

PRE-BID CLARIFICATION FORM

PROJECT NAME:		FILLMORE HIGH SCHOOL NEW ATHLETIC COMPLEX	
PROJECT NUMBER:		Project No. 2024-017 / DSA #03-123950	
TO:		RJ Stump Fillmore Unified School Dist. Roy Frey WestGroup Designs	
		EMAIL: rj.stump@fillmoreusd.org royf@westgroupdesigns.com	
DATE:	2/5/2025		
FROM:	Neil Hulin	EMAIL:	nhulin@bowecontractors.com
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	E2-1.2

REQUESTED CLARIFICATION:

Please circle all applicable bid packages below, that this RFI pertains to:

Base bid

Alt #1

Alt #2

DRAWING SHEET E2-1.2 SHOWS VIDEO SURVEILLANCE
CAMERAS. WHO IS RESPONSIBLE FOR VIDEO CAMERAS SCOPE?
PROVIDE THE SPECIFICATION AND SINGLE LINE DIAGRAM.

PRE-BID CLARIFICATION FORM

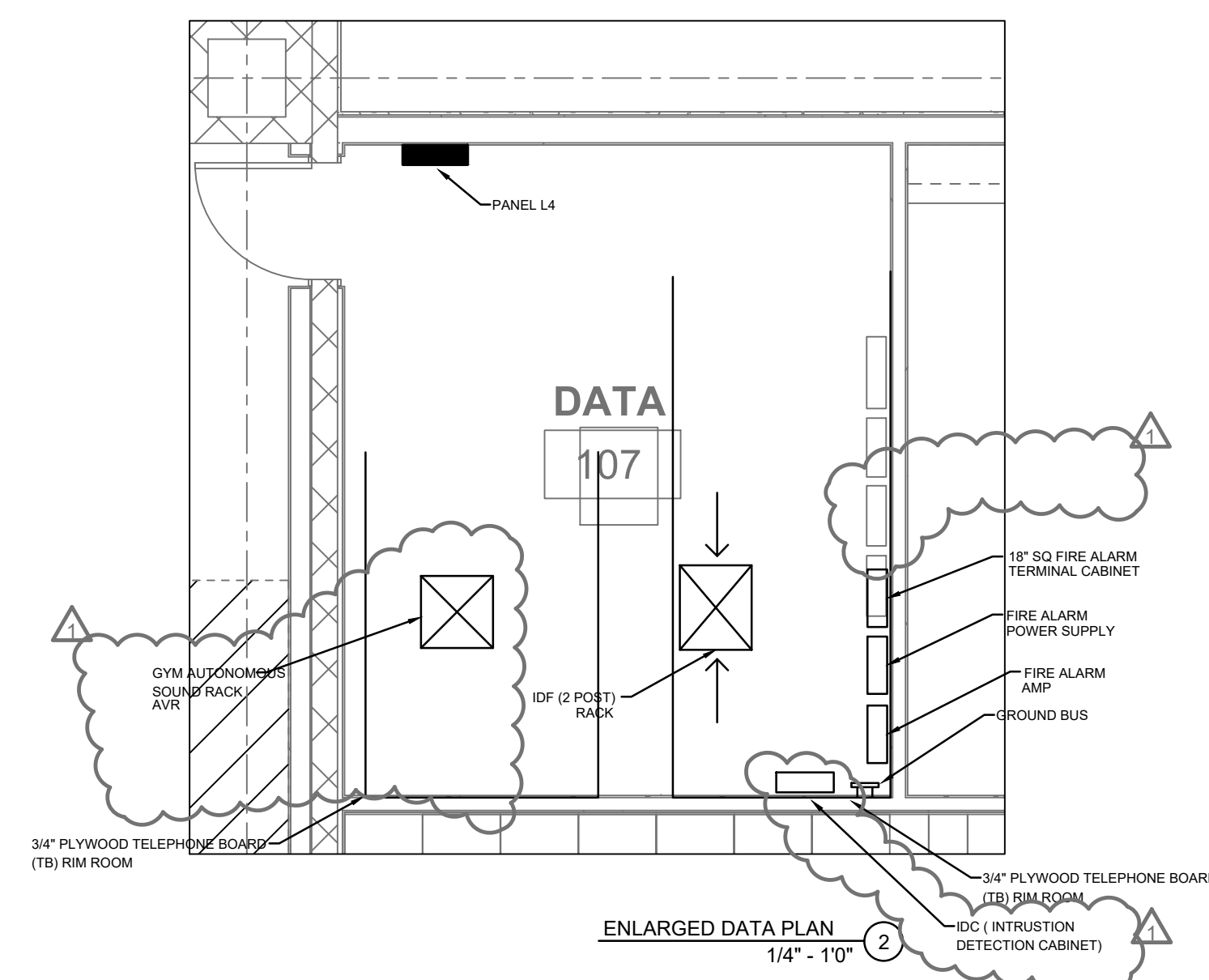
RESPONSE TO CLARIFICATION:

See updated Sheets E2-1.2 E601 and E603 for video camera locations. See added spec 28 25 00 Surveillance.

DL - AGD - 2/10/25

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

- PLAN NOTE:
1. PROVIDE 24" SQ. X 6" DEEP PULL BOX WITH BARRIERS. PROVIDE PATHWAY BETWEEN BOXES.
 2. BLEACHER SEATING AP'S NEED TO BE 6-8FT ABOVE TOP OF SEATING, MOUNTED ON WALL.
 3. OUTDOOR AP'S, CAMERAS, AND SPEAKER TO BE STANDARD +BED HEIGHT OF 12'.
 4. PROVIDE 12" SQ PULL BOX. DROP DOWN TO SCOREBOARD. 1 1/4" PATHWAY TYP. ABOVE.
 5. INDICATES RACKING CONDUIT PATHWAYS ABOVE.
 6. PROVIDE AT 12" H.F.F. (2) SQ BOXES WITH:
 - ASS LISTENING
 - WIRE MICROPHONE
 - ANTENNAS
 7. PROVIDE 6" SQ LOW VOLTAGE PULL BOX LABEL. AV SYSTEM
 8. ANTENNA LOCATION. MOUNTED ON WALL AT 12' AFF. HOMERUN 1 1/4" TO AV ROOM.



- SECURITY INTRUSION.
- KEY PAD.
- EXTERIOR WEATHER PROOF SPEAKER (FLUSH GRILL).
- ATLAS CLOCK/SPEAKER (FLUSH MTD).
- 3/4" UP TO ACCESSIBLE CEILING. (2) - INDICATES CAT 6A CABLE.
- FLUSH W/ FLOOR, DEEP BOX.



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FILLMORE HIGH SCHOOL ATHLETIC COMPLEX
FILLMORE UNIFIED SCHOOL DISTRICT
555 CENTRAL AVE, FILLMORE CA, 93015

ISSUED FOR:

REVISIONS:

REF.1 1-28-25

REGISTRATION/SIGNATURE:

SHEET TITLE:

1ST FLOOR LOW VOLTAGE PLAN

SHEET NUMBER:

E2-1.2

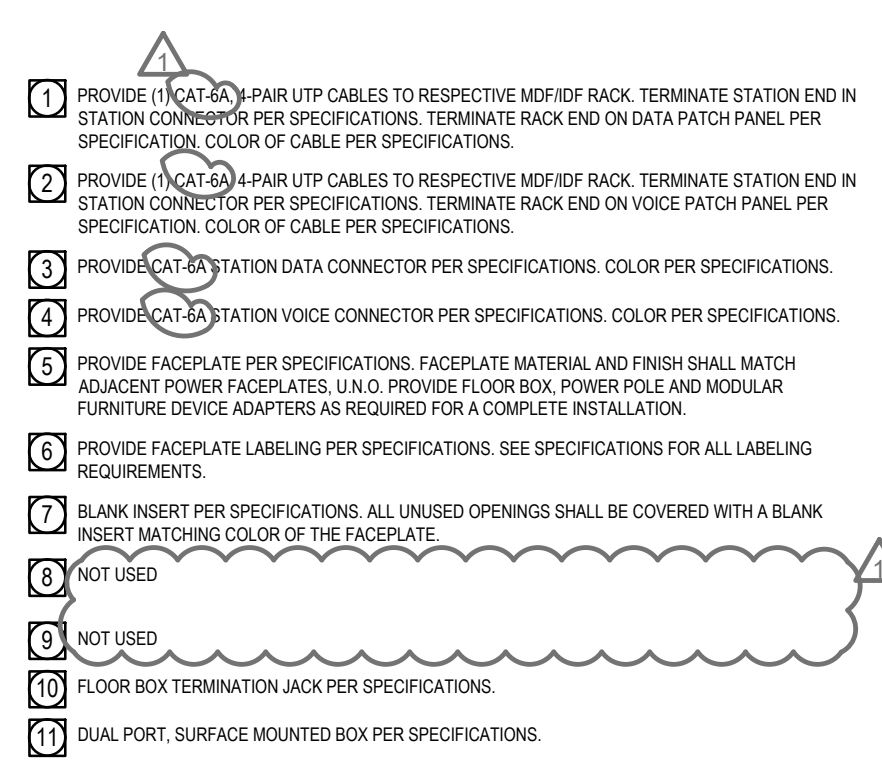
WD PROJ. # DRAWN BY: CHECKED: DATE:
22851 DL, AM GM 06/07/23

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1ST FLOOR LOW VOLTAGE PLAN

1
1/8" = 1'-0"

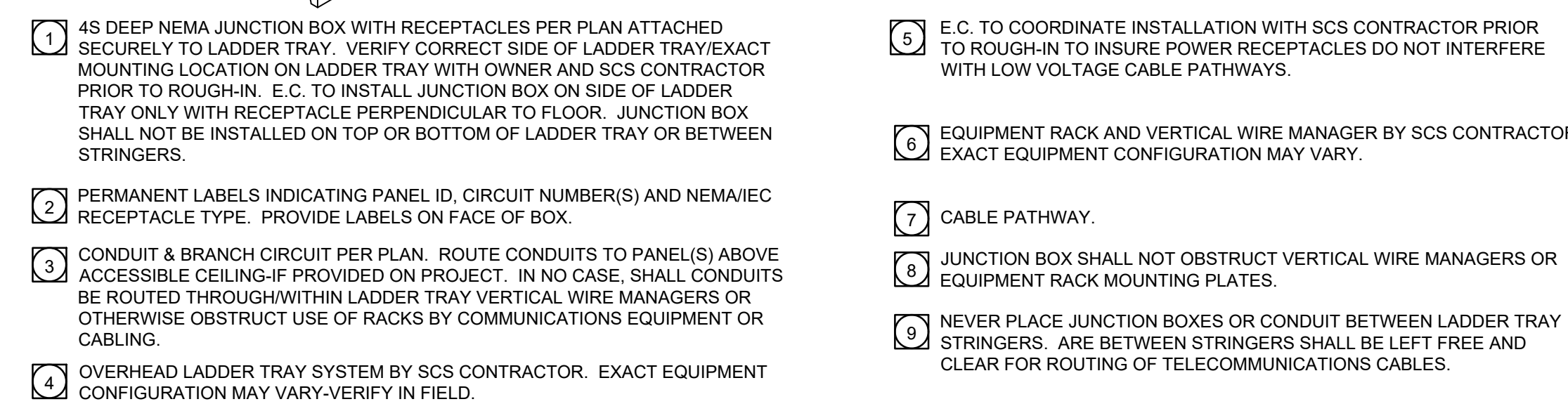
NOT FOR CONSTRUCTION



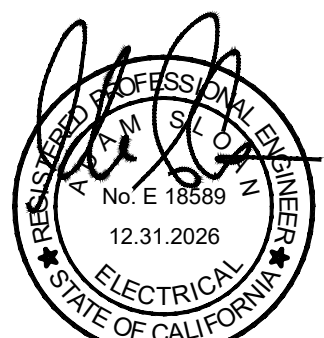


- 1 STANDOFF MOUNTS SHALL BE 14" TO ALLOW STRAPPING TO PASS BEHIND TRAY.
- 2 CABLE FEEDERS.
- 3 WIRE MESH CABLE TRAY. WIDTH SHALL BE THE SPAN OF CONDUITS. HEIGHT SHALL BE FROM BOTTOM OF HORIZONTAL TRAY TO CONDUITS. STRAP CABLE TO WIRE MESH CABLE TRAY AS SPECIFIED.
- 4 EXTEND MESH CABLE TRAY FROM HORIZONTAL TRAY 10" TO BELOW HUNG SLEEVES OR CONDUITS. VERTICAL SPAN LESS THAN 24" MAY NOT REQUIRE A VERTICAL TRAY.
- 5 ALL CONDUITS, CABLE TRAY AND WALL PENETRATIONS SHALL HAVE CABLE RUNWAY RADIOUS DROP.
- 6 HORIZONTAL CABLE TRAY SHALL BE SUPPORTED AT 4' INTERVALS WITH SPECIFIED SUPPORT BRACKETS.
- 7 PROVIDE CABLE RUNWAY RADIOUS DROP/UP WHEREVER CABLES LEAVE HORIZONTAL TRAY. PROVIDE ONE (1) FOR EVERY CABINET AND TWO (2) FOR EVERY TWO-POST RACK.
- 8 HORIZONTAL CABLE TRAY.
- 9 HORIZONTAL CABLE TRAY SECTIONS SHALL BE SPIKED WITH SPECIFIED CABLE RUNWAY JUNCTION SPIKE KIT. EACH SECTION SHALL BE BONDED WITH SPECIFIED CABLE GROUP STRAP KIT.
- 10 CONDUIT WITH BUSHINGS AND PULL ROPS. SIZE, QUANTITY AND SPECIFICATIONS PER PLANS. SEAL ALL CONDUITS PER NATIONAL FIRE CODE.
- 11 VERTICAL DATA RACK, SIZE AND SPECIFICATION PER PLANS.
- 12 HORIZONTAL CABLE TRAY SHALL BE SUPPORTED AT 4' INTERVALS WITH SPECIFIED CEILING SUPPORTS.

- | | | |
|----|--|---|
| 13 | PLYWOOD BACKBOARD AS SPECIFIED ON PLANS. | 5 |
| 14 | SLEEVE WALL PENETRATION WITH BUSHINGS: SIZE, QUANTITY AND SPECIFICATIONS PER PLANS. SCS CONTRACTOR SHALL SEAL INLET OF SLEEVE AFTER CLAMP INSTALLATION PER NATIONAL FIRE CODE. | 1 |
| 15 | ANSI COMPLIANT TELECOMMUNICATIONS GROUND BUS BAR PER SPECIFICATIONS. SEE GENERAL TELECOMMUNICATIONS GROUNDING AND BONDING REQUIREMENTS. | 1 |
| 16 | PROVIDE FIRESTOP ABOVE ALL CONDUIT PENETRATIONS AS REQUIRED. PROVIDED AND INSTALLED BY E.C. | 1 |
| 17 | PROVIDE FIRESTOP LABEL AS REQUIRED BY CODE. | 1 |
| 18 | PROVIDE CLAMP RAILWAY MOUNTING KIT TO HORIZONTAL TRAY PER SPECIFICATIONS. PROVIDE 2" CLEARANCE BETWEEN HORIZONTAL TRAY AND RACK/CABINETS. | 1 |
| 19 | FOR CEILING PENETRATIONS, PROVIDE SLEEVE(S) WITH BUSHING(S) AND ROUTE THROUGH CEILING. | 1 |
| 20 | PROVIDE CH-BWC CLIPS SPACED AT 24" O.C. ON EACH SIDE WITH #16SME. CLIP TO THE LADDER RACK, AND #16 BSTR. ATTACH THE CLIP TO THE WALL W/ 1/4" WALL ANCHOR PER 155409 | 1 |
1. GENERAL NOTE: ONLY SCS CONTRACTOR SHALL COORDINATE WITH PLANS AND PROVIDE A COMPLETE SYSTEM. SCS CONTRACTOR SHALL CONFIRM WITH THE WALL WALK AND TRA STANDARDS.
1. ITEMS THAT SHALL BE PROVIDED BY SCS CONTRACTOR UNLESS OTHERWISE NOTED:
3. SCS CONTRACTOR SHALL COORDINATE ALL HORIZONTAL AND VERTICAL TRAY ROUTING IN LOCATIONS WITH E.C. AND PROVIDE PROPER CLAMP TRANSLATION.



MDF / IDF LADDER TRAY / RECEPTACLE MOUNTING DETAIL	02
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FILLMORE HIGH
SCHOOL ATHLETIC
COMPLEX
FILLMORE
UNIFIED SCHOOL
DISTRICT
555 CENTRAL AVE, FILLMORE
CA. 93015

[illegible]

REGISTRATION/SIGNATURE:			
SHEET TITLE: <div style="text-align: center; font-weight: bold; font-size: 1.5em;"> ELECTRICAL DETAILS </div>			
SHEET NUMBER: <div style="text-align: center; font-weight: bold; font-size: 2em;"> E603 </div>			
WD PROJ. # 22851	DRAWN BY: DL, AM	CHECKED GM	DATE 06/07/23

SECTION 28 25 00- SURVAILANCE SYSTEM

SECTION 1 - GENERAL

1.0 SCOPE OF WORK

- A. This Section includes specification criteria that must be followed both for unit price work that is executed under a specific item description included in this bid package, or for work done on a time and materials basis, or under unforeseen conditions. When preparing the bid for specific line items, or quotes for future projects: all applicable sections herein shall become part of the project scope for material and execution standards. The work under this section includes all labor, material, equipment, supplies, labor, testing, and accessories required to furnish and install a complete IP Camera Surveillance System as indicated on the drawings and as specified herein.

1. Refer to Specification Section 27 10 00 Structured Cabling System and Electrical Materials and Methods-General for pathway material and execution standards and requirements.

- B. It is the intent of the Drawings and Specifications for the Contractor to provide and install a complete, fully operational, and tested system.
- C. All miscellaneous system components including, but not limited to, cables, termination equipment, punch blocks, patch panels, backboards, dedicated power provisions, as well as any other related items, shall be furnished and installed complete under this section, such that the system shall perform all functions listed herein in compliance with all of the specified requirements.

1.1 RELATED WORK

- A. All applicable portions of Section 27 10 00 shall apply to this section as though written herein completely.

1.2 GENERAL REQUIREMENTS

- A. The contractor shall hold a valid State of California C-7 Low-Voltage and C-10 Electrical license, shall have completed at least 20 projects of equal scope, shall have been in business of furnishing and installing systems of this scope and magnitude for at least five years, and capable of being bonded to assure the owner of performance and satisfactory service during the guarantee period.
- B. The contractor shall hold all other licenses required by the legally constituted authorities having jurisdiction over the work.
- C. All work shall be performed under the supervision of a company accredited by the basic equipment manufacturer and such accreditation must be presented with Bid.
- D. The bidding contractor shall be a factory authorized distributor and warranty station for the brand of equipment offered and shall maintain a fully equipped service organization capable of furnishing adequate repair service to the equipment. The installing contractor shall maintain a spare set of all major parts for the system at all times. All system components shall be 100% backed up with stock at contractors shop.
- E. All of the equipment in this specification shall be furnished and installed by the Authorized Factory Distributor of the equipment. The Contractor shall furnish a letter from the manufacturer of all major equipment, which certifies that the installing contractor is the Authorized Distributor and that the equipment has been installed according to factory intended practices. The Contractor shall also furnish a written guarantee from the manufacturer that they will have a service representative assigned to this area for the life of the equipment.

- F. If applicable, all of the equipment in this specification shall be furnished and installed with the most current software package available at the time of installation. At the time of Owner Acceptance of the installation, all equipment shall include any and all updated software revisions. In addition, when the software is available in disk format, a backup copy of the most up to date revision shall be handed to the Owner at the completion of the project.

1.3 QUALITY ASSURANCE

- A. In order to maintain a high degree of quality assurance, the contractor shall, without exception, use the parts and supplies as specified in this specification.

1.4 SUBMITTAL AND MANUAL

- A. Submittal requirements of this section are:
1. Within thirty-five (35) calendar days after the date of award of the Contract, the Contractor shall submit eight copies of the complete submission to the Architect for review.
 2. The submission shall consist of five major sections with each section separated with index tabs. Each page in the submission shall be numbered chronologically and shall be summarized in the index.
 3. The first section shall be the "index" which shall include the project title and address, name of the firm submitting the proposal and name of the Architect.
 4. The second section shall include a copy of the Contractors valid C-7 California State Contractors license, a list of 20 projects of equal or greater scope, and a list of proposed instrumentation to be used by the contractor. In addition, provide Authorized Distributor letter from Axis and Qognify.
 5. The third section shall contain the comparative specification listing, including a complete listing of the characteristics of the equipment to be furnished next to all of the specified equipment's features and functions as stated in the specifications and data sheets.
 6. The fourth section shall contain an original factory data sheet for every component in the specifications.
 7. The fifth section shall contain a designation schedule for each device location and complete 1/8" = 1'-0" scale AutoCAD created drawing showing system wiring plans. The Architect / Engineer will provide AutoCAD format drawings of the original associated plans, upon receipt of a written request from the contractor at no charge.
- B. As Builts and Owner's Manual: The Contractor will provide both printed full size and autocad drafted as-builts as part of project closeout. These will include any field changes made, as well as dimensions for all items which are hidden or buried underground, or within framed walls or hard lid areas.
1. Owner's Manual: The Contractor will also submit 8 ½ x 11 reduced scale diagrams of the final installation. Buildings shall be shown in single line format. Room numbers will match those on door signs installed at the site, rather than match the architectural plan room numbers. All major equipment shall be annotated for type and location. Meet with the Owner to determine their specific labeling and color coding requirements before preparing and submitting these documents.
- C. Failure to comply with all of the requirements listed above will result in the rejection of the entire submittal package.

- D. The Contractor shall provide two copies of an "Operating and Servicing Manual" for the system. The manuals shall be bound in flexible binders. All data shall be printed material or typewritten. Each manual shall include the following:
 - 1. Instructions necessary for the proper operation and servicing of the system.
 - 2. Complete as-built installation drawings of the system.
 - 3. A wiring destination schedule for each circuit leaving for each piece of equipment.
 - 4. A schematic diagram of major components and replacement numbers.
- 1.5 GENERAL SYSTEM PRODUCT, INSTALLATION AND OVERALL SYSTEM WARRANTY
 - A. Prior to Owner acceptance, the contractor shall provide to Owner, a manufacturers product and performance warranty. This will require a submittal of the required pre-job certification registration forms as well as the required project closing information. The Owner will only acknowledge acceptance upon submittal of a valid manufacturers warranty.
 - B. The warranty shall commence from the date of final written acceptance by the Owner.
 - C. All conditions for obtaining the manufacturers warranty shall be the sole responsibility of the contractor.
 - D. The contractor shall maintain a competent service organization and shall, if requested, submit a service maintenance agreement to the owner after the end of the guarantee period.
 - E. A typewritten notice shall be posted at the equipment rack that shall indicate the firm, address and telephone number to call when service is necessary. The notice shall be mounted in a neatly finished metal frame with a clear plastic window and securely attached to the inside of the door.
- 1.6 SPECIFIC PRODUCT, INSTALLATION AND OVERALL SYSTEM WARRANTY
 - A. The entire system shall be warranted free of mechanical or electrical defects for a period of one (1) year after final acceptance of the installation. Any material showing mechanical or electrical defects shall be replaced promptly at no expense to the Owner.

SECTION 2 - SYSTEM EQUIPMENT SPECIFICATION

2.0 ACCEPTABLE MANUFACTURERS

- A. In order to establish quality and standards of performance of equipment and match the District's Standard, the specified equipment for the camera systems is that of Axis and Ocularis Enterprise. All mechanical, electrical and general information set forth on the respective data sheets for each specified item shall be considered as part of these specifications and binding herein.
- B. Its is the responsibility of the bidder to insure that the proposed product meets or exceeds every standard set forth in these specifications and the equipment's technical data sheets.
- C. The functions and features specified are vital to the operation of this facility. Therefore, inclusion of a component's manufacturer in the list of acceptable manufacturers does not release the contractor from strict compliance with the requirements of this specification.
- D. All basic electronic equipment (not including cable) specified herein shall be produced by a single manufacturer of established reputation and experience who shall have produced similar apparatus for at least three or more years and who shall be able to refer to similar installations rendering satisfactory service.

2.1 SYSTEM FUNCTIONS AND CAPABILITIES:

A. Video Surveillance System

1. The Bidder/Contractor shall provide Licensing requirements for Ocularis Enterprise VMS from Qognify. District has existing Ocularis running through out District. Contractor to include in their price additional licensing for added nodes, all programming, set up and training.

2.2 PRODUCTS:

1. Type of Cameras: As noted on floor plan

Type (A). Axis Q3819-PVE with all associated mounting hardware.

Type (B) Axis P3737-PLE with all associated corner pendant mounting hardware.

B. CABLE:

1. Covered under separate specification.

SECTION 3 – EXECUTION

3.01 GENERAL INSTALLATION REQUIREMENTS

- A. The wiring of the system shall be executed in accordance with the drawings and the equipment manufacturer's wiring diagrams. Should any variations in these requirements occur, the contractor shall notify the architect before making any changes. It shall be the responsibility of the factory-authorized distributor of the approved equipment to install the equipment and guarantee the system to operate as per plans and specifications.
- B. Furnish all conduit, junction boxes, conductors, equipment plugs, terminal strips, etc., and labor to install a complete and operable system.
- C. The cables within racks or cabinets shall be carefully cabled and laced with no. 12 Cord waxed linen lacing twine or ty-raps. All cables shall be numbered for identification.
- D. Splices of conductors in underground pull boxes are not permitted.
- E. The labor employed by the contractor shall be regularly employed in the installation and repair of the specified systems and shall be acceptable to the owner and architect to engage in the installation and service of this system.
- F. The contractor shall thoroughly clean all equipment and materials. All exposed parts of the equipment, cabinets, and other equipment shall be left in a clean condition, unblemished and free of all dirt, dust, smudges, spots, fingerprints, etc., The contractor shall remove all debris and rubbish occasioned by the electronic systems work from the site. The contractor shall thoroughly clean all buildings of any dirt, debris, rubbish, marks, etc., Caused by the performance of this work.
- G. The system must meet all local and other prevailing codes.
- H. All cabling installations shall be performed by qualified technicians.
- I. All cabling shall be splice free.

- J. In order to ensure proper terminations, it is required that all cables shall be stripped using a special tool approved by the manufacturer of the cable / terminating device.
- K. The use of lubricants (i.e. Yellow 77) to facilitate the installation of cables in conduits is highly discouraged. If such a lubricant must be used, the contractor shall verify the acceptability of the lubricant to be used with the cable manufacturer, prior to using such a lubricant.
- L. Under no circumstance are "channel locks" or other pliers to be used.
- M. Cable may be run exposed above accessible ceilings, provided the cabling is supported independent of other utilities such as conduits, pipes, and the ceiling support systems. The cables shall not be laid directly on the ceiling panels. The use of cable ties shall be done in accordance with the cable manufacturer's requirements. The cable jacket composition must meet local and all other prevailing fire and safety codes.
- N. All fire rated walls penetrated by system cabling shall be sealed by use a non-permanent fire blanket or other method in compliance with the current edition of National Fire Protection Association (NFPA) and the National Electric Code (NEC) or other prevailing code. The contractor must not use concrete or other non-removable substance for fire stopping on cable trays, wireways or conduits. Contractors who use this method will be required to replace all cables affected and provide the original specified access to each effected area.
- O. Contractor to ascertain proper IP numbers for new end devices from District, Contractor shall program end devices with proper identifiers and provide spreadsheet to District of room naming for the end points.
- P. Contractor shall install additional licensing on the District existing camera server, program all cameras into system, and create customized views as directed by Customer.

3.02 GENERAL TESTING REQUIREMENTS

- A. Provide all instruments for testing and demonstrating in the presence of the owner's inspector that the frequency response is as stated in the factory data sheets. Check all circuits and wiring to verify they are free of shorts and grounds.
- B. System shall be complete and properly operating prior to calling for the test. The inspector, contractor and engineer shall walk test system at district's option and contractor shall make minor satisfactory adjustments to the system in the presence of the inspector. Contractor shall coordinate the time of test with the district inspector. This test shall be performed during a time when there are no other persons on the site.
- C. Provide two portable radio transceivers to be used when walk testing the system. The transceivers shall be capable of communication throughout the entire site.

SECTION 4 - FINAL ACCEPTANCE

- A. The Owner or Owner's representative may visit the site during the installation of the system to ensure that correct installation practices are being followed.
- B. The Owner or Owner's representative will conduct a final job review once the contractor has finished the job. This review will take place within one week after the contractor notifies the owner.
- C. Two copies of all certification data and drawings for all identifications shall be provided to the Owner before the owner's review.

SURVAILANCE SYSTEM

28 25 00 - 6

- D. The Owner or Owner's representative will review the installation and certification data prior to the system acceptance.
- E. The Owner or Owner's representative may test some of the systems features to ensure that the certification data is correct. If a substantial discrepancy is found, the Owner reserves the right to have an independent consultant perform a certification of the entire system. If such a procedure is undertaken, the cost of the testing will be billed back to the contractor.
- F. In the event that repairs or adjustments are necessary, the contractor shall make these repairs at his own expense. All repairs shall be completed within 10 days from the time they are discovered.
- G. The contractor shall provide not less than eight (8) hours for site instruction of personnel in the operation and maintenance of the installed systems. This instruction time shall be divided as directed by the Owner.

END OF SECTION