack, the remaining seven data jacks are spread around the classroom based on the layout of the classroom.

All data and voice jacks are to be category 5e by the standard previously stated. Remaining classroom locations will have data jacks one or more per face plate.

The only exception in the classroom environment is a lab which will have a teacher location and 29 more data jacks spread around the classroom based on the layout. Every effort should be made to ensure that face plates are not installed below white boards or equivalent presentation areas.

DISTRICT CONSTRUCTION STANDARD
FOR ELECTRICAL/ELECTRONICS

All contractors must obtain an authorized dig permit from the District (Building Services Department) prior to commencing any excavation.

Electrical Switch Gear: The electrical switchgear should have the note indicating that the panel should be expandable above bus bar. Fully bused panels. Use Square-D, GE Switch Gear or Westinghouse.

Lamps and Ballasts: T-8 Lamp electronic ballast. (Fluorescent lamps must be 4100K lamps). Should be 3 lamps, 2 ballast fixtures.

Data System: To be specified by Information Technology

Use copper wire, no aluminum.

Transformers to have copper windings.

Use steel fittings, no die-cast, No set screws

Provide hand dryers at all Toilet Rooms for students. Nozzles for hand dryers shall be fixed in the "down position." (To prevent vandals from pouring water into them.)

Dimming System for stage lights: Electronic Theatre Control (ETC).

Switches and receptacles, manufactured by Hubbell

5400 wire mold for computer labs

Steel 90° sweeps on all underground raceways (horizontal or vertical)

All load centers to have bolt on circuit breakers

Power metering panels shall be used that can be remotely monitored.

Neutral must be oversized for computer rooms with multiple circuits

Lighting should be 277V for energy efficiency.

If any utility is uncovered during the course of any work, or construction, it is the contractor's responsibility to notify the District to obtain an inspection prior to covering that utility.

If trenching is required, all surfaces shall be put back in kind, the way they were, prior to the trenching

All underground conduits shall have a minimum of 24 inch of trench back fill coverage

All back filled trenches shall have a minimum of 95 percent compaction

All electrical wiring shall be installed in conduit

All electrical conduit and wiring shall be installed to conform to the National Electrical Code

There shall be no exposed conduit installed on any roofs in the District.

Conduits shall not be installed underneath breezeway's or eves areas between buildings

Their shall be no conduit ran exposed, interior or exterior, without written permission from Building Services

Any conduit that is installed exposed shall be ran parallel are perpendicular to the building.

Any conduit that has 480V and above wires inside, shall be covered with Edison slurry mix.

Within two weeks of completion of job (or each major portion of a multi-job contract) as built drawings must be submitted to building services

The contractor shall preserve and protect from injury all trees, turf, ground cover, poles, fences, playground equipment, utility vaults and boxes, clean outs, etc. The contractor shall restore or replace any of these items that are removed or damaged in the performance of his/her work.

The contractor shall restore or replace, without cost to the District, any asphalt or concrete paving, sidewalk, patio, or playground area that is removed or damaged in the performance of his/her work with the same materials, according to District standards and the satisfaction of the District.

All patching of any asphalt or concrete shall be made using the same materials, workmanship, and finish and shall accurately match all surrounding areas.

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
APPLICATION FOR USE OF SCHOOL BUILDING KEYS

_____ _____
NAME OF ORGANIZATION DATE

_____ HEREBY MAKES APPLICATION FOR
NAME OF INDIVIDUAL THE FOLLOWING KEYS

SCHOOL/SITE _____

NO.	KEY NO.	NO.	KEY NO.	NO.	KEY NO.
____	_____	____	_____	____	_____
____	_____	____	_____	____	_____

THE UNDERSIGNED HEREBY AGREES TO BE PERSONALLY RESPONSIBLE, ON BEHALF OF ABOVE NAMED ORGANIZATION OR INDIVIDUAL, FOR ANY DAMAGE SUSTAINED BY THE SCHOOL BUILDING OR APPURTENANCES THEREOF ACCRUING THROUGH THE USE AND POSSESSION OF THE ABOVE MENTIONED KEYS, AND FURTHER AGREES TO CONFORM TO ALL RULES AND REGULATIONS OF THE S.B.C.U.S.D., BOARD OF EDUCATION, GOVERNING THE USE OF SCHOOL FACILITIES. THE UNDERSIGNED ALSO ACKNOWLEDGES RECEIPT OF THE SUMMARY OF ASBESTOS-CONTAINING BUILDING MATERIAL LOCATED AT THE SITE AT WHICH WORK IS TO BE PERFORMED.

DISTRICT KEYS MAY ONLY BE DUPLICATED BY AUTHORIZED DISTRICT LOCKSMITH. UNAUTHORIZED DUPLICATION OF DISTRICT KEYS IS A VIOLATION OF PENAL CODE SECTION 469, WHICH READS:

> **"ANY PERSON WHO KNOWINGLY MAKES, DUPLICATES, CAUSES TO BE DUPLICATED, OR USES, OR ATTEMPTS TO MAKE, DUPLICATE, CAUSE TO BE DUPLICATED, OR USE, OR HAS IN HIS POSSESSION ANY KEY TO A BUILDING OR OTHER AREA OWNED, OPERATED, OR CONTROLLED BY THE STATE OF CALIFORNIA, ANY STATE AGENCY, BOARD, OR COMMISSION, A COUNTY, CITY , OR ANY PUBLIC SCHOOL OR COMMUNITY COLLEGE DISTRICT WITHOUT AUTHORIZATION FROM THE PERSON IN CHARGE OF SUCH BUILDING OR AREA OR HIS DESIGNATED REPRESENTATIVE AND WITHOUT KNOWLEDGE OF THE LACK OF SUCH AUTHORIZATION IS GUILTY OF A MISDEMEANOR."**

REIMBURSABLE COSTS TO THE DISTRICT FOR REKEYING SCHOOL SITES FOR ANY UNRETURNED MASTER KEYS WILL BE CHARGED TO THE VENDOR BASED ON THE FOLLOWING SCHEDULE:

ELEMENTARY - $5,500.00 MIDDLE - $7,500.00 HIGH - $15,000.00

SIGNATURE OF APPLICANT _____
ADDRESS _____
TELEPHONE NO. _____

Estimated Date of Return _____ Checked Out By _____
Date of Return _____ Received By _____
RECEIVED $ _____ AS KEY DEPOSIT _____ _____
Cash Money Order/Cashier Check

PLEASE NOTE: $250.00 deposit required for each key checked out, with a maximum number of 4 keys.

Date:

To: {Contractor or Company Name}

Subject: Notification of Asbestos Related Information

By receipt of this letter, your company is being advised of the availability of information relative to the location(s) of asbestos-containing building materials (ACBM) which your employees may come into contact with while performing services for the San Bernardino City Unified School District.

Existing Federal law, as contained in 40CFR, part 763.84(d) mandates that your workers be provided with this information before starting work in these areas. Each school facility has it's own site specific "Management Plan" which contains this information. It is suggested that your workers review these documents for their work location.

The San Bernardino City Unified School District assumes no responsibility for providing your workers with training or protective equipment, which may be required by any federal, state or local regulatory enforcement agency.

Our District contact (AHERA "Designated Person") for any questions pertinent to this subject is Mike DeHoog, Maintenance Manager. He may be contacted at (909) 388-6100.

I acknowledge that our company has been notified of the opportunity to receive the above referenced information:

Company Name_____

Company Phone_____ Company Fax_____

Company Authorized Representative_____
(Signature)

Company Authorized Representative_____
(Printed Legibly)

Date: _____,2006

CONTRACTOR'S CERTIFICATE
REGARDING WORKERS' COMPENSATION

Labor Code Section 3700:

> "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, 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 employees."

I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for Workers' Compensation 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.

Principal _____

By _____

Typed or Printed Name _____

Title _____

Date _____

(In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under this contract.)

CONTRACTOR'S CERTIFICATE
REGARDING ASBESTOS MATERIAL

"I certify that all the materials and supplies installed under this contract

NAME OF CONTRACT: _____

_____

_____

are free of asbestos-containing materials."

Official Name of Contractor _____

By: _____

Title _____

Date _____

NONCOLLUSION AFFIDAVIT TO BE EXECUTED

BY BIDDER AND SUBMITTED WITH BID

(Public Contract Code Section 7106)

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN BERNARDINO)

_____, being first duly sworn, deposes and says that he or she is of _____, the party making the foregoing bid; that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that 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 bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Subscribed and sworn to (or affirmed) before me this _____day of _____, 2005.

[SEAL]

_____
(signature of officer)

_____
(typed name of officer)

_____
(office)

CONTRACTOR'S QUALIFICATION STATEMENT

The Undersigned certifies under oath the truth and correctness of all statements and of all answers to questions made hereinafter.

SUBMITTED TO: San Bernardino City Unified School District

SUBMITTED BY:

NAME:

ADDRESS:

PRINCIPAL OFFICE:

____ CORPORATION

____ PARTNERSHIP

____ INDIVIDUAL

____ JOINT VENTURE

____ OTHER

TYPE OF WORK:

____ General Construction

____ HVAC

____ Plumbing

____ Electrical

____ Other (please specify)_____

1.0 ORGANIZATION

1.1 How many years has your organization been in business as a Licensed Contractor?

1.2 How many years has your organization been in business under its present name?

1.2.1 Under what other or former names has your organization operated?

1.3 If your organization is a corporation, answer the following:

1.3.1 Date of Incorporation:

1.3.2 State of Incorporation:

1.3.3 President's name:

1.3.4 Vice-President's name(s):

1.3.5 Secretary's name:

1.3.6 Treasurer's name:

1.4 If your organization is a partnership, answer the following:

1.4.1 Date of organization:

1.4.2 Type of partnership:

1.4.3 Names(s) of general partner(s):

1.5 If your organization is individually owned, answer the following:
1.5.1 Date of organization:
1.5.2 Name of Owner:

1.6 If the form of your organization is other than those listed above, describe it and name the principals:

2.0 LICENSING

2.1 List jurisdictions and trade categories in which your organization is legally qualified to do business, and indicate registration or license numbers, if applicable:

2.2 List jurisdictions in which your organization's partnership or trade name is filed:

3.0 EXPERIENCE

3.1 List the categories of work that your organization normally performs with its own forces:

3.2 Claims and Suits (If the answer to any of the questions below is yes, please attach details):

3.2.1 Has your organization ever failed to complete any work awarded to it?

3.2.2 Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers?

3.2.3 Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years?

3.3 Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? (If the answer is yes, please attach details.)

3.4 On a separate sheet, list major construction projects your organization has in process, giving the name of project, owner, architect, contract amount, percent complete, and scheduled completion date.

3.4.1 State total worth of work in progress and under contract:

3.5 On a separate sheet, list the major projects your organization has completed in the past five years, giving the name of project, owner, architect, contract amount, date of completion, and percentage of the cost of the work performed with your own forces.

3.5.1 State average annual amount of construction work performed during the past five years:

3.6 On a separate sheet, list the construction experience of the key individuals of your organization.

4.0 REFERENCES

4.1 Trade References:

4.2 Bank References:

4.3 Surety:

4.3.1 Name of bonding company:

4.3.2 Name and address of agent:

5.0 FINANCING

5.1 Financial Statement:

5.1.1 Attach a recently audited financial statement (less than one year old), preferably audited, including your organization's latest balance sheet and income statement showing the following items:

a. Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses).

b. Net Fixed Assets.

c. Other Assets.

d. Current Liabilities (e.g. accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes).

e. Other Liabilities (e.g. capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).

5.1.2 Name of Firm preparing financial statement and date thereof:

5.1.3 Is this financial statement for the identical organization named on page one?

5.1.4 If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g. parent-subsidiary):

5.2 Will this organization whose financial statement is attached act as a guarantor of the contract for construction?

6.0 SIGNATURE

6.1 Dated at this day _____ of_____ , 20_____ .

Name of Organization:

By:

Title:

6.2 I, , being duly sworn, deposes and says that he/she is the information provided herein is true and sufficiently complete so as not to be misleading.

Subscribed and sworn before me this _____day of _____ , 2005.

Notary Public

My Commission Expires:

EQUAL OPPORTUNITY CERTIFICATION

To: San Bernardino City Unified School District
777 North "F" Street
San Bernardino, CA 92410

Firm: _____

Street Address: _____

City: State: Zip Code: _____

Telephone ( )_____ FAX ( ) _____

Number of Employees _____

This firm is:

Independently Owned and Operated

An Affiliate of_____ Parent Company _____

A Subsidiary of_____ Address _____

A Division of _____

****

This is to certify that we are an Equal Opportunity Employer and have made a good faith effort to improve minority employment.

****

Signature _____

Title _____

Date _____

FINGERPRINTING PROCEDURES

FOR OUTSIDE CONTRACTORS

1. Contractor obtains form "DOJ - Request For Authorization to Receive State Summary Criminal History" from Building Services Office. Form is signed by Director of Building Services. Contractor completes information on form and mails directly to Department of Justice. The Department of Justice will send contractor a card. (NOTE: When the Department of Justice sends the card, they will also send instructions).

2. Contractor can take card to our School Police Office, and School Police will "roll" the fingerprints on the card (at no cost to Contractor; if prints are taken by City Police or another agency, they usually charge a $10.00 fee) and return the card to the Contractor.

3. Contractor sends the card back to the Department of Justice, along with a (estimated) $32.00 fee for processing. This process could take up to 3 months. For an additional $10.00 (expedite fee), fingerprints can be processed in about 4 weeks.

4. Results will be returned to the Contractor, directly. The School District will not receive the results.

5. The Contractor will submit to the District, "Contractor Certification - Contractor Background Check" form, completed and signed, certifying Company has passed the background check.

PO. Box 903417
SACRAMENTO, CA 94203-4170

DEPARTMENT OF JUSTICE

REQUEST FOR AUTHORIZATION TO RECEIVE STATE SUMMARY CRIMINAL HISTORY INFORMATION – CONTRACT EMPLOYER FOR PUBLIC SCHOOL EDUCATION CODE SECTION 45125.1

Name of Company_____

Street Address_____

City_____ State_____ Zip Code_____

Telephone_____ Fax Number_____

On behalf of the company named above, I hereby acknowledge and agree to the following:

1. The information provided by the Department of Justice (DOJ) to this agency is confidential and shall not be disseminated to any other person or agency not authorized by law (11105 PC). A violation of this section is a misdemeanor (11142 PC).
2. Your agency shall notify the DOJ with regard to any change in agency name, address, telephone number or contact person.
3. Fingerprints received will be retained by the DOJ per 11105.2 PC until notified that the affected individual is no longer employed.
4. Access is granted ONLY to the primary contractor (there is NO authority for subcontractors to gain direct access to DOJ records).
5. Services provided under contract must be performed on school grounds.
6. The entity must have a contract (entities in the bid process are not authorized).
7. Original signatures only (no photocopied signatures or faxed forms will be accepted or processed).

Signature _____ Date _____

Printed Name _____ Title _____

PLEASE PROVIDE A SIGNATURE FROM EACH DISTRICT VERIFYING THAT A BACKGROUND CHECK HAS BEEN REQUIRED OF YOUR COMPANY. (You may attach additional letters or signatures as necessary).

School District/County Office of Education
Background Check Requirement Verification:

1. San Bernardino City Unified School District
   Name of Contracting School District

2. _____
   Signature of School Official

3. (909) 388-6100 (909) 885-9991 (F)
   Phone and Fax Number

In accordance with statutory, regulatory, and constitutional restrictions governing the use and dissemination of criminal offender record information, the above mentioned Education Code Sections allow for exemptions from back-grounding all employees under the following conditions:

1. The installation of a physical barrier at the worksite to limit contact with pupils.
2. Continual supervision and monitoring of all employees of the entity by an employee of the entity whom the DOJ has ascertained has not been convicted of a violent or serious felony.
3. Surveillance of employees of the entity by school personnel.

Construction contractors are not required to comply with the background requirements set forth in the Michelle Montoya School Safety Act if one or more of the above-mentioned conditions exist.

For Department of Justice use only

Your request to receive state summary criminal history information pursuant to the Michelle Montoya School Safety Act is approved. Information regarding procedural requirements is enclosed or will be forwarded under separate cover.

_____ _____

George Renfroe, Manager **DATE**
Communications Administration Program
Bureau of Criminal Information & Analysis

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

APPLICATION FOR USE OF SCHOOL BUILDING KEYS

Name of Organization Date

Hereby Makes Application For The Following Keys

Name of Individual

School/Site

No. Key No. No. Key No. No. Key No.

The undersigned hereby agrees to be personally responsible, on behalf of above named organization or individual, for any damage sustained by the school building or appurtenances thereof accruing through the use and possession of the above mentioned keys, and further agrees to conform to all rules and regulations of the S.B.C.U.S.D., Board of Education, Governing the use of school facilities.

District keys may only be duplicated by an authorized District locksmith. Unauthorized duplication of District keys is a violation of Penal Code Section 469, which reads:

"Any person who knowingly makes, duplicates, causes to be duplicated, or uses, or attempts to make, duplicate, cause to be duplicated, or use, or has in his possession any key to a building or other area owned, operated, or Controlled by the State of California, any State Agency, Board, or Commission, a County, City, or any public school or Community College District without authorization from the person in charge of such building or area or his designated representative and without knowledge of the lack of such authorizatin is guilty of a misdemeanor."

Reimbursable costs to the District for rekeying school sites for any unreturned master keys will be charged to the vendor based on the following schedule. Please note that these current costs are estimates only and are subject to change.

Elementary School - $5,500.00 Middle School - $7, 500.00 High School - $15, 000.00

Signature of Applicant

Address

Telephone Number

Listed below is a brief sumary of sites that contain asbestos in or above the ceilings. **The asbestos must not be disturbed.** The asbestos material is not hazardous, unless it is disturbed, and is monitored on a periodical basis to insure it does not become a hazard. Prior to any work being done in the areas listed below please contact the Asbestos Technician at Building Services for proper procedures.

Cajon High School	Bldg. A, D, E (Except Little Theater) & Library
San Bernardino High School	Bldgs. B & Library, Auditorium (ceilings & walls)
San Gorgonio High School	Bldgs. A, B, C, E & Cafeteria
Arrowview Middle School	Bldg. A
Curtis Middle School	Bldgs. A, D & PE Locker Rooms
Serrano Middle School	Throughout
Shandin Hills Middle School	Main Building
Arrowhead Elementary	Bldg B - Above Chiller Room & Electrical Room
Lincoln Elementary	Main Building
Thompson Elementary	A, B, C, E

THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF THE SUMMARY OF ASBESTOS-CONTAINING BUILDING MATERIAL LOCATED AT THE SITE WHICH WORK IS TO BE PERFORMED. INITIALS

Estimated Date of Return Checked Out By

Date of Return Received By

RECEIVED $ AS KEY DEPOSIT

Cash

PLEASE NOTE: $250.00 deposit required for each key check out

The Key Shop hours for key pick up or return are: Monday - Friday, 7:00 a.m. - 8:00 a.m., 2:00 p.m. - 3:15 p.m. and all other by appointment only.

San Bernardino City Unified School District
777 N. F Street, San Bernardino, CA, 92410

Fingerprint and Criminal Background Check Certification

In accordance with Department of Justice (DOJ) fingerprint and criminal background investigation requirements of Education Code section 45125.1 et seq.

With respect to the Agreement dated _____, between the **San Bernardino City Unified School District "DISTRICT"** and the individual, company, or contractor named _____ **"VENDOR," for provision of** _____**services,**

Please check all appropriate boxes and sign below:

REQUIREMENTS MET:

☐ **A)**

The VENDOR hereby certifies to the DISTRICT's governing board that it has completed the criminal background check requirements of Education Code (EC) section 45125.1 and that none of its employees that may come into contact with DISTRICT students have been convicted of a violent felony listed in Penal Code section 667.5(c) or a serious felony listed in Penal Code section 1192.7(c).

List below, or attach, all employee names that have successfully completed the fingerprinting and criminal background check clearance in accordance with the law.

_____ _____ _____ _____ _____

SERVICES MAY BEGIN AFTER A PURCHASE ORDER (P.O.) IS ISSUED TO THE VENDOR.

~O R~ ~

REQUEST FOR WAIVER:

IF YOU ARE REQUESTING A WAIVER, BE ADVISED THAT NO SERVICES ARE TO BE PROVIDED UNTIL SUCH WAIVER IS APPROVED BY THE DISTRICT AND A P.O. IS ISSUED.

☐ **B) The VENDOR requests a waiver of the Department of Justice(DOJ) fingerprint and criminal background investigation for the following reason(s) permitted by Education Code section 45125.1 et seq.**

☐ The VENDOR and its employees will have NO CONTACT with pupils. (No school-site services will be provided.)

☐ The VENDOR and its employees will have LIMITED CONTACT with pupils. (Attach information about length of time on school grounds, proximity of work area to pupil areas, whether VENDOR/its employees will be working by themselves or with others, and any other factors that substantiate limited contact.) [EC 45125.1(c)]

☐ The VENDOR and its employees WILL HAVE OTHER THAN LIMITED CONTACT with pupils but will assure that ONE(1) OR MORE of the following methods are utilized to ensure pupil safety. [EC 45125.2(a)]
-- Check all methods to be used:

☐ 1) Installation of a physical barrier at the worksite to limit contact with pupils
☐ 2) Continual supervision and monitoring of all employees of the VENDOR by an employee of the VENDOR who has not been convicted of a serious or violent felony as ascertained by the DOJ
☐ 3) Surveillance of employees of the VENDOR by school personnel

☐ The services provided by the VENDOR are for an "EMERGENCY OR EXCEPTIONAL SITUATION, such as when pupil health or safety is endangered or when repairs are needed to make school facilities safe and habitable" [EC 45125.1(b)]

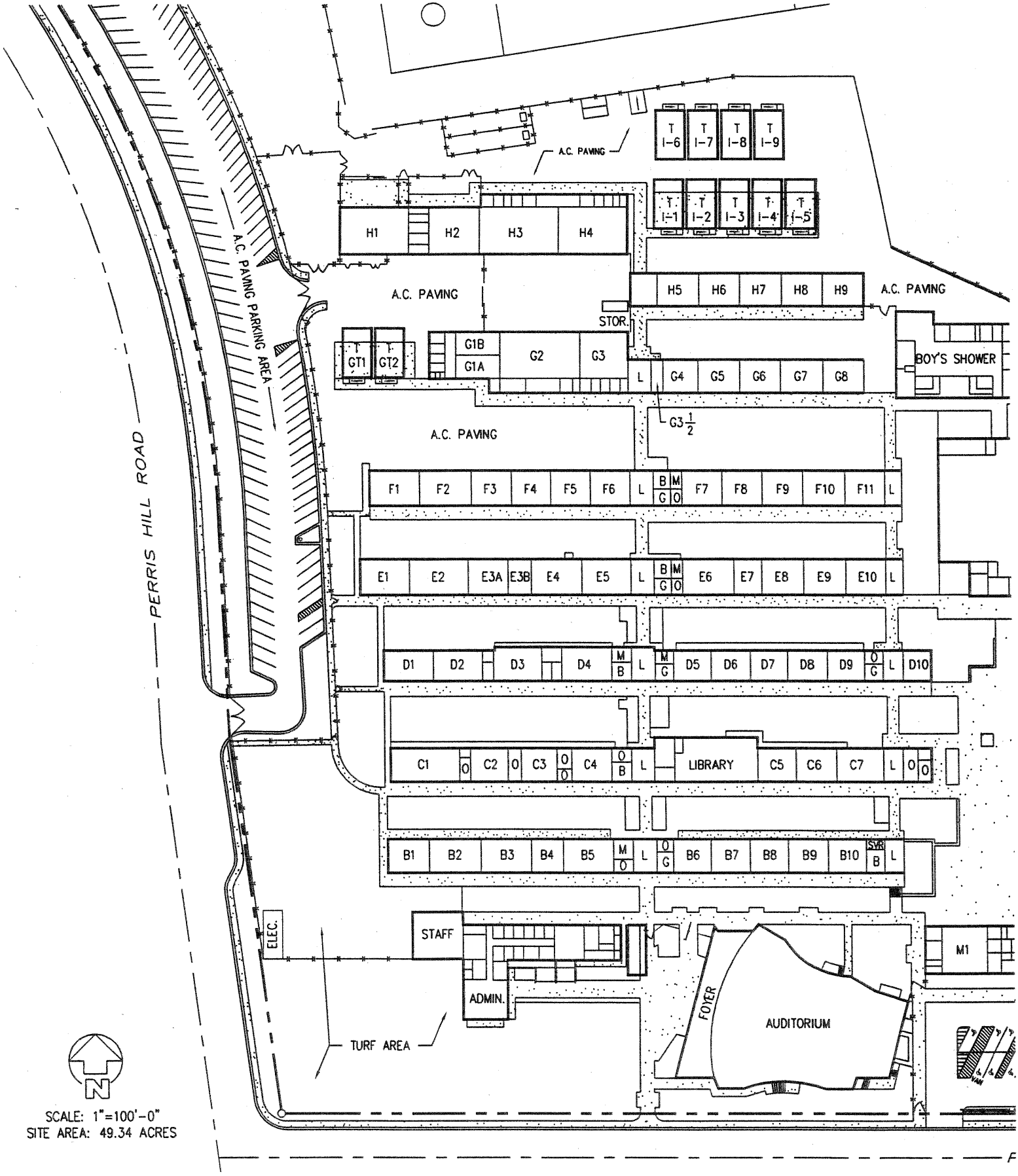
By signing below, under penalty of perjury, I certify that the information contained on this certification form and attached employee list(s) is accurate. I understand that it is the VENDOR's sole responsibility to maintain, update and provide the District with current "Fingerprint and Criminal Background Check Certification", along with the employee list, throughout the duration of VENDOR provided services.

_____
Authorized VENDOR Signature *Printed Name* *Title* *Date*

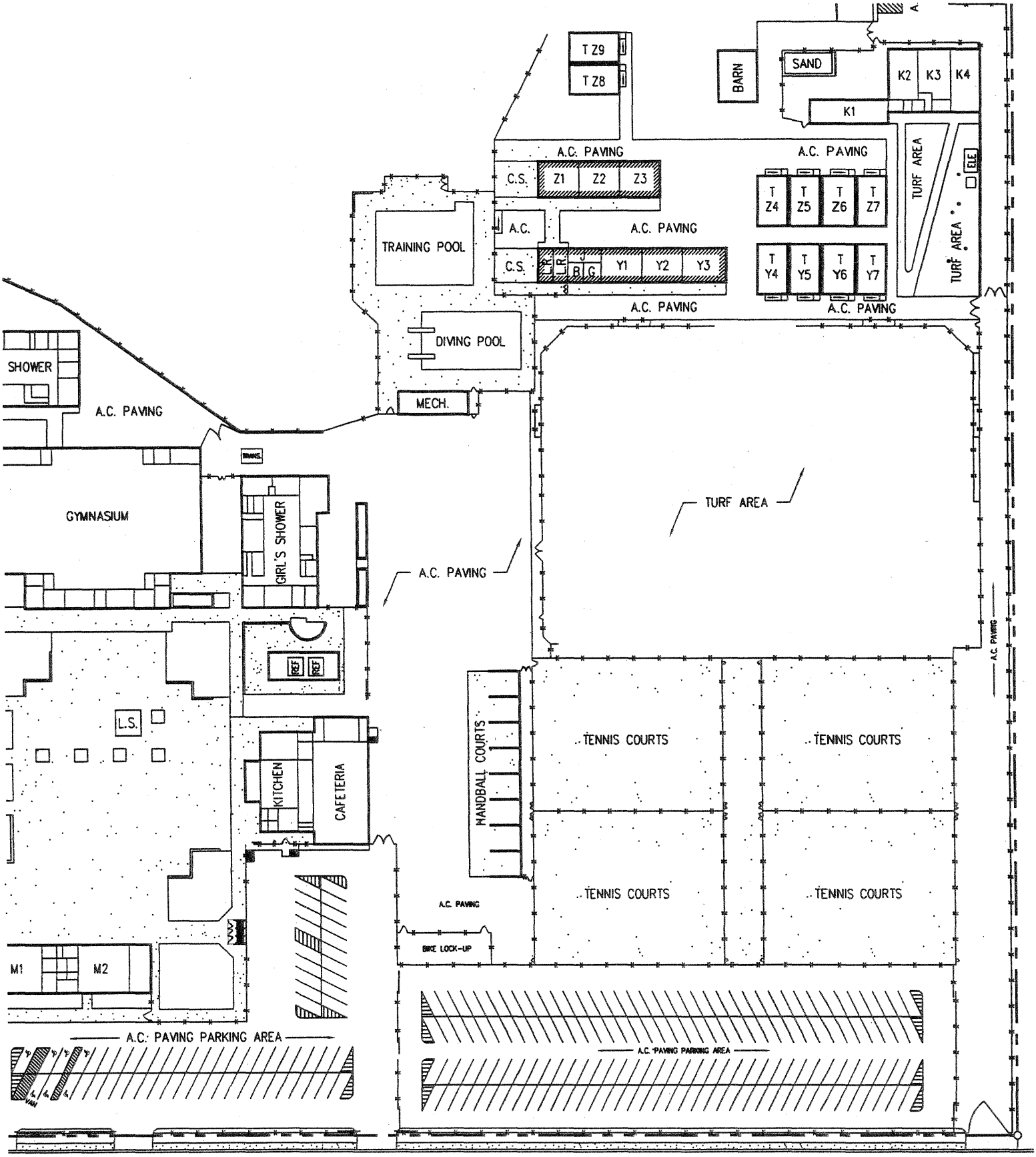
BOTH DISTRICT APPROVALS SHOWN BELOW ARE REQUIRED:

Office use only	
	WAIVER REQUEST: **APPROVED---☐** **DENIED---☐** By:_____ Date _____ *Mohammad Z. Islam, Business Administrator, Business Services Division OR Other Authorized District Agent*
	WAIVER REQUEST: **APPROVED---☐** **DENIED---☐** By:_____ Date _____ *Harold Vollkommer, Asst. Superintendent, Human Resources Division OR Other Authorized District Agent*

ATTACHMENT A1



A.P.N. 147-161-01,02	PLOT PLAN	DRAWN A.H.S.
	PACIFIC HIGH SCHOOL	DATE 02-28-03
	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT SAN BERNARDINO, CALIFORNIA	SHEET NO. 1 OF 5 SHEETS



A.P.N. 147-161-01,02

SCALE: 1"=100'-0"
SITE AREA: 49.34 ACRES

PLOT PLAN

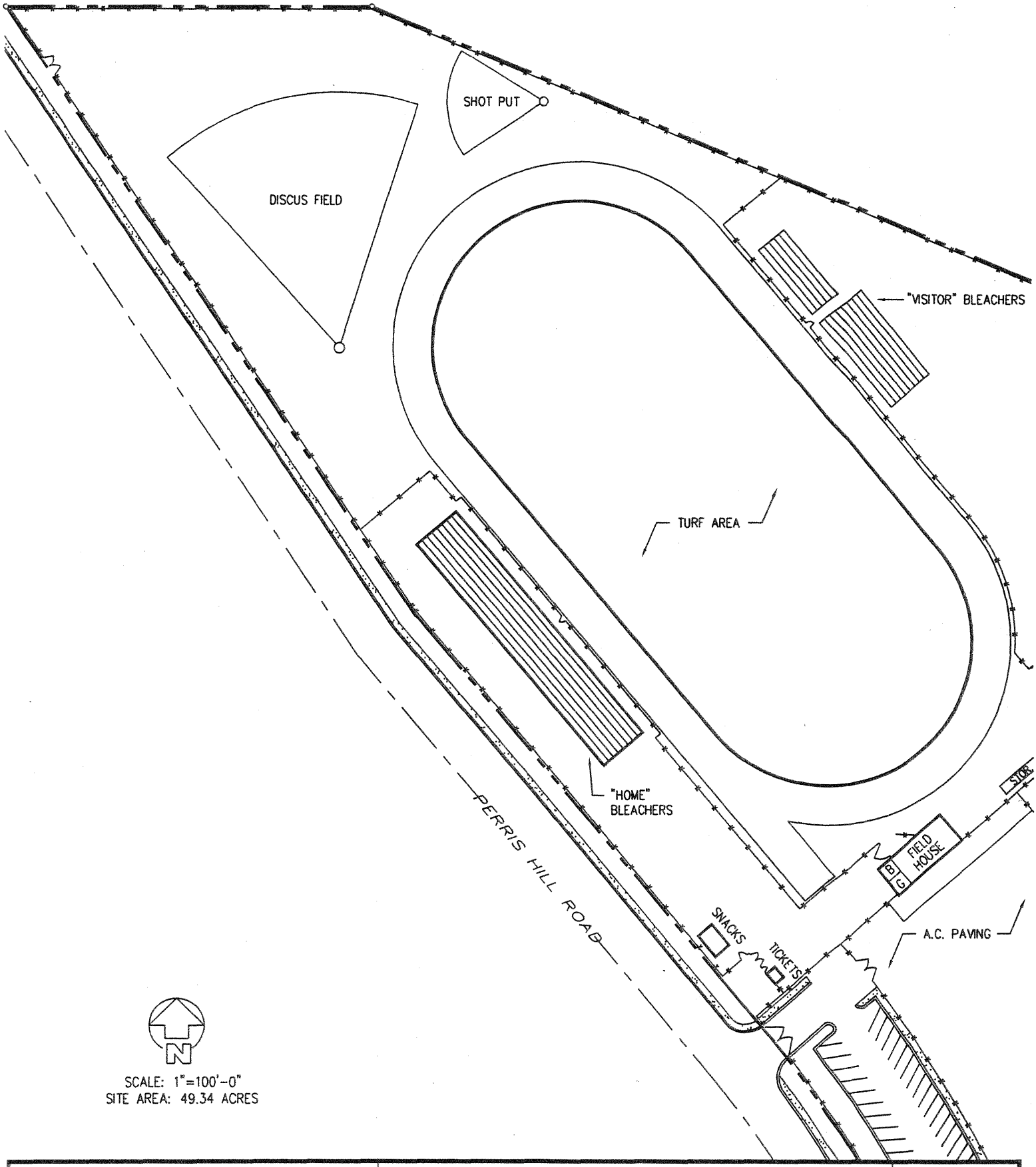
PACIFIC HIGH SCHOOL

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
SAN BERNARDINO, CALIFORNIA

DRAWN A.H.S.

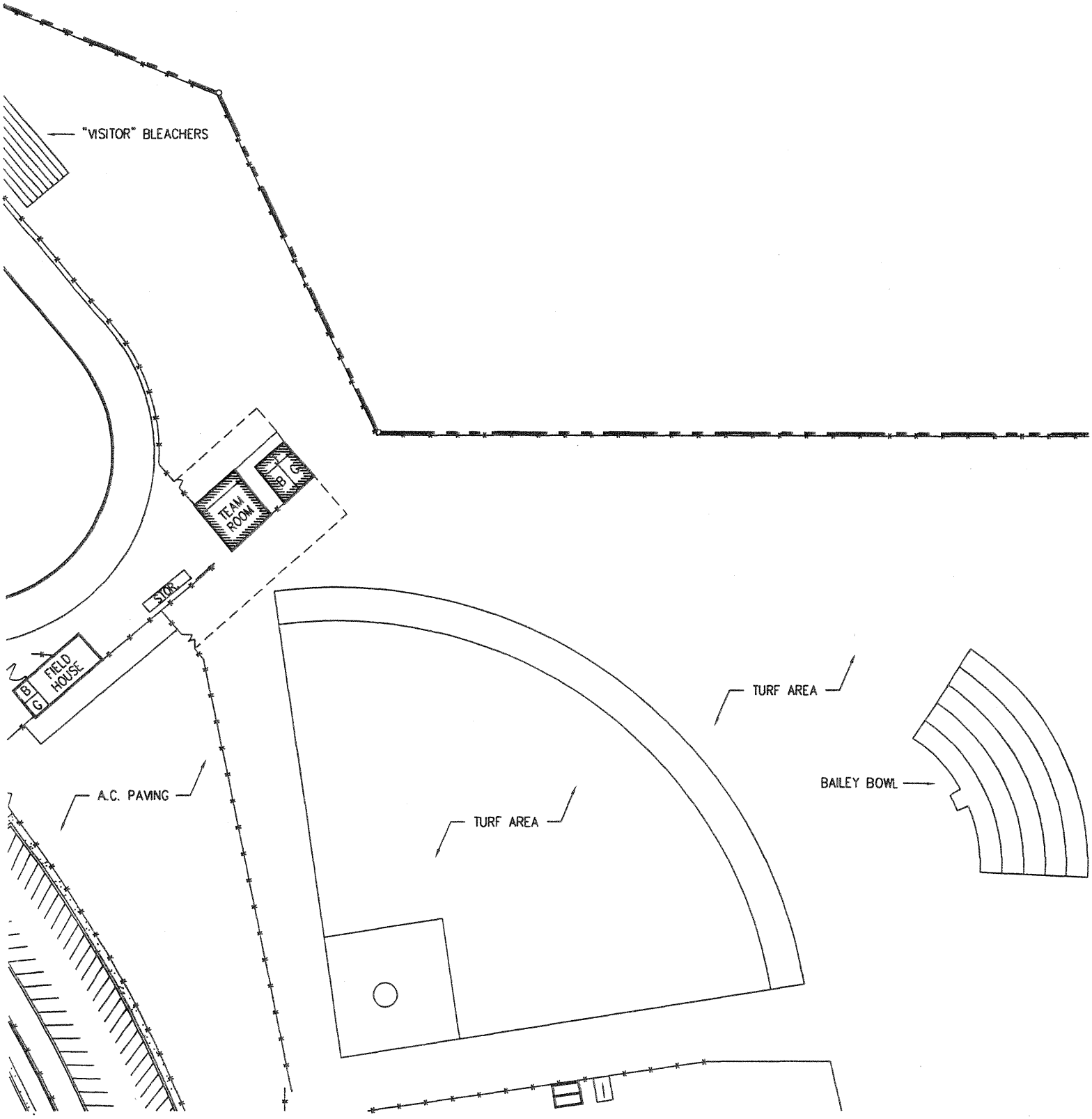
DATE 02-28-03

SHEET NO. 2 OF 5 SHEETS



SCALE: 1"=100'-0"
SITE AREA: 49.34 ACRES

A.P.N. 147-161-01,02	PLOT PLAN	DRAWN A.H.S.
	PACIFIC HIGH SCHOOL	DATE 02-28-03
	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT SAN BERNARDINO, CALIFORNIA	SHEET NO. 3 OF 5 SHEETS



A.P.N. 147-161-01,02

SCALE: 1"=100'-0"
SITE AREA: 49.34 ACRES

PLOT PLAN

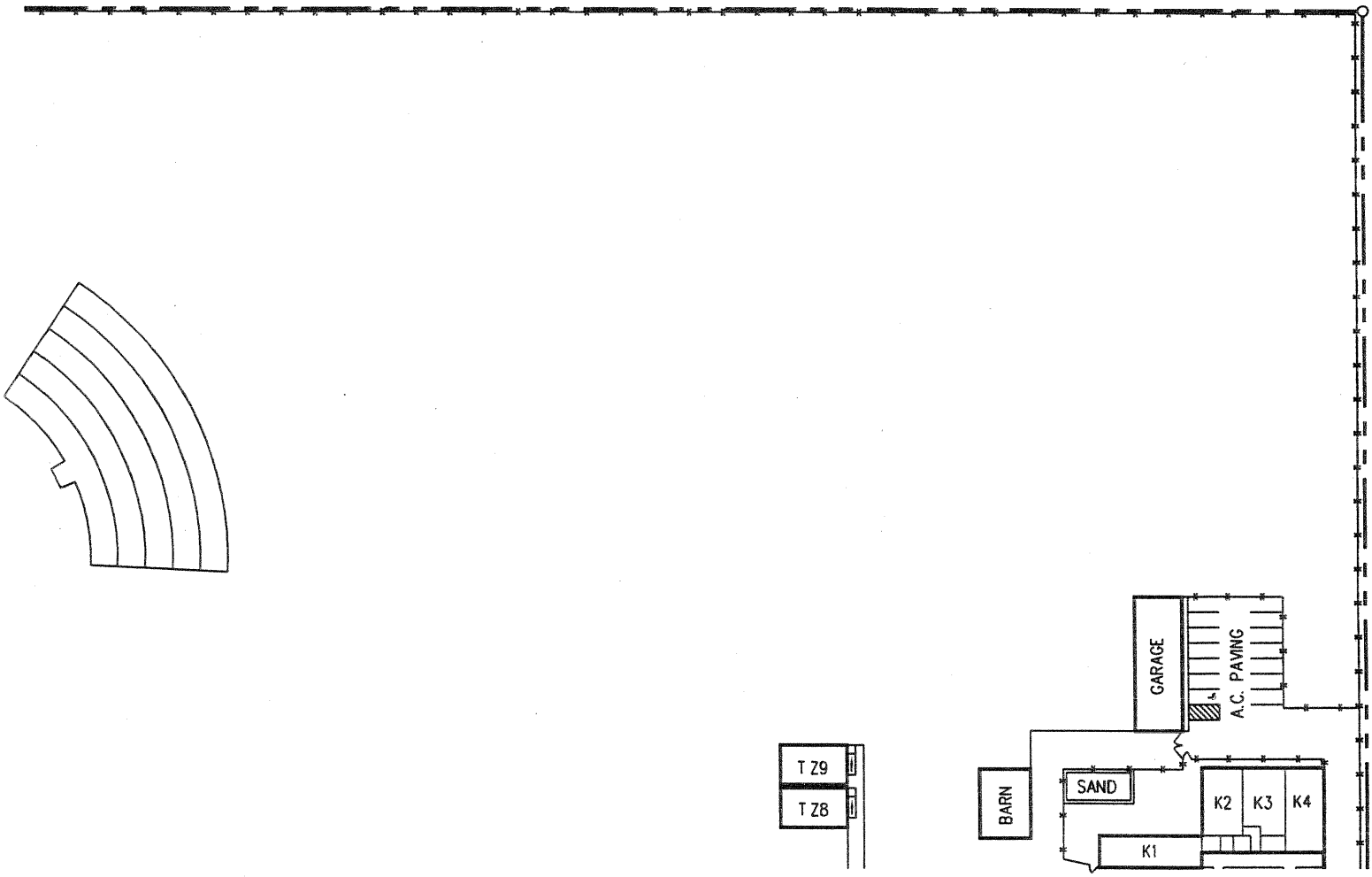
PACIFIC HIGH SCHOOL

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
SAN BERNARDINO, CALIFORNIA

DRAWN A.H.S.

DATE 02-28-03

SHEET NO. 4 OF 5 SHEETS



A.P.N. 147-161-01,02

SCALE: 1"=100'-0"
SITE AREA: 49.34 ACRES

PLOT PLAN

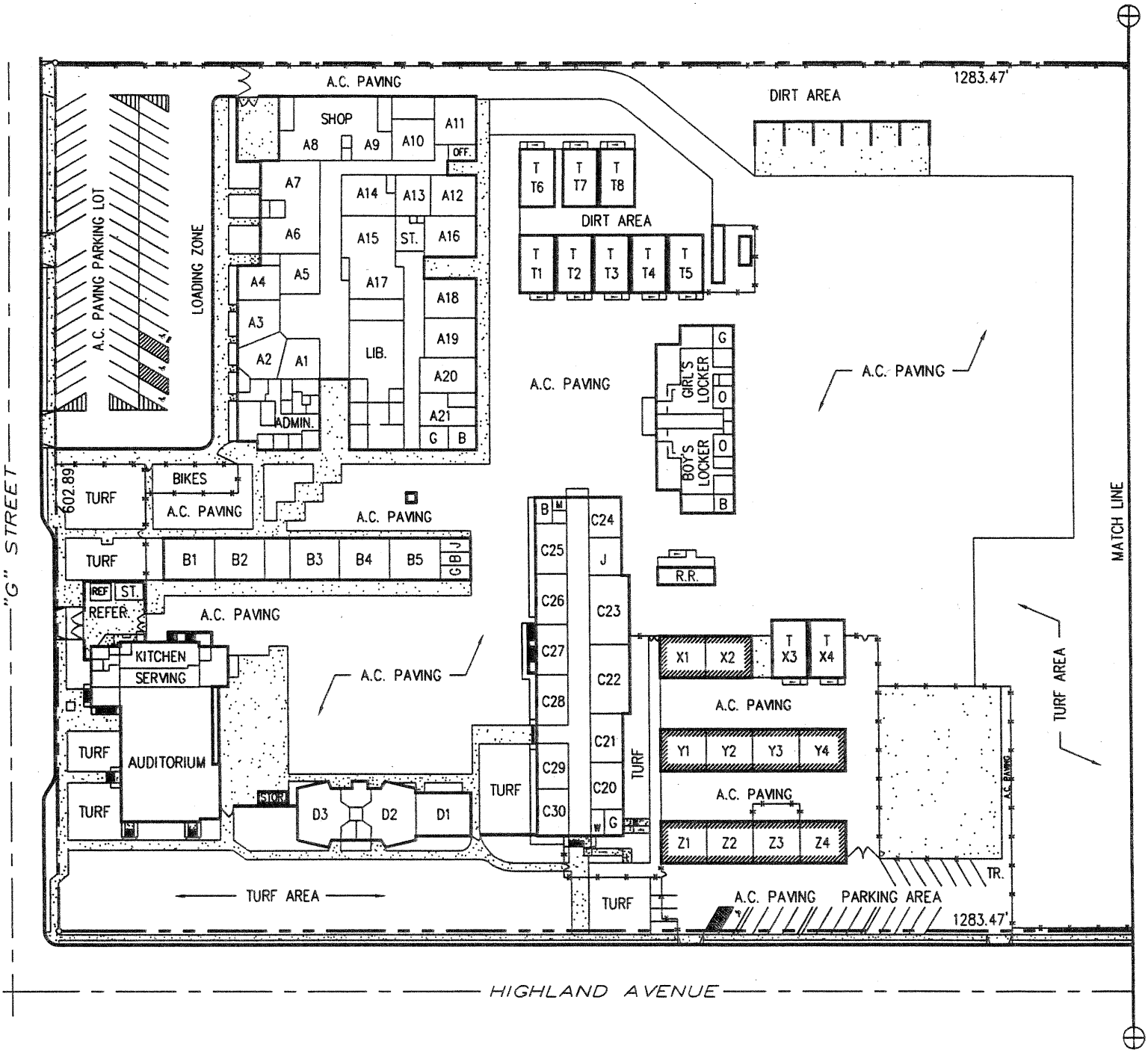
PACIFIC HIGH SCHOOL

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
SAN BERNARDINO, CALIFORNIA

DRAWN
A.H.S.

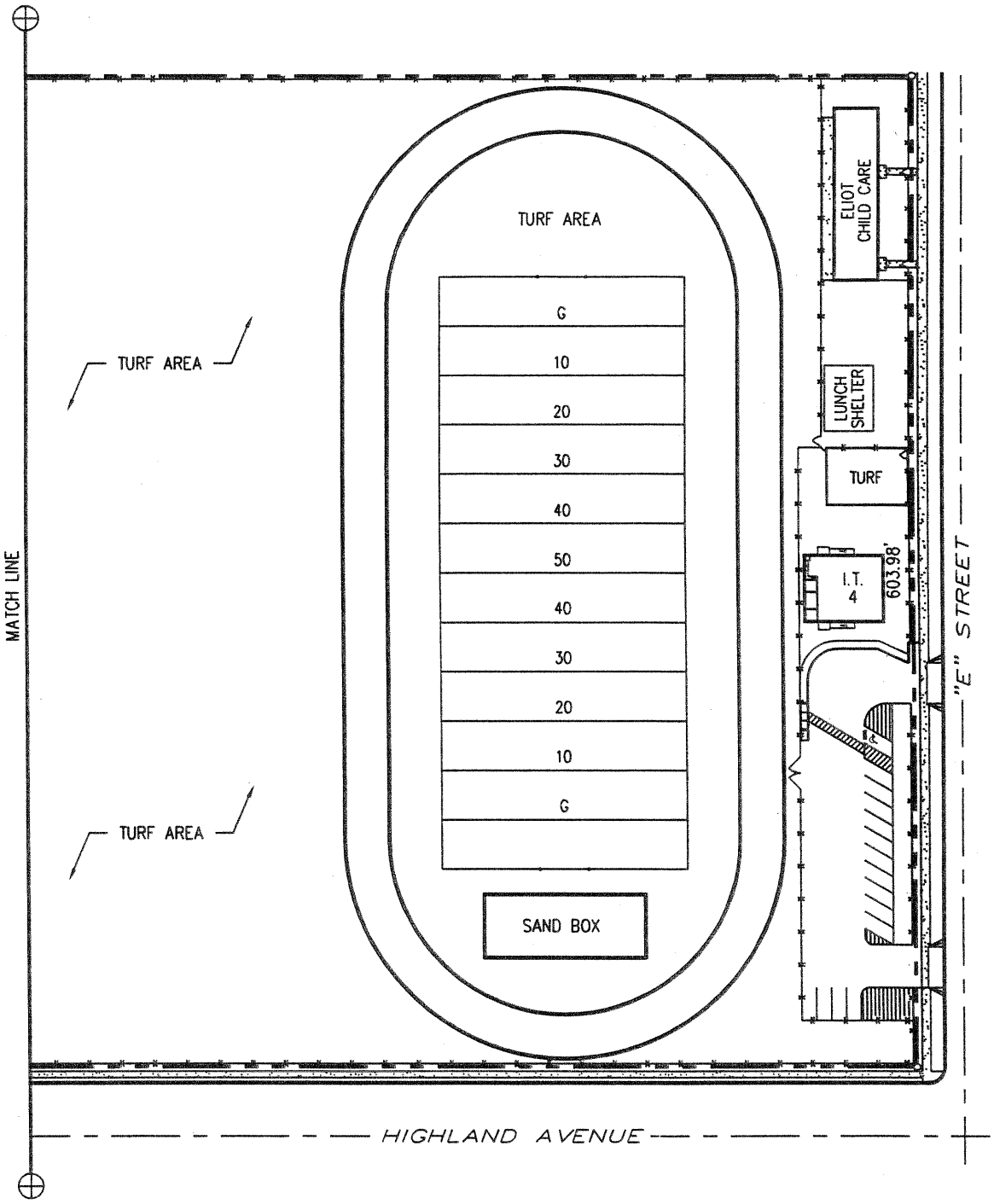
DATE
02-28-03

SHEET NO.
5
OF 5 SHEETS



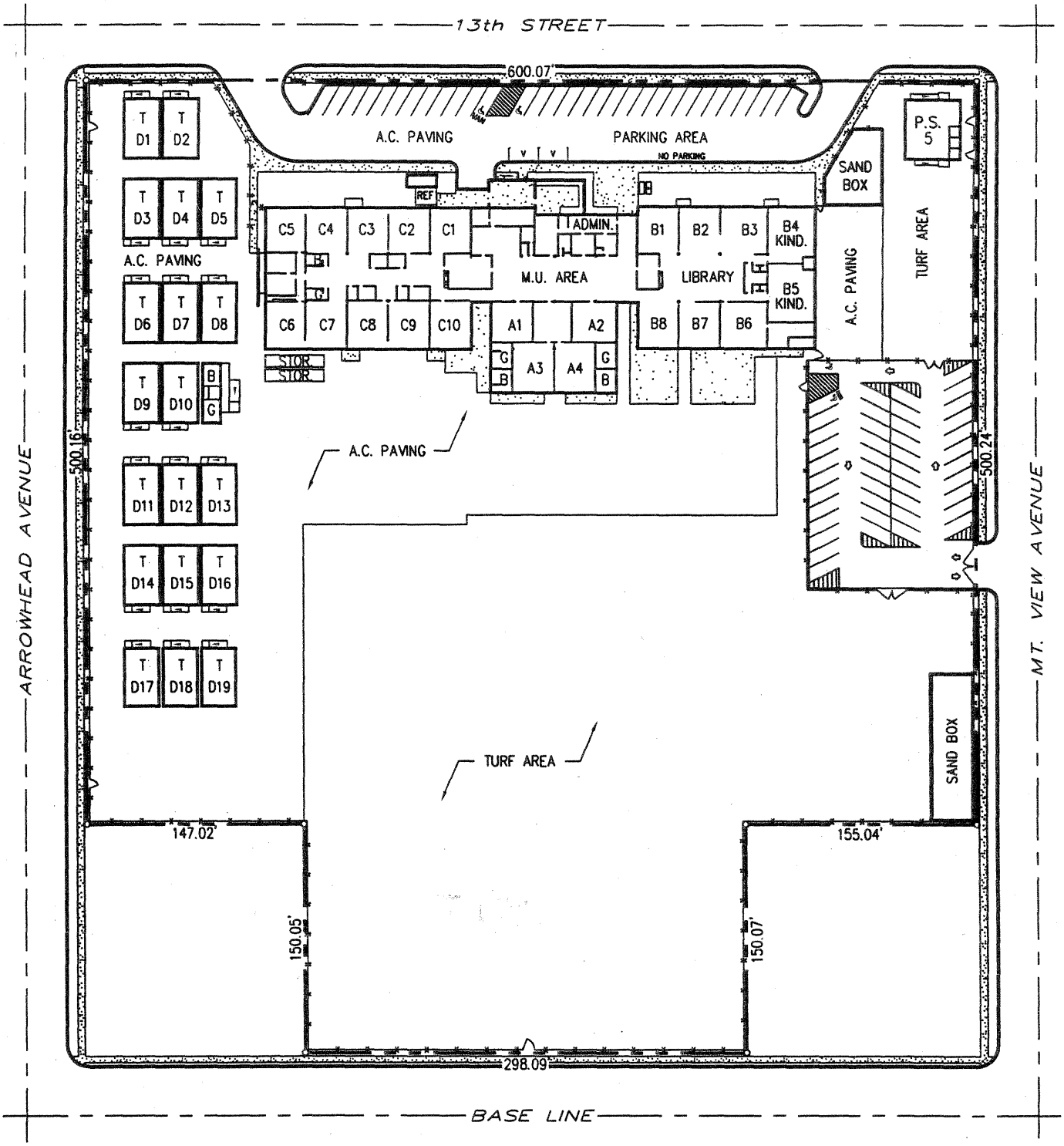
SCALE: 1"=100'-0"
SITE AREA: 17.77 ACRES

A.P.N. 149-201-01,02	PLOT PLAN	DRAWN A.H.S.
	ARROWVIEW MIDDLE SCHOOL	DATE 02-28-03
	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT SAN BERNARDINO, CALIFORNIA	SHEET NO. 1 OF 2 SHEETS



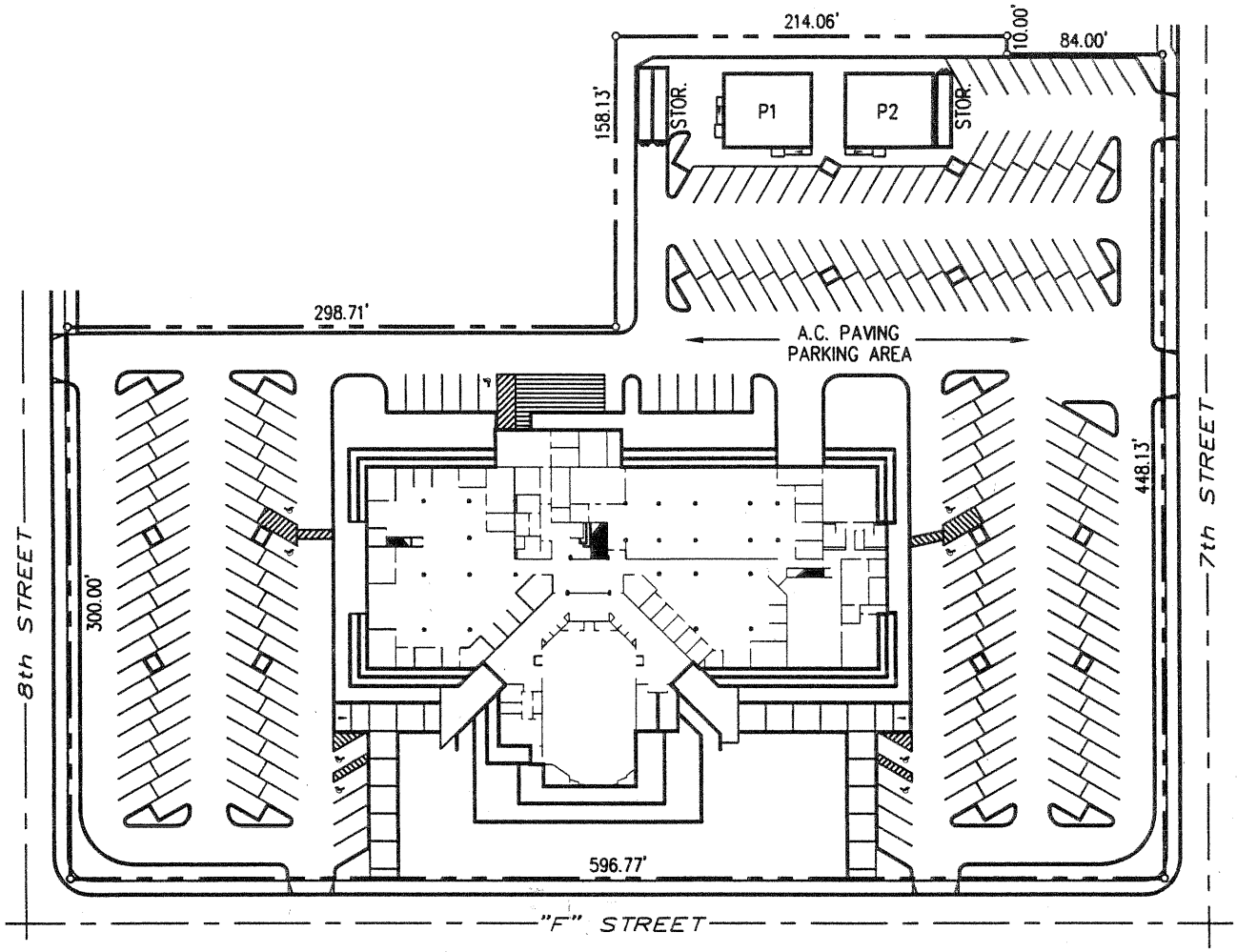
SCALE: 1"=100'-0"
SITE AREA: 17.77 ACRES

A.P.N. 149-201-01,02	PLOT PLAN	DRAWN A.H.S.
	ARROWVIEW MIDDLE SCHOOL	DATE 02-28-03
	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT SAN BERNARDINO, CALIFORNIA	SHEET NO. 2 OF 2 SHEETS



SCALE: 1"=100'-0"
SITE AREA: 6.77 ACRES

A.P.N. 146-221-04 THRU 19	PLOT PLAN	DRAWN A.H.S.
	LINCOLN ELEMENTARY SCHOOL	DATE 02-28-03
	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT SAN BERNARDINO, CALIFORNIA	SHEET NO. 1 OF 1 SHEET



SCALE: 1"=100'-0"
SITE AREA: 5.17 ACRES

A.P.N. 140-273-03,07,08,09,17	PLOT PLAN	DRAWN A.H.S.
	ADMINISTRATION BUILDING BOARD OF EDUCATION	DATE 02-28-03
	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT SAN BERNARDINO, CALIFORNIA	SHEET NO. 1 OF 1 SHEET

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

777 North F Street
San Bernardino, CA 92410

TECHNOLOGY INFRASTRUCTURE BID NUMBER 32-05

Addendum Number One (1) to Bid Number 32-05

To: All Prospective Bidders Date: December 8, 2005

This addendum is made a part of the above referenced Bid and all respondents shall conform and agree to these requirements when submitting their response. All other items, terms and conditions of the Bid remain as originally stated:

Reference All Section regarding Bidders Conference and Job Walk:

The Bidder's pre-bid conference and job-walk are not mandatory. Any vendor interested in bidding should attend the pre-bid conference and job-walk to answer any questions and explain details regarding the bidding requirements, specifications, and scope of the work. This conference and job-walk will give bidding contractors the opportunity to investigate and fully acquaint themselves with the conditions relating to the job so that they may fully understand the facilities, difficulties, restrictions, and any State of California requirements attending the execution of the work. It is the responsibility of all bidders to familiarize themselves with the samples sites to best understand the needs of the District. Bidders will not be allowed to walk District sites at any other time.

****

Companies requesting clarification of any areas of this Bid shall submit all such requests to the following dedicated District e-mail address – lenore.mccall@sbcusd.k12.ca.us . The District will respond to all such submitted questions. Answers to any questions will be posted on the district web site as an addendum. Checking website for addendum(s) is the sole responsibility of the bidder. All other Bid terms and conditions to remain as originally stated.
http://www.sbcusd.k12.ca.us/new/index.cfm?function=deppage&De=46&Cat=370

Please indicate the receipt, understanding and acceptance of this Addendum by having an authorized company representative sign below and return a copy with your Bid Response. Failure to do so may be cause for rejection of your bid.

Thank you,

Lenore McCall
Buyer, Purchasing Department, (909) 381-1339

Company Name	**Authorized Signature**
Date	**Printed Name and Title**

SAN BERNARDINO CITY UNIFIED
SCHOOL DISTRICT
777 North F Street
San Bernardino, CA 92410

TECHNOLOGY INFRASTRUCTURE BID NUMBER 32-05
Addendum Number Two (2) to Bid Number 32-05

To: All Prospective Bidders Date: December 20, 2005

This addendum is made a part of the above referenced Bid and all respondents shall conform and agree to these requirements when submitting their response. All other items, terms and conditions of the Bid remain as originally stated:

Reference original bid section:

Please add to the original bid section, page 30 of 167, General Terms and Conditions, item No. 1 Definitions:

rr. "Housing" Housing for purposes of this bid are considered to be but not limited to, racks, cabinets, wire management panels, patch panels, terminating wall plates etc.
Note: Housing items should be included in the pricing of this bid

ss. "Equipment" for purposes of this bid are considered to be but not limited to, electronics, Active Components, equipment, switches, routers, servers, UPS, access points, etc..
Note: Equipment items should not be included in the pricing of this bid

In response to questions from various bidders:

Question 1: Contractor's Licensing: Prime is required to have C-10 and C-7 license. For the Cisco Gold, Silver or Premier partnership, does partnership have to be associated with Prime or can it be with Sub?

District Response: Contractor/Bidder or Subcontractor does not need to hold a Cisco Partnership Certification for Bid 32-05 Technology Infrastructure bid.

Please remove in its entirety from all Bid Sections referring to "Contractor/Vendor requiring Cisco Gold, Silver, or Premier Partner." Bidder is not required to be a Cisco Gold, Silver, or Premier Partner for Technology Infrastructure Bid 32-05.

Question 2: Bidding Limit: Can a Sub submit only 1 bid?

District Response: Subs can submit multiple bids to different Prime's, but a Prime can only submit 1 bid. See page 8 of 167, No.10.

Question 3: Bid Bond: How does the vendor figure the amount of the bond, since the bond is not E-rate reimbursable?

District Response: Vendor's responsibility to make sure that bond is the current percentage of bid as required in bid document. See page No. 7, 10, and 14 of 167, which state 10% of total Bid amount.

Question 4: New Equipment: How does the vendor figure in new equipment costs in the bid?

District Response: This bid is for cabling and housing only. See Definitions section of bid and this addendum. See page 30 of 167. Vendor's to attach under attachment A-1 separate section any items that they feel might become necessary to complete work and provide a unit price breakdown. See page 11 of 167.

Question 5: Liquidated Damages: If the liquidated damages are based on overall project or site-by-site basis? Also, how many sites were going to be awarded and how they will be grouped?

District Response: Schedule for liquidated damages and timelines for completion will be agreed upon and assigned with each PO in accordance with Erate or District deadlines. See page 18 of 167, No. 3. Also, award will be based on the sample sites in the proposal. However, the District reserves the right to use the prices in the awarded proposal to purchase items/work for all District sites included in the bid documents.

Question 6: Working Hours: What working hours should the vendors base their bids on? Will they be allowed to work during normal working hours, or should they base their bids on 2nd shift working hours? Also, will storage area be supplied for vendor?

District Response: District prefers work to be done during normal working hours and District will make every attempt to accommodate. However, see bid documents for requirements when after hours work is required. See page 39, 73, and 101. Vendors are to keep areas secure. The successful bidder will be permitted to place a storage container on a District agreed upon place in the District for use in storing materials for the District while working on this project.

Question 7: Vendors asked for clarification on the scope of work. Will they be able to view all sites to base their bids?

District Response: The 4 sample sites are representative of all sites, and the bids should be based on the 4 sample sites. The award will be based on the sample sites. The successful bidder will be allowed to view the other District sites prior to each job.

Question 8: How does DVBE affect the award? Do vendors get an incentive?

District Response: DVBE is a requirement. Any bid submitted without proper documentation will be considered as non-responsive. No percentage advantage or incentive is allowed based on DVBE or local businesses.

Please add to the original bid and complete as required the following DVBE forms attached hereto and made part of this addendum:

Disabled Veteran Business Enterprises (DVBE) Outreach, Certification of Compliance with DVBE policy, Disable Veteran Business Enterprise (DVBE) Anticipated Participation Statement, and Disabled Veteran Business Enterprise (DVBE) Actual Participation Statement

Question 9: Is the number of drops for middle schools on Pg. 149 an error?

District Response: Yes, it was an error. The total for Middle School drops should be 150, not 1500.

Question 10: Will sign in sheet be shared?

District Response: Yes, Sign in Sheet for Job-walk will be posted with addendum, check District website.

Question 11: Should vendor split their bids as E-rate vs. non E-rate?

District Response: No, bid as a single price. Do not give separate prices for E-rate or non-E-rate items.

Question 12: On Page 149, is a single cable considered a drop, and is video included in the total number of drops per site?

District Response: See drop breakdown below:
Number of drops per sample site:
Administrative Site – 100 data drops, 20 phone drops, and 10 video drops, 3 patch panels
High School Site – 200 data drops, 40 phone drops, and 20 video drops, 5 patch panels
Middle School Site– 150 data drops, 30 phone drops, and 15 video drops, 4 patch panels
Elementary School Site – 100 data drops, 20 phone drops, and 10 video drops, 3 patch panels
Note: All drops are to be cat5e cable and no longer than 280'.

Question 13: How are the vendors supposed to figure the number of feet of fiber optic needed for job?

District Response: See page 148 of 167, Fiber Runs, vendor will be shown locations during job-walk. **See attached Conduit Path Plot Plan for Pacific High School, which is the only site that currently has underground fiber.** In the future the District may wish to add additional fiber at various District sites.

Question 14: CMAS: Do vendors bid based on CMAS pricing?

District Response: No. Responses must be in accordance with the District bid # 32-05.

Question 15: How will questions be answered?

District Response: See page 4 of 167, No.8.

Question 16: RFI Deadline: When is RFI deadline?

District Response: See page 4 of 167, No. 3.

Question 17: Schedule of Values: What is the deadline to provide the schedule of values?

District Response: See page 34 of 167, item No. 2

Question 18: Page 143, Section 2.9 Active Components. How are the vendors to figure their bids? How to divide the total number of drops among IDF and MDF?

District Response: There are no distinctions between IDF and MDF data drops. All data drops must be CAT 5e compliant, in addition all voice, video and data drops must be CAT 5e compliant.

Question 19: Section 2.9, Page 143, requires that the cabling contractors provide Cisco hardware, UPS, and Data cabinets. Is this correct? If so, more definition needs to be added to this hardware. Specific part numbers and quantities per school will need to be specified for pricing purposes.

District Response: No, Section 2.9, Page 143, Any description of the Active Components/Equipment/Electronics were included to describe the current District environment and are not to be bid on.
See Addendum No. 2, General Terms and Conditions, item No. 1 Definitions "ss" Any description of equipment/electronics or active components in Bid 32-05 bid is there to describe the current environment, and are not to be included in the pricing of this bid.

See Addendum No. 2, General Terms and Conditions, item No. 1 Definitions "rr". Housing, items are to be included in the pricing of Bid 32-05. Housing for purposes of this bid are considered to be but not limited to, racks, cabinets, wire management panels, patch panels, terminating wall plates etc. Housing items should be included in the pricing of this bid.

Question 20: Section 2.9 is also the only section that makes reference to cable management panels. If the cabling contractor should be providing cable management panels how many should be provided per MDF/IDF/School?

District Response: Bidder is to use existing cable management panels where possible and space permitting. Additional 1U cable management panels will be provided by the successful bidder when existing panels are exhausted. Bidders should plan and price accordingly when submitting their proposals.

Question 21: The bid specs indicate that for purposes of pricing these projects we are to assume that High Schools will get 200 drops, Middle Schools get 150 drops, and Elementary and Administrative sites get 100 drops per location.
How will these drops be distributed around the campus? Pacific High School has 15 IDF's, are we to assume that 10 IDF's get 10 drops, and 5 IDF's get 20 drops?

District Response: The quantities listed for drops at the sample sites will be distributed as needed for specific sites and numbers of classrooms. The number and locations of drops needed will be determined at time of site walk prior to work being performed.

Question 22: Without knowing how many new drops we will be installing per IDF, we won't know how many patch panels to provide for that IDF. Or do we price Pacific High School based on 8 drops per classroom (1 teacher, and 7 students) and then assume we are re-cabling the entire school?

District Response: See Addendum No. 2, response to question No. 12.

Question 23: Presently two IDF's are connected to the MDF through another IDF. These would be: IDF G-3, Copper connected to IDF G-1 and then connected to the campus LAN. IDF Z-2, Multimode fiber is routed through IDF Z-6 back to the MDF. Please confirm what cable should be run from the MDF to each of the 4 aforementioned IDF's.

G-1; 6-strand multi-mode directly to MDF?
G3; 6-strand single-mode directly to the MDF?
Z-2; 12-strand single-mode directly to the MDF?
Z-6; 6-strand single-mode to IDF Z-2?

District Response: **See page 148 of 167, <u>Pacific High School</u>** for clarification purposes please add the following:
IDF G-1; 6-strand **single**-mode directly to MDF
IDF G-3; 6-strand single-mode directly to the MDF
IDF Z-2; 12-strand single-mode directly to the MDF
IDF Z-6; 6-strand **single**-mode to IDF Z-2

Question 24: While going around on the job-walk a comment was made: "...in locations secure from students – an open rack is OK." Please confirm. Should we assume that we are putting a cabinet in any location requiring a new one? In what situation will an open wall-mount rack be acceptable?

District Response: Vendor may be required to install a new housing, however, District does not want open racks installed under any circumstance. Open wall-mount racks are not acceptable.

Question 25: IDF in the Employee Benefits at BOE that is mounted in a cabinet. What scope of work needs to be done at this location? Are the patch cords supposed to be removed? If no drops are to be added in this area is anything to be done

with this location? This question applies to all locations visited in the job walk.

District Response: See Addendum No. 2, response to question No. 12.

Question 26: Section 2.3 Paragraph A-1 specifies:
Horizontal Cable – Unshielded Twisted Pair shall be 24 AWG, 4-pair, Category 5 Enhanced, with a ban with of not less than 350 MHz. No Unshielded Twisted Pair cable can meet that bandwidth requirement. Category 6 is only rated to 250 MHz. Do you mean 350 Mbits/sec?

District Response: Please replace 350MHz with 250MHz in original bid section.

Also make the following changes:

Reference Page 149 of 167 and remove and replace original bid section, which currently reads:
"Use Yellow cable for video"

Replace with the following:

Use Black cable for video

Please remove and replace all reference to Public Contract Code 3300. Please replace with Business & Professional Code 7028.15, which states contractor must be properly licensed at time of bid submission.

****

All District responses to the questions above are hereby incorporated as amendments to this bid 32-05.

Companies requesting clarification of any areas of this Bid shall submit all such requests to the following dedicated District e-mail address – lenore.mccall@sbcusd.k12.ca.us . The District will respond to all such submitted questions. Answers to any questions will be posted on the district web site as an addendum. Checking website for addendum(s) is the sole responsibility of the bidder. All other Bid terms and conditions to remain as originally stated.
http://www.sbcusd.k12.ca.us/new/index.cfm?function=deppage&De=46&Cat=370

Please indicate the receipt, understanding and acceptance of this Addendum by having an authorized company representative sign below and return a copy with your Bid Response. Failure to do so may be cause for rejection of your bid.

Thank you,

Lenore McCall
Buyer, Purchasing Department, (909) 381-1339

Company Name **Authorized Signature**

Date **Printed Name and Title**

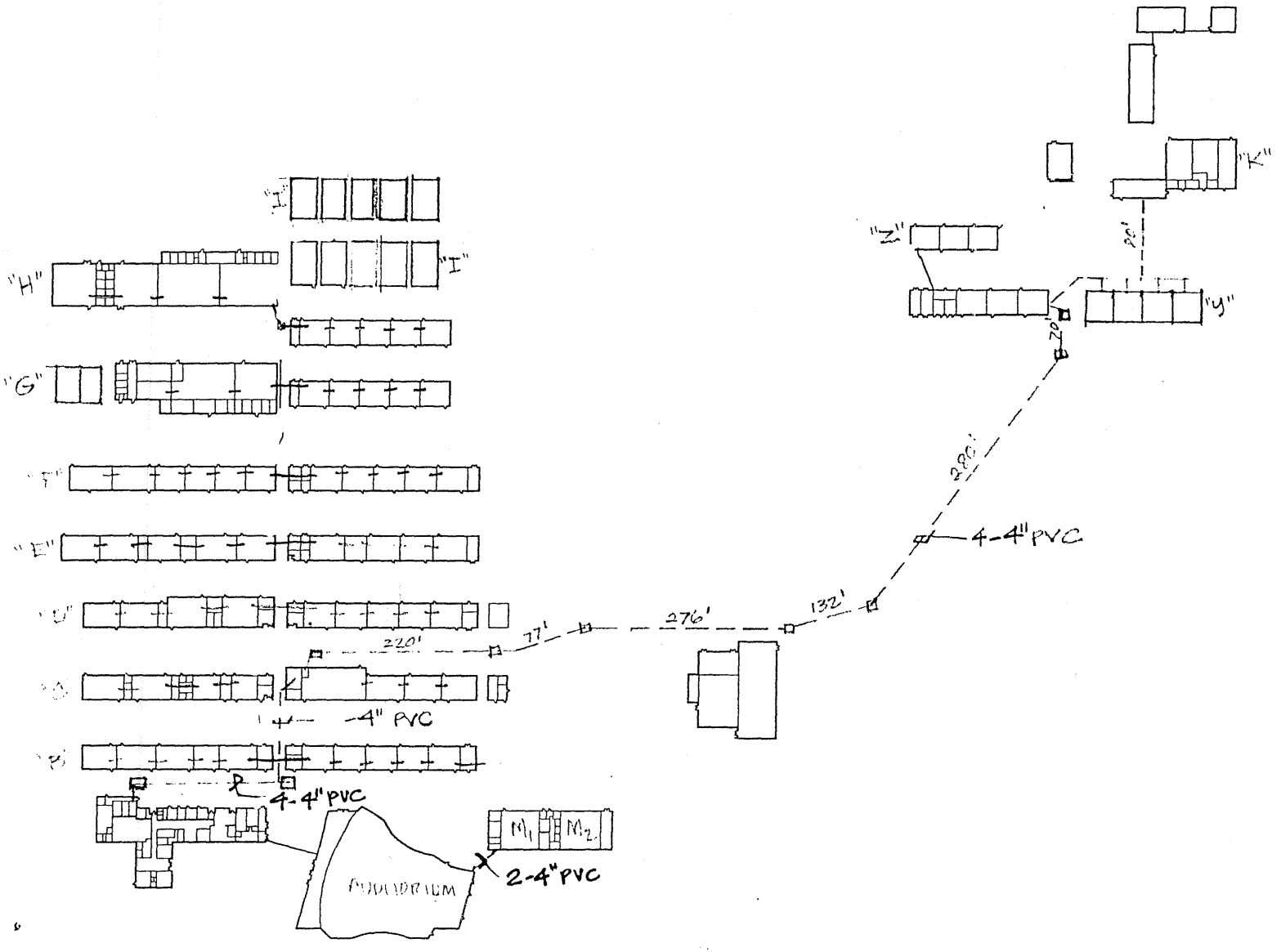
Lan Papa

Sign In (Job Walk) – Bid No. 32-05

Name / Email Address	Company	Phone / Fax Numbers
1. ISAIAS MUÑOZ		(562) 222-1121
IMUNOZ@LTECHNET.COM	L TECH NETWORK SERVICE	(562) 222-1533
2. RANDY HERNAN		(949) 724-9960
	CHECKPOINT COMMUNICATIONS	(949) 724-1698
3. Ed Acosta	Verizon	(909) 590-6126
		(909) 590-6765
4. Javier Moreno		(714) 758-0120
javier@amiteko.com	AMI Electrical + Telecom	(714) 758-0631
5. BRIAN JOSEPH	COMPEL.	(562) 944-9905 (F) (562) 946-8321
6. ~~PAUL BASSCKER~~	~~NEXUS IS~~	~~951-520-9378 (V)~~ ~~951-734-8064 (F)~~
7. RUS MIRANDA	GEMINI ASSOCIATES	(949) 830-0858 V (949) 830-0858 F
8. Tom Cylkowski	Vector Resources	310-436-1182 (V)
tcylkowski@vectorusa.com		
9. TODD KIMBER	MATRIX INDUSTRIES	562-597-7720
10. MIKE CARDINO	MATRIX INDUSTRIES	562 236-2700

Sign In (Job Walk) – Bid No. 32-05

Name / Email Address	Company	Phone / Fax Numbers
1. Tim McGuire	Spectrum Comm	951 371 0549
TMcGuire@spectrumccsi.com		951 370 3833
2. Tommy Hernandez	Spectrum Comm.	951 371-0549
3. Mel Nowlin	Communications Connectivity Solutions	909 3350594
mel.nowlin@communications connectivity.com		909 3350595
4. Ricia McDonald	ABSOLUTE Comunications	714-751-8343
PATRICIA.McDonald@ABSOLUTE.com.BIZ		714-751-8345
5. Rudy Padre	TRANSITION NETWORKS	fax-744-2708
rudyp@transition.com		775-201-8992
6. MARK ALLEN	Vector Resources	310 436-1000
mallen@vectorusa.com		310 921-3226
7. Frank Spaeth	NIC	310-268-5114
fspaeth@nicweb.com		
8. Brent Bush	CDWG	310 642 0777
bbush@cdwg.com		
9. Jeremy Curran	Compel	562-843-2337
Jeremy.Curran@Compel.com		
10.		



Conduit Path Plot Plan
For Pacific High School

REV 6-25-98

Network Configuration For
San Bernardino City Unified School District
Pacific High School

Legend

— • Conduit

⊠ • Pull Box

Site Plan

N

Site Plan
Conduit Runs

Date Issued:	Drawn by:	Page
	Mike Hatza	1

Prepared By
DIGITAL NETWORKS
11 Musick • Irvine, California 92718
Business: (714) 586-2000 • Fax: (714) 586-0300

Disabled Veteran Business Enterprises (DVBE) Outreach

This is a Disabled Veteran Business Enterprise Bid all requirements of the Disabled Veteran Business Enterprise must be met including but not limited to bidder proof of publication seeking active participation of Disabled Veteran Business Enterprise.

Please reference the attached three forms and complete as required:

1) Certification of Compliance with DVBE Policy. (To be completed by all bidders and returned with their bids, along with proof of bidder's publication seeking active participation of DVBE.)

2) DVBE Anticipated Participation Statement (To be completed by successful bidder upon execution of contract.

3) DVBE Actual Participation Statement (To be completed by successful/contracted bidder prior to, and as a condition of final payment).

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

Bid # _____

Project _____

Certification of Compliance with DVBE Policy

Policy No. 3323 DISABLED VETERAN BUSINESS ENTERPRISES

Project agreements for the construction and/or modernization of school facilities, which are approved for funding by the State Allocation Board shall include the following language:

1. As required by the Education Code Section 17076.11, this Board has a participation goal for Disabled Veteran Business Enterprises of three percent, per year, of the overall dollar amount of funds allocated to the District by the State Allocation Board pursuant to the Leroy F. Greene School Facilities Act of 1998 for construction or modernization and expended each year by the District.

2. At the time of execution of a contract, the contractor will provide a statement to the District of anticipated participation of Disabled Veteran Business Enterprises in the contract. Prior to, and as a condition for final payment under any contract for such project, the contractor shall provide appropriate documentation to the District identifying the amount paid to Disabled Veteran Business Enterprises in conjunction with the contract, so that the District can assess its success at meeting this goal.

3. The Superintendent or designee shall devise a process for the implementation of this policy as defined in the Education Code and shall make any necessary revision to keep the policy current with State legislation.

Adopted by the Board of Education: May 2, 2000

The bidder/contractor agrees to comply with the above District DVBE policy:

Bidder/Contractor _____

Signature _____

Date _____

(Copy on Company Letterhead if Available)

Date: _____

San Bernardino City Unified School District
777 North "F" Street
San Bernardino, Ca 92410

Disabled Veteran Business Enterprise (DVBE) *Anticipated* Participation Statement

Project:
_____

Our firm anticipates using Disabled Veteran Business Enterprise (DVBE)-supplied services/materials amounting to $_____or _____% on this project. Attached is the DVBE Certification Letter(s) for the DVBE firms/ individuals we anticipate using.

At the conclusion of the project we will report to the District the total dollar amount of DVBE participation (services/materials) used under our contract for this project, in compliance with the District's DVBE Policy No. 3323.

Company: _____

Name:
_____

Title: _____

Signature: _____

(Copy on Company Letterhead if Available)

Date: _____

San Bernardino City Unified School District
777 North "F" Street
San Bernardino, Ca 92410

Disabled Veteran Business Enterprise (DVBE) *Actual* Participation Statement

Project:
_____

Our firm utilized Disabled Veteran Business Enterprise (DVBE)-supplied services/materials totaling $_____or _____% on this project.

Attached are copies the DVBE Certification Letter(s) for the DVBE firms/ individuals we used, along with copies of invoices, contracts, or receipts confirming the firms utilized, with the combined amounts equaling the total above.

Company: _____

Name:
_____

Title: _____

Signature: _____

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

777 North F Street
San Bernardino, CA 92410

TECHNOLOGY INFRASTRUCTURE BID NUMBER 32-05

Addendum Number Three (3) to Bid Number 32-05

To: All Prospective Bidders Date: December 22, 2005

This addendum is made a part of the above referenced Bid and all respondents shall conform and agree to these requirements when submitting their response. All other items, terms and conditions of the Bid remain as originally stated:

In response to questions from various bidders:

Question 1: In checking with the Cal. State licensing board we have discovered that a C-10 certification supercedes a C-7 certification. A person holding a C-10 is licensed to do all applicable C-7 work. Is a prime contractor that holds a C-10 but not a C-7 license able to bid this project?

District Response: The District is requiring the prime to hold both C10 and C7 license.

Please replace in the original bid section, page 140 of 167, Section 2.5, Paragraph D-1 with the following:

> **"1. Optical fiber cables used outside shall be housed in an OSP indoor/outdoor jacket. Inside fiber shall be riser or plenum tight buffered."**

Please remove in its entirety from the original bid section, page 140 of 167, Section 2.5, Paragraph D-2 which states:

> **"2. Inside/outside gel-filled construction shall be used if entering a building more than 50 feet <u>outside</u> of EMT or IMC conduit."**

Please remove response to question 26 on page 6 of 13 of Addendum Number 2, which states:

> **"Please replace 350MHz with 250MHz in original bid section"**

Please replace in original bid Section 2.3, A-1, on page 138 of 167, with the following:

> **"Horizontal Distribution Cable-Unshielded Twisted Pair Cable: construction shall be 24AWG, 4-pair, Category 5 Enhanced, with a bandwidth of not less than 100MHz."**

****

All District responses to the questions above are hereby incorporated as amendments to this bid 32-05.

Companies requesting clarification of any areas of this Bid shall submit all such requests to the following dedicated District e-mail address – lenore.mccall@sbcusd.k12.ca.us . The District will respond to all such submitted questions. Answers to any questions will be posted on the district web site as an addendum. Checking website for addendum(s) is the sole responsibility of the bidder. All other Bid terms and conditions to remain as originally stated.
http://www.sbcusd.k12.ca.us/new/index.cfm?function=deppage&De=46&Cat=370

Please indicate the receipt, understanding and acceptance of this Addendum by having an authorized company representative sign below and return a copy with your Bid Response. Failure to do so may be cause for rejection of your bid.
Thank you,

Lenore McCall
Buyer, Purchasing Department, (909) 381-1339

Company Name	**Authorized Signature**
Date	**Printed Name and Title**

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

777 North F Street
San Bernardino, CA 92410

TECHNOLOGY INFRASTRUCTURE BID NUMBER 32-05

Addendum Number Four (4) to Bid Number 32-05

To: All Prospective Bidders Date: January 4, 2006

This addendum is made a part of the above referenced Bid and all respondents shall conform and agree to these requirements when submitting their response. All other items, terms and conditions of the Bid remain as originally stated:

In response to questions from various bidders:

Question 1: Can we use J-hooks as apposed to conduit? If not what fill ratio are we leaving for future cable, 40%, 60%?

District Response: See page 137 through 147. It is the Districts intent to eliminate or at the least reduce the amount of unsightly wiring installations. This question and the questions below address specific conditions that are to be avoided where possible. Any use of the installation methods mentioned should be treated as an exception and will have to be approved for the specific work being done at the time for the site. Under no circumstances to any exposed wiring that can be viewed by general on lookers as part of the work being done under this bid.

There is to be no viewable exposed wiring. J hooks and certain other approved installation methods can be used in the area above a dropped ceiling out of view. Under a dropped ceiling wiring should be place inside walls wherever possible. Whenever that is not possible approved raceways (Panduit surface mount raceways for example are a current installation product that matches existing approved installations) can be used on a case by case basis as part of the specific requirements of that site work.

With regard to fill rates where a pathway must be installed a 40% fill rate will be acceptable under most circumstances. No conduit pathway installation should be less than 2 inches unless conditions warrant such (a lack of space) and it has been approved by Information Technology.

Question 2: Are we required to paint any exposed conduit?

District Response: Viewable exposed conduit is not allowed unless approved by Information Technology for the specific work to be done. If conduit is approved painting will not be required as part of the installation requirements.

Question 3: On page 149 it states "No exposed wires in any room, service provider is to avoid the use of wiremold raceways." If we are to avoid wiremold what do you suggest we install? Surface mount conduit?

District Response: See answer for Question 1, Addendum #4.

****

All District responses to the questions above are hereby incorporated as amendments to this bid 32-05.

Companies requesting clarification of any areas of this Bid shall submit all such requests to the following dedicated District e-mail address – lenore.mccall@sbcusd.k12.ca.us . The District will respond to all such submitted questions. Answers to any questions will be posted on the district web site as an addendum. Checking website for addendum(s) is the sole responsibility of the bidder. All other Bid terms and conditions to remain as originally stated.
http://www.sbcusd.k12.ca.us/new/index.cfm?function=deppage&De=46&Cat=370

Please indicate the receipt, understanding and acceptance of this Addendum by having an authorized company representative sign below and return a copy with your Bid Response. Failure to do so may be cause for rejection of your bid.
Thank you,

Lenore McCall
Buyer, Purchasing Department, (909) 381-1339

Company Name	**Authorized Signature**
Date	**Printed Name and Title**

GENERAL CONTRACT
Agreement Bid No. 32-05

THIS GENERAL CONTRACT (this "General Contract") is made as of February 10, 2006, in the County of San Bernardino, State of California, by and between the **SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT** (hereinafter called the **"District"**), and **Checkpoint Communications** (hereinafter called **"Contractor"**).

IN CONSIDERATION OF THE MUTUAL COVENANTS AND CONSIDERATIONS STATED HEREIN, the receipt and sufficiency of which are hereby acknowledged, the District and Contractor hereby agree as follows:

1. **SCOPE OF WORK.** The Contractor shall perform within the time stipulated herein, and shall provide all labor, equipment, materials, tools, utility services and transportation to complete in a workmanlike manner, in accordance with the terms and conditions of the Contract Documents, as defined in Section 10 below, all of the work (the **"Work"**) required in connection with the following titled project, all as more fully described in the Contract Documents (the **"Project"**):

Technology Infrastructure, Bid No. 32-05

It is the duty of the Contractor to complete the Work in exact accordance with the Contract Documents and any approved revisions or interpretations thereto, including, without limitation, all Project Requests for Information, Submittal Endorsements and Architectural and Engineering Field Directives and Inspector Non-compliance Notices. The Contractor shall be liable to the District for any damages arising as a result of a failure to fully comply with its obligations hereunder and, except as otherwise expressly provided in Section 8 of the General Terms and Conditions, shall not be excused from such obligations by any act or omission of the Architect (as defined in Section 7 below), any licensed engineer whose stamp appears on the drawings, the Inspector (as defined in Section 7 below) or any specialty inspector, any representative of the Division of the State Architect (DSA), the District or the State of California.

2. **CONTRACT PRICE.** The District shall pay to the Contractor as full consideration for the faithful performance of the Contract, subject to any additions or deductions ordered or approved by the District by any Change Order (as described and provided for in the General Terms and Conditions), the **Not to Exceed** price of: **Sixteen Million, Six Hundred Eighty Two Thousand, Four Hundred Forty Nine Dollars and Twenty Six Cents.**
$16,682,449.26, or District portion of the Contract Price after applying E-rate discounts. Purchase orders will be issued on an as-needed basis by line item throughout the term of the contract based on the Bid Form, Schedule of Values line item unit price breakdown, and line item prices shown on Attachment A-1. Quantities may vary.

The successful bidder(s) will be responsible for seeking and procuring their E-Rate payback directly from the appropriate agencies. When using E-Rate funding discounts, the District will only issue purchase orders for, and pay the amounts after the E-Rate discounts are applied in accordance with all legal requirements.

GENERAL CONTRACT
Agreement Bid No. 32-05
(Continued)

The District may use this bid to issue purchase orders and pay for items on a purchase order that are not eligible for E-RATE discounts. The District will pay the vendor using District funds for these purchases.

3. **CONTRACT TIME**. The District wishes to award a five (5) year contract to the successful bidder with the District's option to terminate annually without penalty or cost to the District. Purchase Orders will be issued on an as needed basis throughout the term of the contract. The Work shall be commenced on the date stated in the Districts Notice to Proceed to the Contractor (**July 1, 2006 through June 30, 2011**), and as specified therein, shall be completed within **the times mutually agreed at the awarding of a specific purchase order** from and after the Starting Date (**July 1, 2006**) in accordance with E-rate or other deadlines. If the Work is not completed in conformance with the foregoing, the Contractor shall be subject to liquidated damages in the amount set forth in Section 4 below.

4. **LIQUIDATED DAMAGES**. The agreed upon liquidated damages payable to the District pursuant to Section 7 of the General Terms and Conditions in the event that the Work is not completed within the Contract Time shall be One Thousand Dollars **($1,000.00)** for each calendar day that the completion of the Project is so delayed beyond the expiration of the Contract Time.

5. **INSURANCE REQUIREMENTS**. As provided in Section 43 of the General Terms and Conditions, Contractor shall procure and maintain from the Starting Date until final payment under this General Contract is made to the Contractor, and shall require all subcontractors to so procure and maintain for all periods during which such subcontractors are performing any portion of the Work, the insurance described below in the coverage amounts described below.

(a) Builder's Risk Insurance or its equivalent on a so-called all risks basis (including collapse, but excluding coverage for earthquake and flood) on a completed value (non-reporting) form for the full Contract Price (as may be increased from time to time pursuant to Change Orders (as defined in the General Terms and Conditions) or full replacement value, whichever is the greater sum, covering the interest of the District, its contractors and subcontractors in all Work, including, without limitation, all materials and equipment stored on the site to be incorporated in such Work and all materials and equipment already incorporated in such Work.

(b) Comprehensive Bodily Injury and Property Damage Liability Insurance for Combined Single Limit Bodily Injury and/or Property Damage Liability of not less than $1,000,000 each occurrence. The policy(ies) so secured and maintained shall include coverage for Contractual or Assumed Liability, Contractors Protective (Contingency) Liability, Products Liability or Completed Operations, Hazardous Materials (required when the Contract involves removal of these materials), and Owned, Hired, and Non-owned Automobiles Insurance; and shall be endorsed to the name of the San Bernardino City Unified School District, its Board and all other indemnities described in Section 36 of the General Terms and Conditions as additional insured's and shall provide specifically that any insurance carried by the District which may be applicable to any claim or loss shall be deemed excess and the Contractor's insurance primary despite any conflicting provisions in the Contractor's policy to the contrary. Coverage shall be maintained with no self-insured retention.

(c) Workers' Compensation Insurance in accordance with the provisions of the California Labor Code, adequate to protect it and all subcontractors from claims under Workers'

Compensation Acts which may arise from operations under the Contract Documents, whether such operations be by the Contractor or by any subcontractor or anyone directly or indirectly employed by either of them.

(d) All insurance coverage amounts specified above shall be Project-specific to this particular Work, and all such insurance shall cover only risks relating to or arising out of the Project and the Work. The insurance and required amounts of insurance specified above shall not be reduced or encumbered on account of other work contracted for or being performed by Contractor.

(e) Such other insurance in amounts as the District may reasonably deem advisable from time to time for protection against claims, liabilities and losses arising out of or in connection with the Project or the Work; provided that, the additional cost of such insurance shall be added to the Contract Price pursuant to a Change Order in accordance with Section 9 of the General Terms and Conditions.

6. **PROVISIONS REQUIRED BY LAW**. Each and every provision of law and clause required to be inserted into this General Contract and the other Contract Documents shall be deemed to be inserted herein or therein (as applicable) and this General Contract and such other Contract Documents shall be read and enforced as though it were included herein or therein (as applicable), and if through mistake or otherwise any such provision is not inserted or is not inserted correctly, then upon application of either party the General Contract or any of the other Contract documents (as applicable) shall forthwith be physically amended to make such insertion or correction.

7. **DESIGNATION OF ARCHITECT AND INSPECTOR**. The Architect/Engineer for the Project shall be **Director of Information Technology or his designee** (or such other person or legal entity as the District may designate from time to time by written notice to the Contractor), and the Inspector shall be **Director of Information Technology or his designee** (or such other person or legal entity as the District may designate from time to time by written notice to the Contractor).

8. **DUE AUTHORIZATION**. This General Contract is, and all Contract Documents to be executed by Contractor in connection with the Work and the Project will be, duly authorized, executed and delivered by Contractor, is and will be legal, valid and binding obligations of Contractor enforceable against Contractor in accordance with their respective terms (except to the extent that such enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the right of contracting parties generally), and does not and will not violate any provisions of any agreement to which Contractor is a party or may become a party or to which it is subject or may become subject. The representations and warranties contained in this Section 8 shall be deemed to be remade each day throughout the term of the Contract.

GENERAL CONTRACT
Agreement Bid No. 32-05
(Continued)

9. **AUTHORIZATION OF SIGNATORIES**. Each individual and entity executing this General Contract hereby represents and warrants that he, she or it has the capacity set forth on the signature page hereof with full power and authority to bind the party on whose behalf he, she or it is executing this General Contract to the terms and provisions hereof.

10. **COMPONENT PARTS OF THE CONTRACT**. The "Contract" consists of the following contract documents, including but not limited to Bid No. 32-05, all of which are component parts of the Contract as if herein set out in full or attached hereto (the "Contract Documents"):

Notice to Contractors Calling for Bids
Information for Bidders
Bid Form
List of Subcontractors
Contractor's Certificate Regarding Worker's Compensation
Bid Bond
Non-collusion Affidavit
Deviations Form

General Contract
Performance Bond
Payment Bond
General Terms and Conditions
Special Conditions and any Supplementary General Terms and Conditions

District Site Specific Asbestos/HAZMAT documentation (AHERA)
Labor Compliance Program (LCP)
Requests for Information (RFIs)
Submittal Endorsement
Specifications

Addenda Nos. *Addm* as issued
Drawings
Change Orders
Architect/Engineer Field Directives
Submittal Responses
Title 24 of the California Code of Regulations
California Building Code (2000 Edition)
Prevailing Wage Rate Tables

All of the above-listed Contract Documents are intended to be complementary. Work required by any one of the above-named items and not required by another shall be performed as if required by all.

GENERAL CONTRACT
Agreement Bid No. 32-05
(Continued)

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

DISTRICT:

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
777 N. "F" Street
San Bernardino, CA 92410

Mohammad Z. Islam
Assistant Superintendent, Business and Finance

CONTRACTOR:

Checkpoint Communications
2168 Michelson
Irvine, CA 92612

BY _____

BY V.P. James Shoaff
Authorized Officers
or Agents

(CORPORATE SEAL)