

Memorandum

Date: September 26, 2022 **Project #:** M0041

To: Parry Lagro (Callison RTKL)

From: Clayton Maloni

Re: Pompano LIVE Security Narrative

cc: William Sellon (Vanderweil)

The following is a general Security Systems narrative that outlines the Security / CCTV systems for the project.

CODES AND STANDARDS

The design of this facility shall include, but is not limited to, a review of the following Codes, Standards and Regulations to be observed in the design of the telecommunications cabling system and supporting facilities. In the event of conflicts, the more stringent provisions shall apply.

- National Electrical Code (NEC).
- American National Standards Institute (ANSI).
- Electronic Industries Association/Telecommunications Industry Association (EIA/TIA).
- Institute of Electrical & Electronics Engineers (IEEE).
- Underwriters Laboratories (UL)
- National Fire Protection Association (NFPA).
- Federal Communications Commission (FCC).
- American Society of Testing Materials (ASTM).

SECURITY SYSTEM

The electronic security system for the facility is primarily comprised of two (2) main systems. The security camera video management system (VMS) and the optical fiber backbone. These systems are discussed below. These systems should be powered by an AC power generator backup circuit(s).

VIDEO MANAGEMENT SYSTEM (VMS)

Security cameras shall be provided at all building entrance points, loading docks, within telecom rooms, exterior locations on-buildings, and cameras to provide views of the buildings from a distance away from the buildings (on poles), and at other areas as coordinated with the owner. System is designed with a centrally located NVR that all other buildings will record to.

- System hardware will consist of:
 - IP Cameras, Day/Night, High-Resolution; Avigilon, Axis, or Digital Watchdog will be accepted. Axis shall be specified
 - Cameras shall be fixed-position and panoramic; no pan-tilt-zoom motorized cameras will be included in the design
 - Camera Poles or site lighting pole camera mounts
 - Camera Power Supplies and PoE+ Ethernet Switches
 - Hardened POE+ switches at Light Pole Cabinets
 - Digital Video Recording and Management System: NVR with storage shall be provided on-site for local recording
 - Cabling, connectors, terminations, and accessories

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- Configure the Recording and Surveillance System Network Video Recorder (NVR) to digitally record all cameras. The NVR storage shall be sized to meet or exceed the following minimum parameters: 30 days of storage, compression method to be H.264 or H.265, 7 Frames Per Second (FPS), full imager resolution (per each camera's imager size), integrated with a calculation of the maximum exterior low light hours using the darkness period for December 21 at the GPS coordinate of the site location, with 58.3 percent of motion (14 hours out of 24 hours with motion), and 15 percent unused storage to allow minor system expansion. The Security Contractor shall provide the NVR storage calculation as a submittal item. Provide a method whereby hard drive recorded video may be burned to a DVD or CD-R over the network at any time by the system owner. The System shall be connected to the facility's local area computer network (LAN) in order to allow remote storage, viewing, and playback. The system shall operate properly, completely unattended, and without the need for occasional manual rebooting.
- Provide a UPS for generator start-up gap time for the VMS servers and related main headend VMS hardware, and, where practical, for the PoE data switches powering cameras.

FIBER BACKBONE SYSTEM

The buildings will be connected to one centralized security network via fiber optic cabling system. The fiber backbone system consists of fiber optic cable, underground conduit, handholes, terminations, fiber cabinets, and patch cables.

- System hardware will consist of:
 - Multi-strand single mode OSP fiber cable 8.3/125um (strand count to be determined)
 - Rack Mount Fiber Distribution Cabinet (2U)
 - LC Coupler Panel(s)
 - LC fiber terminations
 - LC-LC Fiber Patch Cable(s)
 - 24"X24"X17" Quazite type Handhole
 - 2" Schedule 40 PVC underground conduit to be to connect to each building's Telecom Closet
 - 1 1/2" Schedule 40 PVC underground conduit to be installed from designated handhole to designated light pole base
 - 18"X18"X8" lockable fiberglass cabinet with mounted din rail to be installed at designated light pole(s)
 - 1" Schedule 40 PVC conduit to be installed from lockable fiberglass cabinet to designated camera mounted light pole(s) Category 6 OSP to be installed in 1" conduit for camera connectivity.

R.G. Vanderweil Engineers, LLP



William Sellon, CPD, LEED AP
Principal

CM/WS/am

Attachment: 2022-09-23 Pompano LIVE Site Plan

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