



**Trenton Hansen, Ph.D.**  
**Superintendent**

4850 Pedley Road, Jurupa Valley, CA 92509 T (951) 360-4100

Date: September 25, 2024

Re: 24-25-03PD - Jurupa USD Districtwide Exterior Cameras – Addendum #2

TO ALL BIDDERS:

The following changes, omissions, and/or additions to the Bid Documents and/or Project Manual and/or Drawings shall apply to proposals made for and to the execution of the various parts of the work affected thereby, and all other conditions shall remain the same. All parties of interest shall take careful note of the addendum so that the proper allowances may be made in strict accordance with the Addendum.

***Bidder shall acknowledge receipt of this addendum in the space provided on the Bid Form. Failure to do so may subject Bidder disqualification.***

In case of conflict between Drawings, bid documents and this addendum, this addendum shall govern.

**ITEM #1**      **The Bid Submission Deadline of Monday, September 30, 2024, at 2:00 p.m. has been revised to Wednesday, November 13th, 2024, at 2:00 p.m.**

**ITEM #2**      **The Request for Information (RFI) Deadline of Monday, September 23, 2024, at 12:00 p.m. has been revised to Wednesday, October 30th, 2024, at 12:00 p.m.**

**ITEM #3**      **Response to RFI Questions:**

**Question:** Who is responsible for providing network hardware in the buildings?

**Answer:** The district has existing network equipment. If additional network or CAT6A patch panel ports are needed, the district will provision them.

**Question:** Patriot High School - What camera models do the district want on the stadium musco lights? What is the voltage at the light poles? Are they constant power or on a timer? Are there existing outlets on the light poles?

**Answer:** Basis of design for Patriot High School stadium lights are 4 bullet-style cameras and 2 multi-sensor cameras. The Musco lights are fed from a distribution board, and the poles are 480V. The lights are on a schedule that was set up by the District using the “Control-Link” monitoring system that comes with the Musco lights. There is a manual switch for power shut-off at the Musco Control and Monitoring Cabinet in the (E) electrical yard. There are not existing outlets on the poles.

**LEARNING WITHOUT LIMITS**

*Board of Trustees*

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**Question:** Mission Middle School Solar Farm - What camera models does the district want out at the solar farm? What structures are the cameras expected to be mounted to?

**Answer:** The 10 additional cameras shown on Mission Middle School Plan Sheet T1.01 have been removed from scope. See Addendum 2 Plans for revised Plan Sheet and revised Camera Schedule with updated quantities.

**Question:** The additions to Patriot High School and Mission Middle School may require extensive electrical and networking costs in both labor and materials. Were these costs originally accounted for in the original \$780k project estimate? Or is that estimate increasing to account for these changes?

**Answer:** There are existing pathways and cabling installed for the Patriot High School stadium light pole cameras. The Mission Middle School solar farm cameras have been de-scoped.

**Question:** What kind of cable testing certification is the district looking for?

**Answer:** The contractor performing the structured cabling installation must be a “Leviton Certified Installer” and perform the tests necessary to secure the 1-year product warranty and the limited lifetime warranty. Test results are also to be turned over to the District staff as a deliverable.

**Question:** Arm mounts and pendant caps are not the ideal solution for deploying a 180-degree fisheye camera. The ideal deployment involves a wall mounted Angle Mount. Can we make that adjustment or does the district prefer arm mounts and pendant caps?

**Answer:** Awarded contractor to request approval of proposed mounting hardware via project submittal process after project starts.

**Question:** Will the district accept Berk-Tek CAT6A Micro, (thinner diameter jacket) instead of standard CAT6A?

**Answer:** Berk-Tek LM-RDT cabling is acceptable for this installation. The contractor must include these details in the product submittal process.

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**Question:** The following is called out in Spec Section 27 15 00, 1.5 QUALITY ASSURANCE, B. Installer's Qualifications:

"1. Approved Leviton Optimized Installer or Berk-Tek Oasis Optimized Integrator Optimized before, during, and through completion of the system installation. Supporting documentation will be required as part of the submittal.

2. Responsible for workmanship and installation practices in accordance with Leviton Optimized Installer Program and Berk-Tek Oasis Program"

Q. Leviton Optimized Installer or Berk-Tek Oasis Optimized Integrator Optimized do not exist. Please clarify the correct Leviton Network Installer requirements.

**Answer:** The contractor performing the structured cabling installation must be a "Leviton Certified Installer" and perform the tests necessary to secure the 1-year product warranty and the limited lifetime warranty. Test results are also to be turned over to the District staff as a deliverable. The warranty from Berk-Tek was previously called the "Oasis" program.

**Question:** The following is called out in Addendum 1 Item # 3, 4. Security general note #2 from all T0.00 sheets to be replaced with:

a. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IN WALL CONDUITS, BELOW GRADE CONDUITS, BELOW SLAB CONDUITS, CONDUITS ACROSS OPEN AREAS BACK BOXES, SLEEVES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR EACH SYSTEM SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

Q. We were not provided the opportunity to inspect every Camera location included in this Bid. Nor is there any direction given in the drawings for the exact conduit requirements for each Camera. Will the District provide the required details for the conduit installation at each location so all bidders are bidding on the same thing?

**Answer:** See individual site T1.01 Plan Sheets that include a hashed orange line that indicates the proposed pathway from "New" camera locations to nearest IDF/MDF. See Plan Sheets and Specification Sections for cabling and conduit requirements.

**Question:** Please confirm that we should only bid cabling to the (N) New Camera locations with the Blue Dots and that (F) Future Locations are Not In Contract (NIC).

**Answer:** That is correct. Contractor is responsible for scope associated with (N) camera locations with the Blue Dots. The (F) Future Locations are Not in Contract (NIC).

**Question:** The site maps state: "It is the contractor's responsibility to check if there are open ports on the existing switches for the new cameras inside the MDF/IDF." However, the district did not take us to each MDF/IDF for verification. Will someone from the district verify the availability of ports for the vendors? If not, will the vendors have an opportunity to verify this themselves?

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**Answer:** The district has existing network equipment. If additional network or CAT6A patch panel ports are needed, the district will provision them.

**Question:** The site maps state: "All camera heights are to be determined in the field by the contractor." After the project is awarded, will the district collaborate with the vendor to decide the proper camera heights?

**Answer:** Yes.

**Question:** For the camera locations requiring a 270-degree field of view, are you expecting a multi-sensor camera or a fisheye camera?

**Answer:** The 270-degree field of view cameras should be a fisheye camera.

**Question:** We noticed discrepancies between the camera counts on the sitemaps and the specified numbers. What is the accurate camera count for the project?

**Answer:** See Final Revised Camera Schedule. This reflects the final camera counts and the individual site T1.01 Plan Sheets should also reflect these counts.

**Question:** The Education Center & Parent Center has 10 Cameras in the Table but only 9 in the Floorplan. Should we quote 9 or 10 cameras? What are the specs for the missing camera if yes? (you can provide just field of view)

**Answer:** The blue dot has been added to the tenth camera on the site plan. See Revised Education Center & Parent Center Plan Sheet T1.01.

**Question:** Mira Loma Middle School has a blue dot for the camera on the Floorplan but no mention of which Make / Model. Need FOV Information.

**Answer:** See Revised Mira Loma Middle Plan Sheet T1.01.

**Question:** Patriot High School has 6 Cameras on the Field but with no specification. Need FOV and Zoom information

**Answer:** See Addendum 2 Patriot High School Plan sheet for camera types.

**Question:** Patriot High School has 6 cameras on Light Poles, should we assume that they need Data / Power provided by some kind of Cellular Gateway? Or are you going to run new cable in the light pole?

**Answer:** Existing pathways and cabling exist at those locations.

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**Question:** Mission Middle School will have 10 cameras in Addendum 2, says they will not have data conduit. Should we assume they need power / data from Cellular Gateway?

**Answer:** The 10 additional cameras issued in Addendum 1 as "Bidders Note" have since been removed via Addendum 2. Please see updated Camera Schedule for updated quantities.

**Question:** School Readiness Center has 4 Cameras in the cable but no Floorplan. Need a Floorplan with Camera information

**Answer:** The School Readiness Center is the same as Family Resource and Child Care Center. See Family Resource and Child Care Center Plans for camera locations.

**Question:** Would you like each bidder to provide a standardized BOM from the manufacturer? This way you can compare apples to apples when resellers are bidding the same manufacturer.

**Answer:** No, a BOM is not a required bid form. Contractors should only use the owner provided forms and not provide any additional paperwork

**Question:** Will you allow alternative manufacturers to bid if they do not meet all of the technical requirements listed in section "2.05 SYSTEM AND CAMERA CAPABILITIES"

**Answer:** Products to be bid shall meet all of the technical requirements listed in section 2.05 System and Camera Capabilities.

**Question:** Will the District be bringing their own SIM card when a Cellular device is leveraged? We can provide a data plan if needed.

**Answer:** There is no cellular requirement for the cameras specified in this project.

**Question:** Some manufactures have their own CMAS and PEPPM contract. Once you select a winner for the RFP, would you prefer to purchase off contract for future phases?

**Answer:** To clarify, this project is a hard bid, not an RFP format. We have not determined the procurement method for any potential future phases as they are outside the scope of this bid.

**Question:** Will you be selecting the winner SOLEY off of the lowest bid price? Or will you be taking into account the quality of references and assessing install experience?

**Answer:** We intend to award the project to the lowest responsive/responsible bidder.

**Question:** I am confirming that you are looking to have 30 day cameras quoted.

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**Answer:** Yes. That is correct. See Addendum 2 where this information was clarified in Specification Section 28 23 00.

**Question:** For the cameras drawn on the maps, would you like the manufacturer's best recommendation for the corresponding mount? Or would you like us to quote exactly how it was drawn by the consultant?

**Answer:** Bidders shall price mounts according to Camera Mounting Details noted on the Plans.

**Question:** Confirming that you want 5 year and 10 year licensing quoted.

**Answer:** Spec Section 28 23 00 Video Surveillance System calls for 5-year licenses.

**ITEM #4      Revisions to Plans (*Revised Plans attached below*):**

1. Revised Camera Schedule with updated quantities attached below.
2. Revised Education Center & Parent Center Plan Sheet T1.01 to include one additional (N) camera location with blue dot.
3. Revised Jurupa Valley High School Plan Sheet T1.01 to include locations of six (6) additional cameras. Removed "BIDDERS NOTE." See Camera Schedule for updated quantities.
4. Revised Mira Loma Middle School's T1.01 Sheet.
5. Deleted "BIDDERS NOTE" on Mission Middle School's T1.01 Plan Sheet. See Camera Schedule for updated quantities.
6. Revised Patriot High School Plan Sheet T1.01 to include stadium light pole camera locations, camera types, and Detail #8 regarding mounting of bullet cameras on Musco Light Poles. Mounting for multi-sensor cameras at stadium lights shall be per Camera Manufacturer.

**ITEM #5      Revisions to Specifications (*Revised Specifications attached below*):**

- A. Section 28 23 00 Video Surveillance System:
  1. 1.01 B – Replaced with: "Provide OWNER with 5-year camera licenses. Licenses shall include unlimited cloud archiving and 30-days of cloud backup."
  2. 2.05 A.16 – Replaced with: "Cameras shall support true day/night vision and recording modes using IR cut filters, and infrared illumination for night visibility with a minimum 30 IR. Bullet cameras shall have a minimum 50IR with a telephoto lens for distance."
  3. 3.01 C – Replaced with: "Multi-sensor camera mounts shall be per Camera Manufacturer."

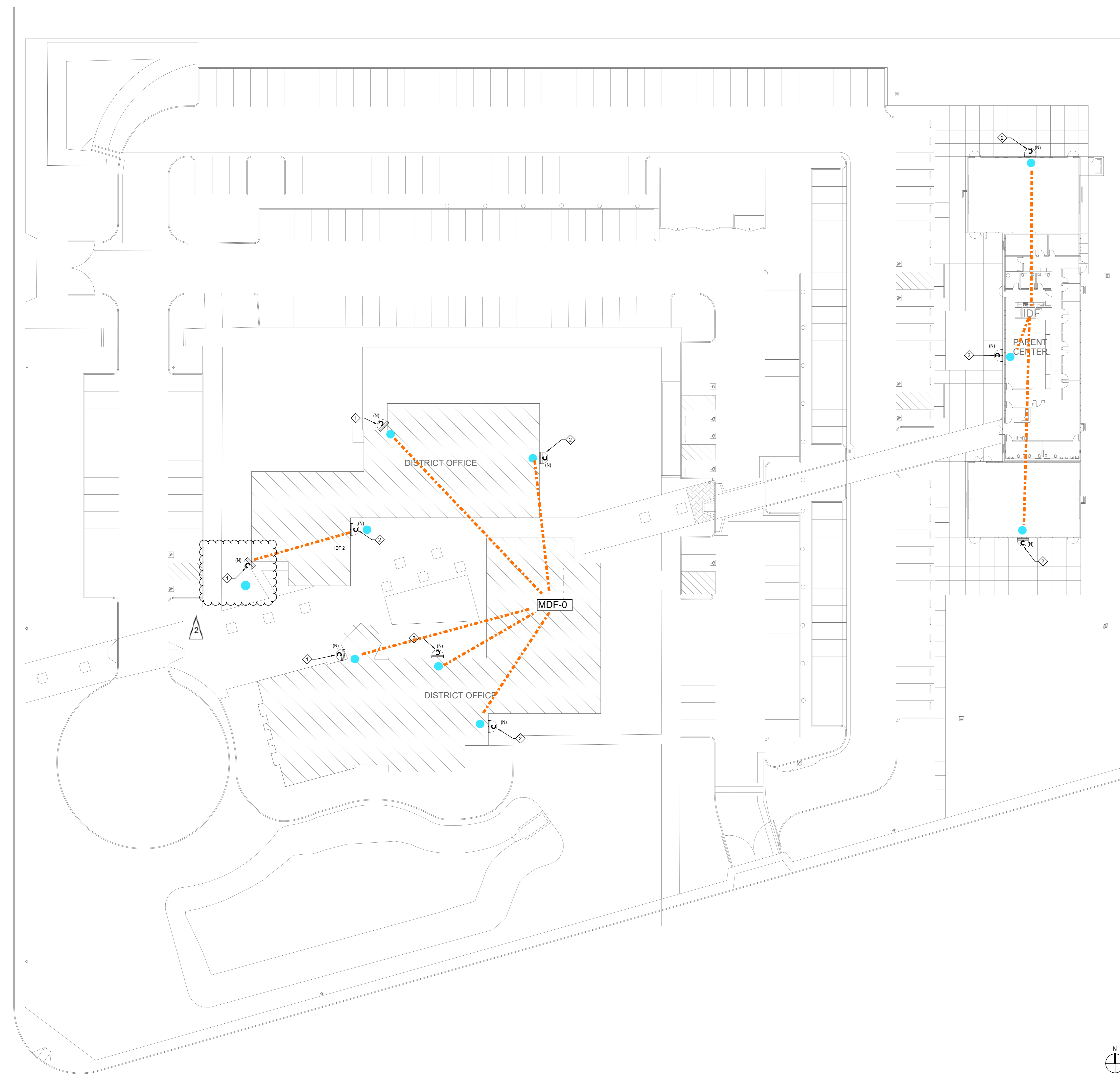
**LEARNING WITHOUT LIMITS**

Jurupa Unified Districtwide Camera Project - Camera Schedule by Site\_Addendum 02

<b>Site</b>	<b>Address</b>	<b>Camera Quantity</b>	
Camino Real Elementary	4655 Camino Real	3	
Granite Hill Elementary	9371 Granite Hill	3	
Indian Hills Elementary	7750 Linares	3	
Mission Bell Elementary	4020 Conning Street	3	
Pacific Avenue Academy of Music	6110 45th Street	3	
Pedley Elementary	5871 Hudson Street	3	
Peralta Elementary	6450 Peralta Place	3	
Rustic Lane Elementary	6420 Rustic Lane	3	
Sky Country Elementary	5520 Lucretia	3	
Stone Avenue Elementary	5111 Stone Avenue	3	
Sunnyslope Elementary	7050 38th Street	3	
Van Buren Elementary	9501 Jurupa Road	3	
West Riverside Elementary	5671 42nd Street	7	
Mira Loma Middle School	5051 Steve Street	3	
Mission Middle School	5961 Mustang Lane	4	Quantity Updated
Nueva Vista High School	6836 34th Street	4	
Jurupa Valley High School	10551 Bellegrave	19	Quantity Updated
Patriot High School	4355 Camino Real	15	
Rubidoux High School	4250 Opal Street	9	
Learning Center (Adult Alternative Education)	4041 Pacific Avenue	6	
School Readiness Center (Listed on Plans as Family Resource & Childcare Center)	5960 Mustang Lane	4	
Maintenance & Operations	4740 Pedley Road	3	
Education Center & Parent Center	4850 Pedley Road	10	
Professional Development Center	10223 Bellegrave Avenue	3	
		<b>123</b>	



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KEY NOTES

- ◇ INDICATES THE LOCATION OF A WEATHER PROOF (IP66) RATED, EXTERIOR SECURITY CAMERA (270 DEGREE) CAMERA SHALL BE POE, IP BASED UNLESS NOTED OTHERWISE. CABLING, CONTRACTOR SHALL PROVIDE AND INSTALL (1) CAT6A CABLE TO EACH LOCATION SHOWN, WIRED BACK TO THE NEAREST MDF/IDF.
- ◇ INDICATES THE LOCATION OF A WEATHER PROOF (IP66) RATED, EXTERIOR SECURITY CAMERA (180 DEGREE) CAMERA SHALL BE POE, IP BASED UNLESS NOTED OTHERWISE. CABLING, CONTRACTOR SHALL PROVIDE AND INSTALL (1) CAT6A CABLE TO EACH LOCATION SHOWN, WIRED BACK TO THE NEAREST MDF/IDF.
- CAMERA LOCATIONS FOR EXISTING PROJECT

GENERAL NOTES

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- 6 CONTRACTOR TO FIELD VERIFY AND COORDINATE WITH OWNER EXACT CABLING AND CONDUIT ROUTING PRIOR TO START OF ANY WORK.



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EDUCATIONAL CENTER AND PARENT CENTER SECURITY CAMERAS

JURUPA UNIFIED SCHOOL DISTRICT  
4850 PEDLEY RD, JURUPA VALLEY, CA 92509

KEY PLAN

ENGINEER

ARCHITECT

CLIENT  
JURUPA UNIFIED SCHOOL DISTRICT

PROJECT NUMBER  
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DATE: 12/20/23  
DRAWN BY: Author  
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REVISIONS

No.	Description	Date
1	Addendum 1	9/12/25

TECHNOLOGY SITE PLAN

ADDENDUM 02

T1.01



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**JURUPA VALLEY HIGH SCHOOL  
SECURITY CAMERAS**  
JURUPA UNIFIED SCHOOL DISTRICT  
10551 BELLEGRAVE AVE, JURUPA VALLEY, CA 91752

KEY PLAN

ENGINEER

ARCHITECT

JURUPA UNIFIED SCHOOL DISTRICT

REVISIONS		
No.	Description	Date
1	Addendum 1	9/12/24

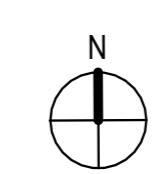
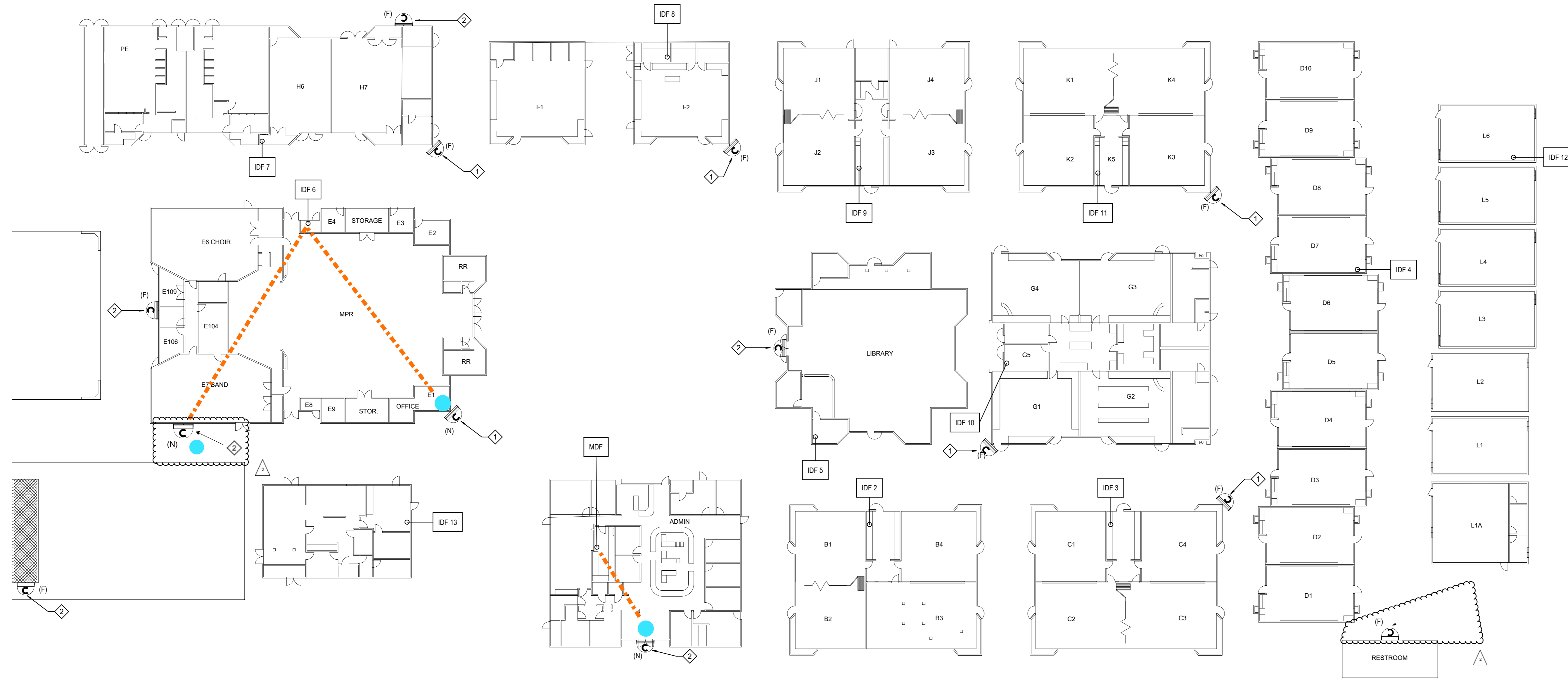
**TECHNOLOGY SITE PLAN**

ADDENDUM 02

**T1.01JV**

KEY NOTES	GENERAL NOTES
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**MIRA LOMA MIDDLE SCHOOL SECURITY CAMERAS**  
JURUPA UNIFIED SCHOOL DISTRICT  
5051 STEVE AVE, JURUPA VALLEY, CA 92509

KEY PLAN

ENGINEER

ARCHITECT

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PROJECT NUMBER

DATE: 12/20/23

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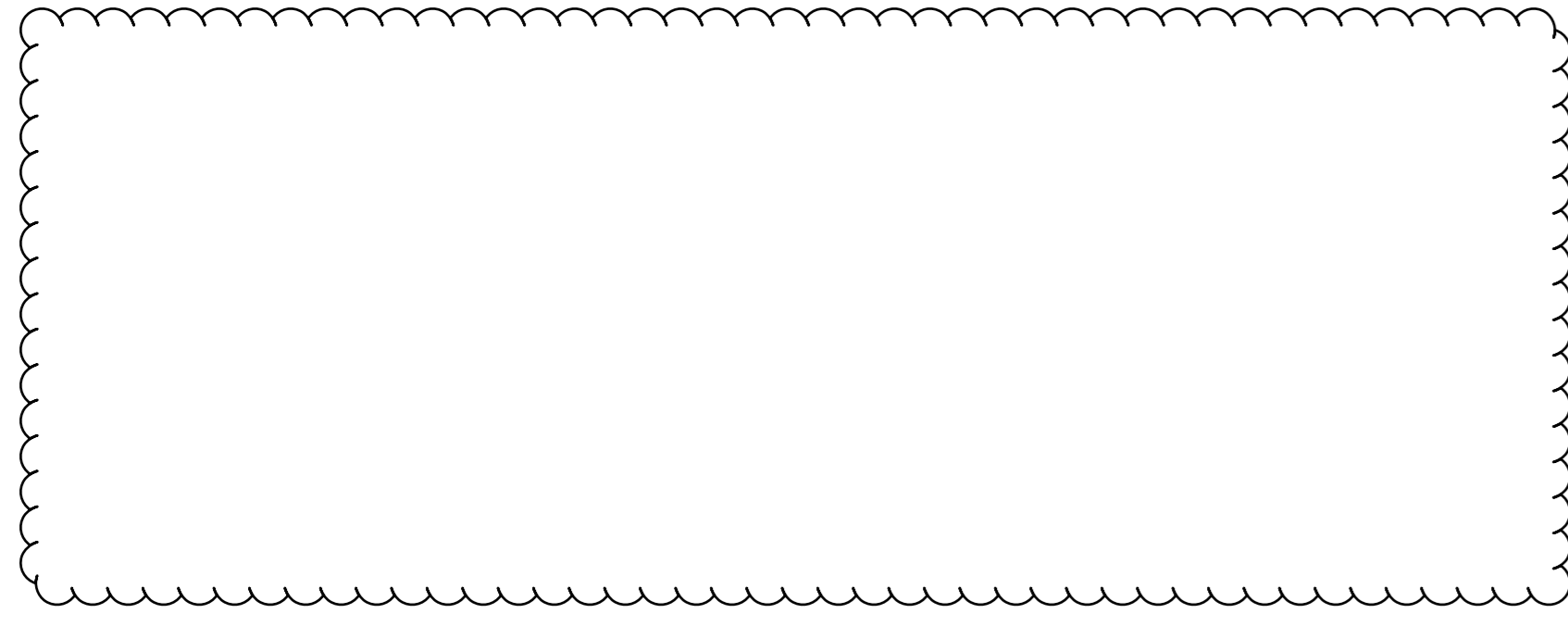
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**TECHNOLOGY SITE PLAN**

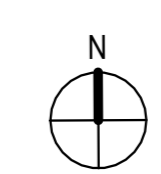
ADDENDUM 02

**T1.01**





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MISSION MS SECURITY CAMERAS

JURUPA UNIFIED SCHOOL DISTRICT  
 5961 MUSTANG LN, JURUPA VALLEY, CA 92509

KEY PLAN



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TECHNOLOGY SITE PLAN

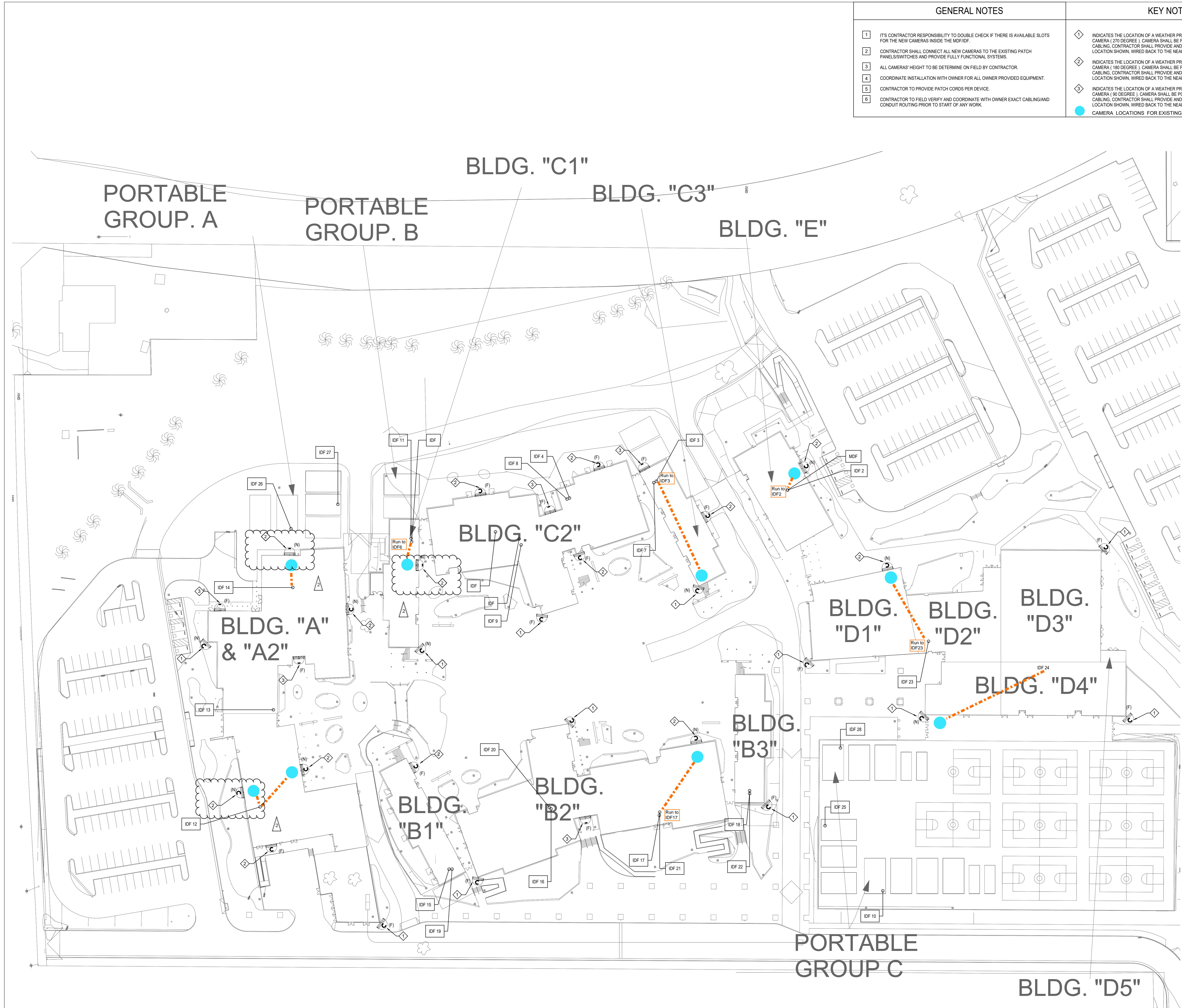
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T1.01



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**PATRIOT HIGH SCHOOL SECURITY CAMERAS**  
JURUPA UNIFIED SCHOOL DISTRICT  
4355 CAMINO REAL, JURUPA VALLEY, CA 92509

KEY PLAN

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**TECHNOLOGY SITE PLAN**

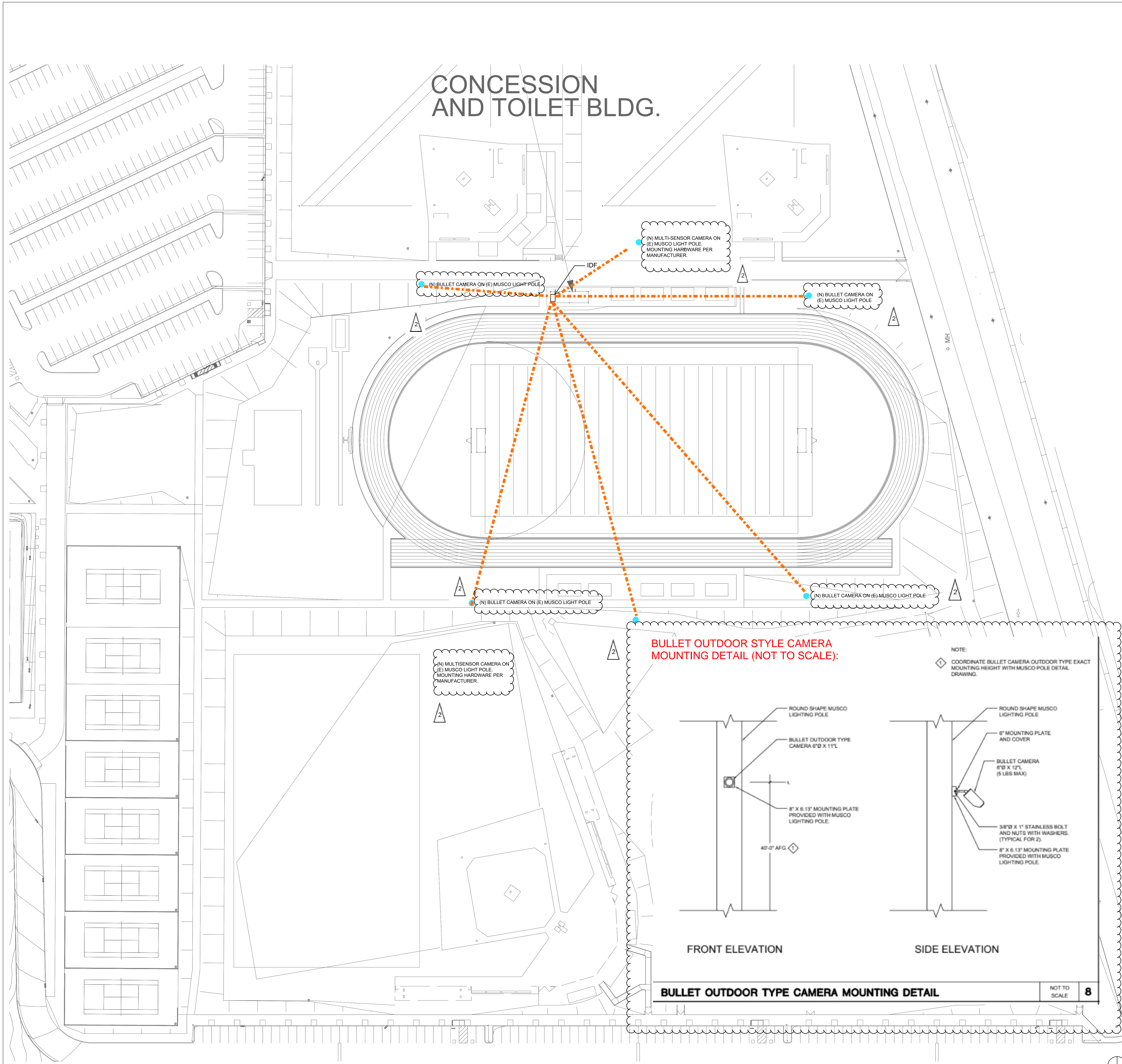
ADDENDUM 02

**T1.01**

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KEY NOTES

- ◇ INDICATES THE LOCATION OF A WEATHER PROOF (IP66) RATED, EXTERIOR SECURITY CAMERA (270 DEGREE) CAMERA SHALL BE POE, IP BASED UNLESS NOTED OTHERWISE. CABLING, CONTRACTOR SHALL PROVIDE AND INSTALL (1) CAT6A CABLE TO EACH LOCATION SHOWN, WIRED BACK TO THE NEAREST MDF/IDF.
- ◇ INDICATES THE LOCATION OF A WEATHER PROOF (IP66) RATED, EXTERIOR SECURITY CAMERA (180 DEGREE) CAMERA SHALL BE POE, IP BASED UNLESS NOTED OTHERWISE. CABLING, CONTRACTOR SHALL PROVIDE AND INSTALL (1) CAT6A CABLE TO EACH LOCATION SHOWN, WIRED BACK TO THE NEAREST MDF/IDF.

GENERAL NOTES

- 1 IT'S CONTRACTOR RESPONSIBILITY TO DOUBLE CHECK IF THERE IS AVAILABLE SLOTS FOR THE NEW CAMERAS INSIDE THE MDF/IDF.
- 2 CONTRACTOR SHALL CONNECT ALL NEW CAMERAS TO THE EXISTING PATCH PANELS/SWITCHES AND PROVIDE FULLY FUNCTIONAL SYSTEMS.
- 3 ALL CAMERAS' HEIGHT TO BE DETERMINE ON FIELD BY CONTRACTOR.
- 4 COORDINATE INSTALLATION WITH OWNER FOR ALL OWNER PROVIDED EQUIPMENT.
- 5 CONTRACTOR TO PROVIDE PATCH CORDS PER DEVICE.
- 6 CONTRACTOR TO FIELD VERIFY AND COORDINATE WITH OWNER EXACT CABLING/AND CONDUIT ROUTING PRIOR TO START OF ANY WORK.



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**PATRIOT HIGH SCHOOL SECURITY CAMERAS**  
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KEY PLAN

ENGINEER

ARCHITECT

CLIENT  
 JURUPA UNIFIED SCHOOL DISTRICT

PROJECT NUMBER

DATE: 12/20/23  
 DRAWN BY: Author  
 CHECKED BY: Checker

REVISIONS

No.	Description	Date

TECHNOLOGY SITE PLAN

ADDENDUM 02

**T1.02**

**SECTION 28 23 00 VIDEO SURVEILLANCE SYSTEM (VSS)****PART 1 – GENERAL****1.01 SUMMARY/DESCRIPTION OF WORK**

- A. Provide a complete and tested IP-based digital video surveillance system (VSS) including cameras, cabling, digital image cloud-based storage and video management system (VMS), integration and accessibility with Owner's Local/Wide Area Network (LAN/WAN), Internet accessibility through remote view application software and simultaneous user access capability. Provide fully terminated unshielded twisted pair (UTP) cable, UTP terminations, racks, raceways, conduit, and other incidental and miscellaneous premises wiring system hardware as required for a complete and usable system. CONTRACTOR is responsible for providing a complete turnkey system to the owner and is responsible for the complete installation of all required components of the IPVSS. The installation shall comply with applicable codes and standards in effect at the job site and as indicated in the Specifications and drawings.
- B. Provide OWNER with 5-year camera licenses. Licenses shall include unlimited cloud archiving and 30-days of cloud backup.
- C. The system shall be Non-Proprietary in nature and be available through multiple distribution channels in the nearest metropolitan marketplace. Systems that are manufactured and installed by a factory office and are not available through multiple distribution channels will not be accepted.
- D. Provide all electronic hardware and coordinate with the buildings' LAN/WAN. CONTRACTOR shall coordinate with other system vendors, where appropriate, to facilitate equipment installation, scheduling, protection of equipment and access to the project site in order to provide the Owner a substantially complete project in a timely manner.
- E. The VSS manufacturer shall have products that provide the ability to tie existing footage from non-cloud-based video surveillance system equipment owned and operated by Owner into the new video management system and use analytics from the new system on the existing cameras.
- F. If the VSS camera system submitted includes microphones or other audio capabilities, those features shall have the ability to be permanently or temporarily disabled.

**1.02 RELATED SECTIONS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1, apply to this Section.

**1.03 REGULATORY REQUIREMENTS**

- A. Standards: All work shall be performed in accordance with the latest revisions of the following standards and codes:
  - 1. Local Building Code
  - 2. Local Electrical Code
  - 3. NEC National Electrical Code
- B. VSS shall be NDAA compliant. Cameras and/or VSS (camera system) must not be included in the FCC or NDAA Prohibited manufacturers list.
- C. Other references:
  - 1. TIA/EIA-568-A - Commercial Building Telecommunications Wiring Standard
  - 2. EIA/TIA-569 - Commercial Building Standard for Telecommunications Pathways and



- Spaces.
3. TIA/EIA-606 - The Administration Standard for the Telecommunications Infrastructure of Commercial Buildings
  4. TIA/EIA-607 - Commercial Building Grounding and Bonding Requirements for Telecommunications
  5. TIA/EIA TSB 67 - Transmission Performance Specification for Field Testing of Unshielded Twisted-Pair Cabling Systems.
  6. ISO/IEC 11801 - Generic Cabling Standard
  7. EN 50173 - Generic Cabling Standards for Customer Premises

- D. Governing Codes and Conflicts: If the requirements of these specifications or the Project Drawings exceed those of the governing codes, regulations, and manufacturer installation requirements, then the requirements of these specifications and the drawings shall govern. However, nothing in the drawings or specifications shall be construed to permit work not conforming to all governing codes, regulations, and manufacturer installation requirements.

#### **1.04 SUBMITTALS**

- A. List of Materials: Submit a complete list of proposed materials in a single consolidated submittal.
- B. Specification Compliance: A letter shall be provided stating, by section and subsection, that the installer complies with the ENTIRE specification section. If the installer intends to deviate from any portion of the specifications, a detailed explanation of reason in which the installer would like to deviate shall be provided in addition to the specification compliance letter. NO DEVIATIONS SHALL BE ACCEPTABLE UNTIL THEY HAVE BEEN ACCEPTED BY THE PROJECT'S TECHNOLOGY CONSULTANT AND THE PROJECT'S OWNER.

#### **1.05 SHOP DRAWINGS**

- A. Samples: Complete manufacturer's product literature and samples (if requested) for all pre-approved substitutions to the recommended products made during the course of the Project.
- B. Permits: The Contractor shall obtain all required permits and provide copies to the Owner/Architect/Engineer.
- C. Product Literature: Complete manufacturer's product literature for all electronics, cable, cable supports, cable labels, outlet devices, and other products to be used in the installation. In addition, whenever substitutions for recommended products are made, samples (when requested by the Owner/Architect/Engineer) and the manufacturer's supporting documentation demonstrating compatibility with other related products shall be included.
- D. Testing: Proposed Contractor test result forms, a list of instrumentation to be used for systems testing.
- E. A complete point-to-point floor plan wiring and cabling diagram indicating camera locations and all required cabling to connect systems.

#### **1.06 PROJECT COMPLETION**

- A. As a condition for project acceptance, the Contractor shall submit the following for review and approval:
1. Inspection and Test Reports: During the course of the Project, the Contractor shall maintain an adequate inspection system to ensure that the materials supplied and the work performed, conform to contract requirements. The Contractor shall provide written documentation that indicates that materials acceptance testing was conducted as specified. The Contractor shall also provide documentation, which indicates that all cable termination testing was completed and that all irregularities were corrected prior to job completion.

2. Field of View determination for fixed camera locations shall be made by CONTRACTOR at no additional cost to OWNER, as necessary to provide the view desired by the OWNER. CONTRACTOR shall coordinate all final camera views and locations with OWNER for final approval prior to project acceptance.
3. Operating and Maintenance Instructions for all devices within the system. These instructions shall reflect any changes made during the course of construction, and shall be provided to the Owner, for their use, submitted electronically.
4. All training sessions with district staff and training media shall be complete.
5. As-built Drawings shall include cable pathways, mac addresses, cable ID's, additional pathways added, camera locations with correct labeling and MDF/IDF locations. The as-built drawings shall be prepared using AutoCad V. 14 or later. Provide the Owner with electronic versions of the as-builts via electronic link.

## **PART 2 - PRODUCTS**

All video surveillance equipment is CFCI (Contractor Furnished, Contractor Installed).

### **2.01 GENERAL**

- A. The cabling to each camera location on this project shall be provided and installed by the CONTRACTOR.
- B. CONTRACTOR is responsible for providing all incidental and/or miscellaneous hardware not explicitly specified below as required for a complete and operational system.
- C. Materials shall be as listed. No alternate products will be allowed without prior consent of the District's technology consultant. Any items proposed as equivalent products shall be submitted five days prior to proposal for OWNER review.
- D. All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system.
- E. All systems and components shall have been thoroughly tested and proven in actual use.
- F. All systems and components shall be provided with the availability of a toll free 24-hour technical support phone number from the manufacturer. The phone number shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge.
- G. All systems and components shall be provided with an explicit manufacturer warranty.

### **2.02 SUBSTITUTIONS**

- A. Equipment and materials that deviate from these requirements shall not be accepted without written approval from OWNER. When deviating or proposing material substitutions the following information shall be submitted:
  1. Substitution request form substantiating reasons and benefits to OWNER, and all necessary documents to validate the claims made in the substitution form.
  2. Submittals must comply with contract general provisions.
- B. The CONTRACTOR assumes all responsibility for additional costs, directly or indirectly, associated with proposing and installing an approved substitution products. All substituted products must meet the intent of form and function identified in the specification.

**2.03 QUALITY ASSURANCE**

- A. The CONTRACTOR or sub-CONTRACTOR shall be a licensed security CONTRACTOR with a minimum of five (5) years' experience installing and servicing systems of similar scope and complexity, and show evidence that CONTRACTOR has completed at least three (3) projects of similar scope, and is currently engaged in the installation and maintenance of systems herein described.
- B. All installation, configuration, setup, program and related work shall be performed by electronic technicians thoroughly trained by the manufacturer in the installation and service of the equipment provided.
- C. The CONTRACTOR or designated sub-CONTRACTOR shall submit installer's third party verified credentials of completion of manufacturer certification. The CONTRACTOR system programmer shall have attended manufacturer training and obtained the highest level certifications for the IPVSS and VMS.
- D. The CONTRACTOR shall provide four (4) current references from clients with systems of similar scope and complexity that became operational in the past three (3) years. At least three (3) of the references shall be utilizing the same system components, in a similar configuration as the proposed system.
- E. The video surveillance system shall be in compliance with applicable industry standards listed under article 1.03 Regulatory Requirements.
- F. The OWNER reserves the right to reject all or a portion of the work performed, either on technical or aesthetic grounds.

**2.04 WARRANTY**

- A. Minimum manufacturer warranty for cameras shall be ten (10) years.
- B. CONTRACTOR shall warranty that all work executed and materials furnished shall be free from defects in materials and workmanship for a minimum period of five (5) years from date of installation acceptance. Immediately upon receipt of written notice from the OWNER, the CONTRACTOR shall repair or replace at no expense to the OWNER, any defective material or work that may be discovered before final acceptance of work or within the warranty period; any material or work damaged thereby; and adjacent material or work that may be displaced in repair or replacement. Examination of, or failure to, examine work by the OWNER shall not relieve CONTRACTOR from these obligations.
- C. Warranty shall provide the OWNER direct access to manufacturer Technical Assistance Center (TAC), software updates, and defect support.
- D. Manufacturer of provided equipment shall guarantee availability of parts common to provided system and/or full replacement units, for a period not less than 10 years. Parts for the supplied systems shall be available within 30 calendar days during the 10 year period.
- E. Installation CONTRACTOR shall install all equipment in accordance with manufacturer's specifications and recommendations necessary to ensure continuation of the manufacturer's warranty. If the installation CONTRACTOR cannot install manufacturer's equipment in such a manner, it is the responsibility of the installation CONTRACTOR to provide written, timely notification to OWNER.
- F. The CONTRACTOR is responsible for replacement of any failed equipment provided by the CONTRACTOR, during the warranty period or the extended warranty period.

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- G. In the event of a “mass failure” the CONTRACTOR shall replace all units and/or components affected within 60 days of written notification from the OWNER.
- H. Upon replacement of each unit or component, the replaced unit warranty shall continue as if the original equipment were still in service.
- I. The warranty shall cover the complete system including fan assembly, power supplies, and the device itself.
- J. The warranty shall include onsite 48-hour advanced part replacement.
- K. The warranty shall include all labor to service and/or replace warranted system(s).
- L. In the event any Supplier or manufacturer offers additional warranty, at no additional cost, beyond that specified herein, CONTRACTOR shall state the terms of such warranty or warranties in writing and shall extend the same to the OWNER without additional cost.
- M. Equipment manufacturers shall have E-mail trouble reporting and response mechanisms in place and a toll free 24-hour help center to assist with troubleshooting and operation of the equipment at no additional cost to the OWNER, or as part of the warranty.

## 2.05 SYSTEM AND CAMERA CAPABILITIES

Basis of Design for the VSS system are Cisco Meraki and Verkada.

- A. General Requirements:
  - 1. System overall shall be capable of intelligent edge-based video analytics, trigger actions based on programming requirements, advanced motion-based insights either as a camera option or an option on the management interface, including people heatmaps showing live and historical views of where activity is taking place, crowd detection alerts, live alerts and notifications when Persons of Interest are detected by any camera.
  - 2. System shall provide ability to share live links, floor plans, or historical footage of a single camera or group of cameras with a set of external contacts (e.g., first responders). System shall allow export of any footage in MP4 format and allow recipients to verify its authenticity.
  - 3. System shall provide ability to filter video based on date range, time range, and attributes.
  - 4. System shall provide ability to archive video footage with unlimited storage and to be saved on the cloud indefinitely.
  - 5. System shall include standard features such as onboard storage, and local video storage via MicroSD/SDXC.
  - 6. System shall have the ability to support AES128 and AES256 encryption standards.
  - 7. System shall be scalable, with no added equipment needed to support additional cameras. Camera vendor shall offer unlimited cloud storage at no additional cost with no expiration for duration of storage.
  - 8. System shall provide either email or SMS notification of critical system events (e.g., camera failure, tampering, etc.).
  - 9. System shall have capability to audit account usage.

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10. System shall provide multiple levels of system administration to accommodate different staff who will have varying roles viewing or managing cameras, and option for mobile app for entrance to access control secure sites.
11. System shall include multi-factor authentication.
12. Cameras shall include a minimum storage capacity of 256GB on the camera itself.
13. Cameras shall include up to 365 days of retention in standard quality.
14. Cameras shall be bandwidth friendly, operating between 20-50kbps per camera at rest.
15. Cameras shall include automatic firmware updates, and new features and enhancements with no additional cost to OWNER.
16. Cameras shall support true day/night vision and recording modes using IR cut filters, and infrared illumination for night visibility with a minimum 30 IR. Bullet cameras shall have a minimum 50IR with a telephoto lens for distance.
17. Cameras shall include a built in solid state hard drive.
18. Camera enclosure shall be contain the following ratings: FCC, ICES, CE, UL, CB, NOM, KCC, 1P67 rating, and minimum 1K8 impact rating.
19. All cameras shall have standard RJ45 connectivity including PoE capability to receive power. Primary power source of cameras shall be PoE++ injector, capable of converting a power cable and an Ethernet cable to a single PoE++ port with up to 60W of power. **Primary power source for cameras shall be CFCI (Contractor Furnished, Contractor Installed).** Power source equipment shall be installed at designated IDF/MDF rack or cabinet.
20. Video at minimum 24 FPS.
21. Image stabilizing to reduce blurring.
22. Environmental operational requirements:
  - a. Operate in a minimum temperature range of -10 °C to +50 °C (14°F to 122 °F).
  - b. Operate in a humidity range of 0-90%.
23. Cameras identified as 270 degree cameras must have a 5MP or greater resolution. Cameras identified as 180 degree cameras must have a 3MP or greater resolution. Cameras identified as 90 degree cameras must have a 1.5MP or greater resolution.
24. Camera system must be capable of recognition of faces and objects. The ability to upload an image of a facial picture for searching through video is necessary. Objects must be able to be searched by colors and descriptions.
25. Camera system must be capable of detecting and alerting on loitering in areas determined by Owner.
26. Camera system must be capable of accepting and processing application program interface (API) calls to perform tasks and get information.

**PART 3 - EXECUTION****3.01 INSTALLATION**

- A. The CONTRACTOR or subcontractors main resources within the project shall carry proper professional certification issued by the manufacturer to confirm sufficient product and technology knowledge.
- B. The CONTRACTOR shall carefully follow instructions in documentation provided by the manufacturer to ensure all steps have been taken to provide a reliable, easy-to-operate system.
- C. Multi-sensor camera mounts shall be per Camera Manufacturer.
- D. Do not install wall mounted cameras into metal fascia. Ensure they are mounted on proper materials, and sealed top and sides (not bottom).
- E. All equipment shall be tested and configured in accordance with instructions provided by the manufacturer prior to installation.
- F. All firmware found in products shall be the latest and most up-to-date provided by the manufacturer.
- G. Field of View determination for fixed camera locations shall be made by CONTRACTOR at no additional cost to OWNER, as necessary to provide the view desired by the OWNER. CONTRACTOR shall coordinate all final camera views and locations with OWNER for final approval prior to project acceptance.
- H. The password for each camera will be changed to a strong password and given to the district project manager.
- I. Contractor will use a spreadsheet hosted by the district to track which cables have been patched over at which schools. District staff will identify and configure network ports for use. Contractor to turn over MAC addresses of equipment prior to installation.

**3.02 NAMING CONVENTIONS**

- A. Coordinate all camera naming conventions with OWNER representative.
- B. Weather proof labels showing the corresponding camera number shall be applied to each camera's housing.

**3.03 TESTING**

- A. The VSS system shall be tested in accordance with the following:
  - 1. Conduct a complete inspection and test of all installed video surveillance equipment.
  - 2. Provide staff to test all devices and all operational features of the system for witness by the Owner's representative and authorities having jurisdiction as applicable.
  - 3. Correct deficiencies until satisfactory results are obtained.
- B. Submit written copies of test results.

**3.04 PROTECTION**

- A. Protect the Work until Substantial Completion, which is established by OWNER.



**3.05 OWNER ORIENTATION (TRAINING)**

- A. Before contract closeout provide the following training and orientation:
  - 1. Provide a minimum 48 hours training for OWNER designated representatives. The content of the training is advanced instruction on the use, programming, maintenance and troubleshooting of the video surveillance system, devices and components.
    - a. Materials shall include training manuals.
    - b. The training shall be provided at OWNER facility.
      - 1) Training shall consist of classroom instruction including intensive course work covering the following topics:
        - a. Product Features and Technical Specifications
        - b. Implementation and Design as-built documentation, including familiarization with drawing sets, symbols and notation as well as other record documents.
        - c. Complete understanding of the system architecture and design of implemented solution.
        - d. Complete function and feature analysis on implemented solution including programming, operation, trouble shooting, error messages, etc.

**3.06 CLEANUP**

- A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

**END OF SECTION**