

Village of Homewood Video Surveillance and Security Camera Upgrade Project  
RFP #24-07PW  
Attn: Joshua Burman, Director of Public Works



**Imperial Surveillance**

1601 E. Algonquin Road  
Arlington Heights, IL  
60005

O: 847-375-0300

F: 847-375-6722

[www.imperialcctv.com](http://www.imperialcctv.com)

**Prepared By:**

**Chad McCollom**

**C: 847-346-7582**

**E: [Chad@imperialcctv.com](mailto:Chad@imperialcctv.com)**

**VILLAGE OF HOMEWOOD**  
 17755 Ashland Avenue  
 Homewood, IL 60430

*All proposals are conditioned upon the instructions and specifications issued with this proposal form. All proposals must be sealed in an envelope labeled 'Sealed Proposal for RFP #24-07PW and either hand delivered or mailed to the office of the Director of Public Works, 17755 Ashland Avenue, Homewood, IL 60430. No late, phone, fax or emailed proposals will be accepted.*

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RFP NO:	24-07PW
RFP OPENING DATE:	November 20, 2024
RFP OPENING TIME:	10:00 a.m.

**PROPOSAL**

DESCRIPTION	AMOUNT
Police Department and Fire Station	Total Delivered/Installed Amount \$ <u>90,647.96</u>
	Total # days to complete project: <u>10</u>
Village Hall	Total Delivered/Installed Amount \$ <u>20,223.93</u>
	Total # days to complete project: <u>3</u>
Village Hall Parking Lot	Total Delivered/Installed Amount \$ <u>3,530.26</u>
	Total # days to complete project: <u>1</u>
Public Works, Water Plant, 183 <sup>rd</sup> & Stewart, Pump House #2, Booster Pump Station, Brian Carey Training Center, Science Center	Total Delivered/Installed Amount \$ <u>53,244.66</u>
	Total # days to complete project: <u>8</u>
Water Tower West, Water Tower East, Landscape Maintenance	Total Delivered/Installed Amount \$ <u>14,299.93</u>
	Total # days to complete project: <u>3</u>



## #1 EXECUTIVE SUMMARY

Why Imperial Surveillance is a great fit for the Village of Homewood Video Surveillance and Security Camera Upgrade Project and why we stand out from our competition. We have adequate staffing levels of 90+ employees. I am proud to say that our company is A+ rated with the BBB and will offer a **standard 1 yr parts and labor warranty** on every piece of equipment you may purchase from us. We are able to offer this as a standard because we select the right equipment and dot our I's and cross our T's during the install process. Every Imperial Surveillance employee that works for us from the warehouse guys to upper management has a PERC card which means they have taken the required state training courses and have had a full background checks conducted on them as required per IDFP.

## #2 PROJECT SCOPE

The scope of the proposed Imperial Surveillance project includes the planning, design, installation, testing, and transition of the Wireless Network System. All proposed items including the software will meet or exceed customer's standards and additional requirements established in the walk through with the Project Manager. The scope of this project includes completion of all documentation, manuals, and training aids to be used in conjunction with the software. Project completion will occur when the software and hardware has been fully explained and documented to delegated staff members. At that point a delegated staff member will sign off as complete.

## #3 Company Overview

Way 2 Easy Inc. DBA Imperial Surveillance, Inc. is a Full Service Security Company Since 2005. We offer Surveillance Camera Systems, Alarm Systems, Access Control / Key fob Systems, Fire Alarms Systems, & Intercom Systems. We Serve Residential, Commercial, & Government Sector clients in the Midwest. We offer Reliable & Quality Products at a reasonable price. Our technicians are highly trained in installation, testing, & repairing Security Systems. Additionally, we use only the most advanced equipment to ensure your facilities' safety. Imperial tests every system we carry, so our clients always receive quality, reliable equipment.

We opened two branch office locations in Milwaukee and Fort Wayne IN that has full capabilities to service the Wisconsin and Indiana Areas.

Not only will you receive top-quality equipment, but you will also get reliable service and installation. SIC # 173110 & 173117, primary company address 1601 E. Algonquin Rd. Arlington Heights, IL 60005. Contact person for this proposed project is Chad McCollom and can be reached at 847.375.0300 (Office) 847.346.7582 (Cell) chad@imperialcctv.com (Email).

License # 127.001463

Sincerely,

Chad McCollom  
Security Consultant  
Imperial Surveillance Inc.  
Office: 847.375.0300  
Cell: 847.346.7582  
Fax: 847.375.6722

License # 127.001463



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Axis Camera with Genetec VMS District Wide  
School District 59  
Albert Tijerina  
Director of Facilities & Operations  
847-593-4340

ICT Access Control City Wide  
City of McHenry  
Aaron Greve  
Director of Information Technology  
[agreve@cityofmchenry.org](mailto:agreve@cityofmchenry.org)

Axis Cameras and ICT Access Control City Wide  
Village of Antioch  
Amy Pisciotto  
IT Manager  
224-788-4440

Hanwha Camera with Wave VMS District Wide  
Joliet School District D86  
John Armstrong  
Chief Officer for Technology & Innovation  
815-740-3196 Ext 8266



## Project Overview:

This Scope of Work (SOW) outlines the requirements for the design, installation, and commissioning of a video surveillance system for the Village of Homewood consisting of multiple buildings located in Homewood IL. The Genetec VMS system will provide comprehensive monitoring and security coverage to ensure the safety and protection of the facilities, assets, and personnel.

### 1. Objective:

To install, configure, and commission a Genetec video surveillance system that provides real-time monitoring, recording, and remote access capabilities for the entire campus or facility. The system will be capable of supporting various security requirements including building perimeters, parking areas, entrances, hallways, and high-risk areas.

### 2. Scope of Work:

#### 2.1 System Design:

##### Site Assessment and Survey:

Per drawings provided within the RFP and camera schedule, Imperial Surveillance will install Hanwha cameras per the camera schedule.

##### Camera Selection:

Imperial Surveillance selected Hanwha Cameras to complete the project. The specific models are as follows:

QNV-C8083R – Indoor/Outdoor 4MP Dome Camera

QNV-C9083R - Indoor/Outdoor 4K Dome Camera with Built in AI

PNM-C16083RVQ – Indoor/Outdoor 16MP Multi-Sensor Camera with motorized lens and track

TNV-8011C – Indoor/Outdoor 5MP Corner mounted Camera with Audio for Jail Cells

##### Centralized Management System (CMS):

Genetec VMS is selected for its robust and user friendly software.

##### Storage Requirements:

Per camera schedule cameras will be recorded for 30 Days or 90 Days.



## 2.2 System Installation:

### Camera Installation:

Install the cameras as per the approved design and survey. This includes mounting cameras on walls, ceilings, poles, or any other necessary structures. All cameras will be securely fixed to prevent tampering or damage.

### Cable Routing:

Run necessary wiring for data and network connections to each new camera. Imperial will be using existing cabling for ALL existing cameras. If analog cabling is in place, additional charges will occur to either run new Cat6e cabling or to purchase and install converters.

### Network Infrastructure:

The village will provide, install and configure all POE switches needed for this project and will provide a 10G backbone network to the centralized server. If backbone network is not sufficient, then each location would need to have its dedicated server and additional charges would apply.

## 2.3 System Configuration:

### Camera Settings:

Configure each camera's settings, including resolution, frame rate, motion detection, and recording schedules. Each camera will be adjusted to maximize coverage and minimize blind spots.

### Remote Access Setup:

Configure remote access to the video surveillance system, ensuring authorized personnel can view live and recorded video from mobile devices, computers, or any other approved platform. Provide necessary credentials and access permissions. Price includes up to 6 concurrent users. If additional concurrent users are needed, additional licensing will be required.

### User Training:

Provide training for relevant personnel on how to use the video surveillance system, including how to monitor live footage, search and retrieve recorded video, and manage user access and system settings.



## 2.4 Testing & Commissioning:

### System Testing:

Perform thorough testing of the entire surveillance system, including camera functionality, video quality, recording performance, and remote access. Verify that all cameras are capturing the intended areas and that no dead zones exist.

### System Handover:

Upon successful testing and verification, hand over the system to the client with full documentation, including equipment specifications, network diagrams, and user manuals. Provide a detailed report of the system installation and configuration.

## 2.5 Ongoing Support & Maintenance:

### Post-Installation Support:

Provide technical support and troubleshooting assistance for 12 months following the installation to ensure the system is functioning properly. This may include software updates, hardware replacements, or adjustments.

### Maintenance Agreement:

Offer a long-term maintenance agreement, which includes periodic system checks, software updates, camera cleaning, and equipment testing to ensure the system continues to perform at its optimal level.

## 3. Deliverables:

### System Configuration Documentation:

A report detailing the configuration settings for cameras, network infrastructure, storage, and user access.

### As-Built Documentation:

A final set of drawings showing the installed locations of cameras, equipment racks, wiring, and network infrastructure.

### Training Materials:

User manuals and training materials for system administrators and security personnel.



Maintenance Schedule:

A recommended maintenance schedule outlining periodic inspections, software updates, and equipment servicing.

4. Exclusions:

The following items are excluded from this scope of work:

Structural modifications (e.g., wall openings, new electrical circuits) required for installation.

Internet or local network infrastructure setup outside of the video surveillance system's requirements.

Any costs related to ongoing power or internet service provision beyond initial installation.

Integration with non-security systems unless specified in the project's scope.

POE Switches.

5. Acceptance Criteria:

The video surveillance system will be considered complete upon the following conditions being met:

All cameras are installed and properly aligned to provide full coverage of designated areas.

The CMS is fully functional and accessible remotely.

Storage systems are correctly configured and tested.

All staff members have been trained on system usage and management.

The system passes all acceptance tests without critical errors or issues.



# VILLAGE OF HOMEWOOD

## Request For Proposal

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### Video Surveillance and Security Camera Upgrade

#### APPLICABILITY:

All items contained in the instructions to bidders are applicable to this Request For Proposal (RFP).

#### QUESTIONS CONCERNING BID:

Contact person: Joshua Burman

Phone: (708) 206-2902 / [jburman@homewoodil.gov](mailto:jburman@homewoodil.gov)

Monday through Friday, 7:00 a.m. through 3:00 p.m.

#### WITHDRAWING OF BIDS:

No bids may be withdrawn for at least (30) days after closing time for receipt of bids.

#### CLOSING TIME:

Proposals must be sealed in an envelope labeled as a sealed bid for RFP #24-07PW either hand delivered or mailed to the attention of the Joshua Burman, Director of Public Works, Village of Homewood, Department of Public Works, 17755 Ashland avenue, Homewood, Illinois, 60430, no later than November 20, 2024 at 10:00 am. Late, Phone, Fax or Emailed bids will not be accepted.

#### RFP OPENING:

All proposals will be opened at the Department of Public Works, 17755 Ashland Avenue, 2<sup>nd</sup> floor, on November 20, 2024 at 10:00 a.m.

#### PROPOSAL AWARD:

The Proposal will be awarded within 30 days to the lowest responsible bidder who meets the specifications outlined by the Village of Homewood.

#### RIGHT TO REJECT PROPOSALS:

The Village reserves the right to reject any or all proposals. Unless otherwise specified, the Village reserves the right to accept any item in the proposal. In case of error in extending the total amount of the bid, the unit prices will govern.

#### DEFAULT:

In case of default by the vendor the Village of Homewood shall hold such vendor responsible for any excess cost caused by the vendor. The Village of Homewood may procure the articles or services from other sources and may deduct from the unpaid balance due to the vendor, and the prices paid by the Village of Homewood shall be considered the prevailing market price at the time such purchase is made.

#### PRICE:

All prices must be submitted on the enclosed proposal form. The proposal must be signed by an authorized officer or individual of the company submitting the bid.

# Specifications & Details

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This project includes all labor and materials needed for the upgrade of video surveillance and security cameras around the Village buildings.

(see plan sheets for camera locations and camera schedule for camera details)

The cameras should be replaced in the following order of importance:

1. Police Department and Fire Station
2. Village Hall
3. Village Hall Parking Lot,
4. Public Works, Water Plant 183rd & Steward, Pump House #2, Booster Pump Station, Brian Carey Training Center and Science Center.
5. Water Tower West, Water Tower East / Landscape Maintenance.

ATTACHMENT FOR SIGN OFF BY BIDDER	REQUIRED	NOT REQUIRED
Drug Free Workplace Certification	X	
Equal Employment Opportunity	X	
Hold Harmless Agreement	X	
Insurance Requirements	X	
Prevailing Wage Certification	X	
Compliance With Safety Standards	X	
Sexual Harassment Policy Certification	X	
Blood Borne Pathogens Compliance Certification	X	
Authorization To Perform Background Checks	X	
Contact Information	X	
Certificate of Authorized Dealer	X	
Performance/Payment Bond	X	
W-9 Form	X	

Contract For: Video Surveillance and Security Camera Upgrade

Date Due: 11/20/24 @ 10:00am

Description: Replacement of video surveillance and security cameras around Village buildings.

## DRUG FREE WORKPLACE CERTIFICATION

The bidder shall certify that it will comply with all requirements of the Illinois Drug Free Workplace Act (30 ILCS 580/1 et seq.) including but not limited to:

1. Publishing a Statement:
  - A. Notifying the employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the bidder's workplace,
  - B. Specifying the actions that will be taken against employees for violations of such prohibition,
  - C. Notifying the employee that as a condition of employment on such contract or grant, the employee will; 1) abide by the terms of the statement and 2) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than 5 days after such conviction.
2. Establishing a drug free awareness program to inform employees about:
  - A. The dangers of drug abuse in the workplace;
  - B. The grantee's or bidder's policy of maintaining a drug free workplace;
  - C. Any available drug counseling, rehabilitation, and employee assistance programs; and
  - D. The penalties that may be imposed upon employees for drug violations.
3. Making it a requirement to give a copy of the statement required by subsection (1) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
4. Notifying the Village of Homewood within 10 days after receiving notice under part (2) of paragraph (C) of subsection 14.1 from an employee or otherwise receiving actual notice of such conviction.
5. Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by an employee who is convicted, as required by Section 5 of the Illinois Drug Free Workplace Act.
6. Training of personnel to effectively assist employees in selecting a proper course of action in the event drug counseling, treatment, and rehabilitation is required and indicating an effectively trained counseling and referral team is in place.
7. Making a good faith effort to continue to maintain a drug free workplace through implementation of requirements of Section 15.3.

## EQUAL EMPLOYMENT OPPORTUNITY

In the event of the bidder's non-compliance with any provision of this equal employment opportunity clause, the Illinois Human Rights Act or the Illinois Department of Human Rights (IDHR) Rules and Regulations for Public Contracts, the bidder may be declared non-responsible, and therefore, ineligible for future contracts or sub-contracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and other sanctions or penalties may be imposed or remedies provided by statute or regulations.

During the performance of this contract the bidder agrees as follows:

1. It will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry or other legally protected class; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such under-utilization.
2. If it hires additional employees in order to perform this contract, or any portion hereof, it will determine the availability (in accordance with the IDHR's Rules and Regulations for Public Contracts) of minorities and women in the area(s) from which it may reasonable recruit, and it will hire from each job classification from which employees are hired in such a way that minorities and women are not underutilized.
3. In all solicitation or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin, ancestry, or other legally protected class.
4. It will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the bidder's obligations under the Human Rights Act and IDHR's Rules and Regulations for Public Contracts. If any such labor organization or representative fails or refuses to cooperate with the bidder in its efforts to comply with such act and rules and regulations, the bidder will promptly so notify IDHR and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations there under.
5. It will submit reports as required by IDHR Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by IDHR or the contracting agency and in all respects comply with the Illinois Human Rights Act and IDHR Rules and Regulations for Public Contracts.
6. It will permit access to all relevant books, records, accounts and work sites by personnel by the contracting agency and IDHR for the purposes of investigation to ascertain compliance.

## HOLD HARMLESS AGREEMENT

The successful bidder shall agree to the fullest extent permitted by law to defend, indemnify and hold harmless the Village of Homewood, its elected and appointed officials, agents and employees, against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, including reasonable attorney fees, which in any way may accrue against the Village of Homewood, its elected and appointed officials, agents and employees, arising in whole, in part, or in consequence of the performance of this work by the Bidder or its employees or subcontractors, or which may in any way result therefrom, except for those injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses caused solely by the acts of the Village of Homewood, its elected or appointed officials, agents or employees. The Bidder shall, at its own expense, appear, defend and pay all attorney fees, costs and other expenses arising therefore or incurred in connection with this hold harmless agreement. If any judgment is rendered against the Village of Homewood, its elected or appointed officials, agents or employees, the Bidder shall, at its own expense, satisfy and discharge the same.

Bidder expressly understands and agrees that any performance bond, payment bond or insurance policy required by this contract or state law shall not limit its responsibility to indemnify, keep and save harmless and defend the Village of Homewood, its elected and appointed officials, agents and employees as herein provided.

## INSURANCE REQUIREMENTS

Upon bid award, the bidder shall submit a Certificate of Insurance providing the following coverage:

- 1) Comprehensive General Liability and Excess Liability Insurance for Personal Injury, Property Damage, Contractual Liability, Product/Complete Operations, Premises Operations and Independent Contractor's coverage. Minimum coverage is \$1,000,000.00.
- 2) Workers' Compensation – coverages A and B.
- 3) Automobile Liability insurance including coverage of Uninsured Motorists and Hired/non-owned auto.

The certificate shall name the Village of Homewood and all its officials and employees, elected and appointed, as additional insured and shall include the policy's expiration date. In addition, as part of the contract, the Village of Homewood must receive a minimum of ten days notice upon cancellation of the company's insurance policy.

- 4) The bidder shall not commence work until it provides the certificate of insurance as described above. The bidder shall maintain all such insurance coverage for the term of the contract.

## PREVAILING WAGE CERTIFICATION

The bidder shall certify that it will comply with the Illinois Prevailing Wage Act. (830 ILCS 130/1 et seq.)

This contract calls for the construction of a “public-work, within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 et seq (The “Act”). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current “prevailing rate of wages” (hourly cash wages plus amount for fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at <http://labor.illinois.gov/>. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department’s website for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer top the Illinois Department of Labor’s web site. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage requirements and notice and record keeping duties.



## COMPLIANCE WITH SAFETY STANDARDS

The bidder shall certify that it has a written safety policy and agrees to comply with all state and federal regulations pertaining to employee safety, including but not limited to the Federal Occupational Safety and Health Act, EPA and OSHA safety standards, and the Village of Homewood's Safety Policy Manual.

## SEXUAL HARASSMENT POLICY CERTIFICATION

The bidder hereby certifies that it has a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105(A)(4).

## BLOOD BORNE PATHOGENS COMPLIANCE CERTIFICATION

Bidder shall submit a BLOOD BORNE PATHOGEN COMPLIANCE CERTIFICATION statement, certifying that the Bidder is in compliance with OSHA standards for Occupational Exposure to Blood Borne Pathogens, 29 CFR, Part 1910.1030.

## AUTHORIZATION TO PERFORM BACKGROUND CHECKS

Personnel assigned by Bidder to perform work at the Village of Homewood shall pass a routine background check to be conducted by the Homewood Police Department prior to commencing work.

Bidder authorizes the Village of Homewood to perform a routine background check on personnel assigned to perform work.

## CONTACT INFORMATION

Bidder shall designate a point of contact responsible for day to day contract performance, including the following information:

Chad McCollom

Name

Sales Engineer

Title

Imperial Surveillance - 1605 E Algonquin Rd, Arlington Heights IL 60005

Organization Name/Address

847-375-0300

Office Phone

847-346-7582

Cell Phone

Chad@ImperialCCTV.com

Email Address

## AUTHORIZED DEALER CERTIFICATION

The bidder shall certify that it is an Authorized Dealer of the product for which a bid has been submitted, and will provide a bona fide manufacturer's warranty reflecting the Village of Homewood as the original purchaser.

## PUBLIC CONSTRUCTION BOND ACT COMPLIANCE

The bidder shall provide a performance/payment bond as required by the Public Construction Bond Act (30 ILCS 550/1 et seq.)

## ACKNOWLEDGEMENT OF BID/CONTRACT TERMS

The undersigned, on behalf of the bidder, hereby agrees that all of the provisions marked "required" on page one of this addendum shall be incorporated into their bid as if fully restated therein.

Chad McCollom  
Signature

Chad McCollom  
Name (Print)

Sales Engineer  
Title

Imperial Surveillance  
Organization

1605 E Algonquin Rd, Arlington Heights, IL 60005  
Address

11-19-24  
Date

WITNESS:

\_\_\_\_\_  
Signature/Printed Name

\_\_\_\_\_  
Date



## VIDEO SURVEILLANCE PART 1 -

## GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section includes a video surveillance system consisting of cameras, digital video recorder, data transmission wiring, and a control station with its associated equipment.

## 1.3 DEFINITIONS

- A. AGC: Automatic gain control.
- B. BNC: Bayonet Neill-Concelman - type of connector.
- C. B/W: Black and white.
- D. CCD: Charge-coupled device.
- E. FTP: File transfer protocol.
- F. IP: Internet protocol.
- G. LAN: Local area network.
- H. MPEG: Moving picture experts group.
- I. NTSC: National Television System Committee.
- J. PC: Personal computer.
- K. PTZ: Pan-tilt-zoom.
- L. RAID: Redundant array of independent disks.
- M. TCP: Transmission control protocol - connects hosts on the Internet.
- N. UPS: Uninterruptible power supply.
- O. WAN: Wide area network.

#### 1.4 FUNCTIONAL DESCRIPTION OF SYSTEM

- A. Video surveillance system shall consist of IP cameras, the majority of which shall be Powered over Ethernet (PoE), connected to a dedicated 1000T based Ethernet security network.
- B. The video recording shall be distributed video server/storage devices.
- C. Network Video Recording
  - 1. Capacity for recording cameras shall be provided to allow a minimum of 30 or 90 days of recording at 15 frames per second, using highest camera resolution with mild (10% or less) H.265 compression
    - a. See Camera Schedule for number of days recording for each camera.
  - 2. Video recording shall be by rack mounted video server running video management software.
  - 3. Server shall have fault tolerant RAID 1 or better fault tolerant operation system drives.
  - 4. Server shall have onboard DVD burner for archiving selected video files.
  - 5. Configurable motion detection alarm output for each video channel.
  - 6. Program camera titles and on-screen placement as coordinated with the Village of Homewood.

#### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include dimensions and data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: For video surveillance. Include plans, elevations, sections, details, and attachments to other work.
  - 1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 2. Functional Block Diagram: Show single-line interconnections between components for signal transmission and control. Show cable types and sizes.
  - 3. Dimensioned plan and elevations of equipment racks, control panels, and consoles. Show access and workspace requirements.
  - 4. UPS: Sizing calculations.
  - 5. Wiring Diagrams: For power, signal, and control wiring.
- C. Design Data: Include an equipment list consisting of every piece of equipment by model number, manufacturer, serial number, location, and date of original installation. Add pretesting record of each piece of equipment, listing name of person testing, date of test, set points of adjustments, name and description of the view of preset positions, description of alarms, and description of unit output responses to an alarm.

## 1.6 INFORMATIONAL SUBMITTALS

- A. Seismic Qualification Data: Certificates, for cameras, camera-supporting equipment, accessories, and components, from manufacturer.
  - 1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
  - 2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
  - 3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.
- B. Field quality-control reports.
- C. Product Warranty: Sample of special warranty.

## 1.7 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For cameras, power supplies, infrared illuminators, monitors, network video recorders, and control-station components to include in emergency, operation, and maintenance manuals. For "Operation and Maintenance Data," include the following:
  - 1. Lists of spare parts and replacement components recommended to be stored at the site for ready access.

## 1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of cameras, equipment related to camera operation, and control-station equipment that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Three years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 SYSTEM REQUIREMENTS

- A. Surge Protection: Protect components from voltage surges originating external to equipment housing and entering through power, communication, signal, control, or sensing leads. Include surge protection for external wiring of each conductor's entry connection to components.
  - 1. Minimum Protection for Power Connections 120 V and More: Auxiliary panel suppressors complying with requirements in Section 264313 "Surge Protection for Low- Voltage Electrical Power Circuits."
  - 2. Minimum Protection for Communication, Signal, Control, and Low-Voltage Power Connections: Comply with requirements in Section 264313 "Surge Protection for Low-Voltage Electrical Power Circuits" as recommended by manufacturer for type of line being protected.

- B. Tamper Protection: Tamper switches on enclosures, control units, pull boxes, junction boxes, cabinets, and other system components shall initiate a tamper-alarm signal when unit is opened or partially disassembled. Control-station, control-unit alarm display shall identify tamper alarms and indicate locations.

## 2.2 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Video surveillance system shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.
  - 1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Comply with NECA 1.
- D. Comply with NFPA 70.
- E. Electronic data exchange between video surveillance system with an access-control system shall comply with SIA TVAC.

## 2.3 IP CAMERAS

- A. Approved Manufacturers:
  - 1. Axis Communications
  - 2. Hanwha Security
  - 3. American Dynamics
  - 4. Avigilon.
- B. Fixed Dome Indoor Camera:
  - 1. Comply with UL 639.
  - 2. Image Sensor: 1/2.7" progressive scan RGB CMOS.
  - 3. Lens: Varifocal, 3-8mm, F1.3
  - 4. Day and Night: Automatically removeable infrared-cut filter.
  - 5. Minimum Illumination:
    - a. Color: 0.13 lux at 50 IRE, F1.3
    - b. B/W: 0 lux at 50 IRE, F1.3
  - 6. Video Compression: H.265 Main Profile.
  - 7. Resolution: 2592x1944
  - 8. Casing: IP52-rated, IK10 impact resistant polycarbonate casing with hard coated dome and dehumidifying membrane.
  - 9. Power: PoE Type 1 Class 3.
    - a. Typical 6.5 W, Max 10.5 W.
  - 10. IR Illumination: Long life 850nm IR LEDs, range of 130 feet.

11. Storage: Support for microSD/microSDHC/microSDXC card.

C. Fixed Dome Outdoor Camera:

1. Comply with UL 639.
2. Image Sensor: 1/1.8" progressive scan RGB CMOS.
3. Lens: Varifocal, 4.3-8.6mm, F1.5
4. Day and Night: Automatically removeable infrared-cut filter.
5. Minimum Illumination:
  - a. Color: 0.14 lux at 50 IRE, F1.5
  - b. B/W: 0 lux at 50 IRE, F1.5
6. Video Compression: H.265 Main Profile.
7. Resolution: 3840x2160
8. Casing: IP66 and NEMA 4X-rated, IK10 impact resistant polycarbonate casing with hard coated dome and dehumidifying membrane.
9. Power: PoE Type 1 Class 3.
  - a. Typical 8.6 W, Max 11.8 W.
10. IR Illumination: Long life 850nm IR LEDs, range of 130 feet.
11. Storage: Support for microSD/microSDHC/microSDXC card.

D. Fixed Wedge Indoor Camera:

1. Comply with UL 639.
2. Image Sensor: 1/2.5" progressive scan RGB CMOS.
3. Lens: Fixed, 2.4mm, F2.0
4. Day and Night: Automatically removeable infrared-cut filter.
5. Minimum Illumination:
  - a. Color: 0.23 lux at F2.1
  - b. B/W: 0.05 lux F2.1
6. Video Compression: H.265 Main Profile.
7. Resolution: 2304x1728
8. Casing:
  - a. Anti-ligature and anti-grip stainless steel casing.
  - b. IP66, IP69, IP6K9K and NEMA 4X-rated.
  - c. IK10+ 50 joules impact resistant.
9. Power: PoE Type 1 Class 3.
  - a. Typical 7.7 W, Max 10.8 W.
10. IR Illumination: Long life and invisible 940nm IR LEDs, range of 49 feet.
11. Storage: Support for microSD/microSDHC/microSDXC card.

E. Multi-Sensor Dome Outdoor Camera:

1. Comply with UL 639.
2. Image Sensor: 4 x 1/2.5" progressive scan RGB CMOS.
3. Lens: Varifocal, 3-6mm, F1.8-2.6
4. Day and Night: Automatically removeable infrared-cut filter.
5. Minimum Illumination:
  - a. Color: 0.20 lux at 50 IRE, F1.8
  - b. B/W: 0.04 lux at 50 IRE, F1.8
6. Video Compression: H.265.
7. Resolution: 4 x 2560x1440

8. Casing: IP66, IP67 and NEMA 4X-rated, IK09 impact resistant aluminum and plastic casing with polycarbonate hard coated dome.
9. Power: PoE Type 2 Class 4.
  - a. Typical 16.3 W, Max 25.5 W.
10. IR Illumination: 4 x long life 850nm IR LEDs, range of 50 feet.
11. Storage: Support for microSD/microSDHC/microSDXC card, dual SD cards.

## 2.4 CAMERA-SUPPORTING EQUIPMENT

- A. Minimum Load Rating: Rated for load in excess of the total weight supported times a minimum safety factor of two.
- B. Mounting Brackets for Fixed Cameras: Type matched to items supported and mounting conditions. Include manual pan-and-tilt adjustment.

## 2.5 NETWORK VIDEO RECORDERS

- A. Manufacturers:
  1. Dell
  2. Hewlett Packard
  3. Lenovo
- B. Network Video Servers
  1. Meets minimum recommended requirements for the Video Management Software, but not less than the following:
    - a. Description: Computer-operated, video control unit complying with 47 CFR 15, Subparts A and B, for Class A and B digital. Include the following minimum features, components, and capabilities:
      - 1) CPU: Intel Core i3
      - 2) RAM: 16GB DDR4
      - 3) Redundant hot-plug power supply
      - 4) Throughput: up to 360 Mbit/s
      - 5) Disk Drive: 2 x 3.5" (external accessible)
      - 6) Raw Storage: 4/8/16/24/32 TB (depending on attached cameras)
      - 7) RAID Controller: Intel Rapid Storage Controller RAID 0,1
      - 8) Display Ports: 2-USB 3.1 Type C/iGFX DisplayPort
  2. Maximum allowable number of IP video streams to be assigned: 32 each server (including unused capacity to meet growth percentages indicated).
  3. Mounting: Standard 19-inch rack complying with EIA 310.
  4. Storage: Each server shall have sufficient on-board or direct connected disk capacity to record each assigned video channel and maintain a rolling record of the video data on a first in first out basis meeting the project's archival requirements.

## 2.6 VIDEO MANAGEMENT SOFTWARE

### A. Manufacturers:

1. Milestone
2. Genetec
3. American Dynamics
4. Avigilon

### B. Description:

1. System shall provide high-quality delivery and processing of IP-based video, audio, and control data using standard Ethernet-based networks.
2. System shall have seamless integration of all video surveillance and control functions.
3. Graphical user interface software shall manage all IP-based video matrix switching and camera control functions, alarm monitoring and control, and recording and archive/retrieval management. IP system shall also be capable of integrating into larger system environments.
4. System shall fully integrate with Brivo access control system.
5. System design shall include all necessary compression software for high-performance, dual-stream, MPEG-2/MPEG-4 video. Unit shall provide connections for all video cameras, discreet sensor inputs, and control system outputs.
6. All camera signals shall be compressed, encoded, and delivered onto the network for processing and control by the IP video-management software.
7. All system interconnect cables, workstation PCs, and network intermediate devices shall be provided for full performance of specified system.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine pathway elements intended for cables. Check raceways and other elements for compliance with space allocations, installation tolerance, hazards to camera installation, and other conditions affecting installation.
- B. Examine roughing-in for LAN, WAN, and IP network before device installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 WIRING

- A. Wiring Method: Install cables in raceways unless otherwise indicated.
  1. Except raceways are not required in accessible indoor ceiling spaces and attics.
  2. Except raceways are not required in hollow gypsum board partitions.
  3. Conceal raceways and wiring except in unfinished spaces.

- B. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii. Provide and use lacing bars and distribution spools.
- C. Splices, Taps, and Terminations: For power and control wiring, use numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- D. Grounding: Provide independent-signal circuit grounding recommended in writing by manufacturer.

### 3.3 VIDEO SURVEILLANCE SYSTEM INSTALLATION

- A. Install cameras level and plumb.
- B. Install tamper switches on components indicated to receive tamper switches, arranged to detect unauthorized entry into system-component enclosures and mounted in self-protected, inconspicuous positions.

### 3.4 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.
- C. Perform tests and inspections.
- D. Tests and Inspections:
  - 1. Inspection: Verify that units and controls are properly installed, connected, and labeled, and that interconnecting wires and terminals are identified.
  - 2. Pretesting: Align and adjust system and pretest components, wiring, and functions to verify that they comply with specified requirements. Conduct tests at varying lighting levels, including day and night scenes as applicable. Prepare video-surveillance equipment for acceptance and operational testing as follows:
    - a. Prepare equipment list described in "Informational Submittals" Article.
    - b. Verify operation of auto-iris lenses.
    - c. Set back-focus of fixed focal length lenses. At focus set to infinity, simulate nighttime lighting conditions by using a dark glass filter of a density that produces a clear image. Adjust until image is in focus with and without the filter.
    - d. Set back-focus of zoom lenses. At focus set to infinity, simulate nighttime lighting conditions by using a dark glass filter of a density that produces a clear image. Additionally, set zoom to full wide angle and aim camera at an object 50 to 75 feet away. Adjust until image is in focus from full wide angle to full telephoto, with the filter in place.
    - e. Set and name all preset positions; consult Owner's personnel.



- f. Set sensitivity of motion detection.
  - g. Connect and verify responses to alarms.
  - h. Verify operation of control-station equipment.
- 3. Test Schedule: Schedule tests after pretesting has been successfully completed and system has been in normal functional operation for at least 14 days. Provide a minimum of 10 days' notice of test schedule.
  - 4. Operational Tests: Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes.
- E. Video surveillance system will be considered defective if it does not pass tests and inspections.
  - F. Prepare test and inspection reports.

### 3.5 ADJUSTING

- A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose. Tasks shall include, but are not limited to, the following:
  - 1. Check cable connections.
  - 2. Check proper operation of cameras and lenses. Verify operation of auto-iris lenses and adjust back-focus as needed.
  - 3. Adjust all preset positions; consult Owner's personnel.
  - 4. Recommend changes to cameras, lenses, and associated equipment to improve Owner's use of video surveillance system.
  - 5. Provide a written report of adjustments and recommendations.

### 3.6 CLEANING

- A. Clean installed items using methods and materials recommended in writing by manufacturer.
- B. Clean video-surveillance-system components, including camera-housing windows, lenses, and monitor screens.
- C. Train Owner's maintenance personnel to adjust, operate, and maintain video-surveillance equipment.

END OF SECTION 282000










# VILLAGE OF HOMEWOOD VIDEO SURVEILLANCE UPGRADE



## DRAWING LIST:

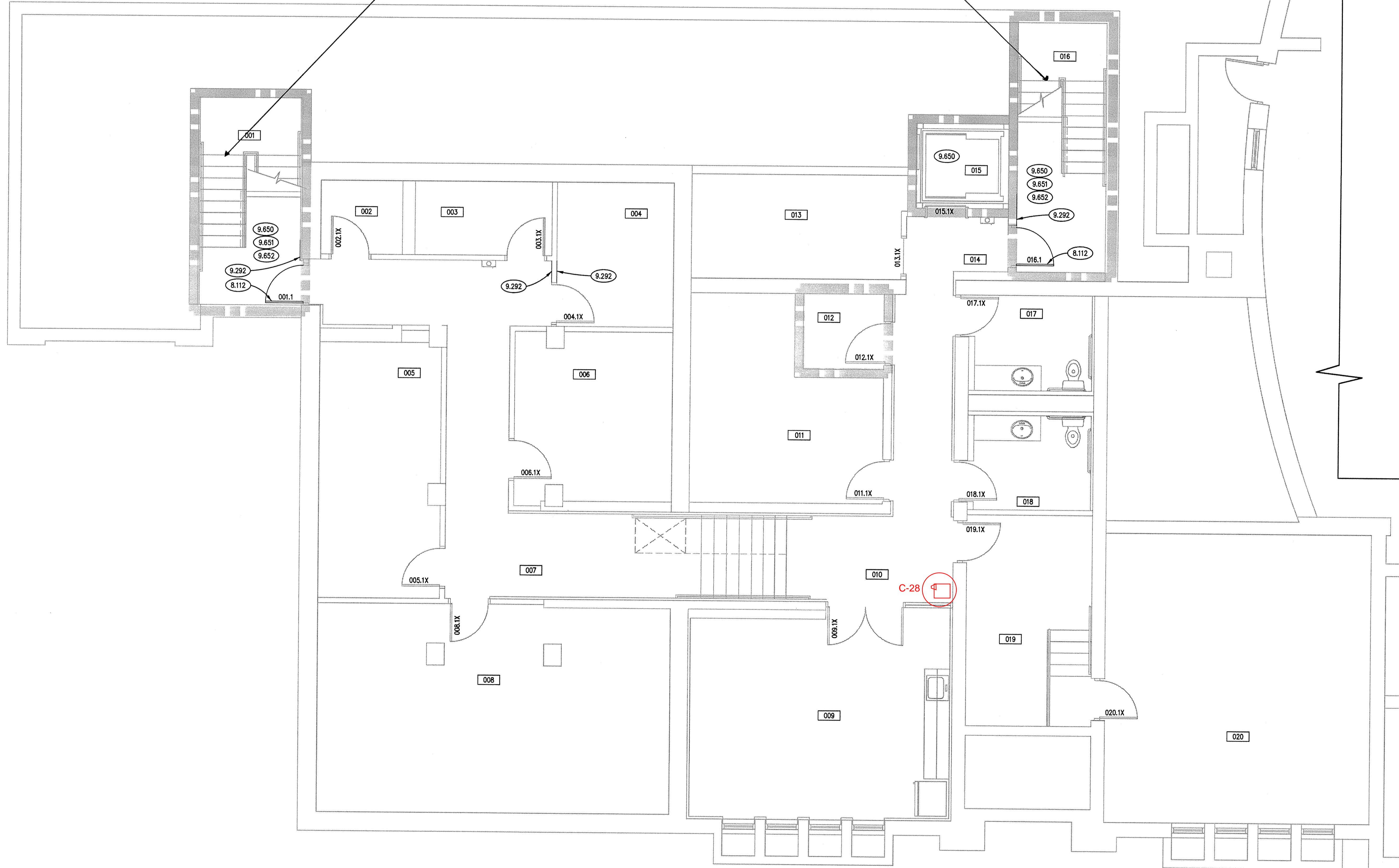
- EY101 VILLAGE SITE PLAN
- EY102 VILLAGE HALL BASEMENT
- EY103 VILLAGE HALL FIRST FLOOR
- EY104 VILLAGE HALL SECOND FLOOR
- EY105 POLICE DEPARTMENT
- EY106 FIRE STATION
- EY107 PUBLIC WORKS
- EY108 PUMP HOUSE #2
- EY109 BRIAN CAREY TRAINING CENTER
- EY110 SCIENCE CENTER
- EY111 WATER PLANT 183rd & STEWARD
- EY112 NEW PUMP STATION
- EY113 WATER TOWER WEST
- EY114 WATER TOWER EAST / LANDSCAPE &  
MAINTENANCE



- LEGEND:**
-  FIXED DOME COLOR CAMERA
  -  MULTI-SENSOR DOME COLOR CAMERA
  -  FISHEYE COLOR CAMERA
  -  WEDGE CAMERA (JAIL CELLS)
  -  CAMERA WALL MOUNT
  -  CAMERA WALL CORNER MOUNT
  -  SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER  
SEE CAMERA SCHEDULE FOR DETAILS

All stair risers were built out with 0'1/4" and 0'1/2" Plywood to accept New one piece stair tread and riser material



**KEYNOTES**

- 1.000 KEYNOTES TYPICALLY ARE NOT DUPLICATED WITHIN A GIVEN DETAIL. CONTRACTOR IS TO ASSUME THAT AN UN-KEYED ITEM IS TO BE THE SAME AS THE KEYNOTED ITEM WITHIN THE SAME DETAIL.
- 8.112 STEEL DOOR: REFER TO DOOR, FRAME AND BORROWED LIGHT SCHEDULE.
- 9.292 GYPSUM BOARD: 5/8" THICK; TYPE "X" PATCHING AS REQUIRED TO ACCOMMODATE NEW SECURITY SYSTEM OR ELECTRICAL COMPONENT INSTALLATION. MATCH EXISTING WALL FINISHES.
- 9.650 RESILIENT FLOOR TILE: REFER TO ROOM FINISH SCHEDULE.
- 9.651 RESILIENT BASE: REFER TO ROOM FINISH SCHEDULE.
- 9.652 RESILIENT STAIR TREAD: REFER TO ROOM FINISH SCHEDULE.

**GENERAL NOTES**

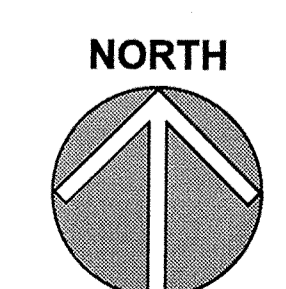
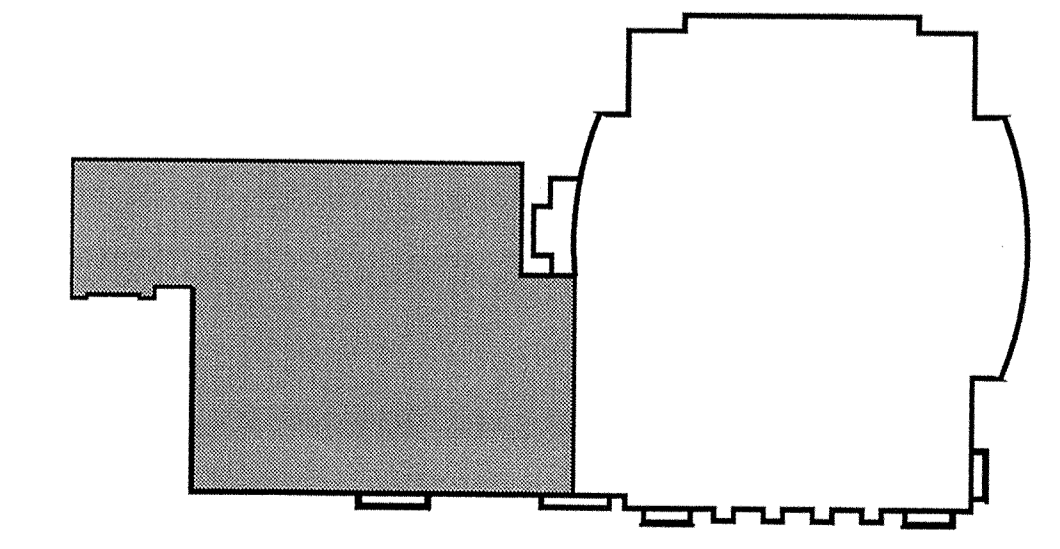
- 1. REFER TO DRAWING 0100 FOR PROJECT GENERAL NOTES.
- 2. COORDINATE FIRE RATED ASSEMBLIES INFORMATION CONTAINED ON G300 SERIES DRAWINGS WITH THE WORK OF ALL CONTRACTS.
- 3. GYPSUM WALLS ARE TYPE G3+ UNLESS TAGGED OTHERWISE.
- 4. IN METAL STUD/GYPSUM BOARD PARTITIONS AND WALLS, PROVIDE 2X FIRE RETARDANT TREATED WOOD BLOCKING FOR WALL-MOUNTED ITEMS REQUIRING MECHANICAL ANCHORAGE.
- 5. COORDINATE EXACT LOCATIONS OF TOILET ACCESSORY ITEMS WITH ACCESSIBILITY AND MOUNTING INFORMATION CONTAINED ON G200 SERIES DRAWINGS AND WITH OWNER'S REPRESENTATIVE.
- 6. LATEX LEVEL AND CRACK FILL EXISTING CONCRETE FLOOR SLABS AS REQUIRED TO RECEIVE NEW FLOORING TREATMENTS. TYPICAL AT ALL LOCATIONS WHERE NEW FLOORING IS TO BE INSTALLED.
- 7. SEE DETAIL 3/A810 FOR ALL WINDOW SILL REPLACEMENTS.
- 8. FLOORING CONTRACTOR TO CONDUCT A FLOORING PRE-INSTALLATION MEETING WITH OWNER AND ARCHITECT TO DETERMINE CARPETING LAYOUT, PATTERN AND PATTERN DIRECTION (FOR LINEAR PRODUCTS) PRIOR TO BEGINNING ANY FLOORING INSTALLATION.

**ROOM SCHEDULE**

RM. NO.	ROOM NAME	RM. NO.	ROOM NAME
001	STAIR NO. 1		
002	WATER SERVICE		
003	SPRINKLER ROOM		
004	ELECTRIC ROOM		
005	SUPPLY STORAGE		
006	CABLE TV / AV ROOM		
007	HALLWAY		
008	STORAGE ROOM 1		
009	LUNCH ROOM		
010	UPPER HALLWAY		
011	SERVER ROOM		
012	ELEVATOR EQUIPMENT		
013	CRANK SPACE		
014	CORRIDOR		
015	ELEVATOR		
016	STAIR NO. 2		
017	MEN'S STAFF TOILET		
018	WOMEN'S STAFF TOILET		
019	JANITOR CLOSET		
020	STORAGE ROOM 2		
021	NOT USED		
022	NOT USED		

**AS-BUILT**

**KEY PLAN**



**BASEMENT FLOOR PLAN** 1  
SCALE: 1/4" = 1'-0"

**Kluber**  
Architects + Engineers

Kluber, Inc.  
Balboa, Illinois 60510  
Tel: 630.405.1213  
Chicago, Illinois 60601  
Tel: 847.395.9426  
www.klubertec.com

**VILLAGE HALL RENOVATIONS**  
FOR THE VILLAGE OF HOMEWOOD  
2030 CHESTER ROAD  
HOMEWOOD, IL 60430

ISSUED	
1 12/07/14 15% CD/OWNER REVIEW	
2 07/05/15 ISSUED FOR BID	

JOB NO. 14-347-938  
DRAWN C/JH  
CHECKED C/JH  
APPROVED C/JH

SHEET TITLE  
**BASEMENT FLOOR PLAN**

SHEET NUMBER

**EY-102**



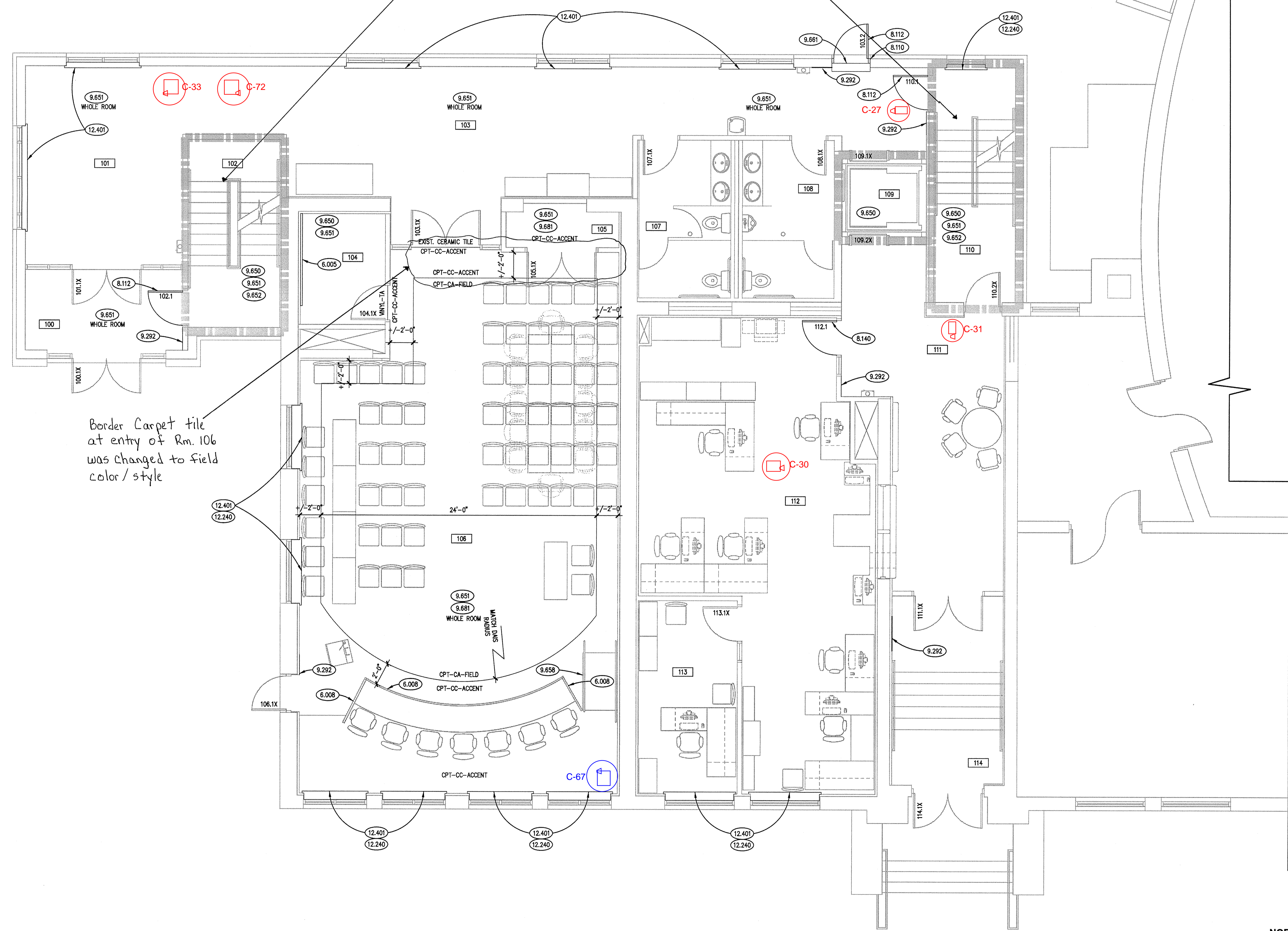
**AS-BUILT**

- LEGEND:**
- FIXED DOME COLOR CAMERA
  - MULTI-SENSOR DOME COLOR CAMERA
  - FISHEYE COLOR CAMERA
  - WEDGE CAMERA (JAIL CELLS)
  - CAMERA WALL MOUNT
  - CAMERA WALL CORNER MOUNT
  - SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER  
SEE CAMERA SCHEDULE FOR DETAILS

All Stair Risers were built out with 0 1/4" and 0 1/2" Plywood to accept New one piece stair tread and Riser material

Border Carpet tile at entry of Rm. 106 was changed to field color / style



**KEYNOTES**

- 1.000 KEYNOTES TYPICALLY ARE NOT DUPLICATED WITHIN A GIVEN DETAIL. CONTRACTOR IS TO ASSUME THAT AN UN-KEYED ITEM IS TO BE THE SAME AS THE KEYNOTED ITEM WITHIN THE SAME DETAIL.
- 6.005 ELECTRICAL EQUIPMENT MOUNTING BOARDS: 4 FEET X 8 FEET X 3/4" THICK PLYWOOD SHEETS; FIRE-RETARDANT TREATED - FIELD PAINTED TO MATCH WALL COLOR.
- 6.008 HARDWOOD TRIM: 8 INCH HIGH RED OAK COLONIAL WOOD BASE. STAINED AND FINISHED TO MATCH BOARD ROOM DAVIS COLOR. INSTALL AT BASE OF EXISTING DAIS AFTER REMOVAL OF CARPETED BASE.
- 8.110 STEEL DOOR FRAME: REFER TO DOOR, FRAME AND BORROWED LIGHT SCHEDULE.
- 8.112 STEEL DOOR: REFER TO DOOR, FRAME AND BORROWED LIGHT SCHEDULE.
- 8.140 WOOD DOOR: REFER TO DOOR, FRAME AND BORROWED LIGHT SCHEDULE.
- 9.292 GYPSUM BOARD: 5/8" THICK; TYPE "X" PATCHING AS REQUIRED TO ACCOMMODATE NEW SECURITY SYSTEM OR ELECTRICAL COMPONENT INSTALLATION. MATCH EXISTING WALL FINISHES.
- 9.650 RESILIENT FLOOR TILE: REFER TO ROOM FINISH SCHEDULE.
- 9.651 RESILIENT BASE: REFER TO ROOM FINISH SCHEDULE.
- 9.652 RESILIENT STAIR TREAD: REFER TO ROOM FINISH SCHEDULE.
- 9.658 RESILIENT ACCESSORY: RAMP EDGE RUBBER STAIR NOSING & RECEIVER; MATCH VINYL BASE COLOR. REFER TO SPECIFICATIONS.
- 9.661 CERAMIC TILE: FLOOR PATCHING AND REGROUTING TO MATCH EXISTING AT LOCATION OF NEW DOOR THRESHOLD. MATCH CERAMIC TILE TYPE. OWNER HAS ATTIO STOCK OF MATCHING TILES THAT CAN BE USED. MATCH GROUT COLOR. TYPICAL FOR APPROXIMATELY 6 TILES.
- 9.681 CARPET TILE: REFER TO ROOM FINISH SCHEDULE.
- 12.240 LIGHT FILTERING, WINDOW ROLLER SHADES: MANUALLY OPERATED, FULL HEIGHT X WINDOW WIDTH. FIELD VERIFY OPENING SIZES PRIOR TO BID. (ALTERNATE BID).
- 12.401 WINDOW SILL: SOLID SURFACING, 3/4" THICK WITH EASED EDGE; WITH 3/4" x 2" SOLID SURFACING SKIRT BOARD; WINDOW SILL TO EXTEND 2" PAST WINDOW OPENING EDGE EA. SIDE; SKIRT BOARD TO EXTEND 1-3/4" PAST WINDOW OPENING EDGE EA. SIDE.

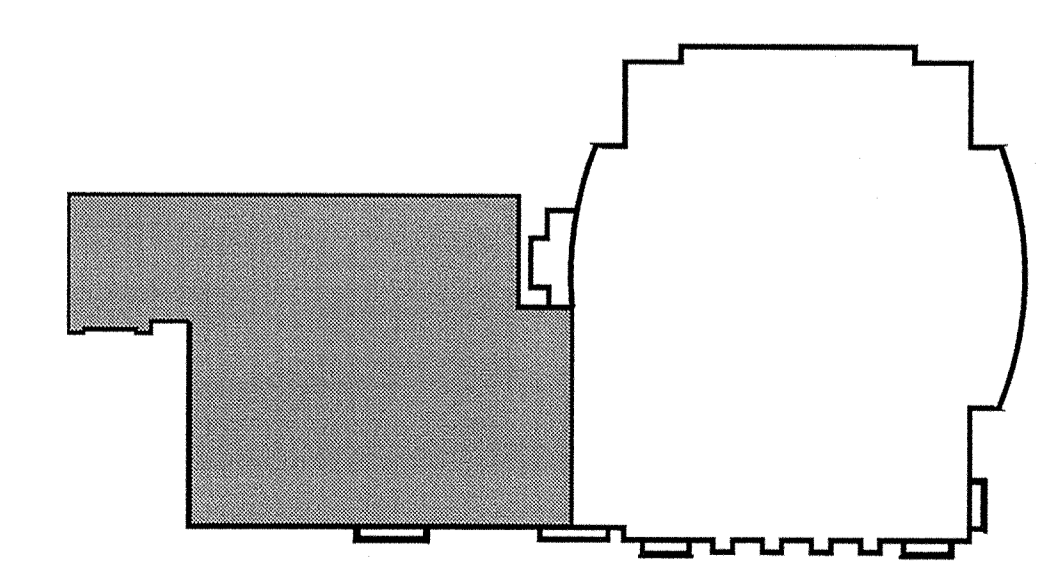
**GENERAL NOTES**

- 1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
- 2. COORDINATE FIRE RATED ASSEMBLIES CONTAINED ON G300 SERIES DRAWINGS WITH THE WORK OF ALL CONTRACTS.
- 3. GYPSUM WALLS ARE TYPE G3e UNLESS TAGGED OTHERWISE.
- 4. IN METAL STUD/GYPSUM BOARD PARTITIONS AND WALLS, PROVIDE 2X FIRE RETARDANT TREATED WOOD BLOCKING FOR WALL-MOUNTED ITEMS REQUIRING MECHANICAL ANCHORAGE.
- 5. COORDINATE EXACT LOCATIONS OF TOILET ACCESSORY ITEMS WITH ACCESSIBILITY AND MOUNTING INFORMATION CONTAINED ON G200 SERIES DRAWINGS AND WITH OWNER'S REPRESENTATIVE.
- 6. LATEX LEVEL AND CRACK FILL EXISTING CONCRETE FLOOR SLABS AS REQUIRED TO RECEIVE NEW FLOORING TREATMENTS. TYPICAL AT ALL LOCATIONS WHERE NEW FLOORING IS TO BE INSTALLED.
- 7. SEE DETAIL 3/A810 FOR ALL WINDOW SILL REPLACEMENTS.
- 8. FLOORING CONTRACTOR TO CONDUCT A FLOORING PRE-INSTALLATION MEETING WITH OWNER AND ARCHITECT TO DETERMINE CARPETING LAYOUT, PATTERN AND PATTERN DIRECTION (FOR LINEAR PRODUCTS) PRIOR TO BEGINNING ANY FLOORING INSTALLATION.

**ROOM SCHEDULE**

RM. NO.	ROOM NAME	RM. NO.	ROOM NAME
100	VESTIBULE		
101	LOBBY		
102	STAIR NO. 1		
103	HALLWAY		
104	STORAGE		
105	CLOSET		
106	BOARD ROOM		
107	WOMEN'S TOILET		
108	MEN'S TOILET		
109	ELEVATOR		
110	STAIR NO. 2		
111	HALLWAY		
112	FINANCE DEPARTMENT		
113	ADMINISTRATIVE FINANCE COORDINATOR		
114	VESTIBULE		
115	NOT USED		

**KEY PLAN**

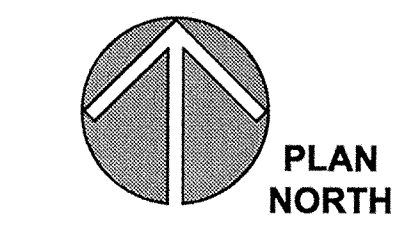


**FIRST FLOOR PLAN**  
SCALE: 1/4" = 1'-0" ①

ISSUED	
1 12/02/14	95% CD-OWNER REVIEW
2 01/05/15	ISSUED FOR BID

JOB NO.	14-347-938
DRAWN	CJH
CHECKED	CJH
APPROVED	CJH

SHEET TITLE	FIRST FLOOR PLAN
SHEET NUMBER	EY-103



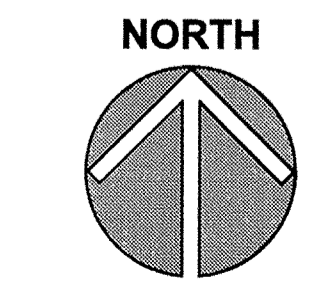
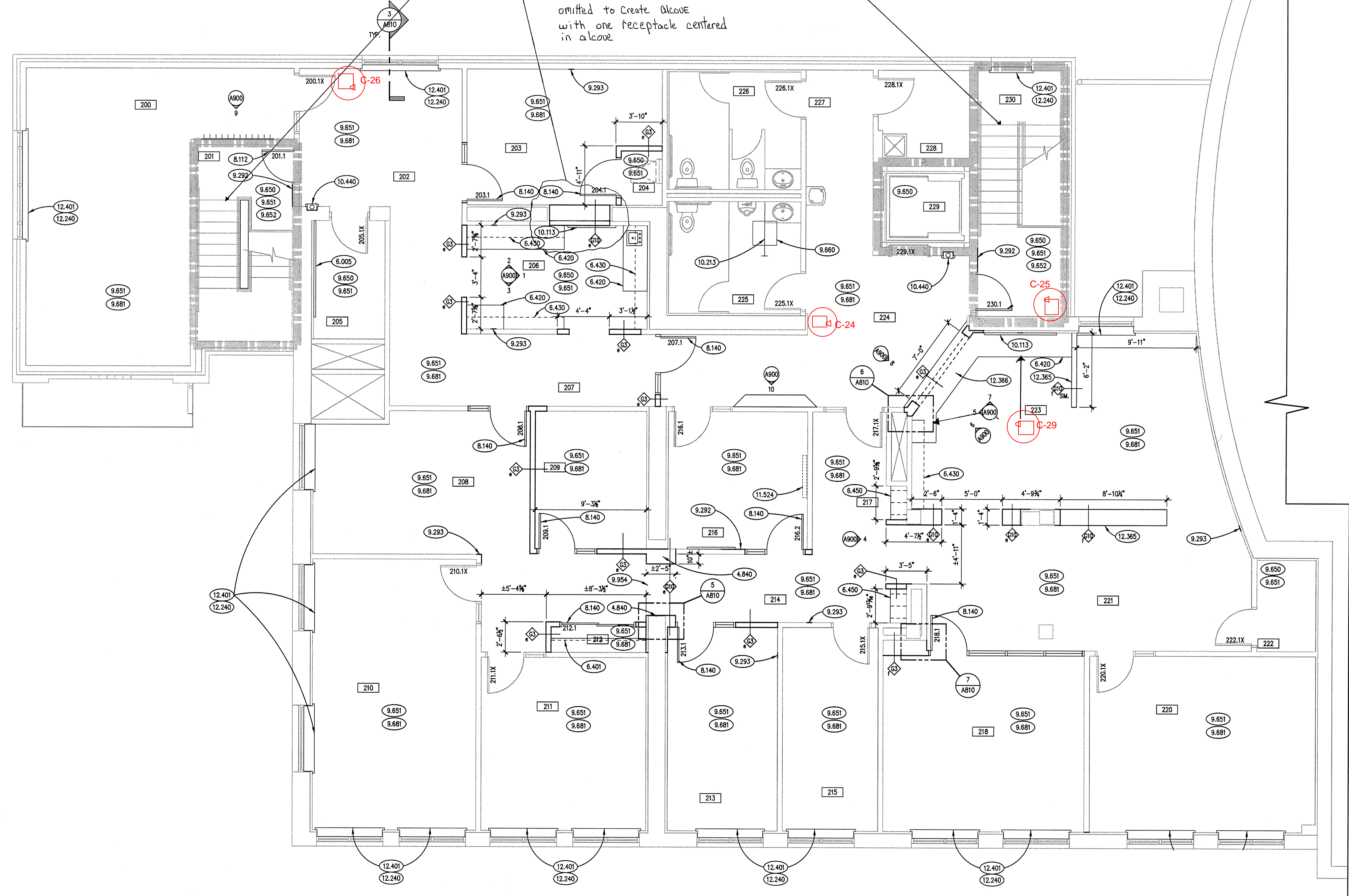
**AS-BUILT**

- LEGEND:**
- FIXED DOME COLOR CAMERA
  - MULTI-SENSOR DOME COLOR CAMERA
  - FISHEYE COLOR CAMERA
  - WEDGE CAMERA (JAIL CELLS)
  - CAMERA WALL MOUNT
  - CAMERA WALL CORNER MOUNT
  - SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER  
SEE CAMERA SCHEDULE FOR DETAILS

All Stair Risers were built out with 0<sup>1</sup>/<sub>4</sub>" and 0<sup>1</sup>/<sub>2</sub>" Plywood to accept New one piece, Stair tread and riser material

WALL in Room 203 was omitted to create alcove with one receptacle centered in alcove



**SECOND FLOOR PLAN**  
SCALE: 1/4" = 1'-0" ①

**KEYNOTES**

- 1.000 KEYNOTES TYPICALLY ARE NOT DUPLICATED WITHIN A GIVEN DETAIL. CONTRACTOR IS TO ASSUME THAT AN UN-KEYED ITEM IS TO BE THE SAME AS THE KEYNOTED ITEM WITHIN THE SAME DETAIL.
- 4.840 PATCH EXISTING MASONRY OPENING AFTER DEMOLITION OPERATIONS.
- 6.005 ELECTRICAL EQUIPMENT MOUNTING BOARDS: 4 FEET X 8 FEET X 3/4" THICK PLYWOOD SHEETS; FIRE-RETARDANT TREATED - FIELD PAINTED TO MATCH WALL COLOR.
- 6.401 ARCHITECTURAL WOOD CASEWORK: PLASTIC LAMINATE; HAT SHELF; 3/4" THK.; 15" DEEP; WITH 1" DIA. CHROMED STEEL CLOTHES HANGER ROD
- 6.420 ARCHITECTURAL WOOD CASEWORK: PLASTIC LAMINATE; BASE CABINETS.
- 6.430 ARCHITECTURAL WOOD CASEWORK: PLASTIC LAMINATE; WALL CABINETS.
- 6.450 ARCHITECTURAL WOOD CASEWORK: PLASTIC LAMINATE; MAIL SLOTS; FULLY LAMINATED WITH ADJUSTABLE SHELVES. QUANTITY AS SHOWN. MIN. 12" WIDE X 12" DEEP COMPARTMENTS, TYPICAL. PROVIDE 3/4" VERTICAL FLAM. DIVIDERS BETWEEN EACH SECTION OF SLOTS. TYP.
- 8.112 STEEL DOOR: REFER TO DOOR, FRAME AND BORROWED LIGHT SCHEDULE.
- 8.140 WOOD DOOR: REFER TO DOOR, FRAME AND BORROWED LIGHT SCHEDULE.
- 9.292 GYPSUM BOARD: 5/8" THICK; TYPE "X" PATCHING AS REQUIRED TO ACCOMMODATE NEW SECURITY SYSTEM OR ELECTRICAL COMPONENT INSTALLATION. MATCH EXISTING WALL FINISHES.
- 9.293 GYPSUM BOARD PATCHING AS REQUIRED AT ALL LOCATIONS OF REMOVED PARTITIONS OR WHERE WALLS HAVE BEEN ACCESSED TO ACCOMMODATE INSTALLATION OF NEW ELECTRICAL OR SECURITY DEVICES TO MATCH EXISTING CONSTRUCTION. TYPICAL THROUGHOUT BUILDING AS REQUIRED.
- 9.650 RESILIENT FLOOR TILE: REFER TO ROOM FINISH SCHEDULE.
- 9.651 RESILIENT BASE: REFER TO ROOM FINISH SCHEDULE.
- 9.652 RESILIENT STAIR TREADS: REFER TO ROOM FINISH SCHEDULE.
- 9.954 LATEX LEVEL FLOOR AT TRANSITION SMOOTH TO ACCOMMODATE NEW FLOORING PRODUCTS.
- 9.660 CERAMIC TILE FLOOR PATCHING AND REGROUTING TO MATCH EXISTING AT LOCATION OF REMOVED URINAL SCREEN. MATCH CERAMIC TILE TYPE. OWNER HAS ATTIC STOCK OF MATCHING TILES THAT CAN BE USED. MATCH GROUT COLOR. TYPICAL FOR APPROXIMATELY 6 TILES.
- 9.681 CARPET TILE: REFER TO ROOM FINISH SCHEDULE.
- 10.113 VISUAL DISPLAY BOARD: TACKBOARD; 4'x4'; MOUNT TOP AT 7'-0" A.F.F. UNLESS NOTED OTHERWISE.
- 10.213 METAL TOILET COMPARTMENT: EXTENDED URINAL SCREEN WITH 6 INCH END PLASTER. MATCH EXISTING PARTITION COLOR.
- 10.440 FIRE PROTECTION SPECIALTY: FIRE EXTINGUISHER AND SEMI-RECESSED WALL CABINET.
- 11.524 AUDIO-VISUAL EQUIPMENT: FUTURE LCD TV; WALL MOUNTED (BY OWNER) N.L.C.
- 12.240 LIGHT FILTERING, WINDOW ROLLER SHADES: MANUALLY OPERATED, FULL HEIGHT X WINDOW WIDTH. FIELD VERIFY OPENING SIZES PRIOR TO BID. (ALTERNATE BID).
- 12.365 COUNTERTOP: SOLID SURFACING; 1-1/2" EDGE THICKNESS WITH EASED EDGE, U.N.O.
- 12.366 COUNTERTOP: GRANITE; 1-1/2" EDGE THICKNESS WITH EASED EDGES.
- 12.401 WINDOW SILL: SOLID SURFACING; 3/4" THICK WITH EASED EDGE; WITH 3/4" x 2" SOLID SURFACING SKIRT BOARD; WINDOW SILL TO EXTEND 2" PAST WINDOW OPENING EDGE EA. SIDE; SKIRT BOARD TO EXTEND 1-3/4" PAST WINDOW OPENING EDGE EA. SIDE.

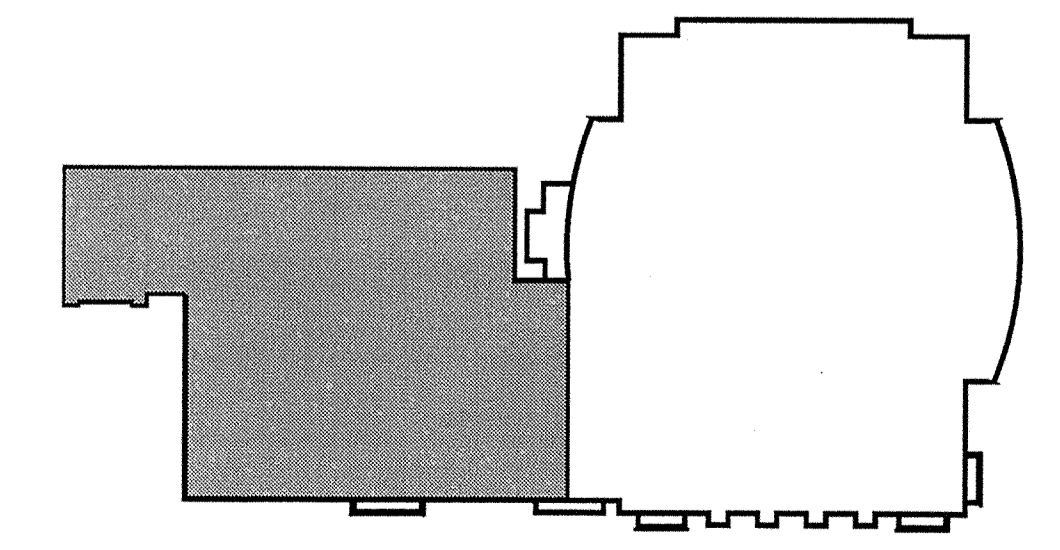
**GENERAL NOTES**

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. COORDINATE FIRE RATED ASSEMBLIES INFORMATION CONTAINED ON G200 SERIES DRAWINGS WITH THE WORK OF ALL CONTRACTORS.
3. GYPSUM WALLS ARE TYPE G34 UNLESS TAGGED OTHERWISE.
4. IN METAL STUD/GYPSUM BOARD PARTITIONS AND WALLS, PROVIDE 2X FIRE RETARDANT TREATED WOOD BLOCKING FOR WALL-MOUNTED ITEMS REQUIRING MECHANICAL ANCHORAGE.
5. COORDINATE EXACT LOCATIONS OF TOILET ACCESSORY ITEMS WITH ACCESSIBILITY AND MOUNTING INFORMATION CONTAINED ON G200 SERIES DRAWINGS AND WITH OWNER'S REPRESENTATIVE.
6. LATEX LEVEL AND CRACK FILL EXISTING CONCRETE FLOOR SLABS AS REQUIRED TO RECEIVE NEW FLOORING TREATMENTS. TYPICAL AT ALL LOCATIONS WHERE NEW FLOORING IS TO BE INSTALLED.
7. SEE DETAIL 3/A810 FOR ALL WINDOW SILL REPLACEMENTS.
8. FLOORING CONTRACTOR TO CONDUCT A FLOORING PRE-INSTALLATION MEETING WITH OWNER AND ARCHITECT TO DETERMINE CARPETING LAYOUT, PATTERN AND PATTERN DIRECTION (FOR LINEAR PRODUCTS) PRIOR TO BEGINNING ANY FLOORING INSTALLATION.

**ROOM SCHEDULE**

RM. NO.	ROOM NAME	RM. NO.	ROOM NAME
200	CONFERENCE ROOM	220	COMMUNITY DEVELOPMENT DIRECTOR
201	STAIR NO. 1	221	OPEN OFFICE
202	HALLWAY	222	CLOSET
203	P.R./EVENTS COORDINATOR OFFICE	223	COMMUNITY DEVELOPMENT RECEPTION
204	ROOF ACCESS	224	HALLWAY
205	STORAGE	225	MEN'S TOILET
206	COPY/COFFEE ROOM	226	WOMEN'S TOILET
207	HALLWAY	227	HALLWAY
208	ADMINISTRATIVE ASSISTANT OFFICE	228	JANITOR CLOSET
209	I.T. MANAGER OFFICE	229	ELEVATOR
210	VILLAGE MANAGER OFFICE	230	STAIR NO. 2
211	ASSISTANT VILLAGE MANAGER OFFICE		
212	COAT CLOSET		
213	FINANCE DIRECTOR OFFICE		
214	HALLWAY / FILES		
215	SENIOR ACCOUNTANT OFFICE		
216	CONFERENCE ROOM		
217	HALLWAY/MAIL ROOM		
218	CODE COMPLIANCE / BLDG. INSP. OFFICER		
219	NOT USED		

**KEY PLAN**



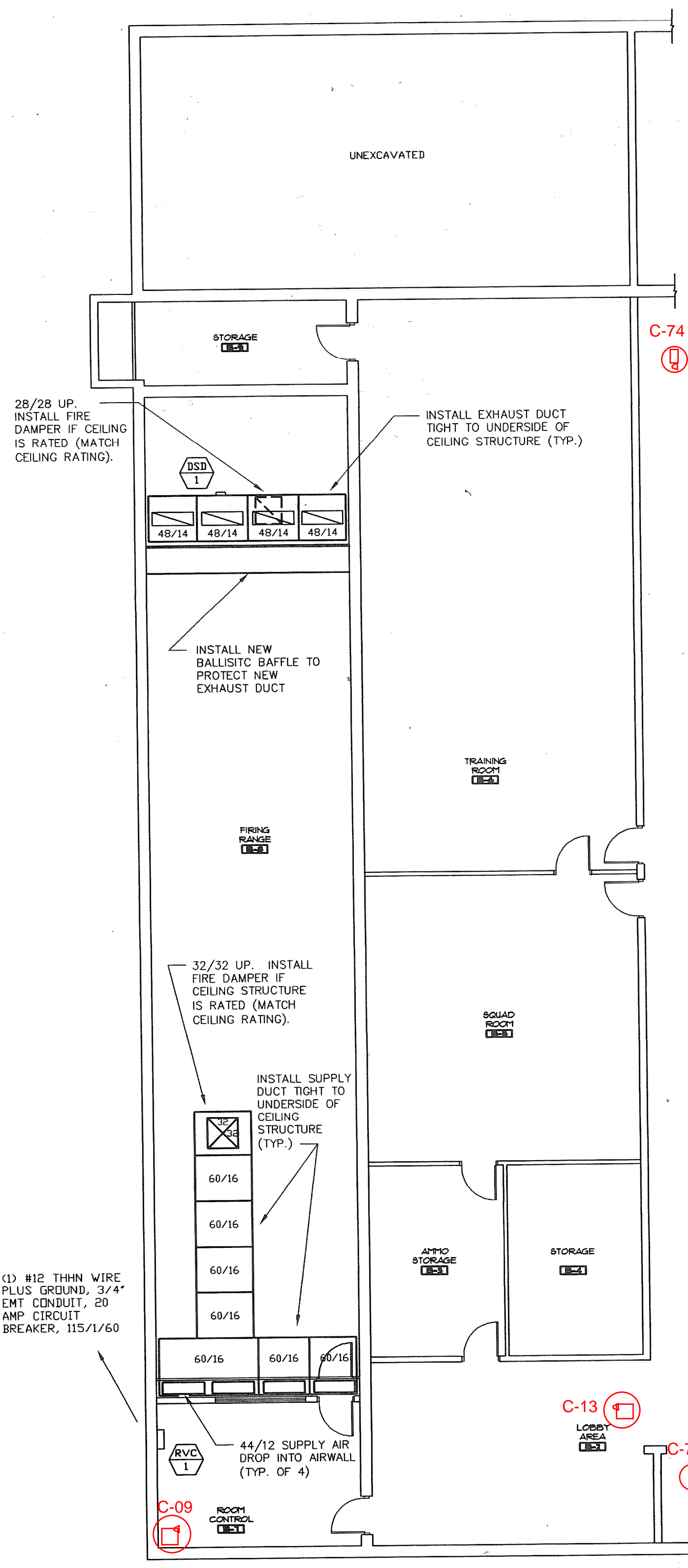
ISSUED FOR BIDDING

1	12/20/14	95% CD-OWNER REVIEW
2	01/05/15	ISSUED FOR BID

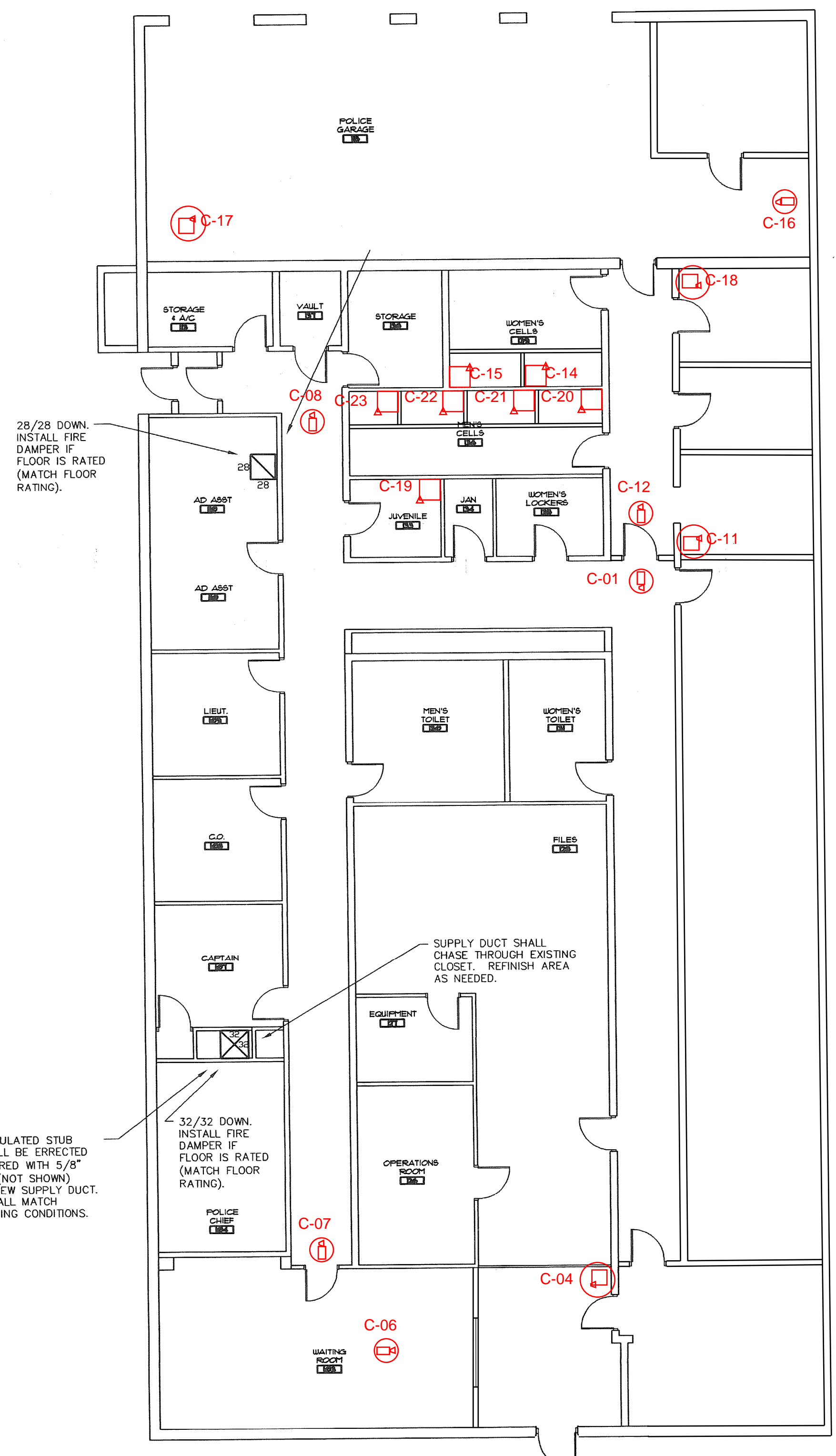
JOB NO. 14-347-938  
DRAWN C/JH  
CHECKED C/JH  
APPROVED C/JH

SHEET TITLE  
**SECOND FLOOR PLAN**

SHEET NUMBER  
**EY-104**



**A** Basement Plan  
RM-2 Scale: 1/8"=1'-0"



**B** First Floor Plan  
RM-2 Scale: 1/8"=1'-0"

**LEGEND:**

- FIXED DOME COLOR CAMERA
- MULTI-SENSOR DOME COLOR CAMERA
- FISHEYE COLOR CAMERA
- WEDGE CAMERA (JAIL CELLS)
- CAMERA WALL MOUNT
- CAMERA WALL CORNER MOUNT
- SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER  
SEE CAMERA SCHEDULE FOR DETAILS

17 Regent Lane  
Lincolnshire, IL 60069  
Voice (847) 528-3500  
Fax (847) 940-8649  
RVdInc.com  
Info@RVdInc.com

**RVD**  
RANGE VENTILATION DESIGN, Inc.  
Technical Consultants

HOMewood PD  
HOMewood, IL

REVISIONS








Rev.	Date	Description	Approved By
B	5/15/07	RELOCATED PENETRATIONS BETWEEN FLOORS	M.A.B.

Design by	M.A.B.	Date	11/22/06
Drawn by	J.L.S.	Project No.	DB-C-50
Created by	M.A.B.	Revision	B

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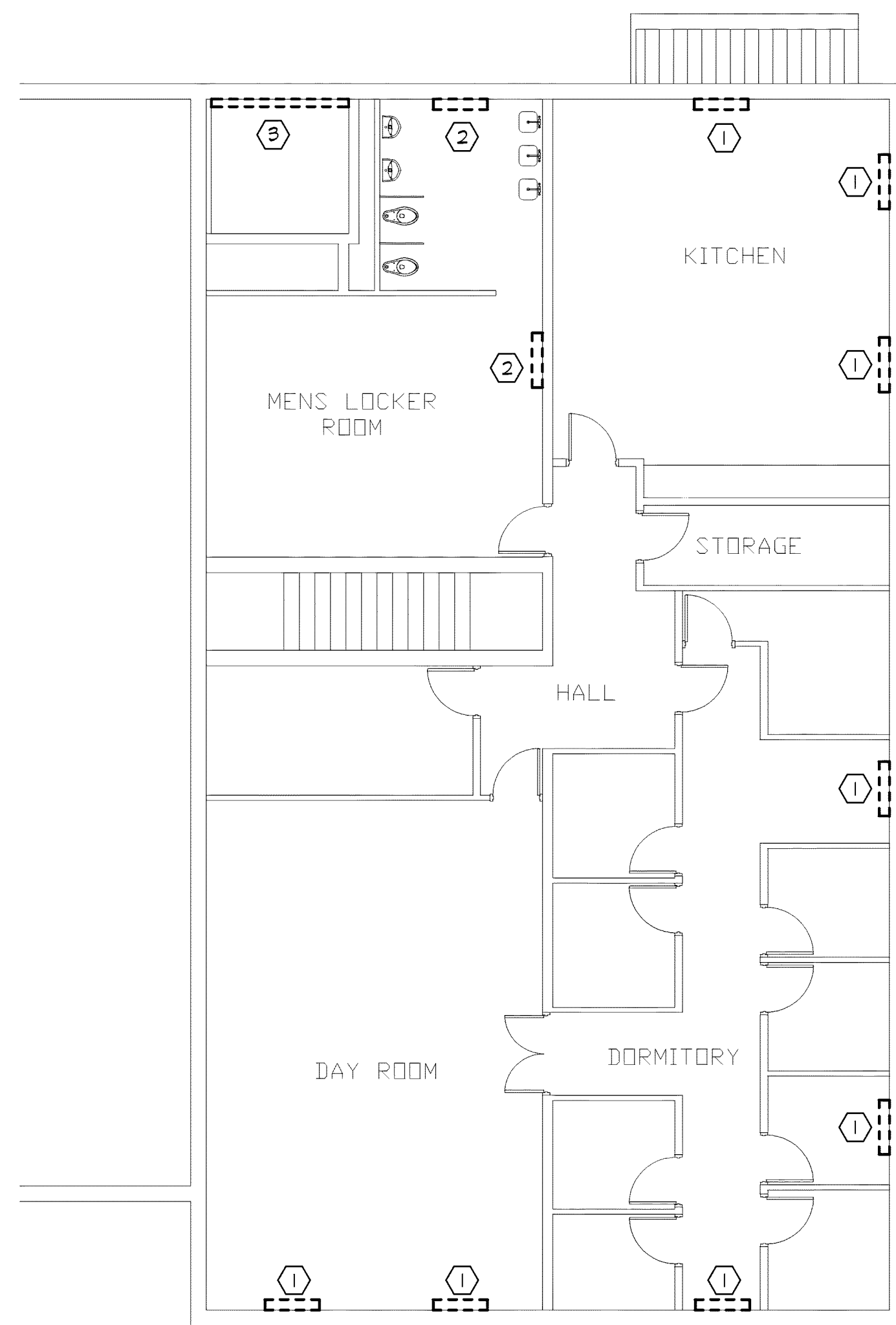
Sheet Title  
**RANGE VENTILATION PLAN VIEWS**

Sheet  
**EY-105**

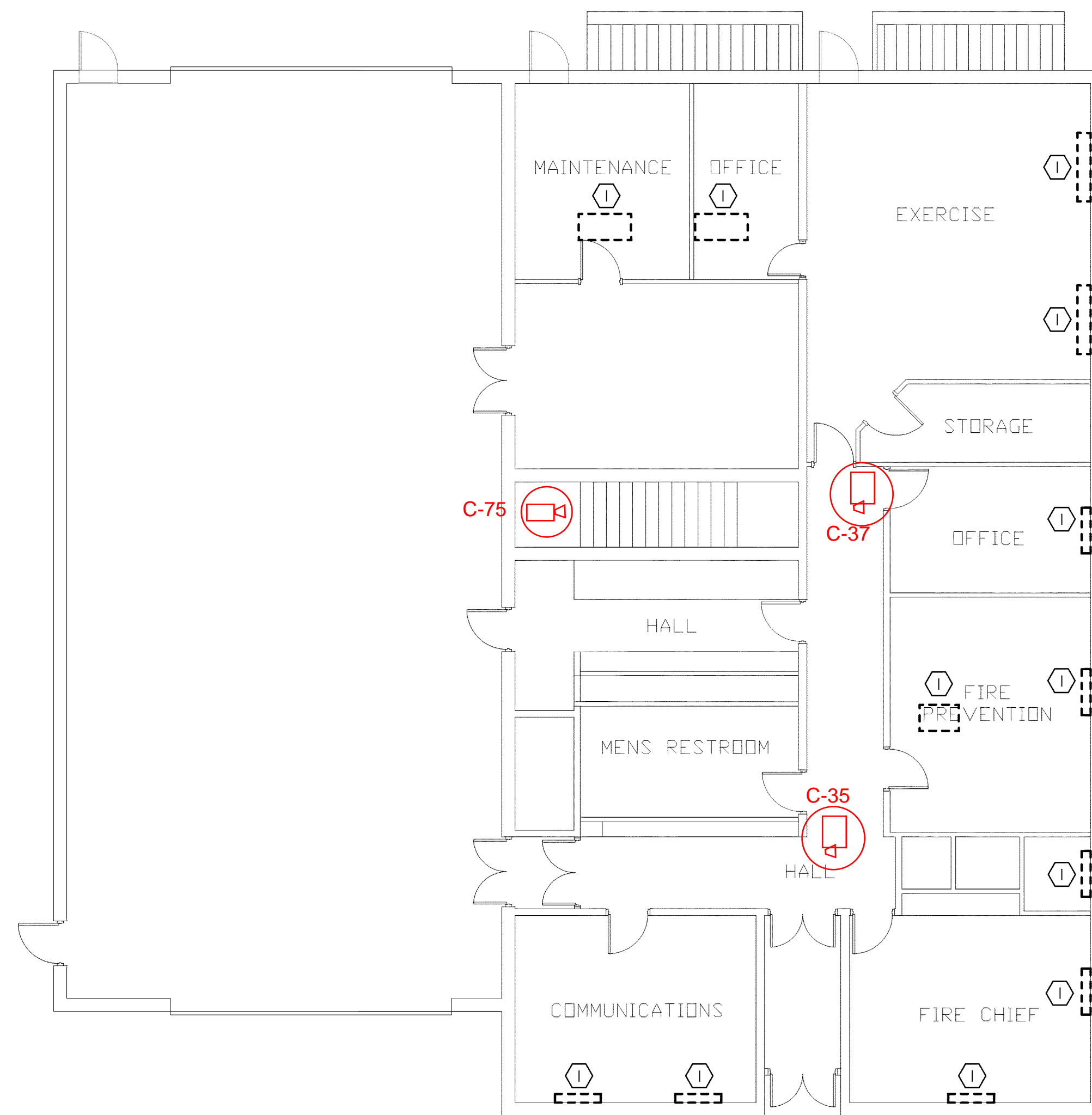
- LEGEND:**
-  FIXED DOME COLOR CAMERA
  -  MULTI-SENSOR DOME COLOR CAMERA
  -  FISHEYE COLOR CAMERA
  -  WEDGE CAMERA (JAIL CELLS)
  -  CAMERA WALL MOUNT
  -  CAMERA WALL CORNER MOUNT
  -  SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER

SEE CAMERA SCHEDULE FOR DETAILS



**03 FIREHOUSE SECOND FLOOR MECHANICAL DEMOLITION PLAN**  
SCALE: 1/8"=1'-0"



**02 FIREHOUSE FIRST FLOOR MECHANICAL DEMOLITION PLAN**  
SCALE: 1/8"=1'-0"

**NOTES:**

- ① REMOVE EXISTING FAN COIL UNIT AND ASSOCIATED PIPING, CONTROLS, AND POWER COMPONENTS.
- ② REMOVE EXISTING UNIT HEATER AND ASSOCIATED PIPING, CONTROLS AND POWER COMPONENTS.
- ③ REMOVE EXISTING FIN TUBE AND ASSOCIATED CONTROLS AND PIPING.

**GENERAL NOTES:**

1. DRAWINGS (PLANS, DETAILS AND SCHEMATICS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL LOCATION AND ARRANGEMENT OF NEW AND EXISTING MAJOR EQUIPMENT AND PIPING SYSTEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATIONS AND DIMENSIONS OF ALL EQUIPMENT, PIPING AND PIPING COMPONENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR FINAL TIE-IN POINT LOCATIONS BETWEEN NEW AND EXISTING PIPING SYSTEMS EQUIPMENT AND UTILITIES.
2. UNLESS OTHERWISE NOTED EXISTING SHOWN IN FADE-AWAY PEN. NEW, RELOCATED OR DEMOLITION ITEMS SHOWN IN DARK HEAVY PEN.
3. MATERIAL EXPOSED WITHIN THE RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPMENT INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84.

NO.	REV DATE

Kirk Travis Mescher, PE  
IL# 062-053479

drawn by: JFS  
designed by: KAS  
checked by: KAS

700 Cherry Street  
Suite C  
Columbia, Missouri  
65201-4822  
Ph. - 573/874-9455  
Fax - 573/874-9474  
Authority #184002463



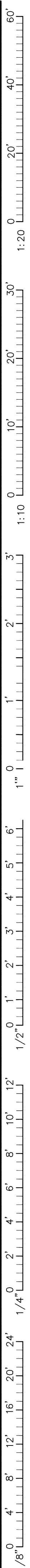
**VILLAGE OF HOMEWOOD CITY HALL**  
17950 DIXIE HIGHWAY  
HOMEWOOD, COOK COUNTY, ILLINOIS

DATE ISSUED:  
10-14-11

**EY-106**

PROJECT NO.  
11055

1/8" = 1/25' PLTD 10/14/11



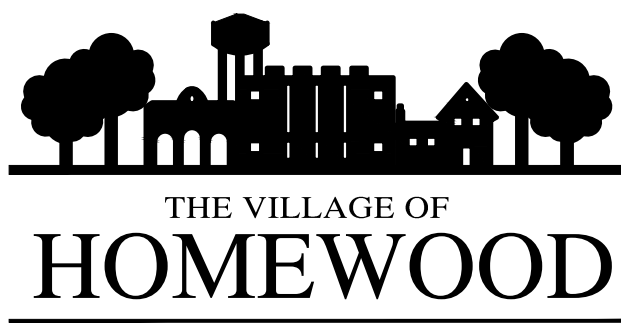
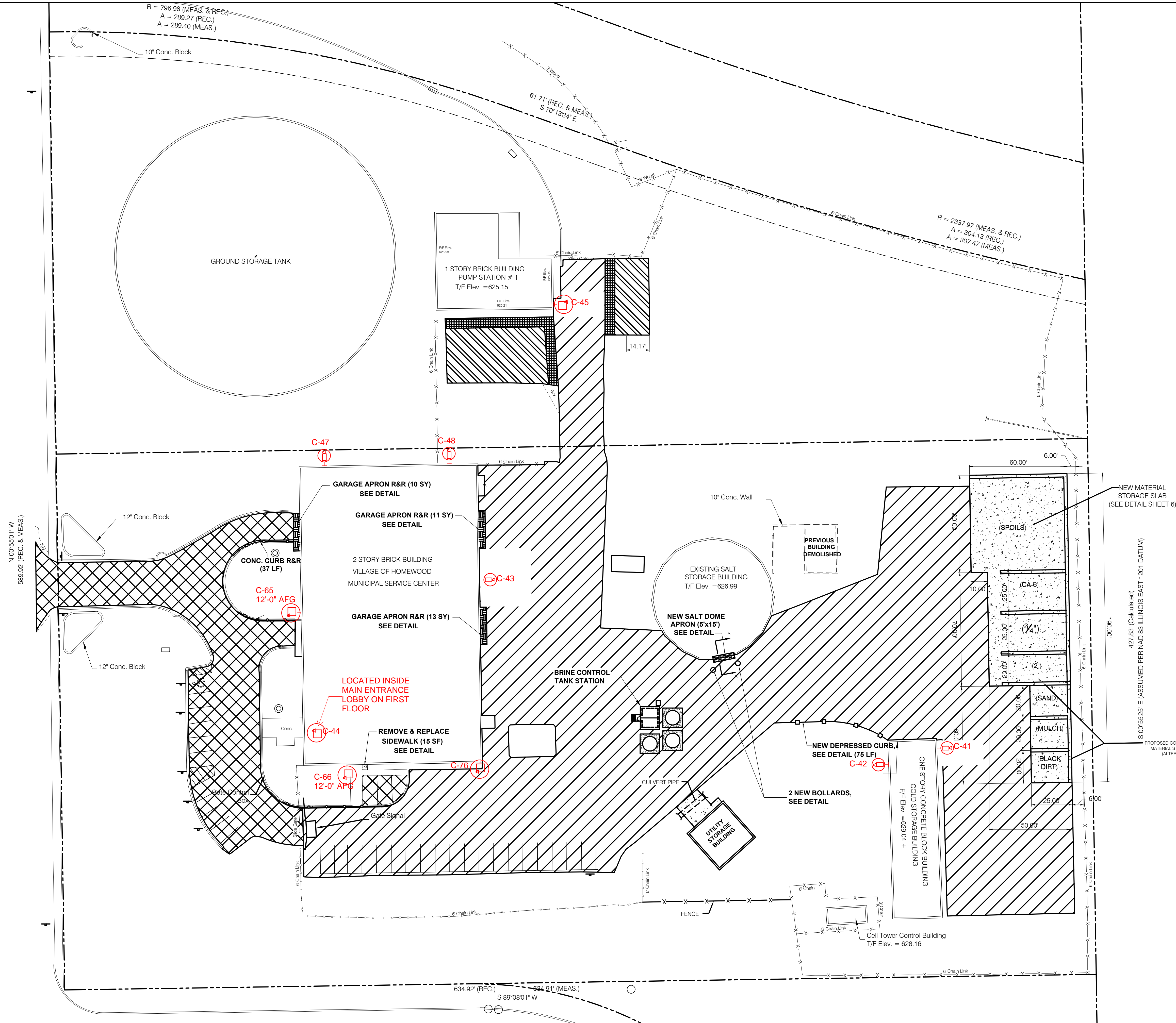


**LEGEND**

- HMA PAVEMENT REMOVAL AND HMA FULL DEPTH REPLACEMENT
- HMA 1.5" MILL AND OVERLAY
- 1.5" HMA 6' EDGE MILL & OVERLAY
- 1.5" HMA OVERLAY, NO MILL
- NEW MATERIAL STORAGE SLAB
- NEW SALT STORAGE APRON
- REMOVE & REPLACE GARAGE APRON
- REMOVE & REPLACE CURB IN-KIND
- REMOVE & REPLACE SIDEWALK
- NEW DEPRESSED CURB

- LEGEND:**
- FIXED DOME COLOR CAMERA
  - MULTI-SENSOR DOME COLOR CAMERA
  - FISHEYE COLOR CAMERA
  - WEDGE CAMERA (JAIL CELLS)
  - CAMERA WALL MOUNT
  - CAMERA WALL CORNER MOUNT
  - C-?? SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER  
SEE CAMERA SCHEDULE FOR DETAILS



**VILLAGE OF HOMEWOOD  
ENGINEERING DIVISION**

DESIGNED BY:	M.M.
DRAWN BY:	D.J.A.
CHECKED BY:	M.M.

REVISIONS			
NO.	DATE	BY	DESCRIPTION





<b>VILLAGE OF HOMEWOOD 2018 MSC FACILITY PAVEMENT RESTORATION ASPHALT &amp; CONCRETE REPAIR PLAN</b>		
PLOT DATE: 08-03-2018	DATE ISSUED: ---	SCALE: 1"=30.0'
CAD FILE: C:\Engineering Files\ENGINEERING PROJECTS		

SHEET  
**EY-107**  
OF 6

# Pump House #2

Maple Rd.

**LEGEND:**

-  FIXED DOME COLOR CAMERA
-  MULTI-SENSOR DOME COLOR CAMERA
-  360° FISHEYE COLOR CAMERA
-  CAMERA WALL MOUNT
-  CAMERA WALL CORNER MOUNT
-  SNS CAMERA WALL CORNER MOUNT
-  NVR
-  C-?? SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

Maple Rd

Maple Rd

C-46

C-38

EY-108

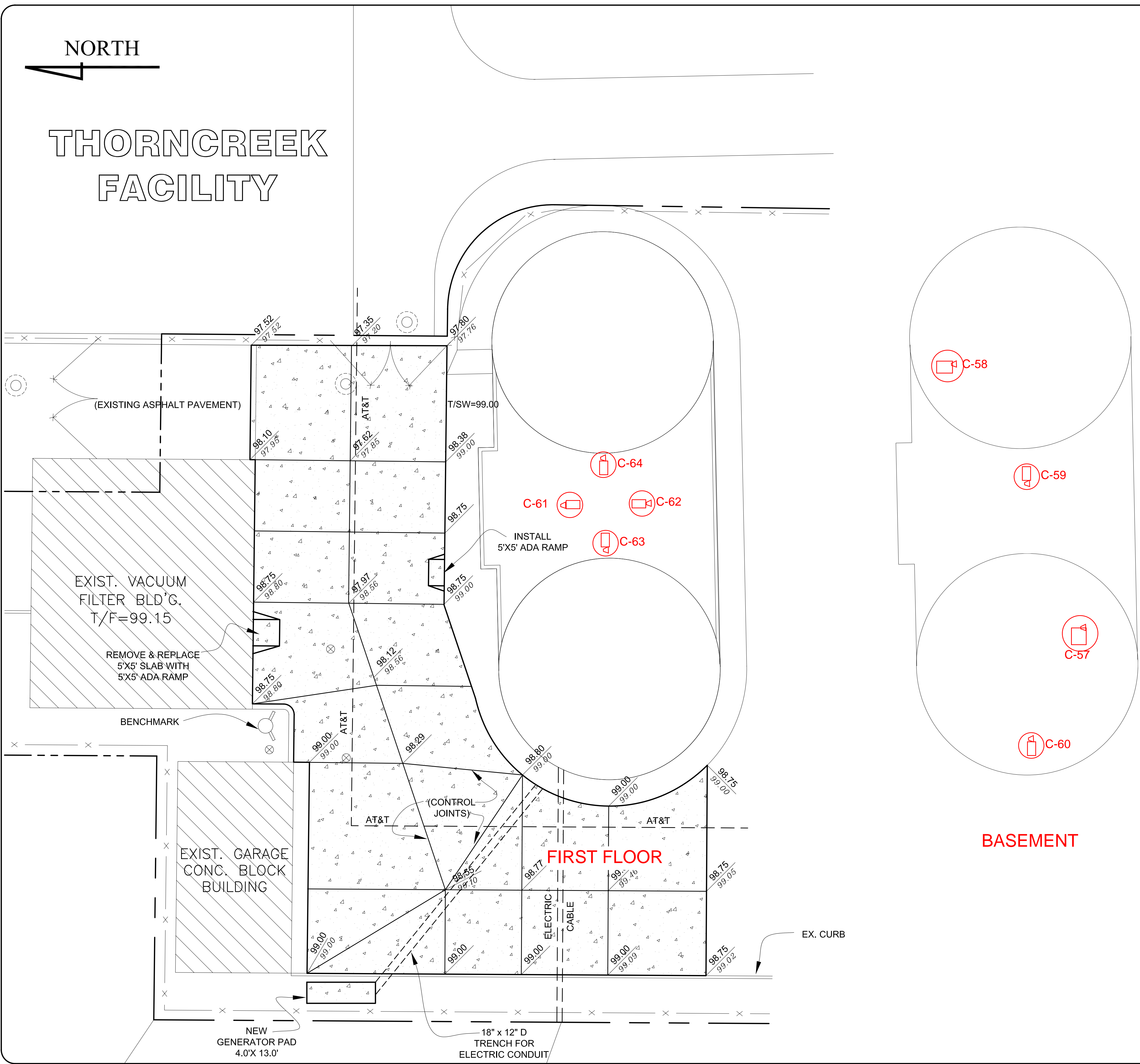


100 ft

NORTH



# THORNCREEK FACILITY



## GENERAL NOTES

1. ALL SITE CLEARING, EXCAVATION, GRADING, COMPACTION, AND SUBGRADE PREPARATION SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007 (HEREIN AFTER REFERRED TO AS STANDARD SPECIFICATIONS).
2. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 1-800-892-0123, 48 HOURS NOTIFICATION IS REQUIRED.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE AND THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATION OF SUCH UTILITIES AND EXERCISE CARE DURING HIS CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM.
4. EXCAVATION SPOILS SHALL BE STOCKPILED ON-SITE AT THE SOUTH END OF THE TRAINING FACILITY.
5. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM, A TANDEM AXLE DUMP TRUCK LOADED TO 14 TONS FOR PROOFROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE AGGREGATE BASE COURSE. PROOFROLLING SHALL BE WITNESSED AND APPROVED BY THE VILLAGE ENGINEER.
6. ANY UNSTABLE SUBGRADE AREA ENCOUNTERED DURING PROOFROLLING SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-1 (3 INCH) CRUSHED LIMESTONE AT LOCATIONS AND DEPTHS DETERMINED BY THE VILLAGE ENGINEER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING ALL LINE AND GRADE STAKES.
8. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED IN CONFORMANCE WITH SECTION 351 OF THE STANDARD SPECIFICATIONS.
9. PCC REINFORCED CONCRETE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 420 OF THE STANDARD SPECIFICATIONS.
10. ALL CONCRETE SHALL CONFORM TO SECTION 1020, CLASS PV CONCRETE. CONCRETE SHALL HAVE AN AIR CONTENT BETWEEN 5 AND 8 PERCENT, A SLUMP OF 2 TO 4 INCHES AND COMPRESSIVE STRENGTH OF 4000 PSI MINIMUM AT 14 DAYS. NO ADMIXTURES SHALL BE ADDED TO THE CONCRETE WITHOUT WRITTEN APPROVAL OF THE VILLAGE ENGINEER.
11. THE OWNER SHALL PROVIDE INSPECTION AND TESTING OF CONCRETE DURING PLACEMENT. THE CONTRACTOR SHALL ACCOMMODATE THE TESTING INSPECTOR WITH REPRESENTATIVE CONCRETE SAMPLES DURING PLACEMENT AND AT THE FREQUENCY DEEMED NECESSARY BY THE INSPECTOR.
12. THE PCC CONCRETE PAVEMENT SHALL BE BROOM FINISHED.
13. CONTROL JOINTS SHALL BE SAWCUT TO A DEPTH OF 2 INCHES AT THE LOCATIONS SHOWN ON THE PLANS AND SHALL BE COMPLETED 4 TO 24 HOURS AFTER FINISHING OF THE CONCRETE BEFORE UNCONTROLLED SHRINKAGE CRACKING TAKES PLACE.
14. THE FINISH ELEVATIONS SHOWN ON THE PLANS ARE TOP OF FINISHED PCC CONCRETE PAVEMENT. EARTH EXCAVATION FOR SUBGRADE SHALL BE COMPLETED TO WITHIN +/- 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS.
15. FRAME AND VALVE BOX ADJUSTMENTS TO FINISHED PAVEMENT GRADE SHALL BE PERFORMED BY THE VILLAGE OF HOMEWOOD DEPARTMENT OF PUBLIC WORKS. THE CONTRACTOR MUST PROVIDE THE VILLAGE 72 HOURS NOTICE OF WHEN THE ADJUSTMENTS WILL BE NEEDED.
16. ANY ITEM THAT IS DAMAGED DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE CONTRACT.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPT CLEANUP AND DISPOSAL OF ANY AND ALL DEBRIS GENERATED BY OR INCIDENTAL TO WORK COVERED BY THIS CONTRACT.

**LEGEND:**

- FIXED DOME COLOR CAMERA
- MULTI-SENSOR DOME COLOR CAMERA
- FISHEYE COLOR CAMERA
- WEDGE CAMERA (JAIL CELLS)
- CAMERA WALL MOUNT
- CAMERA WALL CORNER MOUNT
- SECURITY NETWORK SWITCH (PROVIDED BY OWNER)



CALL JULIE (800) 892-0123 WITH THE FOLLOWING INFORMATION:  
 COUNTY = COOK  
 48 HOURS BEFORE YOU DIG  
 EXCLUDING SAT., SUN. & HOLIDAYS

BENCHMARK NETWORK VIDEO RECORDER  
 NORTHWEST FLANGE BOLT ON FIRE HYDRANT SCHEDULE FOR DETAILS



## VILLAGE OF HOMEWOOD ENGINEERING DIVISION

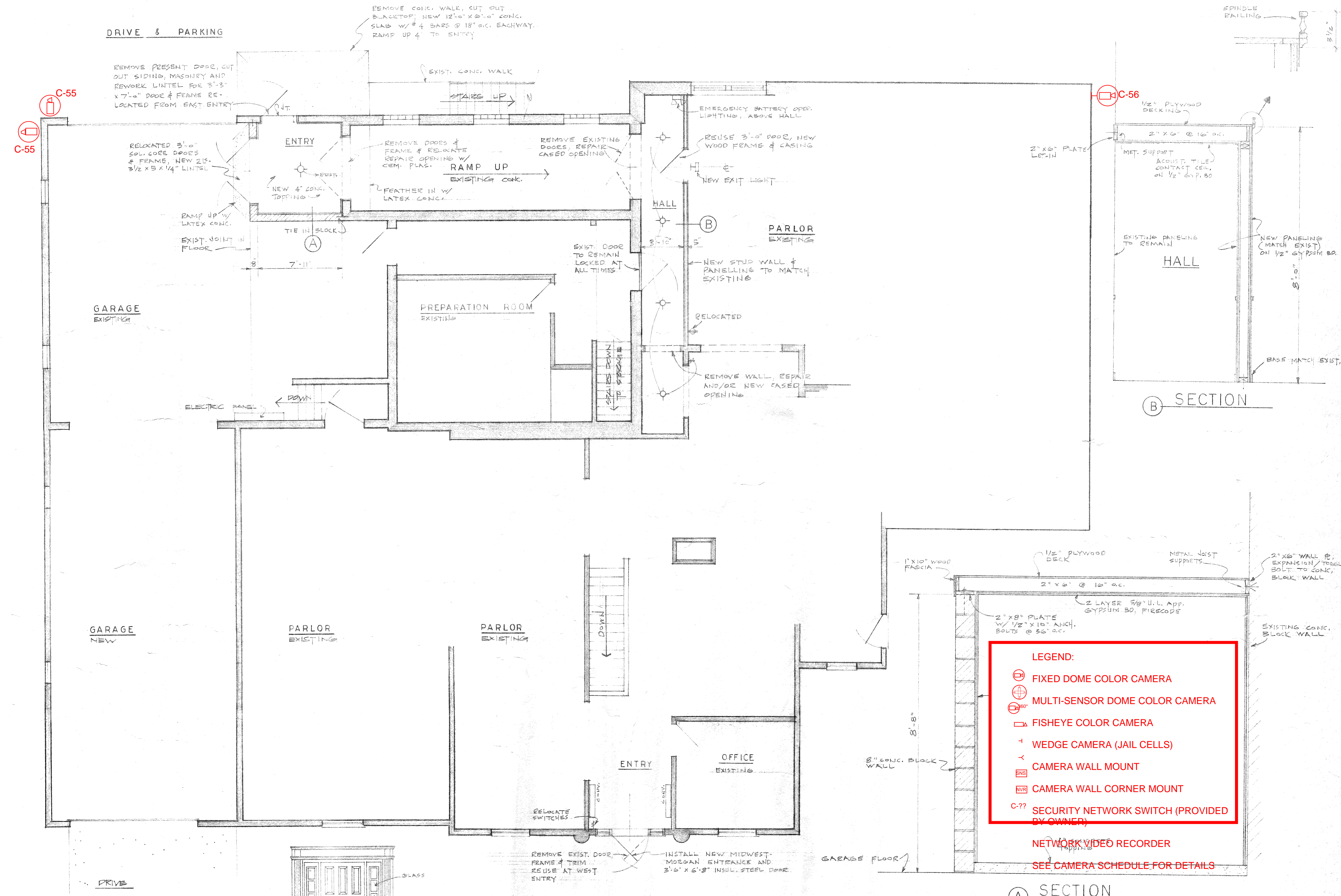
DESIGNED BY:	M.M.
DRAWN BY:	D.J.A.
CHECKED BY:	M.M.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
-	-	-	-

VILLAGE OF HOMEWOOD  
 BRIAN CAREY TRAINING FACILITY  
 PAVEMENT PLAN

PLOT DATE: 04-12-11    DATE ISSUED: ---    SCALE: 1"=10.0'  
 CAD FILE: C:\ENG FILES\2011 DRIVEWAY FD TRAIN SITE.DWG

SHEET  
**EY-109**  
 OF 1



DRIVE & PARKING

C-55

C-56

GARAGE EXISTING

GARAGE NEW

PARLOR EXISTING

PARLOR EXISTING

OFFICE EXISTING

PARLOR EXISTING

PREPARATION ROOM EXISTING

ENTRY

HALL

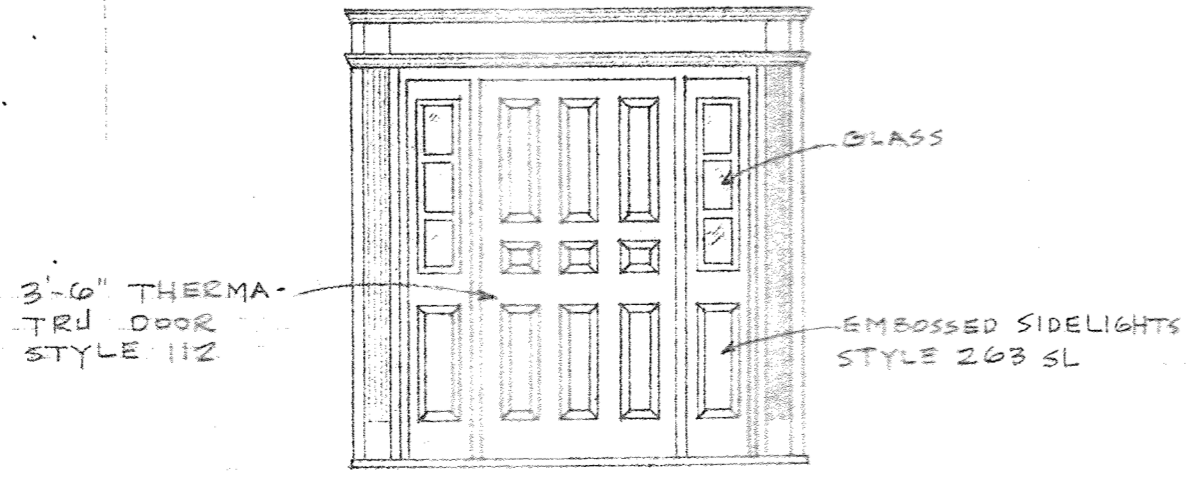
SECTION B

- LEGEND:**
- FIXED DOME COLOR CAMERA
  - MULTI-SENSOR DOME COLOR CAMERA
  - FISHEYE COLOR CAMERA
  - WEDGE CAMERA (JAIL CELLS)
  - CAMERA WALL MOUNT
  - CAMERA WALL CORNER MOUNT
  - SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER

SEE CAMERA SCHEDULE FOR DETAILS

SECTION A  
SCALE 3/4"



FLOOR PLAN

SCALE 1/4" = 1'-0"







EY-110

DANTE GIROLIMON - ARCHITECT - 18656 DIXIE HIGHWAY HOMERWOOD, ILLINOIS 60430 799-8311	REVISIONS	ALTERATIONS	Sep	SHEET No.
		RYAN FUNERAL HOME 18622 DIXIE HIGHWAY HOMERWOOD ILLINOIS		
	DATE	JOB No.	DN BY	APPR BY
	5-22-85	85-15	DG.	M.R.

# Water Plant

183rd St. & Stewart Ave.

**LEGEND:**

-  FIXED DOME COLOR CAMERA
-  MULTI-SENSOR DOME COLOR CAMERA
-  FISHEYE COLOR CAMERA
-  CAMERA WALL MOUNT
-  CAMERA WALL CORNER MOUNT
-  SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER

SEE CAMERA SCHEDULE FOR DETAILS



C-49

Stewart Ave

Stewart Ave

183rd St

183rd St








183rd St

EY-111

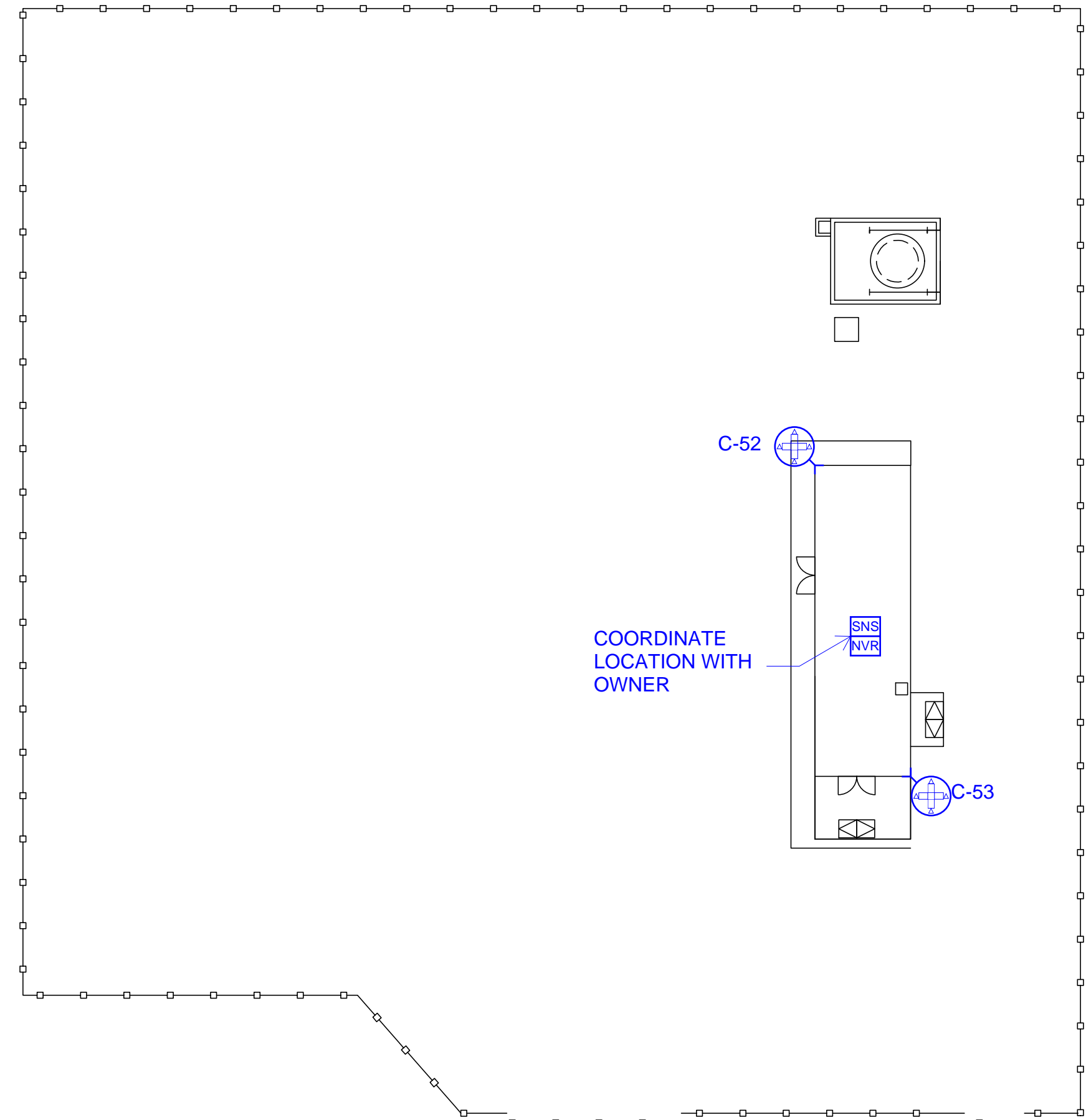
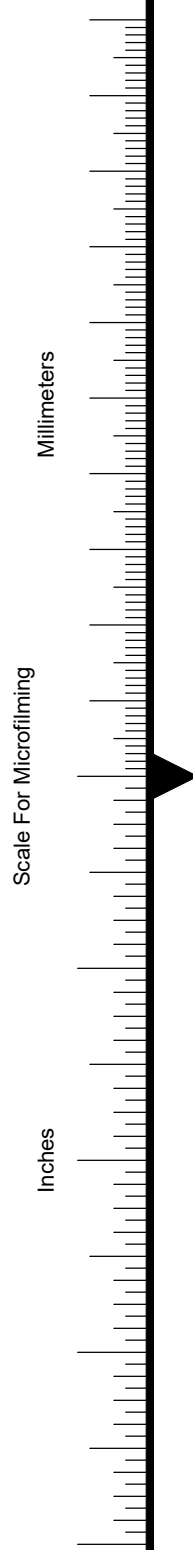


80 ft

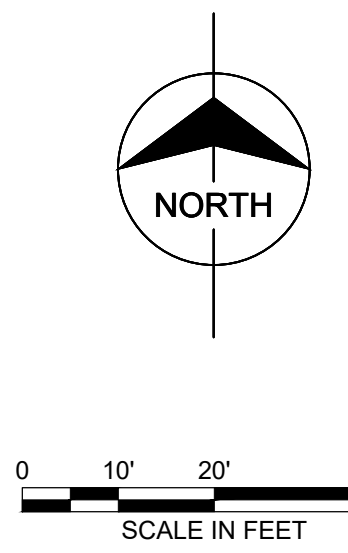
**LEGEND:**

-  FIXED DOME COLOR CAMERA
-  MULTI-SENSOR DOME COLOR CAMERA
-  FISHEYE COLOR CAMERA
-  WEDGE CAMERA (JAIL CELLS)
-  CAMERA WALL MOUNT
-  CAMERA WALL CORNER MOUNT
-  C-?? SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER  
SEE CAMERA SCHEDULE FOR DETAILS



no.	date	by	ckd	description
A	8/10/20	TJK	STC	60% DESIGN
B	8/21/20	TJK	STC	60% DESIGN ADDENDUM #1
C	8/31/20	TJK	STC	60% DESIGN ADDENDUM #3
D	9/30/20	TJK	STC	60% DESIGN ADDENDUM #4
E	1/08/21	TJK	STC	90% DESIGN
F	2/19/21	TJK	STC	100% ISSUED FOR REVIEW
G	3/15/21	TJK	STC	100% ISSUED FOR CONSTRUCTION
H	6/15/21	TJK	STC	100% ISSUED FOR CONSTRUCTION
I	8/27/21	TJK	STC	100% ISSUED FOR CONSTRUCTION



**BURNS  
MCDONNELL**  
200 W ADAMS ST SUITE 2700  
CHICAGO, IL 60606  
312-223-0920  
LICENSEE NO. 184.001310

date	AUGUST, 2021	detailed	T. KARGL
designed	R. PATCHETT	checked	S. CREDE







COOK COUNTY, ILLINOIS  
**HOMEWOOD WATER DELIVERY  
PUMP STATION SITE GRADING PLAN**

project	119283	contract	
drawing	<b>EY-112</b>	rev.	I
sheet	40	of ##	sheets
file	119283_P001.DWG		

# Water Tower West


Rockwell Ave. & Hickory Rd.

## LEGEND:

-  FIXED DOME COLOR CAMERA
-  MULTI-SENSOR DOME COLOR CAMERA
-  FISHEYE COLOR CAMERA
-  CAMERA WALL MOUNT
-  CAMERA WALL CORNER MOUNT
-  SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER

SEE CAMERA SCHEDULE FOR DETAILS

 C-68

C-39 

Hickory Rd

Hickory Rd

Hickory Rd

Hickory Rd

EY-113



80 ft







# Water Tower East

Pierce Ave.

Pierce Ave

Pierce Ave

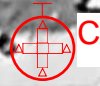
**LEGEND:**

-  FIXED DOME COLOR CAMERA
-  MULTI-SENSOR DOME COLOR CAMERA
-  FISHEYE COLOR CAMERA
-  CAMERA WALL MOUNT
-  CAMERA WALL CORNER MOUNT
-  SECURITY NETWORK SWITCH (PROVIDED BY OWNER)

NETWORK VIDEO RECORDER

SEE CAMERA SCHEDULE FOR DETAILS

C-50



C-51

EY-114



80 ft



VILLAGE OF HOMEWOOD CAMERA SCHEDULE													
CAMERA #	LOCATION	CAMERA TYPE	MODEL	REPLACE	NEW	MOUNTING	INTERIOR	EXTERIOR	POWER	BANDWIDTH	RECORD TIME	SERVER/SWITCH LOCATION	NOTES
C-01	PD NORTH HALL	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-02	PD ALLEY	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-03	PD EAST EXTERIOR	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-04	PD LOBBY	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-05	PD PARKING LOT	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-06	PD RECORDS	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-07	PD SOUTH HALL	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-08	PD VAULT	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-09	PD RANGE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-10	PD ENTRY EXTERIOR	FIXED 4K DOME	AXIS P3248-LVE		X	WALL		X	PoE 11.8 W		30 DAYS		
C-11	PD BOOKING	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		90 DAYS		
C-12	PD BOOKING HALL	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		90 DAYS		
C-13	PD EVIDENCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		90 DAYS		
C-14	PD FEMALE CELL 1	FIXED WEDGE 4MP	AXIS Q9216-SLV	X		CEILING	X		PoE 10.8 W		90 DAYS		Built-in Microphone to be mounted with camera.
C-15	PD FEMALE CELL 2	FIXED WEDGE 4MP	AXIS Q9216-SLV	X		CEILING	X		PoE 10.8 W		90 DAYS		Built-in Microphone to be mounted with camera.
C-16	PD GARAGE NORTH	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		90 DAYS		
C-17	PD GARAGE SOUTH	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		90 DAYS		
C-18	PD HOLDING CELL	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		90 DAYS		
C-19	PD JUVENILE	FIXED WEDGE 4MP	AXIS Q9216-SLV	X		CEILING	X		PoE 10.8 W		90 DAYS		Built-in Microphone to be mounted with camera.
C-20	PD MALE CELL 1	FIXED WEDGE 4MP	AXIS Q9216-SLV	X		CEILING	X		PoE 10.8 W		90 DAYS		Built-in Microphone to be mounted with camera.
C-21	PD MALE CELL 2	FIXED WEDGE 4MP	AXIS Q9216-SLV	X		CEILING	X		PoE 10.8 W		90 DAYS		Built-in Microphone to be mounted with camera.
C-22	PD MALE CELL 3	FIXED WEDGE 4MP	AXIS Q9216-SLV	X		CEILING	X		PoE 10.8 W		90 DAYS		Built-in Microphone to be mounted with camera.
C-23	PD MALE CELL 4	FIXED WEDGE 4MP	AXIS Q9216-SLV	X		CEILING	X		PoE 10.8 W		90 DAYS		Built-in Microphone to be mounted with camera.
C-24	VH 2ND FLOOR EAST LOBBY	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-25	VH 2ND FLOOR EAST STAIR	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-26	VH 2ND FLOOR IT ROOM	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-27	VH 1ST FLOOR NORTH ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-28	VH BASEMENT SERVER	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-29	VH 2ND FLOOR BUILDING DEPT	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-30	VH 1ST FLOOR FINANCE DEPT	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-31	VH 1ST FLOOR MAIN ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		WALL	X		PoE 10.5 W		30 DAYS		
C-32	VH EXTERIOR SOUTH ENTRANCE	MULTI-SENSOR 15MP	AXIS P3719-PLE	X		WALL		X	PoE 25.5 W		30 DAYS		
C-33	VH 1ST FLOOR WEST ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-34	FD FRONT ENTRANCE	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-35	FD MAIN	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-36	FD PARKING	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-37	FD STORAGE	FIXED 5MP DOME	AXIS P3267-LV	X		WALL	X		PoE 10.5 W		30 DAYS		
C-38	PUMPHOUSE 2 TANK	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-39	WATER TOWER WEST - EAST SIDE	MULTI-SENSOR 15MP	AXIS P3719-PLE	X		PENDANT		X	PoE 25.5 W		30 DAYS		
C-40	VH PLAZA CENTRAL TANK	MULTI-SENSOR 15MP	AXIS P3719-PLE	X		WALL		X	PoE 25.5 W		30 DAYS		
C-41	PW COLD STORAGE EAST	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-42	PW COLD STORAGE WEST	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-43	PW EAST LOT	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-44	PW MAIN ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-45	PW NORTH GATE	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-46	PUMPHOUSE 2 ENTRY	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-47	PW PUMPHOUSE 1 WATER TANK	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-48	PW PUMPHOUSE 1 PARKING LOT	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-49	183RD & STEWART	FIXED 5MP DOME	AXIS P3267-LV	X		WALL		X	PoE 10.5 W		30 DAYS		
C-50	L&M GARAGE ENTRY	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-51	L&M MAIN ENTRY	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-52	NEW PUMPSTATION NORTHWEST	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	WALL		X	PoE 25.5 W		30 DAYS		
C-53	NEW PUMPSTATION SOUTHEAST	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	WALL		X	PoE 25.5 W		30 DAYS		
C-54	SC NW ENTRANCE SOUTH	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	WALL		X	PoE 25.5 W		30 DAYS		
C-55	SC NW ENTRANCE NORTH	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	WALL		X	PoE 25.5 W		30 DAYS		
C-56	SC NORTHWEST EXTERIOR LOT	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	WALL		X	PoE 25.5 W		30 DAYS		
C-57	BCTC DRIVING SIMULATOR	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-58	BCTC VIRTRA	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-59	BCTC BASEMENT EAST HALL	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-60	BCTC BASEMENT WEST HALL	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-61	BCTC MAIN ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-62	BCTC SOUTH ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-63	BCTC WEST ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-64	BCTC EAST ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-65	PW MAIN ENTRY PARKING	FIXED 4K DOME	AXIS P3248-LVE		X	WALL		X	PoE 11.8 W		30 DAYS		
C-66	PW SOUTH GATE & PARKING	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	WALL		X	PoE 25.5 W		30 DAYS		
C-67	VH BOARD ROOM SOUTHEAST	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-68	WATER TOWER WEST - WEST SIDE	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	PENDANT		X	PoE 25.5 W		30 DAYS		

Additional after markups 9/26/2024

C-69	VH TRANSFORMER PAD	MULTI-SENSOR 15MP	AXIS P3719-PLE	X		PENDANT		X	PoE 25.5 W		30 DAYS		
C-70	FD NW CORNER	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-71	FD NE SIDE	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-72	VH 1ST FLOOR WEST ENTRANCE #2	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-73	PD BASEMENT SOUTH ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-74	PD BASEMENT NORTH ENTRANCE	FIXED 5MP DOME	AXIS P3267-LV	X		CEILING	X		PoE 10.5 W		30 DAYS		
C-75	FH STAIRWELL	FIXED 5MP DOME	AXIS P3267-LV	X		WALL	X		PoE 10.5 W		30 DAYS		
C-76	PW SW CORNER OF BUILDING	MULTI-SENSOR 15MP	AXIS P3719-PLE		X	WALL		X	PoE 25.5 W		30 DAYS		
C-77	FD NE SIDE	FIXED 4K DOME	AXIS P3248-LVE	X		WALL		X	PoE 11.8 W		30 DAYS		
C-78	VH INTERIOR	FIXED 4K DOME	AXIS P3248-LVE	X		WALL	X		PoE 11.8 W		30 DAYS		



Network

Multi-sensor

# PNM-C16083RVQ

4MP x 4ch AI Camera



## Key Features

- Analytics events based on AI engine: Classified object (Person/Vehicle)
- Attributes (Vehicle type: Car/Bus/Truck/Motorcycle/Bicycle)
- Supports BestShot
- WiseNR II, Prefer shutter control, WiseStreamIII
- TPM 2.0 with FIPS 140-2 level2
- IP66, IK10, NEMA4X

# PNM-C16083RVQ

4MP x 4ch AI Camera



## Specifications

Video	
Imaging Device	1/2.8" CMOS x 4CH
Resolution	2592x1520, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(@4MP Max. 5fps)
Min. Illumination	Color: 0.075Lux(F1.5, 1/30sec, 30IRE) BW: 0.0075Lux(F1.5, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	3.3~5.7mm(1.7x) motorized varifocal
Max. Aperture Ratio	F1.5(Wide)~F1.9(Tele)
Angular Field of View	H: 100°(Wide)~53°(Tele) V: 54°(Wide)~30°(Tele) D: 125°(Wide)~61°(Tele)
Min. Object Distance	1.3m(4.27ft)
Focus Control	Simple focus
Lens Type	Fixed iris
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0°~360° / 0°~65° / 0°~90°
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V , WiseNR II (Based on AI engine)
Motion Detection	8ea, 8point Polygonal zones
Privacy Masking	6ea, rectangular zones - Color: Grey/Black/White
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(2~1/12,000sec) Prefer shutter control(Based on AI engine)
Video Rotation	Flip, Mirror, Hallway view(90°/270°) - Each channel separately

Analytics	Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle(Type: car/bus/truck/motorcycle/bicycle) Support BestShot Analytics events based on AI engine - Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit) Analytics events - Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual area(Appear/Disappear)
Alarm I/O	2 configurable I/O ports * Support extra alarm I/O via optional SPM-4210 I/O box
Alarm Triggers	Analytics, Network disconnect, Alarm input, App event, Time schedule, MQTT subscription
Alarm Events	When alarm trigger occurred - File upload(image): e-mail/FTP - Notification: e-mail - Recording: SD/SDHC/SDXC or NAS recording at event triggers - Alarm output - Handover: PTZ preset, send message by HTTP/HTTPS/TCP - Audio clip playback - MQTT: publication
Audio In	Selectable(mic in/line in)
Audio Out	Line out
IR Viewable Length	WiseIR 15m(49.21ft)
<b>Network</b>	
Ethernet	Metal shielded RJ-45(10/100/1000BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz
Smart Codec	Manual(5ea area), WiseStream II , WiseStreamIII(Based on AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(10 users) / Multicast Multiple streaming(Up to 3 profiles per channel)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP (TCP, UDP Unicast), MQTT
Application Programming Interface	ONVIF Profile S/T SUNAPI(HTTP API) Wisenet open platform
<b>Security</b>	
OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
User authentication	Digest Authentication
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP
Access Control	IP address filtering
Data Protect	Authentication information encryption, ZIP compression encryption
Audit	User Access/System/Event log
Device ID	Device Certificate(Hanwha Private Root CA)
Secure Storage	TPM(Trusted platform module)
Security Certificate	TPM with FIPS 140-2 level 2
<b>General</b>	
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB(512GBx2)

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com)

Hanwha Vision is formerly known as Hanwha Techwin.

**PNM-C16083RVQ**

Memory	8GB RAM, 1GB Flash
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**Environmental & Electrical**

Operating Temperature / Humidity	-40°C~+55°C(-40°F~+131°F) * Start up should be done at above -35°C 0~95% RH(non-condensing) Humidity control /w Air vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH
Certification	IP66, NEMA4X, IK10
Input Voltage	PoE+(IEEE802.3at Type2, Class4)
Power Consumption	PoE+: Max 25.5W, typical 22.0W

**Mechanical**

Color / Material	Body: White / Aluminum Bubble: Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø250x114.2mm(ø9.84x4.50"), 2730g(6.02 lb)
Compatible Conduit hole / Gangbox	Conduit hole: 19.1mm(3/4")(M25) Gangbox: Single, Double, 4" Octagon, Square
Hanging Mount (Dome)	SBP-250HMW, SBP-276HMW

**Certifications & Standards**

EMC	FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A RCM AS/NZS CISPR 32 Class A KS C 9832 Class A, KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471
Environment	IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10 NEMA 250 type 4X

**DORI (EN62676-4 standard)**

Detect (25PPM/ 8PPF)	Wide: 43.5m(142.71ft) / Tele: 104.0m(341.13ft)
Observe (63PPM/ 19PPF)	Wide: 17.4m(57.09ft) / Tele: 41.6m(136.45ft)
Recognize (125PPM/ 38PPF)	Wide: 8.7m(28.54ft) / Tele: 20.8m(68.23ft)
Identify (250PPM/ 76PPF)	Wide: 4.3m(14.27ft) / Tele: 10.4m(34.11ft)



Network

Dome

# QNV-C8083R

5MP IR Vandal Dome Camera



## Key Features

- Max. 5MP resolution
- Max. 30fps
- Color: 0.07Lux(F1.6, 1/30sec), BW: 0.007Lux(F1.6, 1/30sec, 30IRE)
- Focal length: 3.2~10.2mm(3.2x) motorized varifocal
- H.265, H.264, MJPEG codec supported
- Multiple streaming (up to 5 profiles)
- Day & Night (ICR), WDR (120dB)
- Micro SD/SDHC/SDXC 1 slot 256GB
- IP66, IK10
- PoE: Max 12.95W

# QNV-C8083R

5MP IR Vandal Dome Camera



## Specifications

Video	
Imaging Device	1/2.8" CMOS
Resolution	2592x1944, 2560x1440, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@5MP Max. 5fps)
Min. Illumination	Color: 0.07Lux (F1.6, 1/30sec) BW: 0.007Lux (F1.6, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	3.2~10.2mm(3.2x) motorized varifocal
Max. Aperture Ratio	F1.6(Wide)~F3.1(Tele)
Angular Field of View	H: 95°(Wide)~29°(Tele) V: 69°(Wide)~21°(Tele) D: 126°(Wide)~36°(Tele)
Min. Object Distance	1.2m (3.93ft)
Focus Control	Simple focus
Lens Type	DC auto iris(IR corrected)
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0°~350° / -35°~70° / 0°~355°
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V , WiseNR II (Based on AI engine)
Motion Detection	8ea, 8point Polygonal zones
Privacy Masking	32ea, 4point quadrangle zones
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)

Analytics	Classified object type: Person/Vehicle Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine - Motion detection*, Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit) Analytics events - Defocus detection, Tampering, Virtual area(Appear/Disappear)  * Some of the video analytics only works with people and vehicle detection
Alarm I/O	Input 1ea / Output 1ea * Alarm I/O is supported through an optional cable(SPP-C7400)
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	When alarm trigger occurred - File upload(image) : e-mail/FTP - Notification : e-mail - Recording : SD/SDHC/SDXC or NAS recording at event triggers - Alarm output - Handover(PTZ preset, Send message by HTTP/HTTPS/TCP) - Audio clip playback
Audio In	Selectable(mic in/line in) * Audio In is supported through an optional cable(SPP-C7400)
Audio Out	Line out, Max.output level: 0.5Vrms * Audio Out is supported through an optional cable(SPP-C7400)
IR Viewable Length	30m(98.42ft)
IR Wavelength	long-life 850 nm IR LED
<b>Network</b>	
Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz
Smart Codec	Manual(5ea area), WiseStream II → ( will be supported as R/C in July) Manual(5ea area), WiseStreamIII(Based on AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 5 profiles)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP (TCP, UDP Unicast)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API)
<b>Security</b>	
OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
User authentication	Digest Authentication, Prevent brute-force attack
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP, WSS(Websocket secure)
Access Control	Access control based on IP address
Data Protect	Authentication information encryption, ZIP compression encryption
Audit	User Access/System/Event log management
Device ID	Device Certificate(Hanwha Private Root CA)
Secure Storage	SDcard partition encrypt



**QNV-C8083R**

Security Certificate	Secure by default
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**General**

Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB
Memory	2GB RAM, 1GB Flash

**Environmental & Electrical**

Operating Temperature / Humidity	-30°C~+55°C(-22°F ~ +131°F) / 0~95% RH(non-condensing) * Start up should be done at above -30°C Humidity control /w Air vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F ~ +140°F) / 0~95% RH
Certification	IP66, IK10
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 12.95W, typical 5.3W

**Mechanical**

Color / Material	White / Aluminum Bubble : Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø140x110.2mm(ø5.51x4.34"), 875g(1.93 lb)
Compatible Conduit hole / Gangbox	Conduit hole : None Gangbox : Single, Double, 4" Octagon
Hanging Mount (Dome)	SBP-140HMW
Backbox	SBV-140BW

**Certifications & Standards**

EMC	FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A RCM AS/NZS CISPR 32 Class A
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471
Environment	IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10

**DORI (EN62676-4 standard)**

Detect (25PPM/ 8PPF)	Wide: 42.7m(140.20ft) / Tele: 186.9m(613.28ft)
Observe (63PPM/ 19PPF)	Wide: 17.2m(56.08ft) / Tele: 75.4m(245.31ft)
Recognize (125PPM/ 38PPF)	Wide: 8.5m(28.04ft) / Tele: 37.4m(122.66ft)
Identify (250PPM/ 76PPF)	Wide: 4.3m(14.02ft) / Tele: 18.7m(61.33ft)



Network

Dome

# QNV-C9083R

8MP IR Vandal Dome Camera



## Key Features

- Max. 8MP resolution
- Max. 30fps
- Color: 0.06Lux(F1.6, 1/30sec), BW: 0.006Lux(F1.6, 1/30sec, 30IRE)
- Focal length: 3.2~10.2mm(3.2X) motorized varifocal
- H.265, H.264, MJPEG codec supported
- Multiple streaming (up to 5 profiles)
- Day & Night (ICR), WDR (120dB)
- Micro SD/SDHC/SDXC 1 slot 256GB
- IP66, IK10
- PoE: Max 12.95W

# QNV-C9083R

## 8MP IR Vandal Dome Camera

### Specifications

Video	
Imaging Device	1/2.8" CMOS
Resolution	3840x2160, 3328x1872, 3072x1728, 2592x1944, 2688x1520, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@8MP Max. 5fps)
Min. Illumination	Color: 0.06Lux (F1.6, 1/30sec) BW: 0.006Lux (F1.6, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	3.2~10.2mm(3.2x) motorized varifocal
Max. Aperture Ratio	F1.6(Wide)~F3.1(Tele)
Angular Field of View	H: 104°(Wide)~31°(Tele) V: 55°(Wide)~17°(Tele) D: 124°(Wide)~35°(Tele)
Min. Object Distance	1.2m (3.93ft)
Focus Control	Simple focus
Lens Type	DC auto iris(IR corrected)
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0°~350° / -35°~70° / 0°~355°
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SDDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V , WiseNR II (Based on AI engine)
Motion Detection	8ea, 8point Polygonal zones
Privacy Masking	32ea, 4point quadrangle zones
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Analytics	Classified object type: Person/Vehicle Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine - Motion detection*, Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit) Analytics events - Defocus detection, Tampering, Virtual area(Appear/Disappear)  * Some of the video analytics only works with people and vehicle detection

**QNV-C9083R**

Alarm I/O	Input 1ea / Output 1ea * Alarm I/O is supported through an optional cable(SPP-C7400)
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	When alarm trigger occurred - File upload(image) : e-mail/FTP - Notification : e-mail - Recording : SD/SDHC/SDXC or NAS recording at event triggers - Alarm output - Handover(PTZ preset, Send message by HTTP/HTTPS/TCP) - Audio clip playback
Audio In	Selectable(mic in/line in) * Audio In is supported through an optional cable(SPP-C7400)
Audio Out	Line out, Max.output level: 0.5Vrms * Audio Out is supported through an optional cable(SPP-C7400)
IR Viewable Length	30m(98.42ft)
IR Wavelength	long-life 850 nm IR LED

**Network**

Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz
Smart Codec	Manual(5ea area), WiseStream II → ( will be supported as R/C in July) Manual(5ea area), WiseStreamIII(Based on AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 5 profiles)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP (TCP, UDP Unicast)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API)

**Security**

OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
User authentication	Digest Authentication, Prevent brute-force attack
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP, WSS(Websocket secure)
Access Control	Access control based on IP address
Data Protect	Authentication information encryption, ZIP compression encryption
Audit	User Access/System/Event log management
Device ID	Device Certificate(Hanwha Private Root CA)
Secure Storage	SDcard partition encrypt
Security Certificate	Secure by default

**General**

Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB
Memory	2GB RAM, 1GB Flash

**Environmental & Electrical**

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com)  
Hanwha Vision is formerly known as Hanwha Techwin.

**QNV-C9083R**

Operating Temperature / Humidity	-30°C~+55°C(-22°F ~ +131°F) / 0~95% RH(non-condensing) * Start up should be done at above -30°C Humidity control /w Air vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F ~ +140°F) / 0~95% RH
Certification	IP66, IK10
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 12.95W, typical 5.3W

**Mechanical**

Color / Material	White / Aluminum Bubble : Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø140x110.2mm(ø5.51x4.34"), 875g(1.93 lb)
Compatible Conduit hole / Gangbox	Conduit hole : None Gangbox : Single, Double, 4" Octagon
Hanging Mount (Dome)	SBP-140HMW
Backbox	SBV-140BW

**Certifications & Standards**

EMC	FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A RCM AS/NZS CISPR 32 Class A
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471
Environment	IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10

**DORI (EN62676-4 standard)**

Detect (25PPM/ 8PPF)	Wide: 60.0m(196.86ft) / Tele: 276.9m(908.57ft)
Observe (63PPM/ 19PPF)	Wide: 24.2m(78.74ft) / Tele: 111.7m(363.43ft)
Recognize (125PPM/ 38PPF)	Wide: 12.0m(39.37ft) / Tele: 55.4m(181.71ft)
Identify (250PPM/ 76PPF)	Wide: 6.0m(19.69ft) / Tele: 27.7m(90.86ft)



Network

Dome

# TNV-8011C

5MP Corner Mount Camera



## Key Features

- Maximum 5MP resolution
- Maximum 30fps @ all resolutions (H.265/H.264/MJPEG)
- 0.1lux@F2.3(Color), 0.02lux@F2.3(B/W)
- 2.3mm fixed focal
- Anti-ligature design for corrections and behavioral health facilities
- Day & Night Auto(ICR), WDR (120dB)
- Defocus detection, Tampering, Audio detection
- Micro SD/SDHC/SDXC memory slot (128GB)
- Hallway view, WiseStream II support
- PoE, IP66, IP6K9K, IK10

## Compatible Accessories (Optional)



SBC-170CB



SBC-170CW



SBC-170C

# TNV-8011C

5MP Corner Mount Camera



## Specifications

### Video

Imaging Device	1/2.8" CMOS
Resolution	2592x1944, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 15fps/12fps (60Hz/50Hz)
Min. Illumination	Color: 0.1 lux (F2.3, 1/30sec) B/W: 0.02 lux (F2.3, 1/30sec)
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation

### Lens

Focal Length (Zoom Ratio)	2.3mm fixed focal
Max. Aperture Ratio	F2.3
Angular Field of View	H: 131° / V: 93.4° / D: 174°
Focus Control	Fixed

### Operational

Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	Support
Defog	Support
Motion Detection	4ea, polygonal zones
Privacy Masking	6ea, rectangular zones
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor(include Mercury & Sodium)
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2~1/12,000sec)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Analytics	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection
Alarm I/O	Input 1ea / Output 1ea
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output
Audio In	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out. Max.output level: 1Vrms

### Network

Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG

<b>Audio Compression</b>	G.711 u-law /G.726 selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps
<b>Smart Codec</b>	Manual(5ea area), WiseStream II
<b>Bitrate Control</b>	H.264/H.265: CBR or VBR MJPEG: VBR
<b>Streaming</b>	Unicast (6 users) / Multicast Multiple streaming (Up to 3 profiles)
<b>Protocol</b>	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour, sRTP, ONVIF
<b>Security</b>	HTTPS(SSL) login authentication Digest login authentication IP address filtering User access log 802.1X authentication(EAP-TLS, EAP-LEAP) Device certificate(Hanwha Techwin Root CA)
<b>Application Programming Interface</b>	SUNAPI(HTTP API), ONVIF Wisenet open platform

## General

<b>Webpage Language</b>	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
<b>Edge Storage</b>	Micro SD/SDHC/SDXC 1slot 128GB
<b>Memory</b>	512MB RAM, 256MB Flash

## Environmental & Electrical

<b>Operating Temperature / Humidity</b>	-10°C~+55°C(+14°F~+131°F) / Less than 95% RH
<b>Storage Temperature / Humidity</b>	-50°C~+60°C(-58°F~+140°F) / Less than 95% RH
<b>Certification</b>	IP66, IP6K9K, IK10
<b>Input Voltage</b>	PoE(IEEE802.3af, Class2)
<b>Power Consumption</b>	PoE: Max 6.49W, typical 4.6W,

## Mechanical

<b>Color / Material</b>	White / Aluminium
<b>RAL Code</b>	RAL9003
<b>Product Dimensions / Weight</b>	170(W)x165(H)x78.8(D)mm(6.69x6.49x3.10") / 830g(1.83lb)
<b>Skin Cover</b>	SBC-170C, SBC-170CB, SBC-170CW

## DORI (EN62676-4 standard)

<b>Detect (25PPM/ 8PPF)</b>	23.6m(77.51ft)
<b>Observe (63PPM/ 19PPF)</b>	9.4m(31.00ft)
<b>Recognize (125PPM/ 38PPF)</b>	4.7m(15.50ft)
<b>Identify (250PPM/ 76PPF)</b>	2.4m(7.75ft)



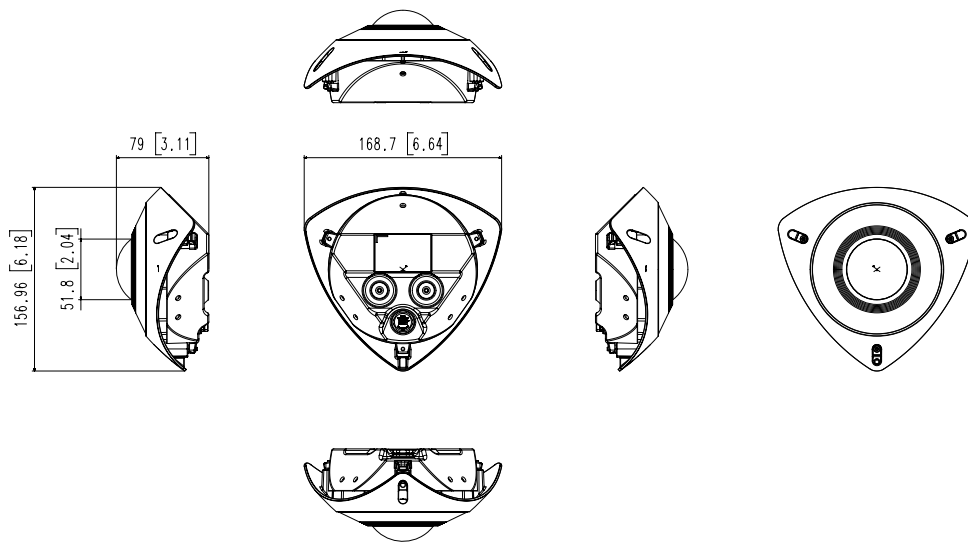
# TNV-8011C

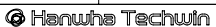
5MP Corner Mount Camera



CAD

Unit: mm [inch]



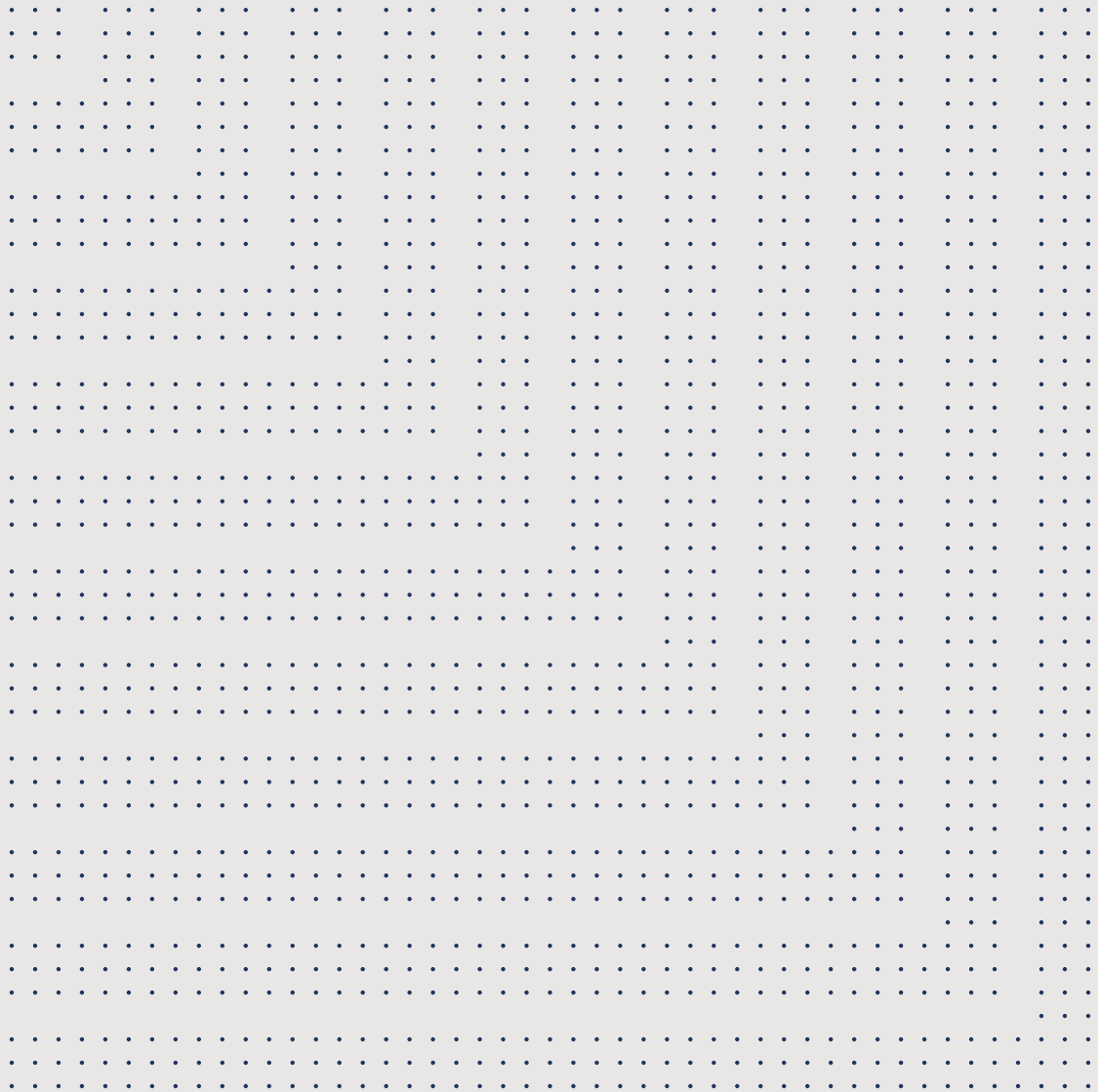
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# Security Center Omnicast.™

## Scalable video management



# An intelligent view of your environment

Working smarter with video while improving your security shouldn't mean overloading your network and people. Adding more security cameras, relying on higher resolution video, and longer retention lengths put a strain on security systems. Cyber security risks and privacy concerns make it even harder.

Security Center Omnicast is a video management system that gives you the means to effectively protect your people and assets. Beyond capturing reliable and usable evidence, it lets you see and understand your environment. It's one of the core systems of Genetec Security Center, our unified security platform.

Whether you're looking after one site or overseeing operations in multiple places, Omnicast is open, flexible, and scalable. It supports the cameras of your choice and operates seamlessly over your network. Intelligent streaming and bandwidth optimization bring down networking and storage costs.

With an uninterrupted view of camera feeds and security alarms, Omnicast allows operators to rapidly assess and respond to situations. It gives them powerful search and reporting tools so they can tackle investigations faster, whether it's from their desk or on mobile devices, relieving the burden on your people and network.

**Unify your video surveillance with your other security systems. By addressing multiple needs behind a single intuitive interface, you control all operations. More importantly, you can instantly react to situations.**



**Evolves with your organization**

Omnicast has a flexible and open architecture that adapts to your organization as your demands and business change. It scales to work for any organization – from very small businesses to very large enterprises – offering certainty that your video system will keep pace as conditions evolve.



**A single, unified platform**

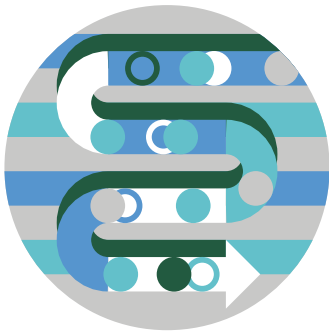
When you unify your security systems with Security Center, you use just one interface for video, access control, and automatic license plate recognition (ALPR). Work smarter as you spend less time jumping between applications. Navigate facilities and oversee cameras and other devices using interactive maps. And achieve more as you tie video to SIP communications and intrusion detection.



**See it all**

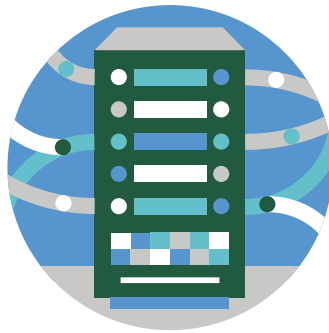
Through Federation™, monitor multiple remote systems and sites as if they were part of a single virtual system. Access your video surveillance system from any location, at any time. Record video and share it across your organization. Control cameras, monitor alarms, and track access control and vehicle activity, to provide a common operational picture of your situation.

**Grow your surveillance system and adapt to the changing demands of your team. Make the most of new technology as soon as it's available. And take advantage of flexible purchasing options: buy up-front or through subscription.**



**Available when you need it most**

Count on live and recorded video being accessible when you need it most. Experience uninterrupted access to your video even if you lose connectivity to your server. With built-in failover and redundancy, Omnicast protects your recordings from network failure and physical damage. Health monitoring notifications give you real-time updates on system health and uptime, so you are always aware.



**Fits with any hardware**

Security Center Omnicast naturally fits with any hardware and supports thousands of industry-leading cameras, encoders, storage equipment, and sensors of your choice. So you're up and running in less time, adopt Genetec's security appliances pre-loaded with Omnicast software. Fully tested and validated, they lessen your risk over time while performing optimally.



**At home on your network**

Omnicast eases into your network; so much so you almost won't know it's there until you need it most. Backed by 20 years' experience, our next generation video engine – with its intelligent streaming and bandwidth management – overcomes network overload encountered by less sophisticated solutions.

# Quotes from our customers

Omnicast is an innovative, established, market-leading video management system. But don't just take our word for it – here are some of our happy customers.

“The new security system is a great ally. We use it daily to monitor hall traffic and doors, as well as the parking lots and bus loop. It also helps tremendously when dealing with student discipline issues, helping us to communicate facts to parents.”

Hilton Central School District

“This system is very much designed so that the entire building can be managed by this very small team and that meant we needed an intelligent solution with proactive detection and reporting capabilities.”

Brisbane City Hall

“Unlike the old analog system where we had to connect to individual DVRs to find video, all of our cameras are right there in a pool. We can search by dates and times, and fast-forward and rewind with the click of a mouse; all of it is smooth and easy.”

Homemakers Furniture

“Genetec was extremely responsive in helping us accomplish this project, and we were able to save a lot of money through this custom application, as we didn’t have to install an entirely new system.”

Tampa International Airport

# Omnicast in action

With Omnicast, organizations of all sizes gain the capacity to bolster security, simplify operational tasks, and gather intelligent data. Here's a closer look at a few of the different types of businesses that can benefit.







# Omnicast customer stories



## A large enterprise

This global retailer manages stores, distribution centers, and many thousands of cameras, but expansion had outpaced security investment. Their existing system couldn't keep up, lacking multi-site capabilities and access to globally distributed entities. Something as simple as replacing a faulty camera could go undetected or meant a lengthy call. Omnicast's centralized monitoring, efficient multi-site stream management, and scalability was the answer. An immediate benefit was its real-time health monitoring, which gives users a clear view of the uptime of all cameras and components to proactively address imminent problems, all over the world.

Whether it's a small coffee shop, a large office, or an international airport, Omnicast provides you with the uptick you need to protect your organization – and help it flourish.

## A coffee shop

An increase in intruder incidents convinced coffee shop manager Jeff that he had to understand what was going on around the store after closing time. He also needed a smarter system than his old school DVR. Using his existing cameras with his new Omnicast system meant he would receive mobile alerts following any after-hours motion and detection of nearby vehicles. A pay-as-you-go subscription gave him a more powerful video option at an affordable price. And the footage he gave the police ensured the perpetrators were found.



## An international airport

With millions of passengers traveling through each year, and an extensive perimeter to monitor, safety is paramount for any international airport. One of the main tasks for the security team is to maintain uninterrupted monitoring of the airport's estate, so they

rely heavily on video surveillance. They need accurate, real-time video to secure the airport against everything from trespassers and unwanted intruders to vandals, or worse. Beyond security, Omnicast is used to make sure vehicles aren't

parked illegally and to help improve the flow of airport traffic. It's this combination of security and insight into how to make the facility work better that makes Omnicast such an invaluable tool.

# The unified Genetec experience

Omnicast is one of the core systems of Security Center, our comprehensive security platform. Along with access control and automatic license plate recognition (ALPR) – as well as optional Genetec modules and partner add-ons – it forms a unified system that offers enhanced intelligence, security, and operations.

# Our core systems

## **Security Center Omnicast**

is a video management system that uniquely addresses your organization's video security and privacy needs. Efficiently manage and monitor HD video, and choose from an ever-growing range of industry-leading cameras.

## **Security Center Synergis**

is an access control system that lets you manage the flow of people coming into your buildings. It secures your organization, simplifies your operations, and ensures you are not locked into a proprietary solution.

## **Security Center AutoVu**

is an automatic license plate recognition system. It makes it easier for commercial and municipal organizations to enforce parking, optimize traffic flow, and identify and track vehicles of interest.

# Our optional modules

## **Plan Manager**

offers interactive and graphical mapping, allowing you to visualize and manage security environments. Dynamically navigate through facilities and oversee a greater number of cameras and doors. It provides complete and real-time coverage for both small and large multi-site environments.

**Sipelia Communications Management** enables SIP-based communications between operators and intercom devices. When

unified in Security Center, intercom communications are linked to your security applications, significantly improving your security team's awareness and facilitating collaboration.

## **Security Center Mobile**

gives you remote access to Security Center through a suite of mobile apps. View live or recorded video, control remote cameras, and review access-control events and system alarms.

## **Security Center Web Client**

allows you to take control of your security system from anywhere you can use a web browser. Monitor cameras, search for and review access control events and system alarms, export video, and manage cardholders and visitors.

# Our built-in key features

**Security Center Federation** provides centralized monitoring, reporting, and alarm management across multiple remote sites and locations, streamlining your global security.

**Global Cardholder Management** lets you easily synchronize cardholders across different locations. You issue one card that accesses across multiple sites, reducing cost and effort at the same time.

**Intrusion Panel Integration** allows you to monitor intrusion status and alarms alongside video and access control, as well as eliminate false alarms and associated costs.

**Failover** offers continuous server access that can tolerate hardware failures without any system interruption.

**Threat Level Management** lets you quickly change the behavior of your system in response to changing security conditions.

**Cloud Archives** gives you the capacity to store video recordings in the cloud.

**Active Directory Integration** synchronizes Windows accounts with Security Center administrator and cardholder accounts, so you save valuable time and eliminate human error.

**SDK Integration Tools** allow you to augment Security Center by integrating new devices, capabilities, and custom functionality.

# Our partner add-ons

**Visualization:** *video walls, dashboards, AutoCAD.* Get an intelligent, structured view of your security environment. See the big picture with video walls that display more video, images, and data. And, with seamless integration to Security Center, overall situational awareness is enhanced.

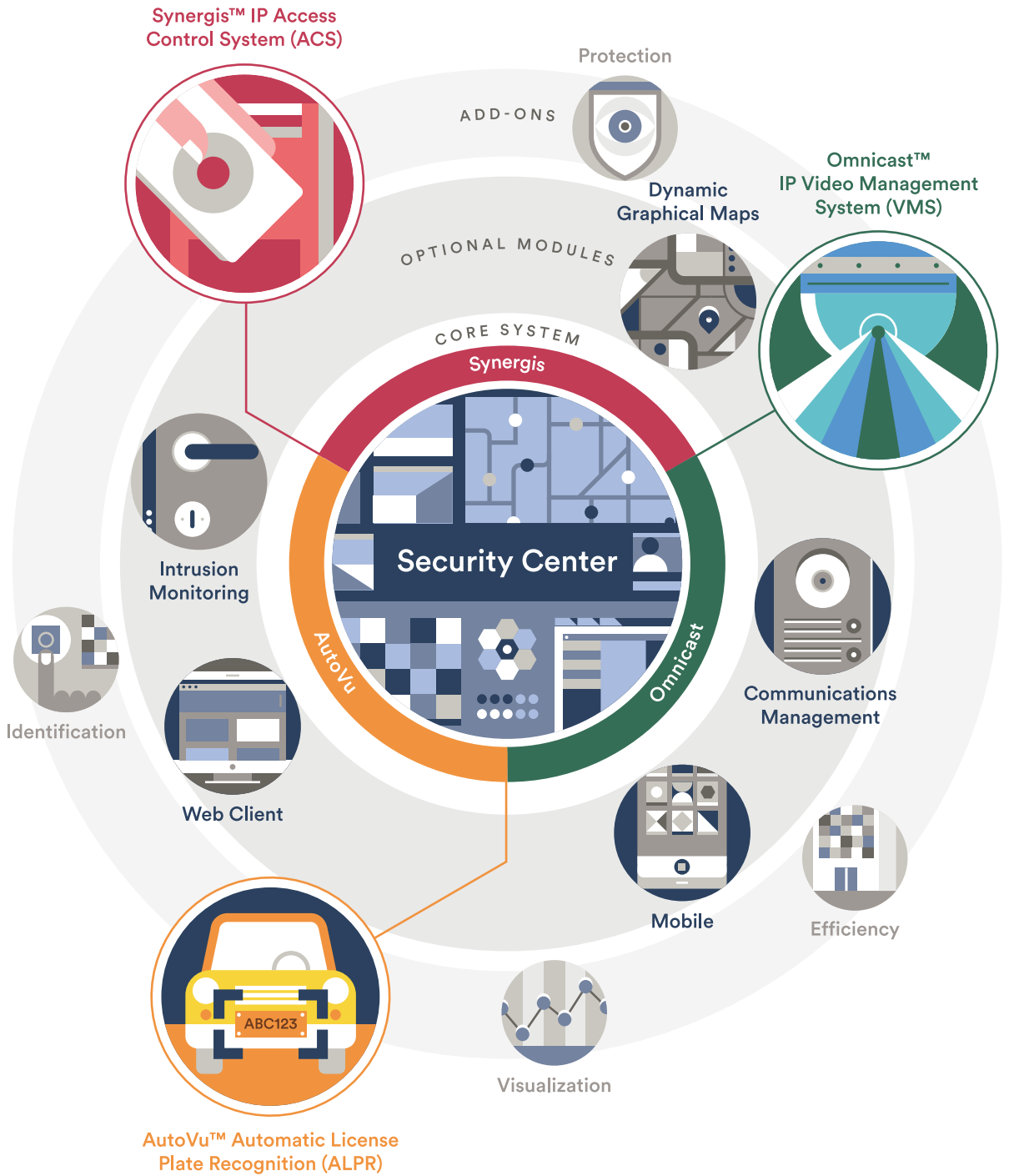
**Identification:** *face recognition, biometrics, ID scanning.* When an access card isn't enough, control entry with

seamless, non-intrusive and secure biometric credentials. Identify people through facial recognition technology and use multi-factor authentication to increase security.

**Protection:** *intrusion, gunshot and perimeter detection, asset management.* Make use of various sensors to improve your monitoring and decision making. Integrate video and audio analytics to automate detection and benefit from smarter forensics

investigations. And augment physical security with video analytics to protect your perimeter, while ensuring personal privacy.

**Efficiency:** *building automation, parking systems, destination management.* Integrate building automation and intelligent parking systems to Security Center. Manage all elevator traffic from your security platform, giving you more control and visibility of building activity.



# See it all, all the time

Omnicast is a video management system that provides organizations of all sizes with the ability to deploy a surveillance system that helps them improve, understand, and protect their people, operations, assets, and environments. Supporting a wide range of industry-leading cameras, encoders, and security devices, the Omnicast system scales and adapts to the changing demands of your security environment.

## **Corporate Headquarters**

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**Security Center Omnicast  
empowers organizations  
large and small to protect  
and secure their people,  
assets, and facilities.**

