

**REQUEST FOR PROPOSAL
RESOLUTION #2018-22**

District Access Control System



**Proposals must be received in Technology Services
by 4:00 p.m. on May 25, 2018**

Submit Response To: Lodi Unified School District
Technology Services Department
1305 E. Vine Street
Lodi, CA 95240

Attention: Edith A. Holbert

**Questions or
Clarifications:**

All questions must be submitted in writing via
email to: rfpquestion@lodiUSD.net

THIS PAGE INTENTIONALLY LEFT BLANK FOR PRINTING PURPOSES

Table of Contents

Part 1 – Summary	4
1.1. Purpose	4
1.2. RFP Schedule.....	4
1.3. Qualified Contractor	4
1.4. Submission	4
1.5. Response Format	5
1.6. Questions	5
1.7. Form of Agreement.....	5
1.8. Indemnity.....	5
1.9. Insurance	5
1.10. Full Opportunity.....	6
Part 2 – Project Description	6
2.1. Project Description	6
2.2. Project Schedules.....	7
2.3. Project Locations.....	8
2.4. Project Site Visit	9
Part 3 - Scope of Services	9
3.1. Scope of Services Summary	9
3.2. References	10
3.3. Quality Assurance	10
3.4. Submittals	10
3.5. Product Delivery, Storage and Handling.....	11
3.6. Warranty.....	11
Part 4 - Products.....	11
4.1. Access Control System Products.....	11
4.2. Wire and Cable.....	15
Part 5 - Execution	15
5.1. Requirements.....	15
5.2. As-Built Drawings.....	16
5.3. Training	16
5.4. Programming	16
5.5. Test and Reports	17
5.6. Lodi USD Technology Services Requirements.....	17

REQUEST FOR PROPOSAL

Part 1 – Summary

1.1. Purpose

Lodi Unified School District, herein referred to as “Client” or “District” is requesting proposals from qualified access control contractors, herein referred to as “Contractor” to provide electronic door access control installation services for a District-wide access control project.

1.2. RFP Schedule

The District has set the following RFP Schedule that all Contractors must adhere to. The District reserves the right to modify this Schedule as needed and will issue an addendum if it modifies the Schedule.

Event / Occurrence	Deadline
District Issues RFP	April 27, 2018
Site Visit (see section 2.2 for schedule)	May 16, 2018
Deadline for Contractor to submit questions regarding this RFQ/RFP	May 18, 2018
Deadline for Contractors to submit	May 25, 2018
District to interview Contractor(s)	Week of May 28, 2018
District to finalize recommendation for District Board of Education	Week of June 4, 2018
District Board of Education approves successful Contractor	June 19, 2018

1.3. Qualified Contractor

The purpose of this RFP is to obtain information that will enable the District to select a contractor that is extremely familiar with all applicable regulations and industry guidelines especially as they apply to the District facilities projects, and be capable of providing work products that will enable the District to strictly comply with said requirements. Each Contractor responding to this RFP should be prepared and equipped to provide full service to the District in an expeditious and timely manner and on relatively short notice so as to enable the District to meet critical time deadlines and schedules.

To submit a proposal, Contractors must be properly licensed by the California Contractors State License Board and registered with the Department of Industrial Relations (“DIR”) as required by law. The selected Contractor will be required to comply with the Labor Code prevailing wage requirements and the District’s bonding and insurance requirements. The selected Contractor shall be required to work cooperatively with District staff, the Board of Education, and all other technical Contractors, the project inspector, and any program and/or construction manager to facility timely and professional completion of the Project.

1.4. Submission

If your firm is interested in performing services for the project, on behalf of the District, please submit to the District a proposal in accordance with this RFP. Proposals must be received no later than the date and time indicated in the RFP Schedule, Section 1.2. Proposals will be date stamped to record receipt thereof. The proposals may be mailed or delivered in person during normal business hours, which are 8:00 a.m. to 4:30 p.m., Monday through Friday. Delivery of proposals is the sole responsibility of the Contractor. All proposals must be signed and become

the property of the District. The address for submission of the proposals is:

Lodi Unified School District
Technology Services
ATTN: Edith Holbert
1305 E. Vine Street
Lodi, CA 95240

1.5. Response Format

Each Contractor is required to submit a response they deem appropriate to the following requests. Submittals should be brief and concise, but provide sufficient clarity to meet the criteria to be used in the evaluation process. Contractor's response shall not exceed twenty (20) pages, excluding Exhibits. Each hardcopy of the Proposal must be bound individually, single-sided, tabbed, and organized in order and include all sections and information as stated in Part 3, Submittals. Each Contractor shall submit four (4) bound hard copies and one (1) electronic copy, in PDF format with bookmarks, of their responses. The District will evaluate the responses based on the responsiveness to District requirements listed.

NOTE for Exhibits: All Exhibits should be tabbed, labeled and included as part of the appendix. It is at the Firm's discretion to determine how to reference, in the body of the Proposal, the location of the Exhibits in the appendix. All Exhibits may be recreated in another program as long as the formatting and information requested mirrors the PDF forms attached to this RFP. The intent of the PDF forms is to keep all the requested information in a uniform format.

NOTE for Firms Teaming with Sub-Contractors: Each responding firm shall select their proposed sub-contractors based on their own criteria. However the District reserves the right to approve sub-contractors proposed for any projects that may be awarded. Sub-contractors do not need to complete all the Exhibits in this RFP. Carefully read each section to determine which forms the sub-contractors need to submit.

1.6. Questions

The selected contractors must carefully read the entire RFP prior to submitting questions as most questions will be answered in this RFP. If, however, you should have questions regarding this RFP, please email rfpquestion@lodiUSD.net. All questions must be submitted in writing. The question deadline is indicated in the RFP Schedule, Section 1.2. After this deadline, the District will not answer, address, and/or review any questions interested Contractor might submit. Responses to all questions received prior to the deadline will be provided to all Contractor.

1.7. Form of Agreement

Selected contractor must be able to execute the District's standard Agreement for Construction Services, ("Agreement") as attached to this RFP as EXHIBIT A.

1.8. Indemnity

Contractors responding to this RFP must acknowledge that they have reviewed the District's indemnity provision set forth in EXHIBIT A and must agree to the indemnity provision and confirm in writing that, if given the opportunity to contract with the District, the Contractor has no substantive objections to the use of the District's standard indemnity provision.

1.9. Insurance

The District requires at least the following insurance coverage:

Type of Coverage	Minimum Requirement
Commercial General Liability Insurance , including Bodily Injury, Personal Injury, Property Damage, Advertising Injury, and Medical Payments	
Each Occurrence	\$ 2,000,000
General Aggregate	\$ 4,000,000
Automobile Liability Insurance - Any Auto	
Each Occurrence	\$ 1,000,000
General Aggregate	\$ 3,000,000
Workers' Compensation	Statutory Limits
Employer's Liability	\$ 4,000,000

Selected contractor shall provide to the District certificate(s) of insurance and endorsements satisfactory to the District. Insurance policy(ies) shall not be amended or modified and coverage amounts shall not be reduced without thirty (30) days' written notice to District prior to modification and/or cancellation. For Commercial General Liability and Automobile Liability, District shall be named as an additional insured on all policies. Contractor's policy(ies) shall be primary; any insurance carried by the District shall only be secondary and supplemental. Selected Contractor shall not allow any employee or subcontractor to commence work on any contract or any subcontract until the proof of insurance required of the Contractor or subcontractor has been provided to and accepted by the District.

1.10. Full Opportunity

The District hereby affirmatively ensures that Disadvantaged Business Enterprises ("DBE"), Small Local Business Enterprise ("SLBE"), Small Emerging Local Business Enterprise ("SELBE") and Disabled Veterans Business Enterprise ("DVBE") firms shall be afforded full opportunity to submit qualifications in response to this notice and will not be discriminated against on the basis of race, color, national origin, ancestry, disability, gender, transgender status, political affiliation, or religion in any consideration leading to the award of contract. No qualified disabled person shall, on the basis of disability, be excluded from participating in, be denied the benefits of, or otherwise by subjected to discrimination in any consideration leading to the award.

Part 2 – Project Description

2.1. Project Description

The District expects a recommendation for an Access Control System (ACS) that is specific to location/building/room function, facility and door type. Any recommended system components should provide the District with maximum flexibility for expansion now and in the future. The components should be upgradable and swappable without requiring mass replacement of all components or fragmented system control. The system components should be open protocol. Cards or other keying devices should offer maximum flexibility, ease of use and access management for users and system administrators. Electronic door locking components (such as card readers) should be durable, exchangeable without causing system fragmentation, failures partial or otherwise, and agnostic to other system components such as card or fobs, program software and keyways. Once in place, the system should provide District security professionals and administrators with a multi-platform access management software that provides systems status, door status, simple access programming capabilities, remote programming, scheduling, locking and unlocking.

2.2. Project Schedules

Access Control RFP	2018-19						2019-20	2020-21
	Apr. 18	May 18	Jun. 18	Jul. 18	Jul. 18	Jul. 18 – Jun. 19 Phase I	Jul. 19 – Jun.20 Phase II	Jul. 19 - Jun. 21 Phase III
RFP Release								
RFP Due								
RFP Review								
RFP Interviews								
RFP Award Recommendation								
Start of Work								
Completion of Work/Final Report								

2.3. Project Locations

James Arieda Education Support Center 1305 E. Vine Street Lodi, CA 95240	Adams (Ansel) Elementary 9275 Glacier Point Drive Stockton, CA 95212	Bear Creek High 10555 Thornton Road Stockton, CA 95209
Beckman Elementary 2201 Scarborough Drive Lodi, CA 95240	Borchardt Elementary 375 Culbertson Drive Lodi, CA 95240	Clairmont Elementary 8282 Le Mans Avenue Stockton, CA 95210
Creekside Elementary 2515 Estate Drive Stockton, CA 95209	Davis Elementary 5224 E. Morada Lane Stockton, CA 95212	Delta Sierra Middle 2255 Wagner Heights Road Stockton, CA 95209
Elkhorn Elementary 10505 N. Davis Road Stockton, CA 95209	Henderson 13451 N. Extension Road Lodi, CA 95242	Heritage Elementary 509 E. Eden Street Lodi, CA 95240
Houston 4600 Acampo Road Acampo, CA 95220	Lakewood Elementary 1100 N. Ham Lane Lodi, CA 95242	Larson Elementary 2375 Giannoni Way Lodi, CA 95242
Lawrence Elementary 721 Calaveras Street Lodi, CA 95240	Liberty High 660 W. Walnut Street Lodi, CA 95240	Lincoln Tech 542 E. Pine Street Lodi, CA 95240
Live Oak Elementary 5099 E. Bear Creek Road Lodi, CA 95240	Lockeford Elementary 19456 N. Tully Road Lockeford, CA 95237	Lodi High School 3 S. Pacific Avenue Lodi, CA 95242
Lodi Middle 945 S. Ham Lane Lodi, CA 95242	Mahin 5080 Armstrong Road Lodi, CA 95240	Maintenance & Operations 31 N. Pacific Avenue Lodi, CA 95242
McAuliffe Middle 3880 Iron Canyon Circle Stockton, CA 95209	McNair High 9550 Ronald E. McNair Way Stockton, CA 95210	Middle College High 5151 Pacific Avenue Stockton, CA 95207
Millswood Middle 233 N. Mills Avenue Lodi, CA 95242	Morada Middle 5001 E. Eastview Drive Stockton, CA 95212	Morgan Elementary 3777 A. G. Spanos Boulevard Stockton, CA 95209
Mosher Elementary 3220 Buddy Holly Drive Stockton, CA 95212	Muir Elementary 2303 Whistler Way Stockton, CA 95209	Needham Elementary 420 S. Pleasant Avenue Lodi, CA 95240
Needham West 421 S. Pleasant Avenue Lodi, CA 95240	Nichols Elementary 1301 S. Crescent Avenue Lodi, CA 95240	Nutrition System 840 S. Cluff Avenue Lodi, CA 95240
Oakwood Elementary 1315 Woodcreek Way Stockton, CA 95209	Parklane Elementary 8405 Tam O'Shanter Drive Stockton, CA 95210	Plaza Robles High 9434 Thornton Road Stockton, CA 95209
Podesta Ranch Elementary 9950 Windmill Park Drive Stockton, CA 95209	Reese Elementary 1800 W. Elm Street Lodi, CA 95242	School Readiness & Preschool 701 Calaveras Street Lodi, CA 95240
Serna Jr. Charter 19 S. Central Avenue Lodi, CA 95240	Silva Elementary 6250 Scott Creek Drive Stockton, CA 95219	Sutherland Elementary 550 Spring River Circle Stockton, CA 95210
Tokay High 1111 Century Boulevard Lodi, CA 95240	Turner Academy at Tokay 13520 E. Live Oak Road Lodi, CA 95240	Transportation Department 820 S. Cluff Avenue Lodi, CA 95240
Victor Elementary 17670 N. Bruella Road Lodi, CA 95253	Vinewood Elementary 1600 W. Tokay Street Lodi, CA 95242	Wagner-Holt Elementary 8778 Brattle Place Stockton, CA 95209
Washington Elementary 831 W. Lockeford Street Lodi, CA 95240	Warehouse 851 S. Guild Avenue Lodi, CA 95240	Westwood Elementary 9444 Caywood Drive Stockton, CA 95210
Woodbridge Elementary 1290 Lilac Street Lodi, CA 95242		

2.4. Project Site Visit

A site visit is strongly encouraged during the RFP process. A site visit is scheduled for May 16th, 2018. The site visit will begin at the James Areida Education Support Center (see above for address). We will meet at the lobby at 9:00 AM. At that time, maps and meeting locations for the balance of the site visits will be distributed to all attendees. We will begin the James Areida Education Support Center visit promptly at 9:15 AM. The site visits will consist of visiting at least 5 of the sites listed above. Allow 4-6 hours for driving time and on-site evaluation. It shall be the responsibility of the vendor to thoroughly read and understand the information, instructions, and scope of services contained in this RFP. Interested participants are expected to fully inform themselves as to the conditions and requirements of the services to be provided. Failure to do so is at the Contractor's own risk. No plea of error or ignorance by the participant of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the service provider to make the necessary examinations and investigations will be accepted as a basis for varying the requirements of the District. The District will assume that submission of a response means that the Contractor has familiarized itself with the conditions and requirements and intends to comply with them unless specifically noted otherwise.

Part 3 - Scope of Services

3.1. Scope of Services Summary

- A. The Contractor shall provide all materials, hardware, software, fabrication, installation, programming and testing in conformity with manufacturer's documentation, specifications contained herein, and applicable codes and authorities having jurisdiction for the implementation of a complete Access Control System (ACS) for the project.
- B. A complete ACS is defined as all card readers, access cards, controllers, specific access control panels, power supplies, etc., as well as all cabling/wiring, needed to achieve a complete and functional system. This documents may not show or list every item to be provided. When an item not shown or listed and it is clearly necessary for proper installation and operation of the equipment and systems, Contractor shall provide, install, test and certify the item at no increase to contract price.
- C. The Contractor shall be fully certified by software vendor to sell, install and maintain in Lodi CA all system components required.
- D. The Contractor shall have at least five (5) years of experience in designing, selling, installing and maintaining the proposed access control systems.
- E. The Contractor shall possess all applicable contractor licenses.
- F. The Contractor shall provide all software licenses for the ACS.
- G. The Contractor shall be responsible for coordination of all ACS programming and ACS connections/interfaces with appropriate District departments and personnel.
- H. The Contractor shall provide all software, hardware and system programming for integration with the new ACS equipment.
- I. The Contractor shall provide all hardware and system programming for connection of the new ACS to the District technology network(s).
- J. The Contractor shall provide installation, testing, adjustment and initial programming necessary for all equipment.
- K. The Contractor shall provide written documentation and specific instructions for system as installed.
- L. The Contractor shall be responsible for fully implementing the functions described in this document and and shown on the design drawings, per the Lodi USD Technology Services Telecommunications Specifications and Standards.
- M. The Contractor shall provide training to District personnel in the operation, adjustment, servicing and repair of this ACS. In addition, provide for manufacture certifications for District staff.

- N. Contractor shall be responsible for communicating and field coordinating conduit and power requirements for security devices directly with electrical contractor when necessary to complete installation.
- O. The ACS design and implementation shall be per the Lodi USD Technology Services Telecommunications Specifications and Standards.
- P. The ACS shall be capable of functional integration with in Lodi USD systems and network platforms.
- Q. The system envelope will have access control functionality primarily at the perimeter entrance doors, elevator lobbies, MDF's & IDF's and electrical rooms, and other specific doors and areas as shown on the Design Drawings.
- R. The access credentials will be validated at the Proximity/SmartCard card readers at the access controlled door locations. The perimeter doors will be locked during regular hours and holidays and controlled by credentials and schedules for off hour's access. In case of an emergency the access controlled doors should be able to be locked down via multiple methods, i.e. computer, mobile phone, manual override.

3.2. References

- A. Published specifications, standards, tests, codes, or recommended standards of trade, industry, or governmental organizations apply to the services to be provided per this RFP in these Sections, including, but not limited to:
 - 1. ADA - Americans with Disabilities Act
 - 2. ASCII - American Standard Code for Information Interchange
 - 3. ASTM - American Society for Testing and Materials
 - 4. EIA - Electronic Industry Association
 - 5. NEMA - National Electrical Manufacturers' Association
 - 6. NFPA - National Fire Protection Association
 - 7. CEO - California Electrical Code
 - 8. UL - Underwriters Laboratories, Inc.
 - 9. ASIS - American Society for Industrial Security
 - 10. LodiUSD Telecommunications Specifications and Standards
- B. Electronic devices radiating "RE" energy shall comply with Federal Communication Commission regulations, particularly Part 15, and shall meet minimum Class "B" requirements. Contractor shall provide FCC certificate numbers indicating that the FCC has approved the products.

3.3. Quality Assurance

- A. A nationally recognized test laboratory shall list all equipment supplied where applicable.
- B. All equipment and accessories to be the product of a manufacturer regularly engaged in the manufacture of ACS components.
- C. All items of a given type shall be the products of the same manufacturer.
- D. All items shall be of the latest technology; no discontinued models or products are acceptable.
- E. No Beta products will be accepted.
- F. The manufacturer, or their authorized representative, shall confirm that within 100 miles of the project site there is an established agency which:
 - 1. Will supply parts and service without delay and at reasonable cost.
 - 2. Offers service during normal working hours as well as emergency service on all equipment to be furnished.
 - 3. Contractor shall be capable of performing service or maintenance work on these specified or accepted systems.

3.4. Submittals

- A. Submit in accordance with Lodi USD Submittals Procedures

- B. Submit the following to Lodi USD:
1. Manufacturers name, brand name, catalog references for all equipment supplied, indicating UL Listings, for all system components
 2. Complete written sequence of operations for all functions of the system.
 3. Complete wiring diagrams for all components and floor plans indicating device locations, etc. Provide dimensioned elevation, mounting, and wiring details for all consoles, racks, control panels, and fabricated equipment being supplied under this section.
 4. Provide complete point-to-point and termination drawings. Partial or "Typical" drawings will not be accepted. All drawings shall be done in Visio.
 5. Bill of Materials.
 6. Service information, including address of nearest representative. Provide written approval from each manufacturer affirming that Contractor is certified and approved for systems installation and service for all referenced systems in this Section.
 7. Proposed training program, including name and qualifications of trainer(s), schedule of training, curricula and written training materials.

3.5. Product Delivery, Storage and Handling

- A. All equipment provided shall be new, not used, and shall be shipped in original packages to prevent damage or entry of foreign matter. All handling shall be in accordance with manufacturers' recommendations. Protective covering shall be provided by Contractor during construction.
- B. Products delivered to the job site in racks and consoles shall be protected from dust, dirt and foreign matter. All racks and consoles shall be protected from dents, bumps and scratching.

3.6. Warranty

- A. The Contractor and manufacturer(s) shall warranty all equipment. Materials and installation labor for two (2) years from the filing of the notice of completion (NOC).
- B. During the warranty period, upon notification of a problem by the District, the Contractor shall ensure that a competent and qualified field service technician arrives on site to correct the problem, within 48 hours. If a problem can be corrected remotely to the Lodi USD's reasonable satisfaction, the onsite arrival time commitment shall be waived.
- C. At least sixty (60) calendar days prior to expiration of warranty, Contractor shall provide the District with post-warranty maintenance contract proposals. The terms and condition of any such post-warranty program shall be consistent with those offered to the provider's most favored customer(s).

Part 4 - Products

4.1. Access Control System Products

- A. System Specifications
1. The District already has almost 250 access controlled doors. The door access control equipment should be reused whenever possible.
 2. The head end software must be able to run in a virtual environment.
 3. The client workstation (or portable laptop) shall be used by the Contractor to program all necessary information into the ACS for this project, including, but not limited to, ACS programming and site specific user information.
 4. The Contractor shall perform all necessary tests of system operations and shall monitor systems activity and functionality during the installation.
 5. The network appliance shall be capable of running on an existing TCP/IP network and shall be accessible, configurable and manageable from any network connected PC with a browser. Browser access for configuration and administration of the system shall be

possible from a PC on the same subnet, through routers and gateways from other subnets, and from the Internet. Control and management of the system shall therefore be geographically independent.

6. Security of the data communicated over the network to and from the browser, network controller and nodes shall be protected by encryption (SSL 128-bit) and authentication (SHA-1).
7. Access control features shall include:
 - a. Multiple access levels and cards per person.
 - b. 128-bit card support.
 - c. Detailed time specifications.
 - d. Multiple card formats for mixed card populations.
 - e. Activation/expiration date/time by person with one minute resolution.
 - f. Access level disable for immediate lockdown.
 - g. Multiple holiday schedules.
 - h. Timed unlock schedules.
 - i. Scheduled actions for arming inputs, activating outputs, locking and unlocking portals.
 - j. Card enrollment reader support.
 - k. Photo ID creation support.
 - l. Counted-use access control.
 - m. Regional and Timed anti-passback.
 - n. First-in unlock rule.
 - o. Up to 60,000 person records.
 - p. One central lockdown switch that kills all campus power supplies for door actuators/levers/electric strikes (thus, securing all ACS doors).
8. Security database features shall include:
 - a. Record recall by ID tag, name or card.
 - b. SQL capability and ODBC compliance.
 - c. LDAP integration for single-user logon authentication.
 - d. Optional storage and recall of ID photos and personal/emergency data.
 - e. An API for adding to, deleting from and modifying the database.
 - f. Storage of system user passwords and permissions.
 - g. System user permissions to grant whole or partial access to system resources, and personal data.
 - h. Pre-defined reports on system configuration, system activity history, and people.
 - i. English-based query language for instant custom reports.
 - j. Custom Report writer interface that allows the interactive creation of custom reports. Reports may be saved for later reuse. No third party software such as Crystal Reports shall be necessary.
 - k. Periodic backup to onboard flash ROM and optional network attached storage (NAS), including FTP servers.
 - l. Periodic archive creation for historical custom reporting and improved on-board database performance.

B. Access Control Panels

1. Access Control Panels (ACP) shall support all of the devices on the design drawings. Standard ACPs shall consist of the following components:

- a. Access Control blade: The access control blade shall receive power via the ribbon cable bus directly from the Node Blade. The access blade shall supply up to 400 milliamps of power to one reader or 200 milliamps of power to each of two readers.
 - b. Input blade: The input blade shall receive power via the ribbon cable bus directly from the Node Blade. It shall support a wide variety of input supervision types including normally-open circuit and normally-closed circuits, and zero, one or two resistor configurations.
 - c. Output blade: The output blade shall receive power via the ribbon cable bus directly from the Node Blade. Both normally open circuit and normally-closed circuit output devices shall be supported. The relay outputs shall support any output devices that operate on the following maximum electrical ratings: 30 Volts DC or AC, 2.5 Amps inductive or 5.0 Amps non-inductive (will be supporting 12VDC & 24 VDC power supplies to actuate striker plates and door levers).
2. The ACPs shall monitor, power, or control, card readers, door position contacts, door strikes and/or locks and other devices as shown on design drawings.
 3. The ACPs shall read data encoded on cards and communicate with the Main Controller and Central Processing unit to determine if entry is authorized.
 4. Authorized opening of any door from a workstation.
 5. All components that make up the access control panel shall be securely mounted on the specified back panel, with an approved enclosure. All cables shall be run within an approved cable management system, and shall be neatly dressed and labeled at the point of termination, per Lodi USD Telecommunications Specifications and Standard. All labels shall be clearly visible without the need to remove any wire way covering or wire management device.
 6. Each site controller will have a locally stored/cached copy of the user access database, should the central database at the Central Site (District Office) be unreachable (and thus, provide authorized passage through the doors w/o access to the main database, should the WAN go offline).
- C. Card Reader Doors
1. Run all wiring from the individual devices associated with the door to the DCU.
 2. Label all wires and cables with machine-generated labels as close as possible to their termination point. All labels shall be clearly visible without the need to move other cables or remove any cable management devices i.e.: tie wraps.
- D. Card Readers
1. The card readers shall be a Multi-Technology Proximity reader. It shall meet or exceed the following criteria:
 - a. The card reader shall read the encoded data from the access card and/or transponder and transmit the data back to the host panel, giving an audible and

visual indication of a properly read card.

- b. The card reader shall not exceed a typical read range of 4" to 8" (unless specified otherwise), when used with a proximity card, proximity adhesive tag or key fob.
- c. The card reader shall have separate terminal control points for the green LED, the red LED, and the audible indicator.
- d. The card reader shall have a hold line that will buffer a card read.
- e. The card reader shall be fully weatherized, and shall have an operating temperature of -22 to 150 degrees Fahrenheit (-30 to 65 degrees Celsius), and shall have an operating humidity of 5-95% non-condensing.
- f. The reader shall have a lifetime warranty.
- g. The card reader shall match the finish color of the wall/mounting surface to the best of its color selection.
- h. The voltage requirements of the card reader shall be 5 to 24 VDC.

E. Power Supplies

1. Access Control peripheral devices shall be powered by power supplies. Provide battery back-up sufficient for a minimum of 4 hours of standby at the maximum rated load.
2. Furnish and install both 12 VDC & 24 VDC power supplies to power up all electrically controlled door locks. Where power boosters are required as part of the hardware group, provide, install and interface the boosters to the electrified lock(s) and the ACS. Coordinate 120 Volt A/C power installations with the electrical contractor.
3. Size all power supplies to permit simultaneous continuous-duty activation of all door locks, with an additional minimum 20% capacity on each supply. Calculate voltage drop to locks and size lock control wiring to provide proper jack operation. System should be configured so that battery backup is an option from one central location for each building, when possible.
4. Run individual lock power circuits from a separate output on the power supply, 12 VDC & 24 VDC, PDS-CB, Power Distribution Modules, located within the ACP.
5. Provide a separate enclosure for the batteries if the batteries will not fit securely in power supply enclosure "right-side-up". Do not lay batteries on their sides or ends in order to fit them into the enclosure. Do not expose wiring between the power supplies and the batteries.

F. Electrified Locking Hardware

1. All Electric Locks shall be "Fail Secure" (Magnetic Door Only at District Office).
2. Striker Plates shall be compatible w/ both 12 VDC and 24 VDC systems.

G. Access Control Cards

1. Cards shall be compatible with all card readers in the Lodi Unified School District.
2. The access cards shall be iClass Smart Card/ Proximity combination card, 32 bit or industry equivalent. Must be able to print use existing Zebra printers to print on cards.

3. The Contractor shall furnish clips and lanyards for each card. Cards shall be able to be "punched" for a clip attachment after printing.
4. Furnish 3500 cards to the District.

4.2. Wire and Cable

- A. All cable runs for controlled doors, annunciation control panels and security cameras will be Category-6a unshielded twisted pair (Cat-6a UTP). All UTP cabling shall be CommScope Systemax, which is the LODI USD IT/telecom cable standard. This cabling shall be provided by the low-voltage IT/telecom cabling contractor. The Security Contractor shall be responsible for all security control cabling from the network outlet to the security device (i.e., Camera, DCU, etc.).
- B. Cat-6a network connection cables shall be provided by the low voltage contractor between the Telecommunication Equipment Rooms (IDF's) and the work area outlet. Terminations are as follows:
 1. At the security device end (i.e., Camera, DCU, Annunciation Panel, etc.): Terminate the Category-6a cabling onto standard Category-6a RJ-45 connector at the device.
 2. At the IDF end: Terminate the Cat-6 network cabling onto Cat-6a RJ-45 patch panels.
- C. It shall be the responsibility of the Security Contractor to make the physical connections from the DCU, Annunciation Panel, Security Camera or Duress Button to the RJ-45 network work area outlet.
- D. Once installed, all cable runs and wiring provided by contractor is the sole property of the District.
- E. It shall be the responsibility of the security Contractor to make the connections from the Cat-6a patch panels which will be mounted to either the walls of the IDF or with-in the equipment racks in the IDF based on the type of control unit. Jack selection, along w/ Cat6a cabling specifications, should come from **Lodi Unified's "Telecommunications Specifications"** (not attached to this document; ask for a copy if needed before purchasing any parts or installing in Cat5/6a cabling). Locations for jacks in the IDF's will have to be approved by the IT Department.

Part 5 - Execution

5.1. Requirements

- A. Systems shall be complete and operational in all respects.
- B. The Contractor shall furnish and install all equipment for all necessary building ACS as referenced herein.
- C. All wall, floor, and ceiling penetrations, regardless of fire rating, must be properly sleeved with conduit and properly sealed using approved fire stopping materials and sealants, according to Lodi USD standards.
- D. All security equipment, junction boxes, terminal cans, etc. installed in public accessible areas shall be installed utilizing tamper proof mounting hardware. Contractor shall provide a

minimum of 2 driver bits or hand tools for each type and size of security fastener provided.

- E. The Contractor shall provide seismic restraint for all equipment, including equipment racks, consoles, etc.

5.2. As-Built Drawings

- A. The Contractor shall maintain a complete set of prints of design drawings on-site as the work on the ACS is being completed. As work is installed, Contractor shall carefully draw on prints, in colored pencil, correct location of work including all critical dimensions.
- B. Upon completion of the project, Contractor shall transfer hand-drawn information to Visio drawings in native Microsoft Visio format (no imported non-Visio drawings), updated Visio disks, and submit to the Lodi USD for review. No hand-drawn As-Built Drawings shall be accepted.
- C. The Contractor shall provide four (4) sets of As-Built Drawings, plus one (1) set of Visio disks, to the Lodi USD. One (1) additional complete set shall remain on the job site in folders secured on the wall adjacent to the control panels.

5.3. Training

- A. The Contractor shall provide a minimum of four (3) copies of Operation and Maintenance manuals for all equipment furnished under the Security Systems section. These manuals are to be available during training.
- B. Provide a minimum of eight (8) hours of scheduled training for the equipment furnished under this Section, including programming, operation, service, and maintenance.
- C. Training shall be by engineers or technicians highly skilled in the systems and certified by manufacturer as qualified to train in the particular systems.
- D. Training shall be conducted at dates and times directed by the LODI USD's representative. Training shall be provided for all security staff personnel and system end-users.
- E. LODI USD, prior to release of retention compensation, shall require verification of completion of training.

5.4. Programming

- A. Contractor shall provide initial programming for all applicable systems. Contractor programming shall include, but not be limited to:
 - 1. English-language description of each access control location.
 - 2. Programming of the head-end equipment.
 - 3. Programming of Access Control Software.
- B. The Contractor shall submit to LODI USD for the review, prior to work being initiated, the proposed programming, including device names and descriptions, timings, sequence of operations, etc.

- C. The Contractor shall coordinate with the Technology Services staff to update the system software to the most recent version available during the warranty period at NO ADDITIONAL COST.

5.5. Test and Reports

- A. The Contractor shall perform system tests using personnel who have attended a manufacturer's training school for installation and testing of the systems as described herein. The Contractor shall perform testing with the test instruments as specified/directed by the manufacturer. Testing by means other than the manufacturer's procedures will not be acceptable unless agreed to in advance in writing by the Lodi USD, Security Contractor and the equipment manufacturer.
- B. Upon completion of the installation of the ACS, the Contractor shall submit written reports including, but not limited to, the following information:
 - 1. A complete list of all equipment installed, including serial numbers of major components.
 - 2. Certification that all equipment is properly installed, programmed, functional, 100% operational, and in conformance with contract specifications.
 - 3. Test reports of all devices, and equipment.
 - 4. Test technician's name, company and date of test.
- C. Following review of the test report(s) by LODI USD, the Contractor shall perform a test of the ACS equipment in the presence of the Lodi USD and the Contractor. Test(s) shall include performance tests of all equipment and material required by the contract. The Contractor shall be responsible for all additional costs to the Lodi USD if retesting is required. At a minimum, perform tests to demonstrate that:
 - 1. All systems are free from grounding problems and open circuits.
 - 2. If applicable, systems operate properly on battery backup.
 - 3. All software functions properly as specified, and all equipment is fully programmed.
 - 4. ACS doors actuate properly with visual indicator or light.
- D. Sixty (60) days prior to expiration of warranty, Contractor shall retest all systems as described herein, and submit a test report of findings. The scheduling of the retest shall be coordinated with Lodi USD staff. All items covered by warranty shall be corrected immediately. The warranty shall remain in effect until the Contractor corrects 100% of defective items.

5.6. Lodi USD Technology Services Requirements

- A. The Contractor shall coordinate with the LODI USD's Technology Services department for all network and telecom connections.