

# ELECTRICAL PERFORMANCE SPECIFICATIONS

26.05.00 - COMMON WORK RESULTS FOR ELECTRICAL A SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT FOR THE ELECTRICAL WORK AS INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS.

B. STANDARDS, CODES AND REGULATIONS: COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, AND INTERNATIONAL FIRE CODE INCLUDING ALL STATE AND LOCAL AMENDMENTS TO THESE CODES. COMPLY WITH THE LATEST PUBLISHED VERSION OF THE NECA STANDARD OF INSTALLATION.

C. DRAWINGS: THE DRAWINGS ARE DIAGNOSTIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF EQUIPMENT UNLESS SPECIFICALLY DIMENSIONED. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSOLETE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS TO THE ATTENTION OF THE DEPARTMENT. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.

D. RECORD DRAWINGS: MARK UP A CLEAN SET OF DRAWINGS AS THE WORK PROGRESSES TO SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL ELECTRICAL WORK WHICH WILL BECOME PERMANENTLY CONCEALED. SHOW ROUTING OF WORK IN PERMANENTLY CONCEALED BLIND SPACES WITHIN THE BUILDING. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS SHOWN.

E. WORKMANSHIP: INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS AND IN ACCORDANCE WITH NECA STANDARDS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, NEMA STANDARDS AND UNDERWRITERS LABORATORIES STANDARDS WHERE APPLICABLE.

F. SUBMITTALS: PROVIDE PRODUCT DATA, QUALIFICATIONS, SHOP DRAWINGS, AND OTHER ITEMS AS REQUIRED IN INDIVIDUAL SECTIONS. SUBMIT ALL SECTIONS TOGETHER IN A BOOKMARKED PDF FILE UNLESS DIRECTED OTHERWISE BY THE DEPARTMENT.

G. WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM BENEFICIAL OCCUPANCY. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE GUARANTEE PERIOD.

H. REFERENCE SYMBOLS: THE ELECTRICAL "LEGEND" ON THE DRAWINGS IS A STANDARDIZED VERSION, AND ALL SYMBOLS SHOWN MAY NOT BE USED. USE THE "LEGEND" AS A REFERENCE FOR THE SYMBOLS USED ON THE DRAWINGS.

I. PENETRATION OF FIRE BARRIERS: ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED BARRIERS SHALL BE SEALED IN ACCORDANCE WITH NEC ARTICLE 300.21 AND THE FOLLOWING:

1. ALL HOLES OR VOIDS CREATED TO EXTEND ELECTRICAL SYSTEMS THROUGH FIRE RATED FLOORS, WALLS OR CEILING SHALL BE SEALED WITH AN ASBESTOS-FREE INTUMESCENT FIRE STOPPING MATERIAL CAPABLE OF EXPANDING 8 TO 10 TIMES WHEN EXPOSED TO TEMPERATURES 250 DEGREES F OR HIGHER.
2. MATERIALS SHALL BE SUITABLE FOR THE FIRE STOPPING OF PENETRATIONS MADE BY STEEL, GLASS, PLASTIC AND SHALL BE CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME, SMOKE AND GASES IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM E814, UL 1479 AND THE UL FIRE RESISTANCE DIRECTORY REQUIREMENTS FOR THROUGH-PENETRATION FIRESTOP DEVICES (X-ROR).
3. THE RATING OF THE FIRE STOP SHALL BE THE SAME AS THE TIME-RATED FLOOR, WALL OR CEILING ASSEMBLY.
4. INSTALL FIRE STOPPING MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

26.05.19 - WIRE AND CABLE

A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.

B. MATERIALS:

1. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW, THHN, THW, OR THHN INSULATION. MINIMUM CONTROL CIRCUIT CONDUCTOR SIZE SHALL BE #18 AWG.
2. CONTROL CIRCUITS SHALL BE COPPER, STRANDED CONDUCTOR, 600V INSULATION, THHN/THW, MINIMUM SIZE 18 AWG.

C. INSTALLATION:

1. USE PROPERLY SIZED INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR ALL CONDUCTORS #8 AWG AND SMALLER.
2. INSTALLATION SCHEDULE: BUILDING WIRE IN RACEWAYS AT ALL LOCATIONS UNLESS OTHERWISE NOTED. PROVIDE XHHW-2 IN EXTERIOR LOCATIONS.

26.05.29 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.

B. MATERIAL: SUPPORT CHANNEL SHALL BE GALVANIZED OR PAINTED STEEL. HARDWARE SHALL BE CORROSION RESISTANT.

26.05.33 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION. EXISTING PARTIALS MAY BE RE-USED. ALL NEW CABLING SHALL BE IN CONDUIT WITH THE EXCEPTION OF LOW-VOLTAGE CABLING IN J-HOOKS ABOVE ACCESSIBLE CEILINGS.

B. MATERIALS

1. ELECTRICAL METALLIC TUBING CONDUIT (EMT): ANSI C80.3, GALVANIZED TUBING, FITTINGS AND CONDUIT BODIES: ANSI/AREA B8.1; STEEL OR MALLEABLE IRON, COMPRESSION TYPE FITTINGS WITH INSULATED THROAT BUSHINGS, DIE-CAST FITTINGS ARE NOT ACCEPTABLE. ALL CONDUIT STRIPS SHALL BE TWO-HOLE WITH CENTER-PIN TORX FASTENERS IN INMATE-ACCESSIBLE AREAS UNDER 10' AFF. IN CELLS AND DAYROOMS. ANY EXPOSED CONDUIT UNDER 10' AFF SHALL BE COMPLETELY COVERED WITH A BENT METAL CONDUIT SHROUD SECURED TIGHTLY TO THE WALL.
2. PROVIDE GALVANIZED OR GALVALUM PLATED, ONE PIECE PRESSED STEEL OUTLET BOXES 4 INCH SQUARE OR OCTAGONAL, 1 1/2 INCHES DEEP MINIMUM SIZE FOR USE IN INTERIOR AREAS.

C. INSTALLATION:

1. INSTALL CONDUIT FOR ALL SYSTEMS UNLESS OTHERWISE NOTED. PROVIDE 3/4" MINIMUM FOR LOW-VOLTAGE CABLING.
2. PROVIDE OUTLET BOXES AS SHOWN ON THE DRAWINGS, AND AS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, DEVICE INSTALLATION AND CODE COMPLIANCE.
3. SUPPORT BOXES INDEPENDENTLY OF CONDUIT.

26.05.53 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.

B. MATERIALS:

1. WIRE AND CABLE MARKERS: CLOTH MARKERS, SPLIT SLEEVE OR TUBING TYPE.

C. INSTALLATION:

1. CONDUITS: MARK ALL CONDUITS ENTERING OR LEAVING CABINETS WITH INDELIBLE BLACK MAGIC MARKER WITH THE DOOR NUMBER CONTAINED INSIDE.
2. WIRE IDENTIFICATION: PROVIDE WIRE MARKERS ON EACH CONDUCTOR IN PULL BOXES, JUNCTION BOXES, AND AT DOOR/RELAY CONNECTION. MARKERS SHALL BE LOCATED WITHIN ONE INCH OF EACH CABLE END, EXCEPT IN CABINETS, WHERE MARKERS FOR DOOR WIRING SHALL BE VISIBLE AT TERMINATION POINTS.

26.10.00 - ELECTRONIC ACCESS CONTROL SYSTEM

A. SUBMITTALS:

1. SUBMIT PRODUCT DATA FOR APPROVAL.
2. SUBMIT QUALIFICATIONS FOR THE SYSTEM SUBMITTED.
3. SUBMIT SHOP DRAWINGS WITH ALL CARD READERS AND OTHER HARDWARE, PROPOSED CABLE ROUTING, LAYOUT OF ACCESS CONTROL ENCLOSURES, AND CONNECTIONS TO OTHER SYSTEMS. AUTOMAT OF THE FACILITY WILL BE MADE AVAILABLE TO ASSIST IN CREATING DRAWINGS.

B. CLOSEOUT: PROVIDE AS-BUILT DRAWINGS WITH ALL INSTALLED COMPONENTS, ACTUAL CABLE ROUTING AND TERMINATIONS, IP/MAC ADDRESSES, AND SOFTWARE BACKUP ON FLASH DRIVE.

C. MATERIALS

1. ACCESS CONTROL SYSTEM: ALL LICENSES REQUIRED, ACCESS CONTROL PANELS, DOOR CONTROLLERS, DOOR POWER SUPPLIES WHERE REQUIRED, AND NEW CARD READERS.
2. PROVIDE NEW DOOR HARDWARE FOR NEW CONTROLLED DOOR.
3. EXISTING CREDENTIALS SHALL BE MIGRATED TO NEW SYSTEM. IF EXISTING CREDENTIALS CANNOT BE ENROLLED, PROVIDE REPLACEMENT CREDENTIALS AND LABOR TO CONFIGURE IN NEW SYSTEM.

28.32.00 - VIDEO SURVEILLANCE SYSTEM

A. SUBMITTALS:

1. SUBMIT PRODUCT DATA FOR APPROVAL.
2. SUBMIT QUALIFICATIONS FOR THE SYSTEM SUBMITTED.
3. SUBMIT SHOP DRAWINGS WITH ALL CAMERAS, PROPOSED CABLE ROUTING, HARDWARE, AND CALCULATIONS PROVIDED FOR THE SYSTEM. AUTOMAT OF THE FACILITY WILL BE MADE AVAILABLE TO ASSIST IN CREATING DRAWINGS.
4. CLOSEOUT: PROVIDE AS-BUILT DRAWINGS WITH ALL INSTALLED COMPONENTS, ACTUAL CABLE ROUTING AND TERMINATIONS, IP/MAC ADDRESSES, AND FINAL CONFIGURATION OF HARDWARE SETTINGS IF FIELD ADJUSTMENTS CAN BE MADE. PROVIDE CABLEING TEST REPORTS PERFORMED WITH A FLUKE "DSX" OR EQUIVALENT TESTER FOR CATEGORY 6 CABLING.

B. MATERIALS

1. VIDEO MANAGEMENT SYSTEM:

- 1.1. MANUFACTURER BASIS OF DESIGN IS AVIGILON. COMPARABLE SYSTEMS OF THIS SIZE MAY BE PROPOSED BY MILESTONE, VICON, OR SIMILAR. PROVIDE SOFTWARE, ALL LICENSES REQUIRED FOR SERVER, SITE, ALL CAMERAS AS NOTED, WORKSTATIONS, LABOR PROGRAMMING, AND ALL MATERIAL FOR A COMPLETE AND OPERABLE SYSTEM.
2. VIDEO SERVER:
- 2.1. HARDWARE CONFIGURATION SHALL MEET WAS REQUIREMENTS FOR SIZE OF THE SYSTEM AND THE NUMBER OF CAMERAS AND WORKSTATIONS CONNECTED.
- 2.2. PROVIDE CAPACITY FOR 90 DAYS OF CALCULATED STORAGE AT 30X MOTION, H.264 COMPRESSION (H.265 IF APPLICABLE), AND MINIMUM FRAME RATE OF 15FPS ON ALL CAMERAS UPON MOTION.
- 2.3. PROVIDE RAID 6 CONFIGURATION OR AS RECOMMENDED BY THE MANUFACTURER. CALCULATED STORAGE CAPACITY SHALL BE NET AMOUNT AFTER RAID.
- 2.4. PROVIDE SEPARATE ARCHIVER AND MANAGEMENT SERVERS.

3. VIDEO SYSTEM WORKSTATIONS

- 3.1. HARDWARE CONFIGURATION SHALL MEET WAS REQUIREMENTS FOR SIZE OF THE SYSTEM AND NUMBER OF MONITORS CONNECTED TO EACH WORKSTATION.
- 3.2. MONITOR: 32" WIDESCREEN, 1080P, HDMI INPUT. PROVIDE WITH DESKTOP STAND.
4. NETWORK SWITCHES:
- 4.1. PoE NETWORK SWITCHES SHALL BE PROVIDED FOR ALL NEW AND EXISTING CAMERAS SHOWN ON THE DRAWINGS, PLUS EXPANSION CAPABILITY OF 20%. BASED ON RECORD DRAWINGS, THERE ARE 70 CAMERAS AT THE FACILITY, WHICH WOULD REQUIRE 88 SWITCH PORTS TO MEET THIS SECTION. ASSUME (4) 24-PORT NETWORK SWITCHES AND A SEPARATE 8-PORT (MINIMUM) SWITCH FOR WORKSTATIONS.
- 4.2. SWITCHES SHALL BE CAPABLE OF PROVIDING PoE SWITCH ON ALL PORTS SIMULTANEOUSLY FOR CAMERAS. WORKSTATION SWITCH DOES NOT REQUIRE PoE CAPABILITY.
- 4.3. SWITCHES SHALL MEET WAS MANUFACTURER REQUIREMENTS FOR NETWORK MANAGEMENT, SECURITY PROTOCOLS, AND THROUGHPUT BASED ON SYSTEM DESIGN.
5. VIDEO CAMERAS:
- 5.1. GENERAL REQUIREMENTS: ALL CAMERAS SHALL BE IK-10 IMPACT RESISTANT, PoE POWERED, ONV COMPLIANT, UTILIZE WAF-FOCAL LENSES WITH REMOTE ZOOM AND FOCUS UNLESS OTHERWISE NOTED, AND SHALL HAVE IR ILLUMINATORS UNLESS OTHERWISE NOTED. PROVIDE ALL MOUNTING HARDWARE, CABLING, AND LABOR FOR INSTALLATION.
- 5.2. SPECIFIC REQUIREMENTS:
- 5.2.1. GENERAL REQUIREMENTS AND OBSERVATION CAMERAS (CORRIDORS, VESTIBULES): 1080P OR HIGHER RESOLUTION, CORRIDOR MODE WHERE APPLICABLE, INTEGRAL MICROPHONE. LOCATIONS MAY BE CONSOLIDATED INTO MULTI-SENSOR APPLICATIONS, ELIMINATING ONE OR MORE CAMERAS, IF EQUAL OR BETTER VIEW CAN BE PROVIDED.
- 5.2.2. CELLS/SALTPOOTS: PREFERENCE IS CORNER-MOUNT CAMERAS WITH INTEGRAL IR ILLUMINATORS, INTEGRAL MICROPHONE, LIGATURE-RESISTANT DESIGN WITH NO GAPS TO WALL. MINI-DOME DESIGN IS ACCEPTABLE IN LOCATIONS WHERE CABLING CANNOT BE EASILY ROUTED TO A CORNER LOCATION.
- 5.2.3. LARGE ROOMS (BOOKING/DAYROOMS, ETC.): MULTI-SENSOR 1080P OR GREATER TO PROVIDE 180° - 360° COVERAGE OF THE ROOM DEPENDING ON CAMERA PLACEMENT.
- 5.2.4. EXTERIOR PTZ: 1080P, 30X OPTICAL ZOOM, 360° ROTATION.

6. CABLING SYSTEM:

- 6.1. CATEGORY 6 CABLING SHALL BE PROVIDED FOR ALL CAMERAS,

WORKSTATIONS, AND OTHER COMPONENTS NOTED IN THE DRAWINGS WHERE NEW IS REQUIRED.

- 6.2. BASIS OF DESIGN FOR CABLE PERFORMANCE IS SUPERIOR ESSEX "DATAGAN" OR APPROVED EQUAL.
- 6.3. PROVIDE CABLING SYSTEM JACKS, OUTLETS, PATCH PANELS AS APPROVED BY THE CABLING MANUFACTURER SUBMITTED.
- 6.4. TERMINATE ALL CAMERA HORIZONTAL CABLING IN AN OUTLET AND CONNECT CAMERA WITH A PATCH CORD.

D. INSTALLATION:

1. INSTALLATION SHALL BE COORDINATED WITH THE OWNER AND FACILITY TO MINIMIZE SYSTEM DOWNTIME. CUTOVER TIMES SHALL BE AS NOTED IN CONTRACT TERMS AND CONDITIONS. CONTRACTOR SHALL PROVIDE A PHASED CUTOVER PLAN FOR APPROVAL.
2. SYSTEM DOWNTIME SHALL BE APPROVED A MINIMUM OF 48 HOURS IN ADVANCE, UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
3. ALL CABLING SHALL BE INSTALLED BY TECHNICIANS QUALIFIED TO PROVIDE AND INSTALL THE SUBMITTED SYSTEM. TERMINATE AND TEST ALL CABLING AND PROVIDE TEST REPORTS WITH CLOSEOUT SUBMITTALS.
4. ALL CAMERAS SHALL HAVE FIELD OF VIEW, AFOV, FOCUS, AND ZOOM APPROVED BY FACILITY PERSONNEL PRIOR TO COMPLETION.

28.40.00 - DETENTION MONITORING AND CONTROL SYSTEM

A. EXISTING SYSTEM:

1. PLC SYSTEM: SCHNEIDER ELECTRIC -MODICON M340 SERIES.
1. TOUCHSCREEN CONTROLLER: DELL OPTIPLEX SERIES OR EQUAL, COMPATIBLE WITH SOFTWARE AND TOUCHSCREEN MONITOR.
2. TOUCHSCREEN MONITOR: ELO TOUCH 24" OR SIMILAR.
3. SOFTWARE: UPDATE EXISTING VIDEO DIRECT TO LATEST VERSION WITH ALL EXISTING PLC CONTROL POINTS AND PROGRAMMING MIGRATED.

C. SUBMITTALS:

3. SUBMIT SCREEN SHOTS OF SCREEN MODIFICATIONS TO SYSTEM.
- D. CLOSEOUT: PROVIDE UPDATED SYSTEM DRAWINGS AS APPLICABLE, SHOWING ALL NEW CONNECTIONS MADE AS PART OF THIS PROJECT. SUBMIT UPDATED BACK-UP COPY OF PROGRAMMING WITH VIDEO SYSTEM CALL-UPS.

E. INSTALLATION:

1. COORDINATE ACCESS TO THE CONTROL SYSTEM WITH THE DEPARTMENT. IF REMOTE ACCESS IS NEEDED TO MAKE PROGRAMMING CHANGES, A SCHEDULED DATE/TIME WILL BE AGREED-UPON AND A PHYSICAL CONNECTION MADE AT THE FACILITY.
2. ANY DISRUPTION OF SECURITY CONTROLS DUE TO PROGRAMMING UPDATES, SYSTEM REBOOT, OR OTHER FUNCTIONS, SHALL BE COORDINATED NO LESS THAN 48 HOURS AHEAD OF TIME TO ALLOW FOR STARTING CHANGES AS NEEDED.
3. UPDATE SYSTEM PROGRAMMING FOR COMMUNICATION WITH NEW VIDEO MANAGEMENT SYSTEM. TEST ALL CAMERA CALL-UPS TO VIDEO MANAGEMENT.
4. AFTER THE UPDATED PROGRAMMING AND TOUCHSCREEN FUNCTIONS ARE IN PLACE, DEMONSTRATE PROPER OPERATION TO THE FACILITY REPRESENTATIVE FOR FINAL APPROVAL.

28.46.32 - DETENTION INTERCOM SYSTEM

D. EXISTING SYSTEM:

1. HARDING DTL SYSTEM.
2. NO REPLACEMENT WORK IS ANTICIPATED. AFTER PLC/RELAY SYSTEM IS UPDATED, TEST ALL INTERCOM POINTS ON TOUCHSCREEN AND VERIFY PROPER OPERATION.

28.10.00 - ELECTRONIC ACCESS CONTROL SYSTEM

A. SUBMITTALS:

1. SUBMIT PRODUCT DATA FOR APPROVAL.
2. SUBMIT QUALIFICATIONS FOR THE SYSTEM SUBMITTED.
3. SUBMIT SHOP DRAWINGS WITH ALL CARD READERS AND OTHER HARDWARE, PROPOSED CABLE ROUTING, LAYOUT OF ACCESS CONTROL ENCLOSURES, AND CONNECTIONS TO OTHER SYSTEMS. AUTOMAT OF THE FACILITY WILL BE MADE AVAILABLE TO ASSIST IN CREATING DRAWINGS.

B. CLOSEOUT: PROVIDE AS-BUILT DRAWINGS WITH ALL INSTALLED COMPONENTS, ACTUAL CABLE ROUTING AND TERMINATIONS, IP/MAC ADDRESSES, AND SOFTWARE BACKUP ON FLASH DRIVE.

C. MATERIALS

1. ACCESS CONTROL SYSTEM: ALL LICENSES REQUIRED, ACCESS CONTROL PANELS, DOOR CONTROLLERS, DOOR POWER SUPPLIES WHERE REQUIRED, AND NEW CARD READERS.
2. PROVIDE NEW DOOR HARDWARE FOR NEW CONTROLLED DOOR.
3. EXISTING CREDENTIALS SHALL BE MIGRATED TO NEW SYSTEM. IF EXISTING CREDENTIALS CANNOT BE ENROLLED, PROVIDE REPLACEMENT CREDENTIALS AND LABOR TO CONFIGURE IN NEW SYSTEM.

RFP DOCUMENTS  
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CITY OF KODIAK  
KODIAK POLICE DEPARTMENT  
SECURITY UPGRADES RFP

REVISIONS:  
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DRAWING TITLE  
ELECTRICAL PERFORMANCE SPECIFICATIONS

SHEET  
E0.1

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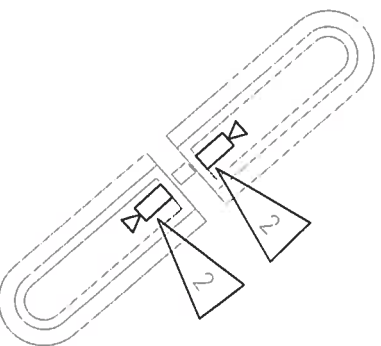
DRAWING TITLE:  
ELECTRICAL LEGEND &  
SITE PLAN

SHEET  
E0.2

**SHEET NOTES:**

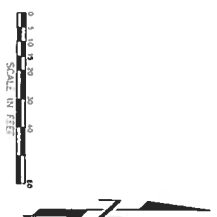
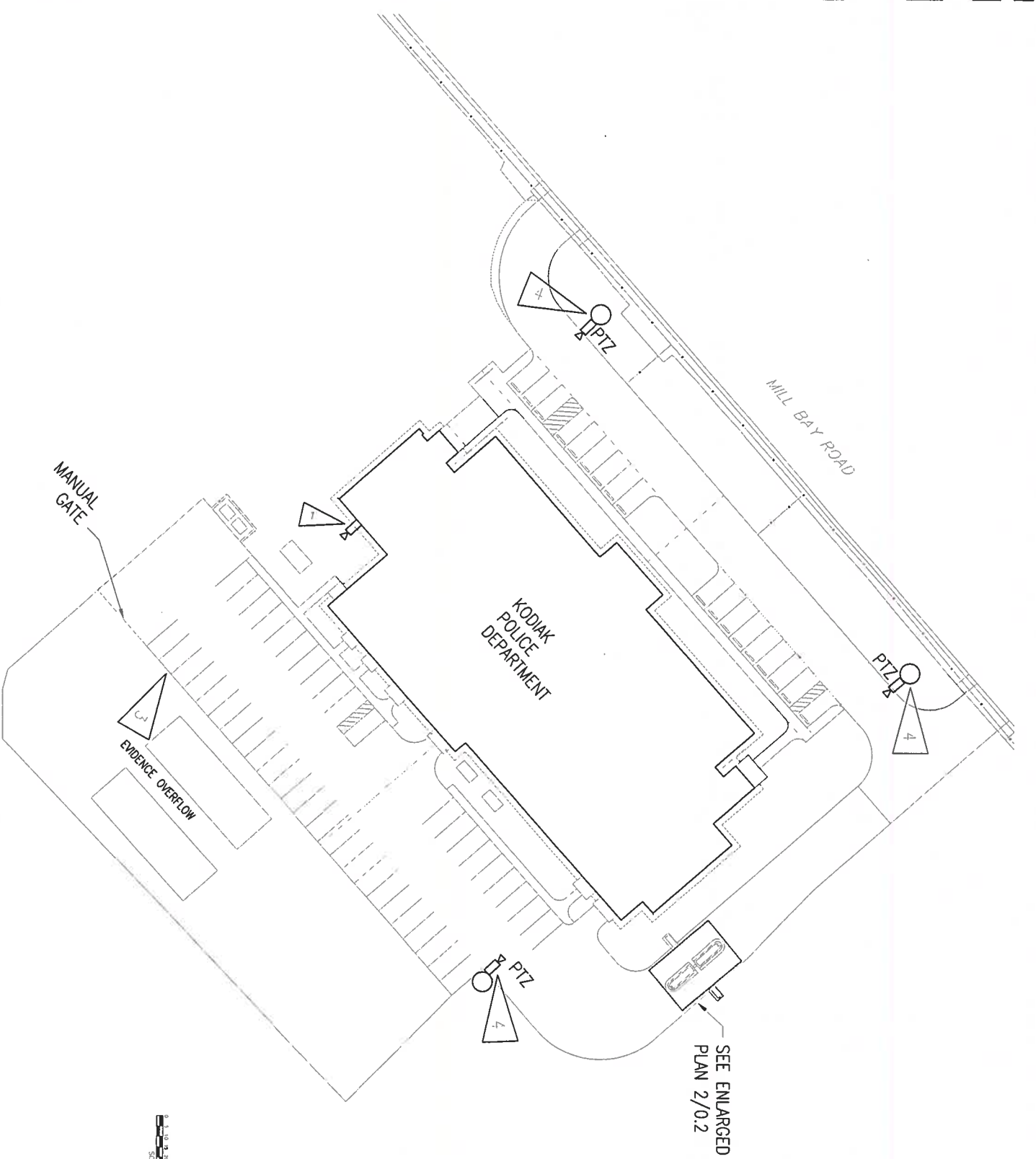
1. MOUNT NEW CAMERA ~18' AFF TO PROVIDE VIEW OF EVIDENCE OVERFLOW OVER EXISTING GATE AND THROUGH FENCE.
2. GOOSENECK-MOUNTED SMALL FORM FACTOR CAMERAS ARE NOT FUNCTIONAL, TOTAL OF (4). REPLACE CAMERAS AND CABLING. ASSUME CONDUIT PATH IS INTACT AND CAN BE RE USED. IF IT IS COMPROMISED, A MODIFICATION FOR NEW PATHWAY WILL BE NEGOTIATED POST-AWARD.
3. KPD WILL REMOVE PRIVACY SLATS TO ALLOW CAMERA VIEW THROUGH FENCE LINE.
4. REPLACE POLE-MOUNTED PTZ, PANORAMIC VIEW OF AREA OR FIXED-VIEW SUPPLEMENT TO PTZ ARE DESIRED OUTCOME.

LEGEND	
	VIDEO SYSTEM CAMERA
	VIDEO SYSTEM MONITOR
	TOUCHSCREEN CONTROLLER
	TOUCHSCREEN MONITOR
	VIDEO SYSTEM WORKSTATION
	NOTE TAG (NO. INDICATES NOTE)
	CONDUIT/CABLE TAG (NO. INDICATES NUMBER IN SCHEDULE)
	LIGHT POLE -> EXISTING
	PAN-TILT-ZOOM
	TYPICAL
	UNLESS OTHERWISE NOTED



**2 ENLARGED PLAN - VEHICLE GATES**  
NOT TO SCALE

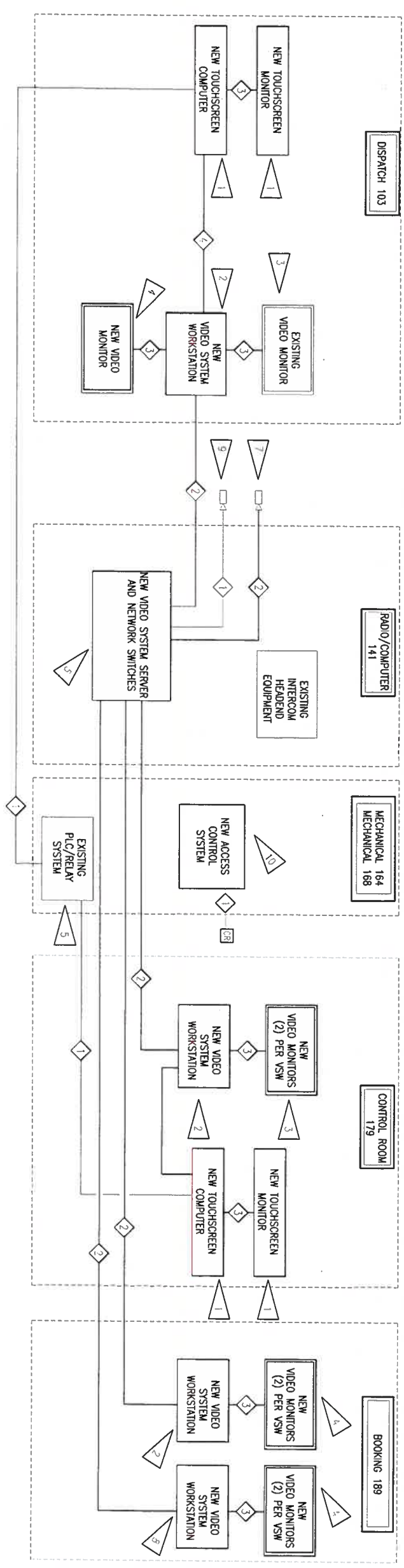
**1 SITE PLAN**



**GENERAL NOTES:**  
A. SEE E1.1 FOR GENERAL NOTES.

**DETAIL NOTES:**

1. PROVIDE NEW TOUCHSCREEN COMPUTER AND MONITOR FOR PLC/TOUCHSCREEN SYSTEM. EXISTING CONNECTION TO PLC/RELAY SYSTEM MAY BE USED.
2. NEW VIDEO SYSTEM WORKSTATION. CONNECT TO VIDEO SYSTEM WITH NEW NETWORK CONNECTION.
3. EXISTING MONITOR/TV FOR VIDEO SYSTEM CALL-UPS ON WALL. CONNECT TO NEW WORKSTATION.
4. NEW MONITOR(S) FOR NEW VIDEO SYSTEM WORKSTATIONS. PROVIDE NEW HDMI CABLING.
5. UPDATE PLC/RELAY SYSTEM TO NEAREST VERSION OF SOFTWARE. PROVIDE INTEGRATION FOR NEW VIDEO MANAGEMENT SYSTEM INCLUDING UPDATED COMMUNICATION FOR CAMERA CALL-UPS UPON ACTIVATION OF DOOR OR INTERCOM CONTROLS OR MANUAL CALL-UPS. COORDINATE WITH CAMERA WORK AND UPDATE TOUCHSCREENS TO REFLECT NEW CAMERA LAYOUTS.
6. PROVIDE NEW VIDEO SYSTEM SERVERS (MANAGEMENT AND ARCHIVER) AND NETWORK SWITCHES IN EXISTING RACK. REMOVE EXISTING SYSTEM EQUIPMENT AND TURN OVER TO KPD FOR SALVAGE. NEW SYSTEM SHALL UTILIZE SEPARATE SWITCHES FOR WORKSTATIONS AND CAMERAS. IP CAMERAS TERMINATED IN RACK SHALL BE RE-CONNECTED TO NEW SWITCH. EXISTING KVM TO REMAIN FOR ACCESS TO SYSTEM.
7. DEMOLISH ANALOG CAMERAS AND CABLING TO GATES. PROVIDE NEW CAMERAS AND CABLING. REMOVE ENCODER AND CONNECT TO NEW VIDEO SYSTEM.
8. ADD/REMOVE ALTERNATE #1: PROVIDE NEW VIDEO SYSTEM WORKSTATION AND MONITORS AT NEW LOCATION. PROVIDE NEW TELECOM OUTLET AND CABLING TO VIDEO SYSTEM RACK.
9. CAMERAS SHALL BE REPLACED UNDER BASE BID AND ALTERNATES USING EXISTING CABLING AND BE CONNECTED TO NEW VIDEO SYSTEM. ALL CAMERAS NOT REPLACED SHALL BE CONNECTED TO NEW SYSTEM.
10. PROVIDE NEW ACCESS CONTROL SYSTEM INCLUDING CONTROLLERS, DOOR POWER SUPPLIES, CARD READERS, AND SOFTWARE. NEW VIDEO SYSTEM SERVER MAY BE USED TO HOST SOFTWARE. EXISTING CABLING MAY BE RE-USED. PROVIDE NEW CABLING TO NEW CARD READER LOCATION.



WIRE/CABLE SCHEDULE	
1	EXISTING SYSTEM CABLING, NO MODIFICATION ANTICIPATED
2	NEW UTP CABLE, CATEGORY 6
3	NEW MONITOR CABLE, HDMI
4	NEW CABLING PER MANUFACTURER REQUIREMENTS

**1 SECURITY SYSTEM ONE-LINE DIAGRAM**  
NO SCALE

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SECURITY SYSTEM  
ONE-LINE DIAGRAM

SHEET  
**E0.3**



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DRAWING TITLE  
WEST SIDE SECURITY SYSTEM PLAN

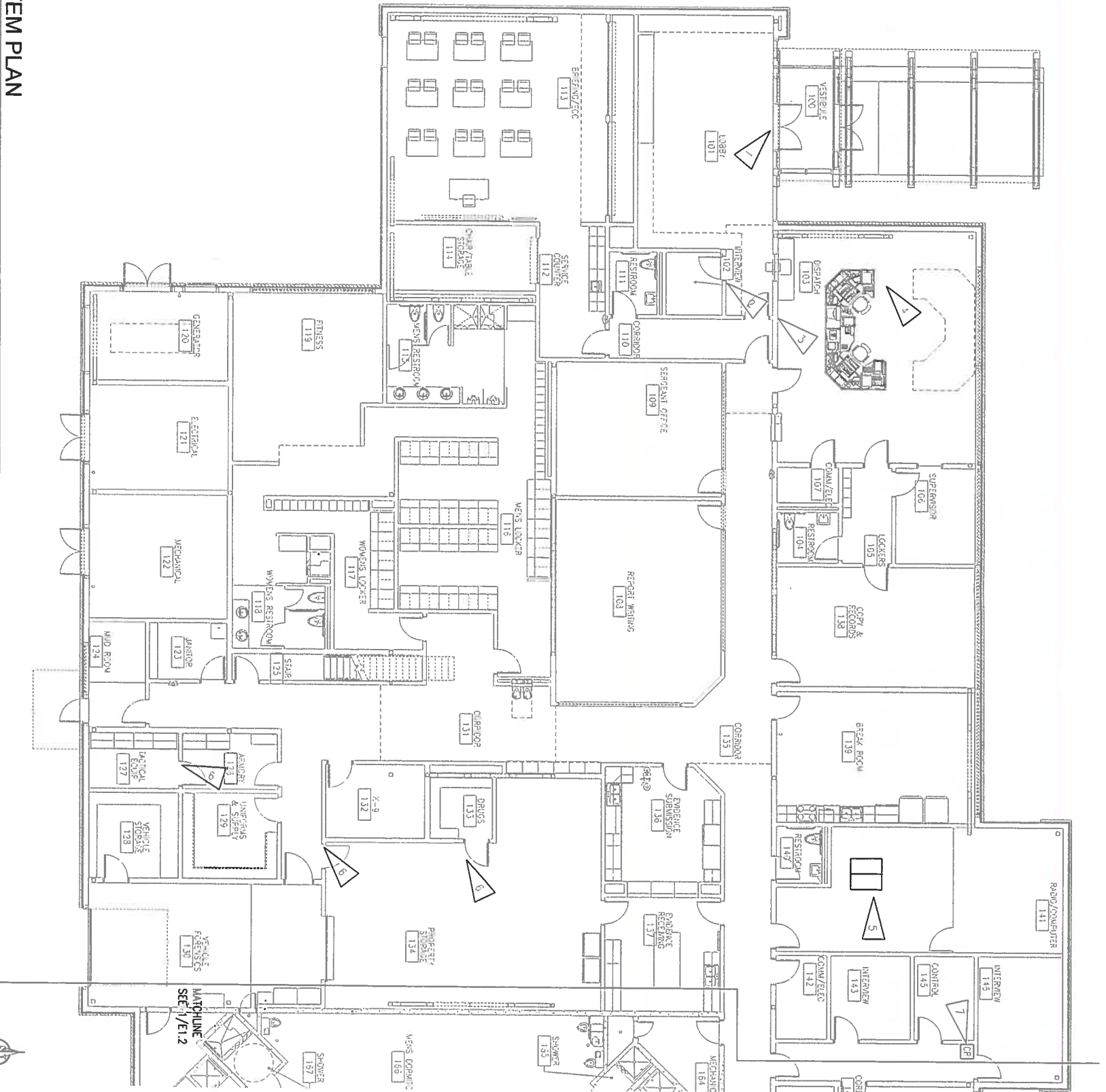
SHEET  
E1.1

GENERAL NOTES:

- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.
  - B. THE OWNER SHALL HAVE FIRST RIGHT OF REUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.
  - C. DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
  - D. ACCESS CONTROL SYSTEM SCOPE OF WORK SHALL INCLUDE REPLACEMENT OF SYSTEM COMPUTERS, DOOR CONTROLLERS, POWER SUPPLIES, CARD READERS, AND SOFTWARE. CABLING IS INTENDED TO BE RE-USED. DOOR CONTACTS, REQUEST-TO-EXIT SENSORS, AND OTHER DEVICES MAY BE RE-USED AT CONTRACTOR'S OPTION.
  - E. VIDEO SYSTEM SCOPE OF WORK INCLUDES REPLACEMENT OF VIDEO MANAGEMENT SOFTWARE, ARCHIVERS, MANAGEMENT SERVERS, CLIENT WORKSTATIONS, NETWORK SWITCHES, SOFTWARE, AND CAMERAS. CAMERA REPLACEMENT SHALL BE DIVIDED BETWEEN BASE BID AND ALTERNATES. SEE SCOPE OF WORK. CABLING SHALL BE RE-USED UNLESS OTHERWISE NOTED.
  - F. DOOR CONTROL/TOUCHSCREEN SYSTEM SCOPE OF WORK INCLUDES REPLACEMENT OF TOUCHSCREEN MONITORS IN DISPATCH AND CONTROL, TOUCHSCREEN MONITOR COMPUTERS, UPGRADE OF PLC SOFTWARE TO LATEST SUPPORTED VERSION, AND INTEGRATION WITH VIDEO SYSTEM FOR CAMERA CALL-UPS. INTENT IS FOR PLC, I/O MODULES, RELAYS, AND FIELD DEVICES TO BE RE-USED.
  - G. INTERCOM SYSTEM SHALL REMAIN AS IS, WITH ALL POINTS REMAINING CONNECTED TO DOOR CONTROL/TOUCHSCREEN SYSTEM. CONTRACTOR SHALL VERIFY PROPER OPERATION OF ALL INTERCOM SYSTEM POINTS AFTER INSTALLATION OF NEW TOUCHSCREENS.
  - H. FIELD DEVICES FOR ALL SYSTEMS ARE SHOWN ON SECURITY SYSTEM SHOP DRAWINGS OR IN DATA FILES FROM KPD. THESE WILL BE PROVIDED TO BIDDERS DURING THE RFP PROCESS. AREAS OF PARTICULAR INTEREST ARE NOTED ON THESE DRAWINGS, OTHERWISE THE INTENT IS ONE-FOR-ONE REPLACEMENT UNLESS OTHERWISE NOTED.
- SHEET NOTES:**
1. DOORS ARE PART OF THE TOUCHSCREEN CONTROL SYSTEM BUT ARE NOT FUNCTIONAL. TROUBLESHOOT AND REPAIR. CONTRACTOR SHALL INCLUDE 8 HOURS OF LABOR AND \$500 IN MATERIAL ON A TRAIL BASIS FOR EACH DOOR IDENTIFIED AS NON-FUNCTIONAL. AFTER AWARD, ACTUAL TIME AND MATERIAL COSTS SHALL BE TRACKED. ONCE TROUBLESHOOTING IS PERFORMED AND A REPAIR PROPOSED, COSTS SHALL BE NEGOTIATED AT THAT TIME IF EXCEEDING INITIAL BUDGET. REPAIRS LESS THAN INITIAL BUDGET SHALL RESULT IN CREDIT TO THE OWNER OR TOWARDS OTHER WORK ON THE PROJECT.
  2. THIS DOOR INCLUDED AN INTERCOM STATION IN SECURITY SYSTEM RECORD DRAWINGS BUT NO INTERCOM WAS INSTALLED. NOW WILL ONE BE NEEDED.
  3. LARGE MONITOR SHALL REMAIN FOR NEW VIDEO SYSTEM. TOUCHSCREEN CAN POPULATE MONITOR WITH MULTIPLE CAMERA VIEWS.
  4. TOUCHSCREEN AND VIDEO SYSTEM CALL-UP MONITOR LOCATED HERE. NEW EQUIPMENT SHALL BE LOCATED AT THE SAME LOCATION.
  5. INTERCOM AND VIDEO SYSTEM EQUIPMENT LOCATED HERE. REMOVE OLD VIDEO SYSTEM EQUIPMENT AND INSTALL NEW IN ITS PLACE.
  6. CARD READER IS NOT FUNCTIONAL. AFTER SYSTEM REPLACEMENT, CONFIRM PROPER OPERATION. IF DOOR IS STILL NOT FUNCTIONAL, AND REQUIRES REPAIR BEYOND ACCESS CONTROL SYSTEM, MODIFICATION WILL BE NEGOTIATED.
  7. DOOR SHALL BE ADDED TO ACCESS CONTROL SYSTEM. PROVIDE ELECTRIFIED HARDWARE, CARD READER, CABLING, AND ALL COMPONENTS AND LABOR REQUIRED TO ADD TO SYSTEM. NOTE THAT DOORS IN THIS AREA TYPICALLY USE AN ELECTRIFIED MORTISE LOCKSET. PROVIDE LOCKSET AND ELECTRIC HINGE. DRILL DOOR FOR CABLING. IF MORTISE LOCKSET CANNOT BE INSTALLED, NOTIFY OWNER AND PROVIDE CREDIT TO USE ELECTRIC STRIKE.

1 WEST SECURITY SYSTEM PLAN

1/8" = 1'-0"



**SHEET NOTES:**

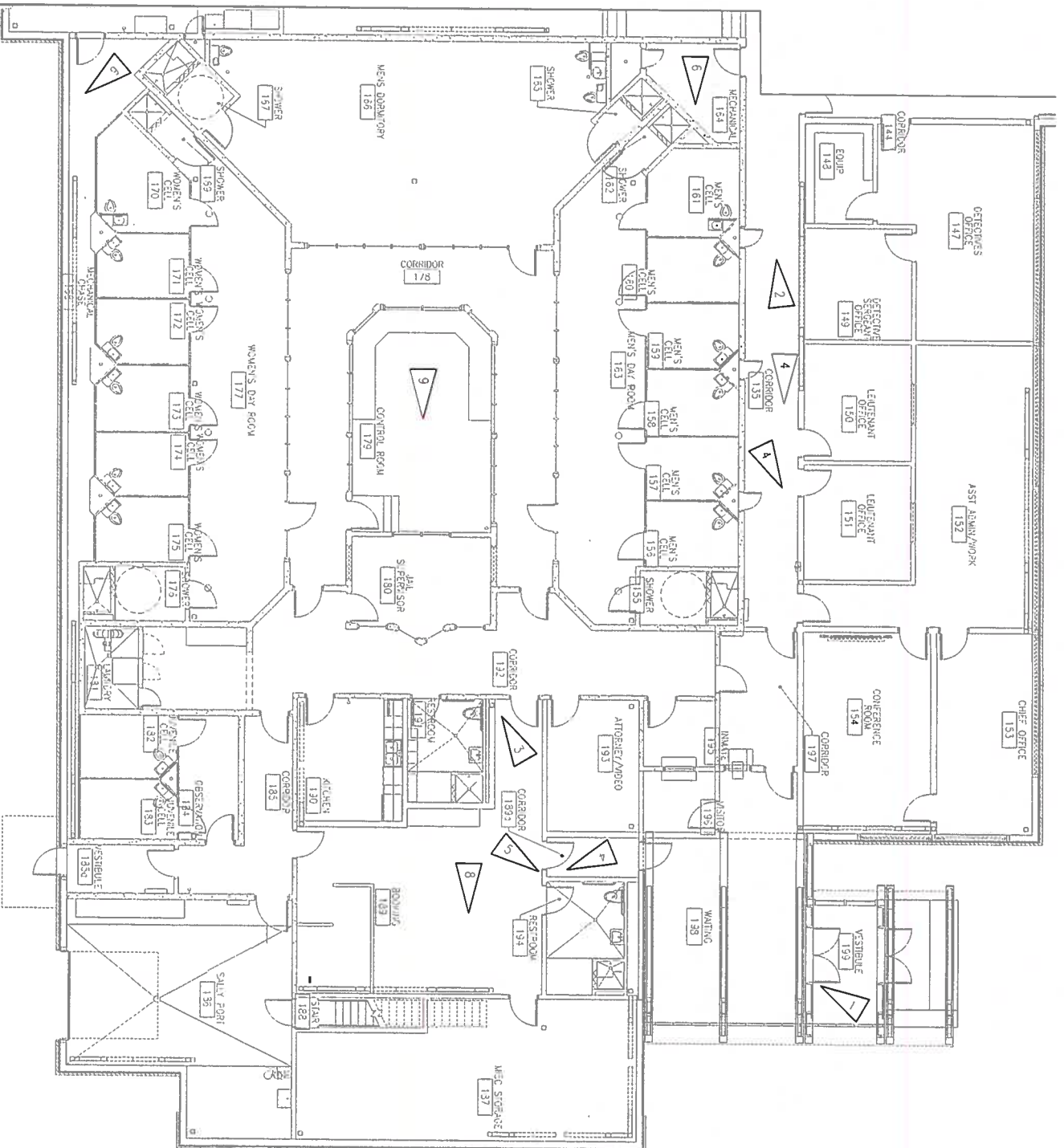
1. DOORS ARE PART OF THE TOUCHSCREEN CONTROL SYSTEM BUT ARE NOT FUNCTIONAL. TROUBLESHOOT AND REPAIR. CONTRACTOR SHALL INCLUDE 8 HOURS OF LABOR AND \$500 IN MATERIAL ON A TEAM BASIS FOR EACH DOOR IDENTIFIED AS NON-FUNCTIONAL. AFTER AMMO, ACTUAL TIME AND MATERIAL COSTS SHALL BE TRACKED. ONCE TROUBLESHOOTING IS PERFORMED AND A REPAIR PROPOSED COSTS SHALL BE NEGOTIATED AT THAT TIME. IF EXCEEDING INITIAL BUDGET, REPAIRS LESS THAN INITIAL BUDGET SHALL RESULT IN CREDIT TO THE OWNER OR TOWARDS OTHER WORK ON THE PROJECT.
2. CAMERA ORIGINALLY INSTALLED AT THIS LOCATION WAS RELOCATED TO A CELL TO REPLACE A BROKEN CAMERA. CAMERA WAS PART OF A PAIR FOR CORRIDOR COVERAGE LOOKING IN OPPOSITE DIRECTIONS. CABLING IS AVAILABLE FOR USE WITH A NEW CAMERA.
3. CAMERA ORIGINALLY INSTALLED AT THIS LOCATION WAS RELOCATED TO WALL NEXT TO RESTROOM 194. CABLING IS AVAILABLE FOR USE, BUT A NEW CAMERA WILL NOT BE REQUIRED IF REPLACEMENT AT NEW LOCATION CAN INCLUDE THIS AREA IN FIELD OF VIEW.
4. CARD READER IS NOT FUNCTIONAL. AFTER SYSTEM REPLACEMENT, CORRECT PROPER OPERATION. IF DOOR IS STILL NOT FUNCTIONAL, AND REQUIRES REPAIR BEYOND ACCESS CONTROL SYSTEM, MODIFICATION WILL BE NEGOTIATED.
5. LOCATION OF RELOCATED CAMERA PREVIOUSLY NEAR ENTRANCE TO ROOM. REPLACE AS PART OF BASE BID WITH MULTI-SENSOR OR WIDE VIEW CONFIGURATION TO INCLUDE VIEW OF ENTRANCE.
6. ACCESS CONTROL AND DOOR CONTROL EQUIPMENT LOCATED IN THIS ROOM. REPLACE SYSTEM COMPONENTS AS NOTED IN SCOPE OF WORK.
7. CAMERA AT THIS LOCATION IS NOT WORKING. REPLACE AS PART OF BASE BID. CONNECT TO EXISTING CABLING.
8. BASE BID - ADD CLIENT WORKSTATION COMPUTER AND (2) 32" MONITORS IN BOOKING AS PART OF VIDEO SYSTEM WORK.  
ALTERNATE #1 - ADD 2ND CLIENT WORKSTATION COMPUTER AND (2) MORE 32" MONITORS IN BOOKING.
9. TOUCHSCREEN AND VIDEO SYSTEM CALL-UP MONITOR LOCATED HERE. NEW EQUIPMENT SHALL BE LOCATED AT THE SAME LOCATION.

MATCHLINE  
SEE 1/ET.1

**1 EAST SECURITY SYSTEM PLAN**  
1/8" = 1'-0"

**GENERAL NOTES:**

A. SEE SHEET E1.1 FOR GENERAL NOTES.



RFP DOCUMENTS  
NOT FOR CONSTRUCTION

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**CITY OF KODIAK**  
**KODIAK POLICE DEPARTMENT**  
**SECURITY UPGRADES RFP**

REVISIONS

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CHECKED BY: JAM  
DATE: 3/9/2022  
CJE DRAWER: M1246  
DWG FILE:

DRAWING TITLE  
**EAST SIDE SECURITY SYSTEM PLAN**

SHEET  
**E1.2**