



**COLLIN COUNTY**

## **New Camera Installation at Detention Facility Book-In and Recreation Areas**

**IFB 2018-272**

**J. D. Griffin, CPPB  
Jack Hatchell Administration Building  
2300 Bloomdale Road, Ste. 3160  
McKinney, TX 75071**

**(P) 972-548-4116 (F) 972-548-4694  
jgriffin@collincountytx.gov**

Collin County exclusively uses IonWave Technologies, Inc. ([Collin County eBid](#)) for the notification and dissemination of all solicitations. The receipt of solicitations through any other means may result in your receipt of incomplete specifications and/or addendums which could ultimately render your bid/proposal non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other means.

LEGAL NOTICE

By order of the Commissioners' Court of Collin County, Texas, sealed bids will be received by the Purchasing Agent, 2300 Bloomdale, Suite 3160, McKinney, TX 75071, until **2:00 P.M., Thursday, July 19, 2018**, for Invitation For Bid **New Camera Installation at Detention Facility Book-In and Recreation Areas (IFB No. 2018-272)**. A **Mandatory Pre-Bid Site-Walk** will be held **Tuesday, July 10, 2018 at 2:00 p.m.** at Collin County Detention Center Lobby, 4300 Community Ave. McKinney, TX 75071. Bidders shall use lump sum pricing. Contractor must furnish a performance and payment bond within ten (10) consecutive calendar days following award of contract. Funds for payment have been provided through the Collin County budget approved by the Commissioner's Court for this fiscal year only. Bidders may obtain detailed specifications and other documents at Office of the Purchasing Agent: Collin County Administration Building, 2300 Bloomdale, Suite 3160, McKinney, TX 75071, 972-548-4165, or by going to: <https://collincountytx.ionwave.net>. Sealed bids will be opened on **Thursday, July 19, 2018 at 2:00 P.M.** by the Purchasing Agent, 2300 Bloomdale, Suite 3160, McKinney, TX 75071. The Commissioners' Court reserves the right to reject any and all bids.

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**ATTENTION: CLASSIFIEDS**  
**BILL TO: ACCOUNT NO 06100315-000**  
**COMMISSIONER'S COURT**

NOTICE TO PUBLISHERS: Please publish in your issue on **Thursday, June 28, 2018** and **Thursday, July 5, 2018**. A copy of this notice and the publisher's affidavit must accompany the invoice when presented for payment.

**NEWSPAPER: Plano Star Courier**  
**DATE: June 26, 2018**  
**FAX: 972-529-1684**

# Collin County, Texas

## Bid Information

Bid Owner JD Griffin, CPPB Buyer II  
 Email jgriffin@co.collin.tx.us  
 Phone (972) 548-4116 x  
 Fax (972) 548-4694 x  
  
 Bid Number 2018-272  
 Title New Camera Installation at  
 Detention Facility Book-In and  
 Recreation Areas  
  
 Bid Type IFB  
 Issue Date 06/26/2018  
 Close Date 7/19/2018 02:00:00 PM (CT)

## Contact Information

Address 2300 Bloomdale Rd.  
 Ste. 3160  
 McKinney, TX 75071  
  
 Contact JD Griffin, CPPB Buyer II  
 Department Purchasing  
 Building Admin. Building  
 Floor/Room Ste.3160  
 Telephone (972) 548-4116 x  
 Fax (972) 548-4694 x  
 Email jgriffin@co.collin.tx.us

## Ship to Information

Address 4300 Community Ave.  
  
 McKinney, TX 75071  
  
 Contact  
 Department  
 Building Justice Center  
 Floor/Room  
 Telephone  
 Fax  
 Email

## Supplier Information

Company Name \_\_\_\_\_  
 Contact Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
  
 Telephone \_\_\_\_\_  
 Fax \_\_\_\_\_  
 Email \_\_\_\_\_

## Supplier Notes

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The undersigned hereby certifies the foregoing bid submitted by the company listed below hereinafter called "bidder" is the duly authorized agent of said company and the person signing said bid has been duly authorized to execute same. Bidder affirms that they are duly authorized to execute this contract; this company; corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder or other person or persons engaged in the same line of business; and that the contents of this bid as to prices, terms and conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

Signature \_\_\_\_\_ Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

## Bid Notes

Please log in to view bid documents. Collin County exclusively uses IonWave Technologies, Inc. (Collin County eBid) for the notification and dissemination of all solicitations. The receipt of solicitations through any other means may result in your receipt of incomplete specifications and/or addendums which could ultimately render your bid/proposal non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other means.

## Bid Activities

Date	Name	Description
7/10/2018 02:00 PM (CT)	Mandatory Pre-Bid Site-Walk	Mandatory Pre-Bid Site-Walk: A Mandatory Pre-bid site walk will be held by Collin County on Tuesday, July 10, 2018 at 2:00 PM at the Collin County Detention Center Lobby, 4300 Community Ave., McKinney, TX 75071. All prospective bidders are requested to have a representative present at one site walk. It is the bidder's responsibility to review the site and documents to gain a full understanding of the requirements of the bid. Once the pre-bid site-walk has begun, late arrivals will not be allowed to join. A sign in sheet will be provided at the meeting by the Purchasing Representative. This sign-in sheet will be the official record of attendance at the meeting.
7/13/2018 05:00 PM (CT)	Intent to Bid	Do you intend to submit a bid?

## Bid Messages

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## Bid Attachments

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The following attachments are associated with this opportunity and will need to be retrieved separately

#	Filename	Description
Header	LEGAL NOTICE-2018-272.doc	Legal Notice
Header	General_Instructions_Bid.docx	General_Instructions_Bid
Header	Terms_of_Contract_Bid.docx	Terms_of_Contract_Bid
Header	3.0 Insurance_Requirements.doc	Insurance Requirements
Header	4.0 Special Conditions and Specifications.docx	Special Conditions and Specifications
Header	Attachment A.PDF	Attachment A
Header	Attachment B.pdf	Attachment B
Header	Attachment C.PDF	Attachment C
Header	Attachment D.pdf	Attachment D
Header	Attachment E.pdf	Attachment E
Header	Attachment F.pdf	Attachment F
Header	Attachment G.pdf	Attachment G
Header	Attachment H.pdf	Attachment H
Header	Attachment I.pdf	Attachment I
Header	Attachment J.pdf	Attachment J
Header	Payment Bond.doc	Payment Bond
Header	Performance Bond.doc	Performance Bond
Header	Construction Contract.docx	Construction Contract
Header	HB23 CIQ.docx	Information Regarding Conflict of Interest Questionnaire
Header	CIQ_113015.pdf	Conflict of Interest Questionnaire
Header	HB89 Verification.docx	HB89/Chapter 2270 Verification
Header	W9_2014.pdf	W-9

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## Bid Attachments Requested

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The following attachments are requested with this opportunity

#	Required	Specified Attachment
1	YES	Project Schedule
2	NO	Conflict of Interest Questionnaire
3	YES	W-9

**Bid Attributes**

Please review the following and respond where necessary

#	Name	Note	Response
1	Bidder's Experience	State the number of years' experience installing and programming Bosch or equivalent surveillance installations.	_____ (Required)
2	Calendar Days Bid	Please state the consecutive calendar days bid.	_____ (Required)
3	Exceptions	Do you take exceptions to the specifications. If so, by separate attachment, please state your exceptions. Valid Responses: [Please Select], Yes, No	_____ (Required)
4	Insurance	I understand that the insurance requirements of this solicitation are required and a certificate of insurance shall be submitted to the Purchasing department if I am awarded all or a portion of the resulting contract.  Please initial.	_____ (Required)
5	Subcontractors	State the business name of all subcontractors and the type of work they will be performing under this contract.  If you are fully qualified to self-perform the entire contract, please respond with "Not Applicable-Self Perform".	_____ (Required)
6	Reference No. 1	List a company or governmental agency, other than Collin County, where these same/like products /services, as stated herein, have been provided.  Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.	_____ (Required)
7	Reference No. 2	List a company or governmental agency, other than Collin County, where these same/like products /services, as stated herein, have been provided.  Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.	_____ (Required)
8	Reference No. 3	List a company or governmental agency, other than Collin County, where these same/like products /services, as stated herein, have been provided.  Include the following: Company/Entity, Contact, Address, City/State/Zip, Phone, and E-Mail.	_____ (Required)
9	Preferential Treatment	The County of Collin, as a governmental agency of the State of Texas, may not award a contract to a nonresident bidder unless the nonresident's bid is lower than the lowest bid submitted by a responsible Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a nonresident bidder to obtain a comparable contract in the state in which the nonresident's principal place of business is located (Government Code, Title 10, V.T.C.A., Chapter 2252, Subchapter A).  1. Is your principal place of business in the State of Texas?  2. If your principal place of business is not in Texas, in which State is your principal place of business?	_____ (Required)

3. If your principal place of business is not in Texas, does your state favor resident bidders (bidders in your state) by some dollar increment or percentage?

4. If your state favors resident bidders, state by what dollar amount or percentage.

10 Debarment Certification

I certify that neither my company nor an owner or principal \_\_\_\_\_ (Required) of my company has been debarred, suspended or otherwise made ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension," as described in the Federal Register and Rules and Regulations.

Please initial.

11 Immigration and Reform Act

I declare and affirm that my company is in compliance with \_\_\_\_\_ (Required) the Immigration and Reform Act of 1986 and all employees are legally eligible to work in the United States of America.

I further understand and acknowledge that any non-compliance with the Immigration and Reform Act of 1986 at any time during the term of this contract will render the contract voidable by Collin County.

Please initial.

12 Disclosure of Certain Relationships

Chapter 176 of the Texas Local Government Code \_\_\_\_\_ (Required) requires that any vendor considering doing business with a local government entity disclose the vendor's affiliation or business relationship that might cause a conflict of interest with a local government entity. Subchapter 6 of the code requires a vendor to file a conflict of interest questionnaire (CIQ) if a conflict exists. By law this questionnaire must be filed with the records administrator of Collin County no later than the 7th business day after the date the vendor becomes aware of an event that requires the statement to be filed. A vendor commits an offense if the vendor knowingly violates the code. An offense under this section is a misdemeanor.

By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code.

Please send completed forms to the Collin County County Clerk's Office located at 2300 Bloomdale Rd., Suite 2104, McKinney, TX 75071.

Please initial.

13 Disclosure of Interested Parties

Section 2252.908 of the Texas Government Code requires \_\_\_\_\_ (Required) a business entity entering into certain contracts with a governmental entity to file with the governmental entity a disclosure of interested parties at the time the business entity submits the signed contract to the governmental entity. Section 2252.908 requires the disclosure form (Form 1295) to be signed by the authorized agent of the contracting business entity, acknowledging that the disclosure is made under oath and under penalty of perjury. Section 2252.908 applies only to a contract that requires an action or vote by the governing body of the governmental entity before the contract may be signed or has a value of at least \$1 million. Section 2252.908 provides definitions of certain terms occurring in the section.

Section 2252.908 applies only to a contract entered into on

or after January 1, 2016.

Please initial.

14 Notification Survey

In order to better serve our offerors, the Collin County Purchasing Department is conducting the following survey. \_\_\_\_\_ (Required)  
We appreciate your time and effort expended to submit your bid. Should you have any questions or require more information please call (972) 548-4165.

How did you receive notice of this request?

Valid Responses: [Please Select], Plano Star Courier, Plan Room, Collin County eBid Notification, Collin County Website, Other

15 Construction Acknowledgement

Bidder, declares that the only person or parties interested in this bid are those principals named herein, that his/her bid is made without collusion with any other person, firm or corporation, that he/she has carefully examined the Contract Documents including the Advertisement for Bids, Instruction to Bidders, Construction Agreement, Specifications and the Drawings, therein referred to and has carefully examined the locations, conditions and classes of materials for the proposed work, and agrees that he/she will provide all the necessary labor, machinery, tools, equipment, apparatus and other items incidental to construction and will do all the work and furnish all the materials called for in the Contract Documents in the manner prescribed therein. \_\_\_\_\_ (Required)

Bidder hereby declares that he/she has visited the site of the Work and has carefully examined the Contract Documents pertaining to the Work covered by the above Bid, and he/she further agrees to commence work within ten (10) consecutive calendar days after date of written Notice to Proceed and to substantially complete the work on which he/she has bid within the number of days specified subject to such extensions of time allowed by Specifications.

Bidder certifies that the bid prices contained in this bid have been carefully checked and are submitted as correct and final. The prices have been shown in words and figures for each item listed in this bid and it is understood that in the event of a discrepancy, the words shall govern.

Please initial.

Line Items

#	Qty	UOM	Description	Response
1	1	lump sum	Bid Grand Total	\$ _____ (Required) Price

Supplier Notes: \_\_\_\_\_  
\_\_\_\_\_

Item Attributes: Please review the following and respond where necessary

#	Name	Note	Response
1	Bid Grand Total- Written in Words	The contract award will be based on the total bid price.	_____ (Required)
2	Total Material Cost Incorporated in Project		\$ _____ (Required)
3	Total Material Cost Incorporated in Project- Written in Words		_____ (Required)
4	Total Labor Cost Incorporated in Project		\$ _____ (Required)
5	Total Labor Cost Incorporated in Project- Written in Words		_____ (Required)



## 1.0 GENERAL INSTRUCTIONS

### 1.0.1 Definitions

1.0.1.1 Bidder: refers to submitter.

1.0.1.2 Vendor/Contractor/Provider: refers to a Successful Bidder/Contractor/Service Provider.

1.0.1.3 Submittal: refers to those documents required to be submitted to Collin County, by a Bidder.

1.0.1.4 IFB: refers to Invitation For Bid.

1.1 If Bidder does not wish to submit an offer at this time, please submit a No Bid.

1.2 Awards shall be made not more than ninety (90) days after the time set for opening of submittals.

1.3 Collin County is always conscious and extremely appreciative of your time and effort in preparing your submittal.

1.4 Collin County exclusively uses ionWave Technologies, Inc. (Collin County eBid) for the notification and dissemination of all solicitations. The receipt of solicitations through any other company may result in your receipt of incomplete specifications and/or addendums which could ultimately render your bid non-compliant. Collin County accepts no responsibility for the receipt and/or notification of solicitations through any other company.

1.5 A bid may not be withdrawn or canceled by the bidder prior to the ninety-first (91<sup>st</sup>) day following public opening of submittals and only prior to award.

1.6 It is understood that Collin County, Texas reserves the right to accept or reject any and/or all Bids for any or all products and/or services covered in an Invitation For Bid (IFB), and to waive informalities or defects in submittals or to accept such submittals as it shall deem to be in the best interest of Collin County.

1.7 All IFB's submitted in hard copy paper form shall be submitted in a sealed envelope, plainly marked on the outside with the IFB number and name. A hard copy paper form submittal shall be manually signed in ink by a person having the authority to bind the firm in a contract. Submittals shall be mailed or hand delivered to the Collin County Purchasing Department.

1.8 No oral, telegraphic or telephonic submittals will be accepted. IFB's may be submitted in electronic format via Collin County eBid.

1.9 All Invitation For Bids (IFB) submitted electronically via Collin County eBid shall remain locked until official date and time of opening as stated in the Special Terms and Conditions of the IFB.

1.10 Time/date stamp clock in Collin County Purchasing Department shall be the official time of receipt for all Invitation for Bids (IFB) submitted in hard copy paper form. IFB's received in the Collin County Purchasing Department after submission deadline shall be considered void and unacceptable. Absolutely no late submittals will be considered. Collin County accepts no responsibility for technical difficulties related to electronic submittals.

1.11 For hard copy paper form submittals, any alterations made prior to opening date and time must be initialed by the signer of the IFB guaranteeing authenticity. Submittals cannot be altered or amended after submission deadline.

1.12 Collin County is by statute exempt from the State Sales Tax and Federal Excise Tax; therefore, the prices submitted shall not include taxes.

1.13 Any interpretations, corrections and/or changes to an Invitation For Bid, and related Specifications or extensions to the opening/receipt date will be made by addenda to the respective document by the Collin County Purchasing Department. Questions and/or clarification requests must be submitted no later than seven (7) days prior to the opening/receipt date. Those received at a later date may not be addressed prior to the public opening. Sole authority to authorize addenda shall be vested in Collin County Purchasing Agent as entrusted by the Collin County Commissioners' Court. Addenda may be transmitted electronically via Collin County eBid.

1.13.1 Addenda will be transmitted to all that are known to have received a copy of the IFB/RFQ/RFP/RFI/CSP and related Specifications. However, it shall be the sole responsibility of the Bidder/Quoter/Offeror to verify issuance/non-issuance of addenda and to check all avenues of document availability (i.e. **Collin County eBid** <https://collincountvtx.ionwave.net/>, telephoning Purchasing Department directly, etc.) prior to opening/receipt date and time to insure Bidder/Quoter/Offeror's receipt of any addenda issued. Bidder/Quoter/Offeror shall acknowledge receipt of all addenda.

1.14 All materials and services shall be subject to Collin County approval.

1.15 Collin County reserves the right to make award in whole or in part as it deems to be in the best interest of the County.

1.16 Any reference to model/make and/or manufacturer used in specifications is for descriptive purposes only. Products/materials of like quality will be considered.

1.17 Bidders taking exception to the specifications shall do so at their own risk. By offering substitutions, Bidder shall state these exceptions in the section provided in the IFB or by attachment. Exception/substitution, if accepted, must meet or exceed specifications stated therein. Collin County reserves the right to accept or reject any and/or all of the exception(s)/substitution(s) deemed to be in the best interest of the County.

1.19 Minimum Standards for Responsible Prospective Bidders: A prospective Bidder must meet the following minimum requirements:

1.19.1 have adequate financial resources, or the ability to obtain such resources as required;

1.19.2 be able to comply with the required or proposed delivery/completion schedule;

1.19.3 have a satisfactory record of performance;

1.19.4 have a satisfactory record of integrity and ethics;

1.19.5 be otherwise qualified and eligible to receive an award.

Collin County may request documentation and other information sufficient to determine Bidder's ability to meet these minimum standards listed above.

1.20 Vendor shall bear any/all costs associated with it's preparation of an IFB.

1.21 Public Information Act: Collin County is governed by the Texas Public Information Act, Chapter 552 of the Texas Government Code. All information submitted by prospective bidders during the bidding process is subject to release under the Act.

1.22 The Bidder shall comply with Commissioners' Court Order No. 2004-167-03-11, County Logo Policy.

1.23 Interlocal Agreement: Successful bidder agrees to extend prices and terms to all entities that has entered into or will enter into joint purchasing interlocal cooperation agreements with Collin County.

1.24 Bid Openings: All bids submitted will be read at the county's regularly scheduled bid opening for the designated project. However, the reading of a bid at bid opening should be not construed as a comment on the responsiveness of such bid or as any indication that the county accepts such bid as responsive.

The county will make a determination as to the responsiveness of bids submitted based upon compliance with all applicable laws, Collin County Purchasing Guidelines, and project documents, including but not limited to the project specifications and contract documents. The county will notify the successful bidder upon award of the contract and, according to state law; all bids received will be available for inspection at that time.

1.25 Bidder shall comply with all local, state and federal employment and discrimination laws and shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin or any other class protected by law.

## 2.0 TERMS OF CONTRACT

2.1 A bid, when properly accepted by Collin County, shall constitute a contract equally binding between the Vendor/Contractor/Provider and Collin County. No different or additional terms will become part of this contract with the exception of a Change Order.

2.2 No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All Amendments and/or Change Orders to the contract will be made in writing by Collin County Purchasing Agent.

2.3 No public official shall have interest in the contract, in accordance with Vernon's Texas Codes Annotated, Local Government Code Title 5, Subtitle C, Chapter 171.

2.4 The Vendor/Contractor/Provider shall comply with Commissioners' Court Order No. 96-680-10-28, Establishment of Guidelines & Restrictions Regarding the Acceptance of Gifts by County Officials & County Employees.

2.5 Design, strength, quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practice.

2.6 Bids must comply with all federal, state, county and local laws concerning the type(s) of product(s)/service(s)/equipment/project(s) contracted for, and the fulfillment of all ADA (Americans with Disabilities Act) requirements.

2.7 All products must be new and unused, unless otherwise specified, in first-class condition and of current manufacture. Obsolete products, including products or any parts not compatible with existing hardware/software configurations will not be accepted.

2.8 Vendor/Contractor/Provider shall provide any and all notices as may be required under the Drug-Free Work Place Act of 1988, 28 CFR Part 67, Subpart F, to its employees and all sub-contractors to insure that Collin County maintains a drug-free work place.

2.9 Vendor/Contractor/Provider shall defend, indemnify and save harmless Collin County and all its officers, agents and employees and all entities, their officers, agents and employees who are participating in this contract from all suits, claims, actions, damages (including personal injury and or property damages), or demands of any character, name and description, (including attorneys' fees, expenses and other defense costs of any nature) brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of Vendor/Contractor/Provider's breach of the contract arising from an award, and/or any negligent act, error, omission or fault of the Vendor/Contractor/Provider, or of any agent, employee, subcontractor or supplier of Vendor/Contractor/Provider in the execution of, or performance under, any contract which may result from an award. Vendor/Contractor/Provider shall pay in full any judgment with costs, including attorneys' fees and expenses which are rendered against Collin County and/or participating entities arising out of such breach, act, error, omission and/or fault.

2.10 Expenses for Enforcement. In the event either Party hereto is required to employ an attorney to enforce the provisions of this Agreement or is required to commence legal proceedings to enforce the provisions hereof, the prevailing Party shall be entitled to recover from the other, reasonable attorney's fees and court costs incurred in connection with such enforcement, including collection.

2.11 If a contract, resulting from a Collin County IFB is for the execution of a public work, the following shall apply:

2.11.1 In accordance with V.T.C.A. 2253.021, a governmental agency that makes a public work contract with a prime contractor shall require the contractor, before beginning work, to execute to the governmental entity a Payment Bond if the contract is in excess of \$25,000.00. Such bond shall

be in the amount of the contract payable to the governmental entity and must be executed by a corporate surety in accordance with Section 1, Chapter 87, Acts of the 56<sup>th</sup> Legislature, Regular Session, 1959 (Article 7.19-1 Vernon's Texas Insurance Code).

2.11.2 In accordance with V.T.C.A. 2253.021, a governmental agency that makes a public work contract with a prime contractor shall require the contractor, before beginning work, to execute to the governmental entity a Performance Bond if the contract is in excess of \$100,000.00. Such bond shall be in the amount of the contract payable to the governmental entity and must be executed by a corporate surety in accordance with Section 1, Chapter 87, Acts of the 56<sup>th</sup> Legislature, Regular Session, 1959 (Article 7.19-1 Vernon's Texas Insurance Code).

2.12 Purchase Order(s) shall be generated by Collin County to the vendor. Collin County will not be responsible for any orders placed/delivered without a valid purchase order number.

2.13 The contract shall remain in effect until any of the following occurs: delivery of product(s) and/or completion and acceptance by Collin County of product(s) and/or service(s), contract expires or is terminated by either party with thirty (30) days written notice prior to cancellation and notice must state therein the reasons for such cancellation. Collin County reserves the right to terminate the contract immediately in the event the Vendor/Contractor/Provider fails to meet delivery or completion schedules, or otherwise perform in accordance with the specifications. Breach of contract or default authorizes the County to purchase elsewhere and charge the full increase in cost and handling to the defaulting Vendor/Contractor/Provider.

2.14 Collin County Purchasing Department shall serve as Contract Administrator or shall supervise agents designated by Collin County.

2.15 All delivery and freight charges (FOB Inside delivery at Collin County designated locations) are to be included as part of the bid price. All components required to render the item complete, installed and operational shall be included in the total bid price. Collin County will pay no additional freight/delivery/installation/setup fees.

2.16 Vendor/Contractor/Provider shall notify the Purchasing Department immediately if delivery/completion schedule cannot be met. If delay is foreseen, the Vendor/Contractor/Provider shall give written notice to the Purchasing Agent. The County has the right to extend delivery/completion time if reason appears valid.

2.17 The title and risk of loss of the product(s) shall not pass to Collin County until Collin County actually receives and takes possession of the product(s) at the point or points of delivery. Collin County shall generate a purchase order(s) to the Vendor/Contractor/Provider and the purchase order number must appear on all itemized invoices.

2.18 Invoices shall be mailed directly to the Collin County Auditor's Office, 2300 Bloomdale Road, Suite 3100, McKinney, Texas 75071. All invoices shall show:

2.18.1 Collin County Purchase Order Number;

2.18.2 Vendor's/Contractor's/Provider's Name, Address and Tax Identification Number;

2.18.3 Detailed breakdown of all charges for the product(s) and/or service(s) including applicable time frames.

2.19 Payment will be made in accordance with V.T.C.A., Government Code, Title 10, Subtitle F, Chapter 2251.

2.20 All warranties shall be stated as required in the Uniform Commercial Code.

2.21 The Vendor/Contractor/Provider and Collin County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

- 2.22 The Vendor/Contractor/Provider agree to protect Collin County from any claims involving infringements of patents and/or copyrights.
- 2.23 The contract will be governed by the laws of the State of Texas. Should any portion of the contract be in conflict with the laws of the State of Texas, the State laws shall invalidate only that portion. The remaining portion of the contract shall remain in effect. The contract is performable in Collin County, Texas.
- 2.24 The Vendor/Contractor/Provider shall not sell, assign, transfer or convey the contract, in whole or in part, without the prior written approval from Collin County.
- 2.25 The apparent silence of any part of the specification as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of the specification shall be made on the basis of this statement.
- 2.26 Vendor/Contractor/Provider shall not fraudulently advertise, publish or otherwise make reference to the existence of a contract between Collin County and Vendor/Contractor/Provider for purposes of solicitation. As exception, Vendor/Contractor/Provider may refer to Collin County as an evaluating reference for purposes of establishing a contract with other entities.
- 2.27 The Vendor/Contractor/Provider understands, acknowledges and agrees that if the Vendor/Contractor/Provider subcontracts with a third party for services and/or material, the primary Vendor/Contractor/Provider (awardee) accepts responsibility for full and prompt payment to the third party. Any dispute between the primary Vendor/Contractor/Provider and the third party, including any payment dispute, will be promptly remedied by the primary vendor. Failure to promptly render a remedy or to make prompt payment to the third party (subcontractor) may result in the withholding of funds from the primary Vendor/Contractor/Provider by Collin County for any payments owed to the third party.
- 2.28 Vendor/Contractor/Provider shall provide Collin County with diagnostic access tools at no additional cost to Collin County, for all Electrical and Mechanical systems, components, etc., procured through this contract.
- 2.29 Criminal History Background Check: If required, ALL individuals may be subject to a criminal history background check performed by the Collin County Homeland Security prior to access being granted to Collin County. Upon request, Vendor/Contractor/Provider shall provide list of individuals to Collin County Purchasing Department within five (5) working days.
- 2.30 Non-Disclosure Agreement: Where applicable, vendor shall be required to sign a non-disclosure agreement acknowledging that all information to be furnished is in all respects confidential in nature, other than information which is in the public domain through other means and that any disclosure or use of same by vendor, except as provided in the contract/agreement, may cause serious harm or damage to Collin County. Therefore, Vendor agrees that Vendor will not use the information furnished for any purpose other than that stated in contract/agreement, and agrees that Vendor will not either directly or indirectly by agent, employee, or representative disclose this information, either in whole or in part, to any third party, except on a need to know basis for the purpose of evaluating any possible transaction. This agreement shall be binding upon Collin County and Vendor, and upon the directors, officers, employees and agents of each.
- 2.31 Vendors/Contractors/Providers must be in compliance with the Immigration and Reform Act of 1986 and all employees specific to this solicitation must be legally eligible to work in the United States of America.
- 2.32 Certification of Eligibility: This provision applies if the anticipated Contract exceeds \$100,000.00 and as it relates to the expenditure of federal grant funds. By submitting a bid or proposal in response to this solicitation, the Bidder certifies that at the time of submission, he/she is not on the Federal Government's list of suspended, ineligible, or debarred contractors. In the event of placement on the list between the time of bid/proposal submission and time of award, the Bidder will notify the Collin County Purchasing Agent. Failure to do so may result in terminating this contract for default.

2.33 Notice to Vendors/Contractors/Providers delivering goods or performing services within the Collin County Detention Facility: The Collin County Detention Facility houses persons who have been charged with and/or convicted of serious criminal offenses. When entering the Detention Facility, you could: (1) hear obscene or graphic language; (2) view partially clothed male inmates; (3) be subjected to verbal abuse or taunting; (4) risk physical altercations or physical contact, which could be minimal or possibly serious; (5) be exposed to communicable or infectious diseases; (6) be temporarily detained or prevented from immediately leaving the Detention Facility in the case of an emergency or “lockdown”; and (7) subjected to a search of your person or property. While the Collin County Sheriff’s Office takes every reasonable precaution to protect the safety of visitors to the Detention Facility, because of the inherently dangerous nature of a Detention Facility and the type of the persons incarcerated therein, please be advised of the possibility of such situations exist and you should carefully consider such risks when entering the Detention Facility. By entering the Collin County Detention Facility, you acknowledge that you are aware of such potential risks and willingly and knowingly choose to enter the Collin County Detention Facility.

2.34 Delays and Extensions of Time when applicable:

2.34.1 If the Vendor/Contractor/Provider is delayed at any time in the commence or progress of the Work by an act or neglect of the Owner or Architect/Engineer, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Vendor/Contractor/Provider's control, or by delay authorized by the Owner pending mediation and arbitration, or by other causes which the Owner or Architect/Engineer determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Owner/Architect may determine.

2.34.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that the weather conditions had an adverse effect on the scheduled construction.

2.35 Disclosure of Certain Relationships: Chapter 176 of the Texas Local Government Code requires that any vendor considering doing business with a local government entity disclose the vendor’s affiliation or business relationship that might cause a conflict of interest with a local government entity. Subchapter 6 of the code requires a vendor to file a conflict of interest questionnaire (CIQ) if a conflict exists. By law this questionnaire must be filed with the records administrator of Collin County no later than the 7th business day after the date the vendor becomes aware of an event that requires the statement to be filed. A vendor commits an offense if the vendor knowingly violates the code. An offense under this section is a misdemeanor. By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code. Please send completed forms to the Collin County, County Clerk's Office located at 2300 Bloomdale Rd., Suite 2104, McKinney, TX 75071.

2.36 Disclosure of Interested Parties: Section 2252.908 of the Texas Government Code requires a business entity entering into certain contracts with a governmental entity to file with the governmental entity a disclosure of interested parties at the time the business entity submits the signed contract to the governmental entity. Section 2252.908 requires the disclosure form (Form 1295) to be signed by the authorized agent of the contracting business entity, acknowledging that the disclosure is made under oath and under penalty of perjury. Section 2252.908 applies only to a contract that requires an action or vote by the governing body of the governmental entity before the contract may be signed or has a value of at least \$1 million. Section 2252.908 provides definitions of certain terms occurring in the section. Section 2252.908 applies only to a contract entered into on or after January 1, 2016.

2.37 Vendors/Contractors/Providers must be in compliance with the provisions of Section 2270.001 of the Texas Government Code which states a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and, (2) will not boycott Israel during the term of the contract. By submitting a response to a Collin County solicitation, the vendor will be required to sign the Chapter 2270 Verification form prior to a recommendation of the contract. This Act is effective September 1, 2017.

2.38 Vendors/Contractors/Providers must be in compliance with the provisions of Section 2252.152 and Section 2252.153 of the Texas Government Code which states, in part, contracts with companies engaged in business with Iran, Sudan, or Foreign Terrorist Organizations are prohibited. A governmental entity may not enter into a contract with a company that is listed on the Comptroller of the State of Texas website identified under Section 806.051, Section 807.051 or Section 2253.253 which do business with Iran, Sudan or any Foreign Terrorist Organization. This Act is effective September 1, 2017.

**NOTE:** All other terms and conditions (i.e. Insurance Requirements, Bond Requirements, etc.) shall be stated in the individual IFB Solicitation documents as Special Terms, Conditions and Specifications.



**3.0 INSURANCE REQUIREMENTS**

3.1 Before commencing work, the vendor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) indicating the coverage to remain in force throughout the term of this contract.

3.1.1 **Commercial General Liability** insurance including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability.

- Each Occurrence: \$1,000,000
- Personal & Adv Injury: \$1,000,000
- Products/Completed Operation: \$2,000,000
- General Aggregate: \$2,000,000

3.1.2 **Workers Compensation** insurance as required by the laws of Texas, and Employers' Liability.

Employers' Liability

- Liability, Each Accident: \$1,000,000
- Disease-Each Employee: \$500,000
- Disease – Policy Limit: \$500,000

3.1.3 **Commercial Automobile Liability** insurance including owned, non-owned, and hired vehicles used in connection with the contract.

- Combined Single Limit – Each Accident: \$1,000,000

3.1.4 **Umbrella/Excess Liability** insurance.

- Each Occurrence/Aggregate: \$1,000,000

3.2 With reference to the foregoing insurance requirement, the vendor shall endorse applicable insurance policies as follows:

3.2.1 A waiver of subrogation in favor of Collin County, its officials, employees, volunteers and officers shall be provided for General Liability, Commercial Automobile Liability and Workers' Compensation.

3.2.2 The vendor's insurance coverage shall name Collin County as additional insured under the General Liability policy.

3.2.3 All insurance policies shall be endorsed to require the insurer to immediately notify Collin County of any decrease in the insurance coverage limits.

3.2.4 All insurance policies shall be endorsed to the effect that Collin County will receive at least thirty (30) days notice prior to cancellation, non-renewal or termination of the policy.

3.2.5 All copies of Certificates of Insurance shall reference the project/contract number.

3.3 All insurance shall be purchased from an insurance company that meets the following requirements:

3.3.1 A financial rating of A+VII or better as assigned by the BEST Rating Company or equivalent.

3.4 Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent, and shall contain provisions representing and warranting the following:

3.4.1 Sets forth all endorsements and insurance coverages according to requirements and instructions contained herein.

3.4.2 Sets forth the notice of cancellation or termination to Collin County.

## **4.0 SPECIAL CONDITIONS AND SPECIFICATIONS**

4.1 Authorization: By order of the Commissioners' Court of Collin County, Texas sealed bids will be received for IFB 2018-272.

4.2 Purpose: The intended use/purpose for this Invitation For Bid is to describe the requirements for New Camera Installation at Detention Facility Book-In and Recreation Areas.

4.3 Mandatory Pre-Bid Site-Walk: A Mandatory Pre-bid site walk will be held by Collin County on Tuesday, July 10, 2018 at 2:00 PM at the Collin County Detention Center Lobby, 4300 Community Ave., McKinney, TX 75071. All prospective bidders are requested to have a representative present at one site walk. It is the bidder's responsibility to review the site and documents to gain a full understanding of the requirements of the bid. Once the pre-bid site-walk has begun, late arrivals will not be allowed to join. A sign in sheet will be provided at the meeting by the Purchasing Representative. This sign-in sheet will be the official record of attendance at the meeting.

4.4 Term: Provide for a contract commencing on the date of the award and continuing until the project is complete.

4.5 Funding: Funds for payment for Collin County expenditures have been provided through the Collin County budget approved by the Commissioners' Court for this fiscal year only. All other participating entities expenditures have been provided through their entity's governing body for this fiscal year only. State of Texas statutes prohibit any obligation of public funds beyond the fiscal year for which a budget has been approved. Therefore, anticipated orders or other obligations that arise past the end of the current fiscal year shall be subject to budget approval.

4.6 Price Reduction: If during the life of the contract, the vendor's net prices to its customers for the same product(s) and/or services shall be reduced below the contracted price, it is understood and agreed that Collin County shall receive such price reduction.

4.7 Delivery/Completion/Response Time: Vendor shall state the number of calendar days to complete services at the County's designated location after receipt of purchase order in the space provided on Attribute 2.

4.8 Delivery/Setup/Installation Locations: Locations for delivery and installation are Collin County Detention Center, 4300 Community Ave., McKinney, TX 75071. Delivery, assembly, set-up and installation shall be included in the bid price.

4.9 Testing: Testing may be performed at the request of Collin County, by an agent so designated by the County, without expense to Collin County.

4.10 Samples/Demos: When requested, samples/demos shall be furnished to the County at no expense.

4.11 Approximate Expenditure: The approximate expenditure by Collin County for this project is \$65,000.00. Estimated expenditure does not constitute an order, but only implies the probable quantity the County will use.

4.12 Warranties: If within one year after final acceptance of the work by Collin County, any of the work or material is found to be defective or not in accordance with the specifications of the contract, the contractor shall correct it promptly after receipt of a written notice from the County to do so. This obligation shall survive termination or completion of the contract. The County shall give such notice promptly after discovery of the condition.

If any materials or equipment utilized in this project are covered by a standard manufacturer's warranty greater than requirements specified herein, Contractor shall extend that coverage to Collin County.

The contractor shall remove from the site all portions of the work which are defective or nonconforming and which have not been corrected unless removal is waived in writing by the County.

4.13 Subcontractors: Bidder shall state names of all subcontractors and the type of work they will be performing on Attribute 5. If a bidder fails to specify a subcontractor, then he shall be deemed to have agreed that he is fully qualified to perform the contract himself, and that he will fully perform the contract himself.

No bidder whose bid is accepted shall (a) substitute any subcontractor, or (b) permit a subcontract to be voluntarily assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the original bid without approval in writing from the Collin County Purchasing Department.

The successful bidder further agrees that Collin County and its agents, servants and employees shall not be liable for any loss or damage resulting from personal injury, physical loss, harassment of or discrimination against employee or other violations of the provisions of this contract occasioned by the acts or omissions of the successful bidder's sub-contractors, their agents or employees. The indemnification provisions of this contract shall apply to all sub-contractors.

4.14 The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, a Performance Bond in the amount of one hundred percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.

4.15 The Contractor shall post with Owner, not later than ten (10) consecutive calendar days of Collin County Commissioners' Court award of Contract, a Payment Bond in the amount of one hundred percent (100%) of the total contract price in such form as is satisfactory to Owner, in compliance with Chapter 2253 of the Texas Government Code and all other applicable Texas Law, and on the form specified in the Contract Documents. This bond shall be executed by a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed to issue such a bond in the State of Texas. The Contractor shall notify its corporate surety of any Contract changes.

4.16 Wage Scale: In accordance with The Texas Government Code, Title 10, Chapter 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule. Refer to Attachment J for current prevailing wage rates.

4.17 Execution of Contract: The person or persons, partnership, company, firm, association or corporation to whom a contract is awarded shall within ten (10) consecutive calendar days after such award, sign the necessary contract agreements and submit the required bonds entering into the required Contract with Owner. No contract shall be binding on Owner until it has been executed by Owner or his/her duly authorized representative, and delivered to the Contractor.

4.18 Liquidated Damages: Should the contractor fail to complete the project within the specified completion schedule, the sum of \$175.00 per calendar day may be deducted from the monies due the contractor for the work. This sum shall not be considered as a penalty, but rather as reasonable liquidated damages, since it would be impracticable or extremely difficult to fix the actual damages. An extension of time may be allowed for delays beyond the control of the contractor at the discretion of Owner.

4.19 Substitutions: No substitution will be considered unless written request has been submitted to Owner for approval at least seven (7) consecutive calendar days prior to the date for receipt of bids. Substitution requests shall be emailed to [jgriffin@co.collin.tx.us](mailto:jgriffin@co.collin.tx.us). If Owner approves a proposed substitution, such approval will be set forth in an Addendum.

4.19.1 Camera equipment shall be Bosch with no substitutions per approved County Construction Standards.

4.20 Bid Documents: Contractor shall notify Collin County prior to bid if the bid documents are missing scope, incomplete or are contrary to actual site conditions.

4.21 Project Requirements and Clarifications:

4.21.1 Bidders are responsible for field verification of site conditions, dimensions, wire pull distances, equipment terminations and verify access for this scope of work. Equipment stated in this specification is provided for bidding proposes only and is not intended to be a complete materials list. The contractor is responsible for

verification of scope, labor, materials and manufactures installation recommendations prior to submitting a bid. The bid will have a mandatory site walk that allows bidding contractors access to existing system and perform site investigations.

4.21.2 Successful Bidder shall have five (5) years minimum experience installing and programming Bosch or equivalent surveillance installations.

4.21.3 Bidder shall provide a schedule for the project with their bid.

4.21.4 All screws, anchors, sealants and fasteners shall be detention grade to match the existing finishes.

4.21.5 Once awarded the contract, a mandatory background check performed by Collin County will be required for all persons who will work onsite.

4.21.6 A fulltime escort by a Facilities Technician or Detention Officer shall be required while contractor is working onsite.

4.21.7 Collin County Employees shall not sign for or be responsible for material/equipment that is drop-shipped to the job site by the contractor.

4.21.8 Collin County Government is not responsible for contractor equipment or personnel safety.

4.21.9 Contractor shall have the ability to respond onsite to warranty or service requests within four (4) hours of the initial notification from the County.

4.21.10 Contractor shall be responsible for removing and hauling away all trash and removed materials daily. Contractor shall not use County dumpsters.

4.21.11 All work shall be scheduled with the following time and day restrictions for the required escorts: Monday through Friday from 7:00 AM to 4:00 PM (with one hour mandatory lunch break).

4.21.12 The existing camera systems shall stay online with all functionality and with no interruptions to security or daily building operations.

4.21.13 Contractor shall not have onsite storage or office space available.

4.21.14 Contractor shall provide a foreman level technician onsite during the course of this installation to ensure the equipment is being installed per the bid documents, installed to the manufactures requirements and to ensure quality control of the installation.

4.21.15 Collin County will provide all CAD files and termination spreadsheets for the Adult Detention Center installation(s) after bid award.

4.22 Scope: This project consists of installing twelve (12) cameras; one PTZ camera installed in twelve (12) recreation areas of the housing PODs and install nine (9) fixed cameras throughout Book-In and other areas of the Adult Detention Center. The new cameras shall require two (2) new Bosch 16 channel DVRs and four (4) new power supplies. All twenty-one (21) new cameras shall require new wiring, new mounts, required accessories and surveillance system programming. Successful Contractor shall provide all equipment, components, materials, parts and skilled labor required to complete the installation. All components shall be new and unused; rebuilt or refurbished components will not be accepted.

4.23 Pan Tilt and Zoom (PTZ) Camera Specifications and Locations:

4.23.1 Provide and install twelve (12) new Bosch Model VG5-624-ECS cameras with new wiring from the Main Security Room to the Cluster Recreation Areas. Refer to Attachment A-Plans DET E1 through DET E 12 for installation locations, Attachment B for the manufactures camera specifications and Attachment C for an overhead view.

4.23.2 Install one (1) ceiling mount camera in Cluster One POD A Recreation

4.23.3 Install one (1) ceiling mount camera in Cluster One POD B Recreation

4.23.4 Install one (1) ceiling mount camera in Cluster One POD C Recreation

4.23.5 Install one (1) ceiling mount camera in Cluster One POD D Recreation

4.23.6 Install one (1) ceiling mount camera in Cluster Three POD A Recreation

4.23.7 Install one (1) ceiling mount camera in Cluster Three POD B Recreation

4.23.8 Install one (1) ceiling mount camera in Cluster Three POD C Recreation

4.23.9 Install one (1) ceiling mount camera in Cluster Three POD D Recreation

4.23.10 Install one (1) ceiling mount camera in Cluster Five POD A Recreation

4.23.11 Install one (1) ceiling mount camera in Cluster Five POD B Recreation

4.23.12 Install one (1) ceiling mount camera in the Cluster Five POD C Recreation

4.23.13 Install one (1) ceiling mount camera in the Cluster Five POD D Recreation

4.24 Fixed Camera Specifications and Locations:

4.24.1 Provide and install nine (9) new Bosch Model VDN-5085-V321S fixed dome cameras with new wiring from the Main Security Room camera locations on

the lower and first levels. Refer to Attachment A Plans BI- E1 through BI- E4 for installation locations and Attachment D for the manufactures camera specifications.

4.24.2 Install four (4) ceiling mount cameras in the Lower Level Book In area.

4.24.3 Install one (1) ceiling mount camera in the Lower Level Property Room.

4.24.4 Install one (1) ceiling mount camera in the Lower Level Bonds Room.

4.24.5 Install one (1) ceiling mount camera in the Lower Level Bonds Corridor.

4.24.6 Install one (1) ceiling mount camera in the First Level Arraignment Courtroom.

4.24.7 Install one (1) ceiling mount camera in the First Level Safety Vestibule.

4.25 Digital Video Recorder Specification and Location:

4.25.1 Provide and install two (2) new Bosch DRH 5532-414N00 Hybrid 16 channel DVRs each with four (4) DVR-XS600-A 24/7 HDD Expansion 6TB storage and include all mounts, cables, connectors and network cabling as required for this installation. Refer to Attachment A Plan page BI-E4 for installation location and Attachment E for the manufactures DVR specifications.

4.26 Camera Power Supply Specifications and Locations:

4.26.1 Provide and install four (4) new Altronix Power Supply R2416ULCBi or Collin County approved equal. Refer to Attachment F for the manufactures specifications and Attachment G for installation locations. The contractor shall provide and install a plug in type power cord from the power supply into an existing UPS power located in the mechanical room noted in Attachment G.

4.27 Camera Wiring Scope and Specifications:

4.27.1 All new wiring for the twenty one (21) cameras will originate from the Main Security Room to the camera locations. Refer to Attachment A-Plans for the camera installation locations and Attachment H and Attachment I for the manufacture specifications.

4.27.2 Contractor shall provide a high quality RG-59/U coax cable with the following minimum specifications for Cluster One and Cluster Three cameras:

4.27.2.1 Inner conductor: Solid Copper (No copper clad steel)

4.27.2.2 Braid: 95%



4.27.2.3 Jacket: PVC (Plenum rated)

4.27.4 Contractor shall provide a high quality RG-11/U coax cable with the following minimum specifications for Cluster Five cameras. Refer to Attachment I for the manufacture specifications and Attachment A-Plans for the camera installation locations.

4.27.4.1 Inner Conductor: Solid Copper (No copper clad steel)

4.27.4.2 Braid: 95%

4.27.4.3 Jacket: PVC (Plenum rated)

4.28 Integration for the Detention Controls Programming:

4.28.1 Collin County shall separately contract with the sole source provider, Argyle Security, for camera programming between the system integration and Detention Controls. The awarded contractor shall provide any required programming on the DVR and matrix equipment.

4.29 Project Closeout Requirements:

4.29.1 Contractor shall provide two (2) bound hard copies in 3" HEAVY DUTY 11" X 17" 3" RING BLACK BINDERS (Office Depot Item # 1388845 or equal) of project as-built drawings showing all camera devices, complete building floor plans showing plotted cameras and show surveillance equipment locations in 11" X 17" format.

4.29.2 Provide termination sheets with all points on the surveillance system to include; camera number, camera type, camera inputs, matrix inputs/outputs and power supply outputs.

4.29.3 Provide as-built drawings for the intercom system to include intercom station numbers, headend equipment with locations with point terminations.

4.29.4 Include two (2) thumb drives with all PDF format drawings, CAD files with termination sheets in excel format.

# SHEET INDEX

## Attachment A

SHEET BI-E1 - BOOK-IN AREA FLOOR PLAN

SHEET BI-E2 - BOOK-IN AREA FLOOR PLAN

SHEET BI-E3 - ARRAIGNMENT AREA FLOOR PLAN

SHEET BI-E4 - SAFETY VESTIBULE AREA

SHEET DET-E1 - RECREATION AREA CLUSTER 1

SHEET DET-E2 - RECREATION AREA CLUSTER 1

SHEET DET-E3 - RECREATION AREA CLUSTER 1

SHEET DET-E4 - RECREATION AREA CLUSTER 1

SHEET DET-E5 - RECREATION AREA CLUSTER 3

SHEET DET-E6 - RECREATION AREA CLUSTER 3

SHEET DET-E7 - RECREATION AREA CLUSTER 3

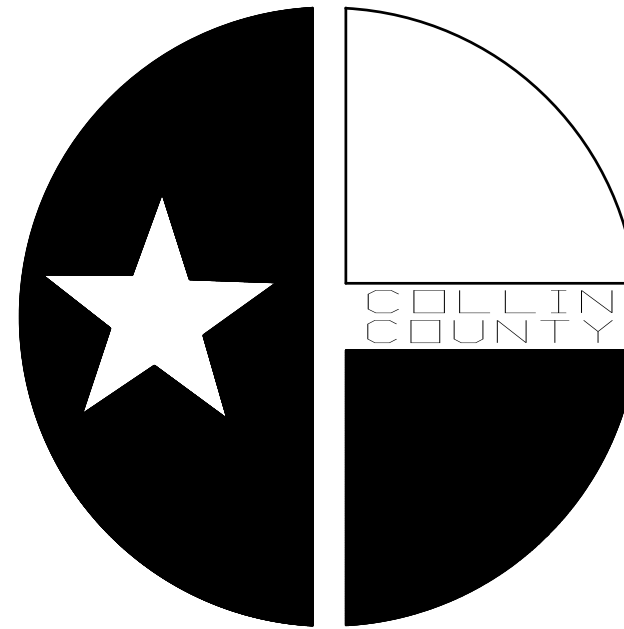
SHEET DET-E8 - RECREATION AREA CLUSTER 3

SHEET DET-E9 - RECREATION AREA CLUSTER 5

SHEET DET-E10 - RECREATION AREA CLUSTER 5

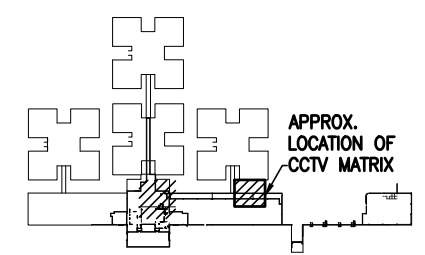
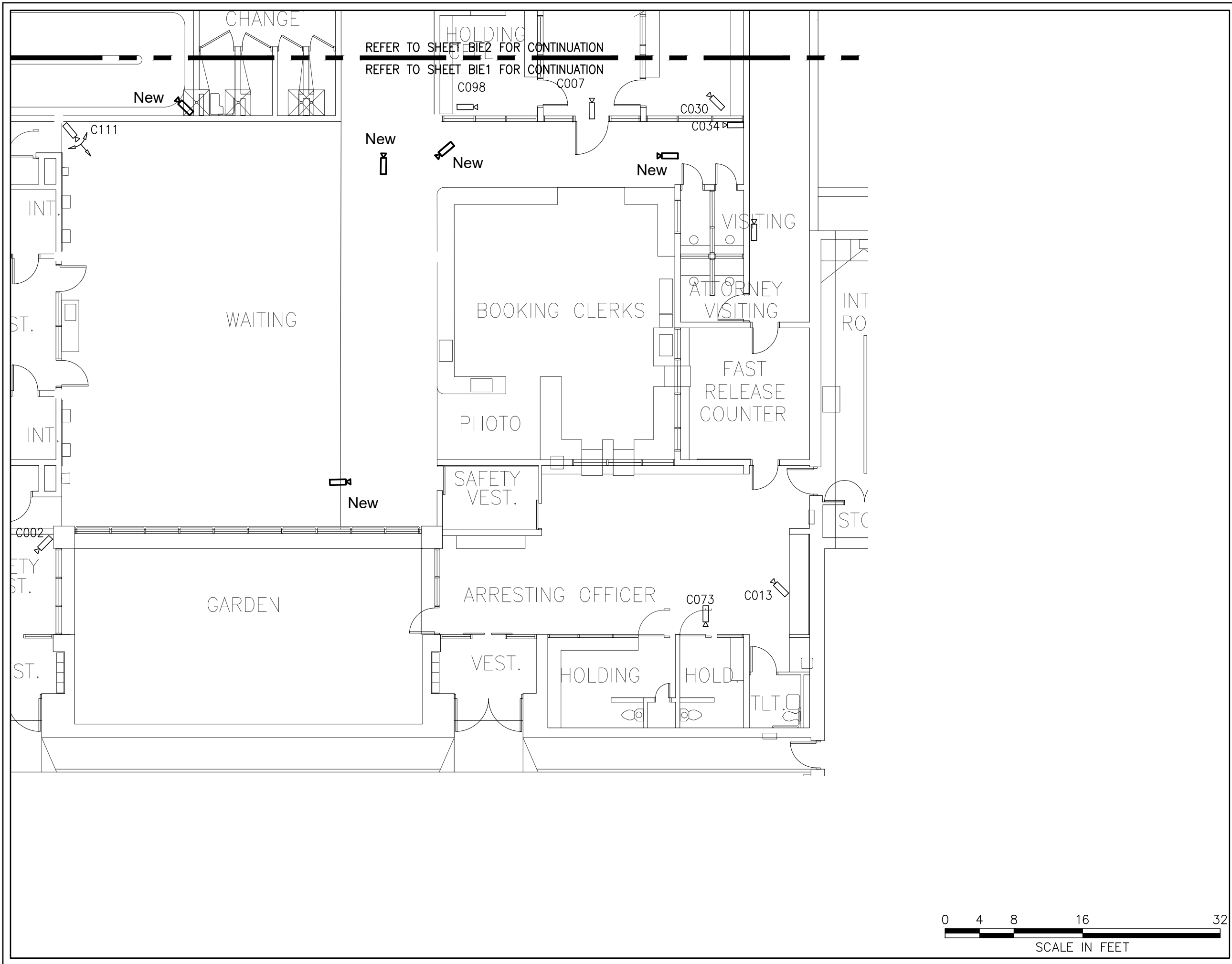
SHEET DET-E11 - RECREATION AREA CLUSTER 5

SHEET DET-E12 - RECREATION AREA CLUSTER 5



# RFP-DRAWING SET COLLIN COUNTY SURVEILLANCE SYSTEMS

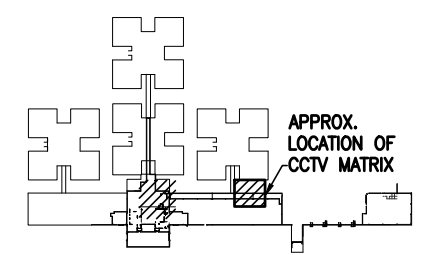
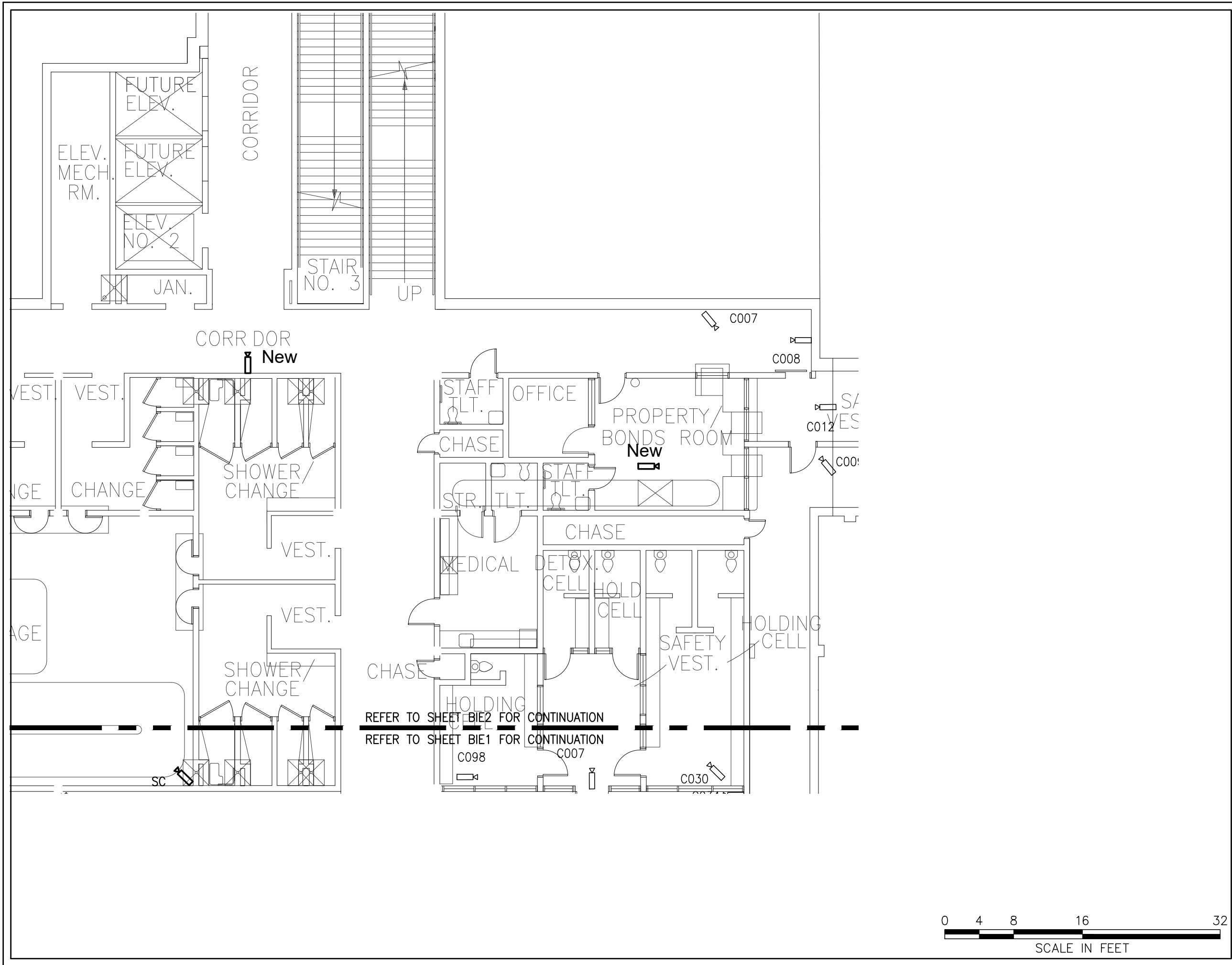
OWNER REP:  
BRAD HARRIS  
BJHARRIS@CO.COLLIN.TX.US



**KEY PLAN**

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<b>BI-E1</b> Sheet Number

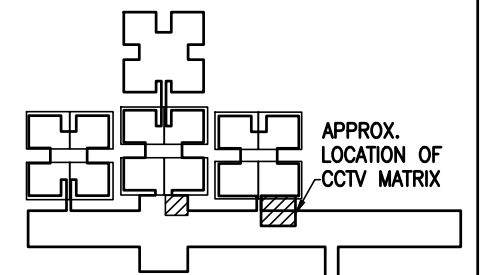
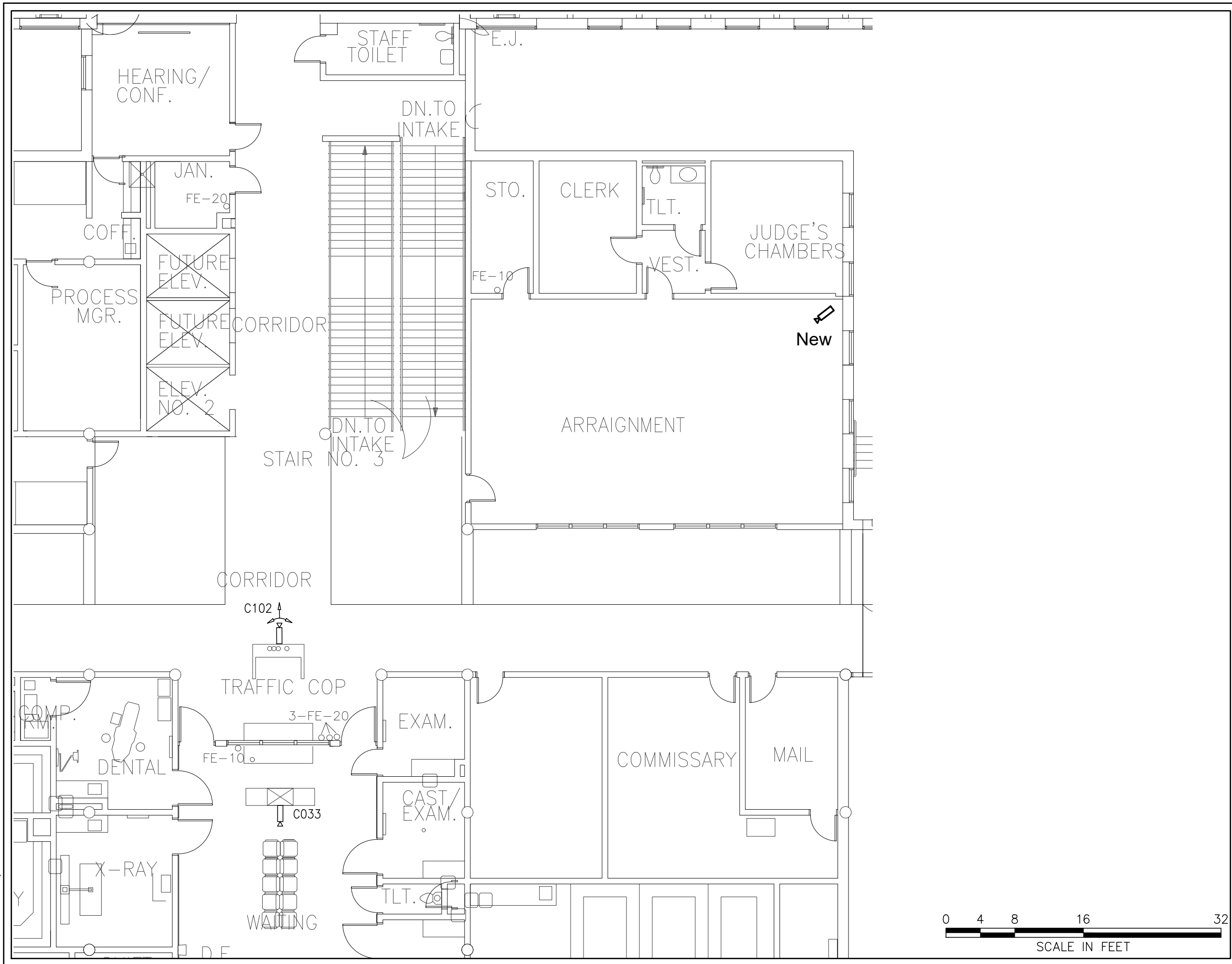




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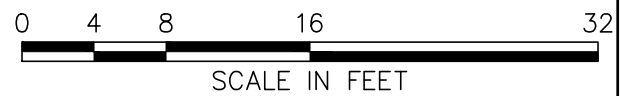
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<b>BI-E2</b>
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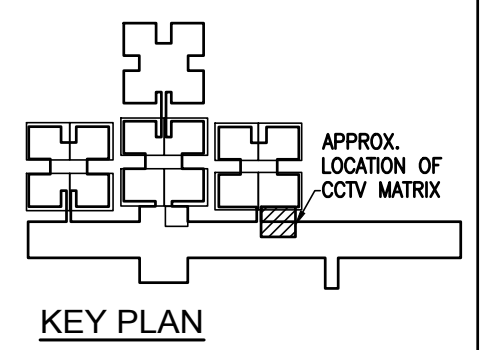
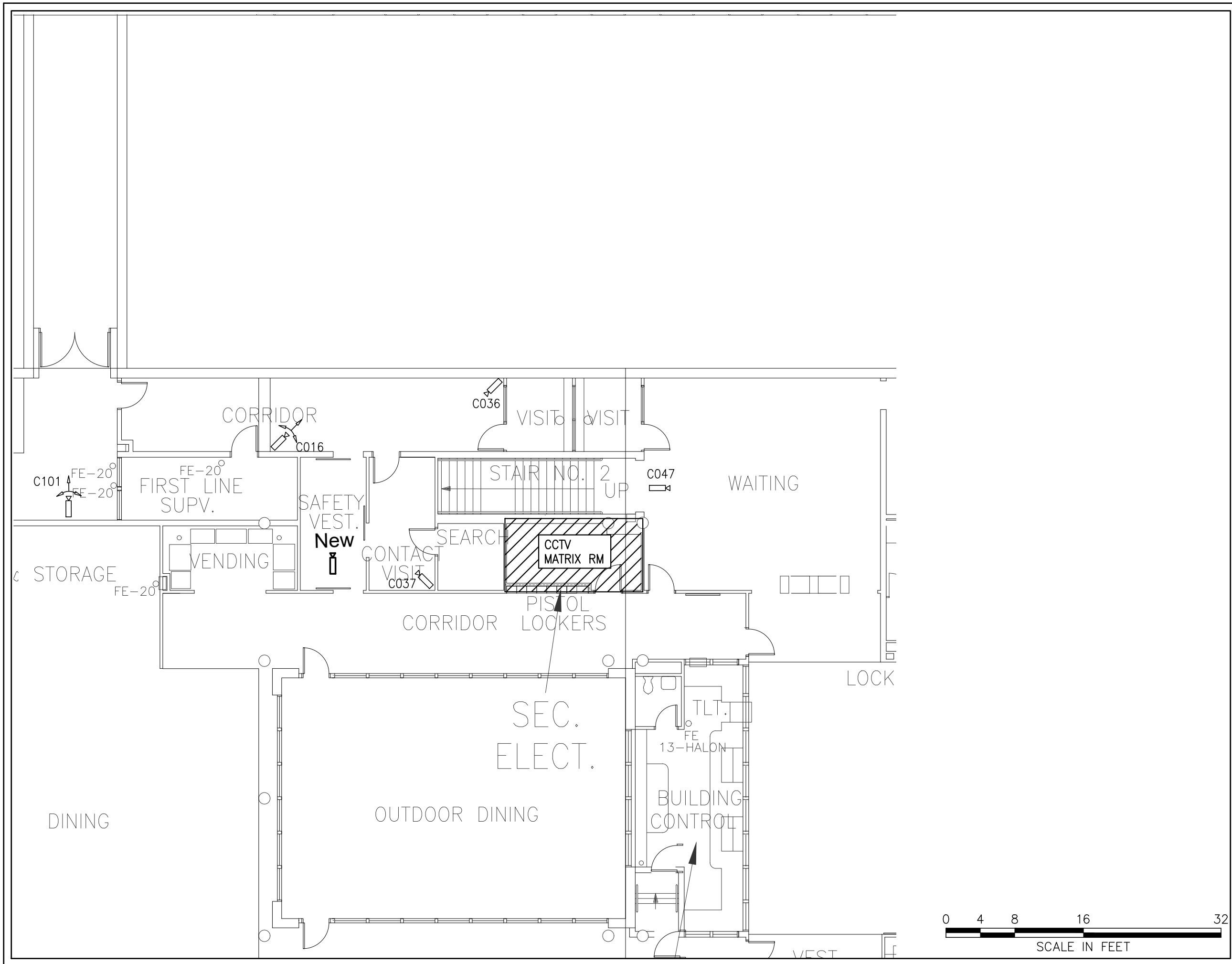




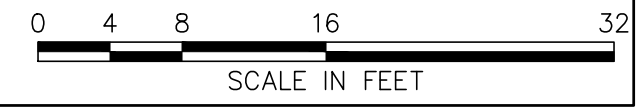
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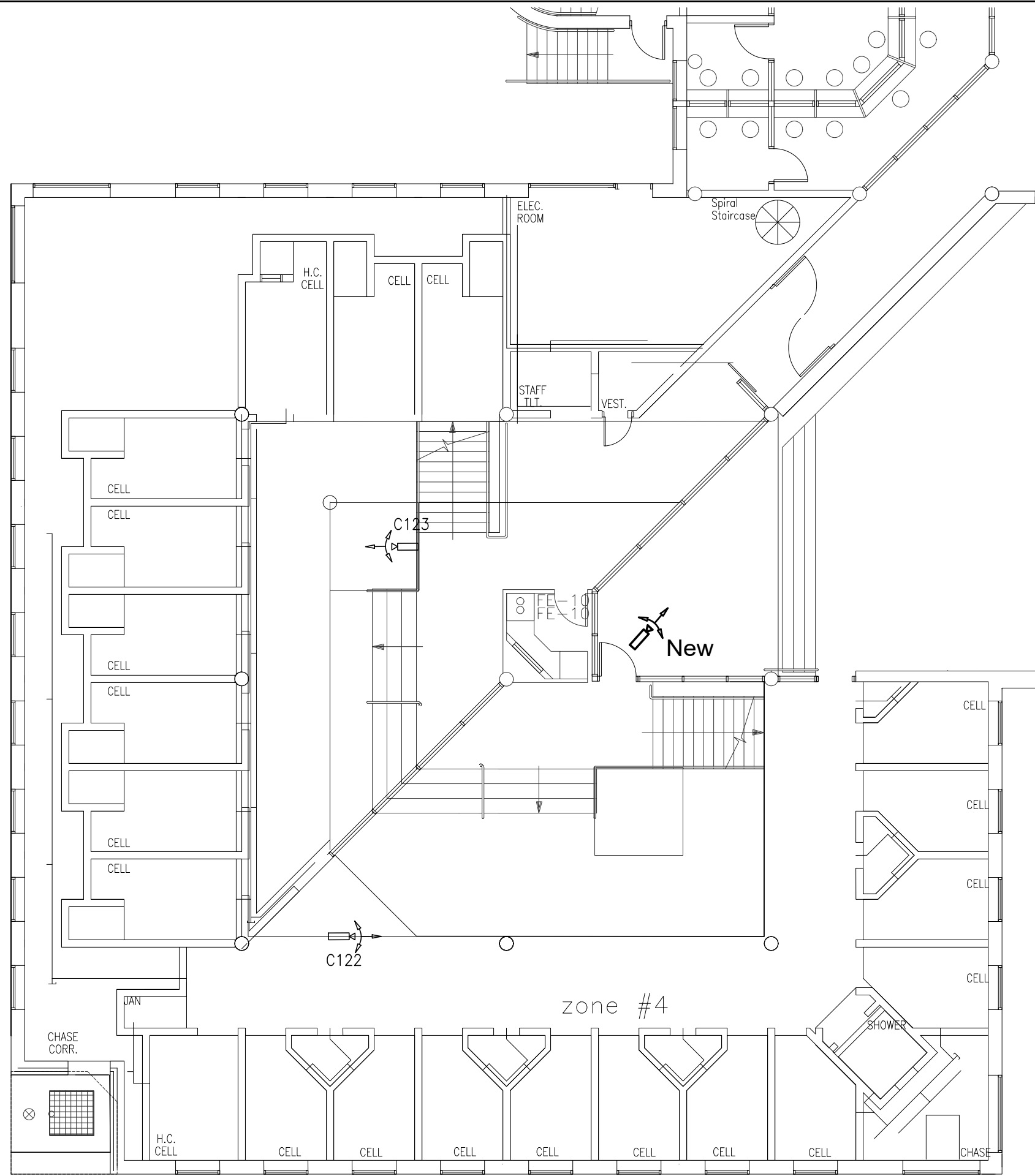
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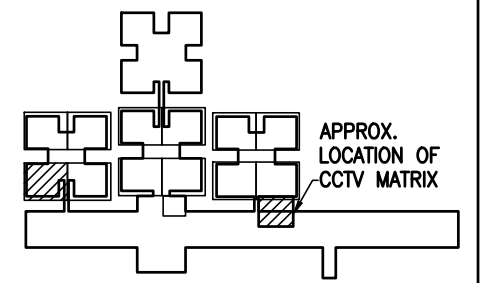


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SEC.  
ELECTRONICS



**KEY PLAN**

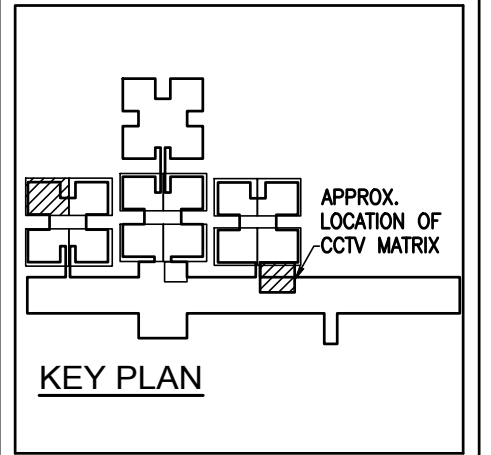
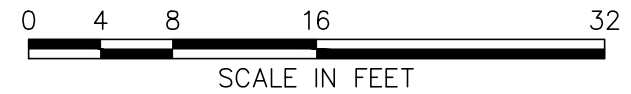
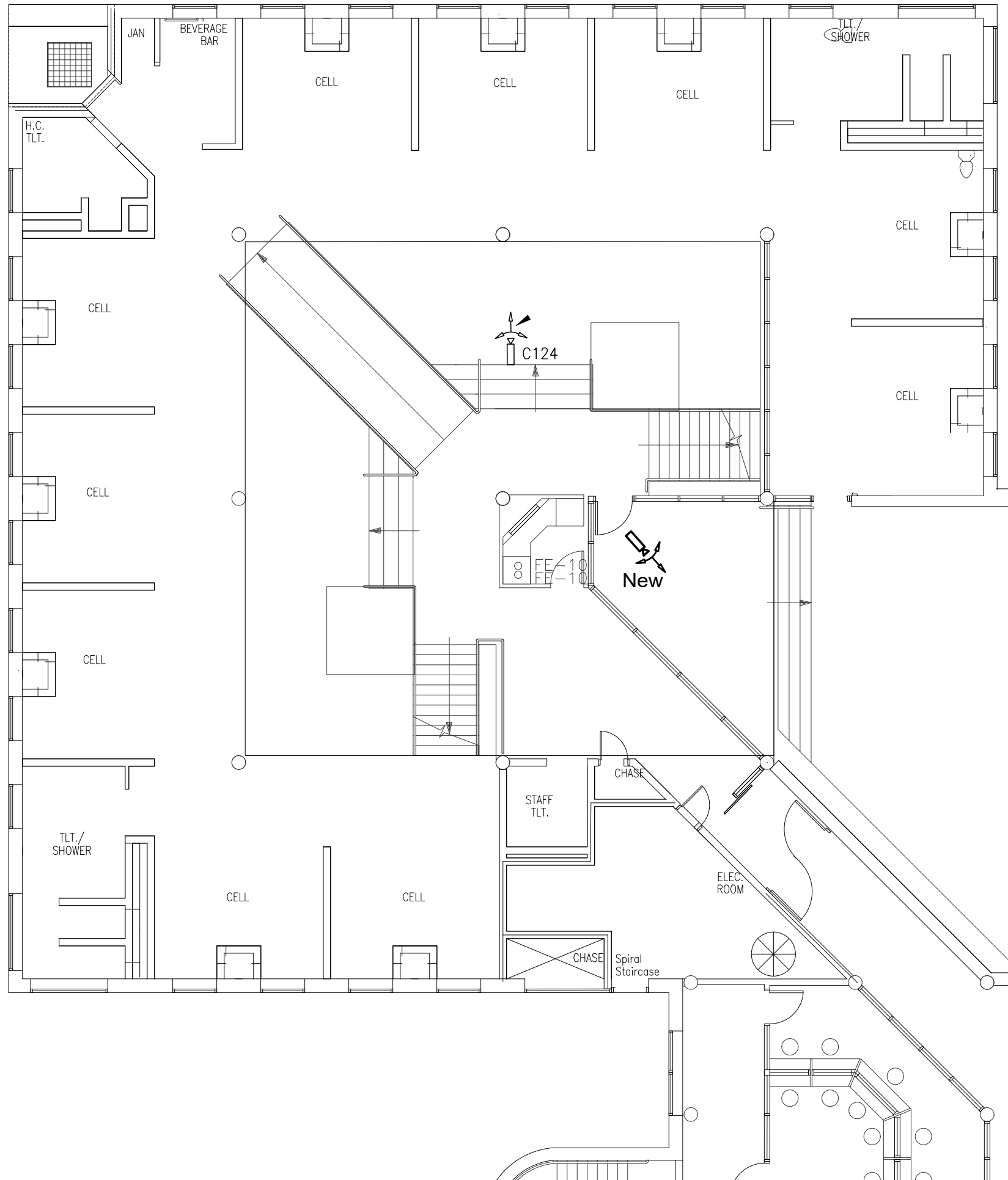
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**RECREATION AREA  
 CLUSTER 5  
 FIRST FLOOR PLAN**

**DET-E1**

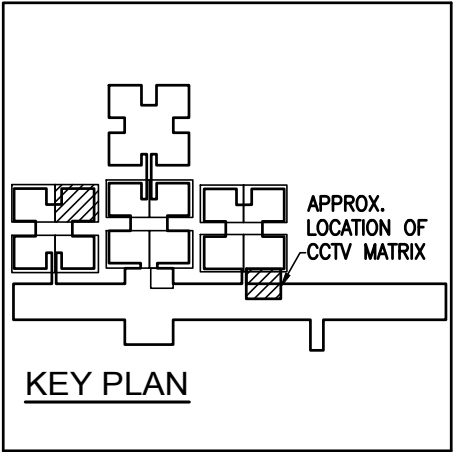
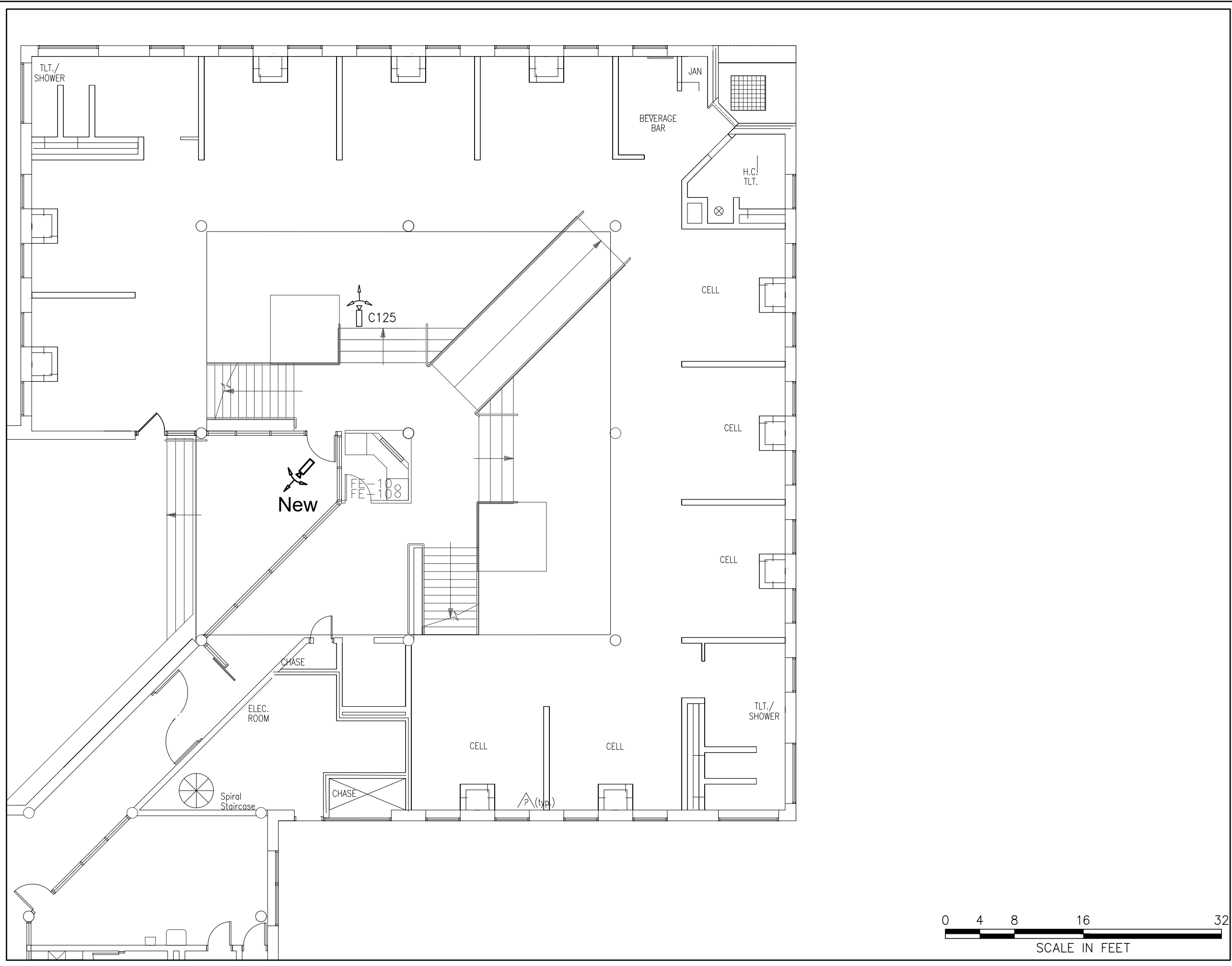
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Checked By: BH  
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 Sheet Title  
**RECREATION AREA  
 CLUSTER 5  
 FIRST FLOOR PLAN**

**DET-E2**  
 Sheet Number

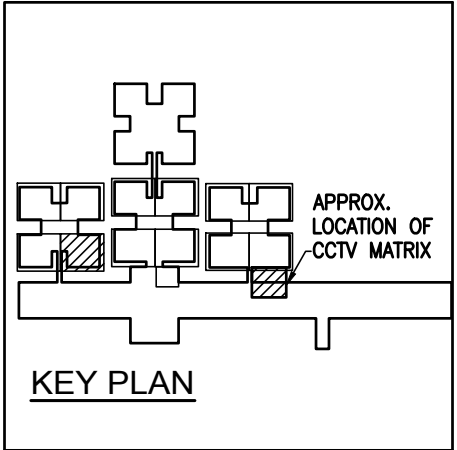
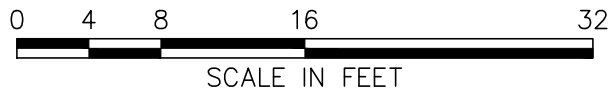
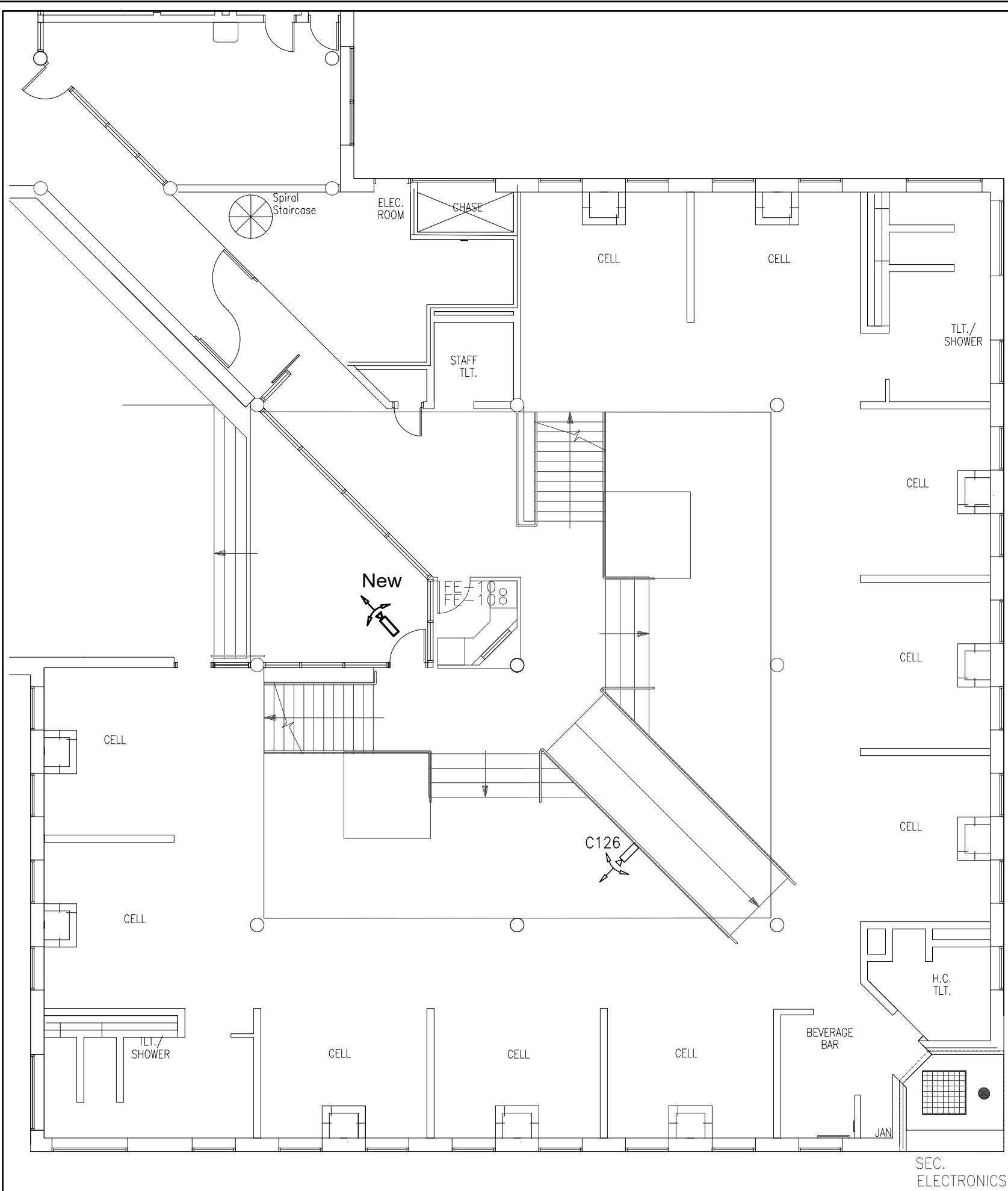




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**RECREATION AREA  
 CLUSTER 5  
 FIRST FLOOR PLAN**

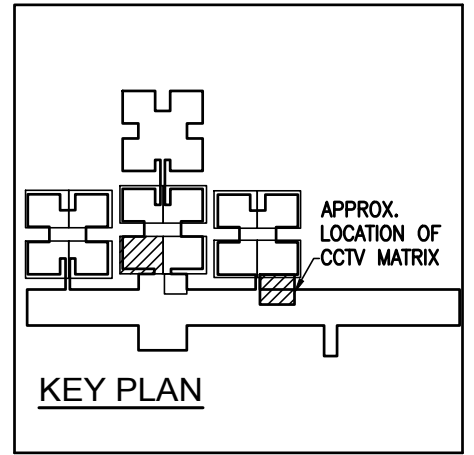
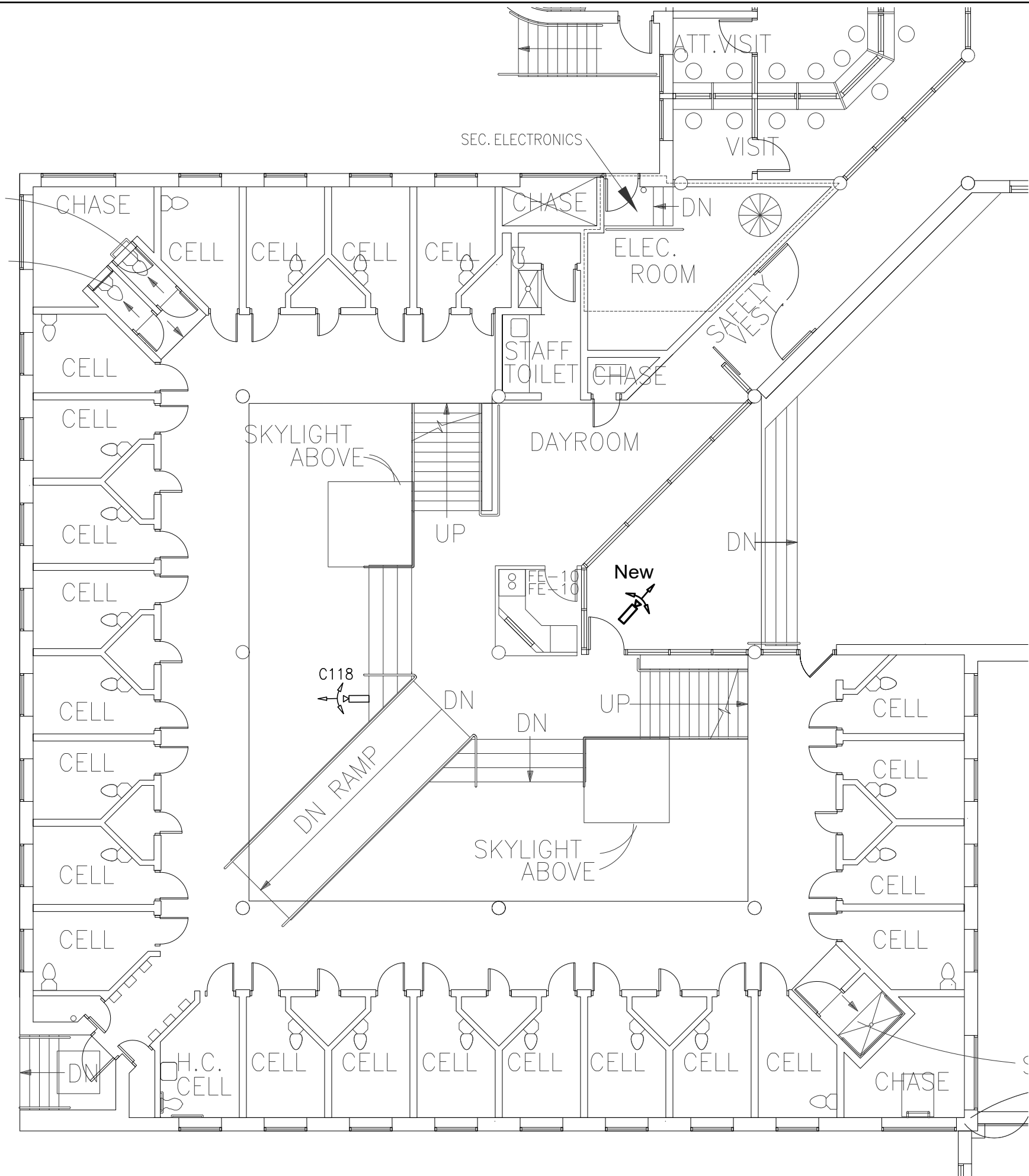
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 Sheet Number





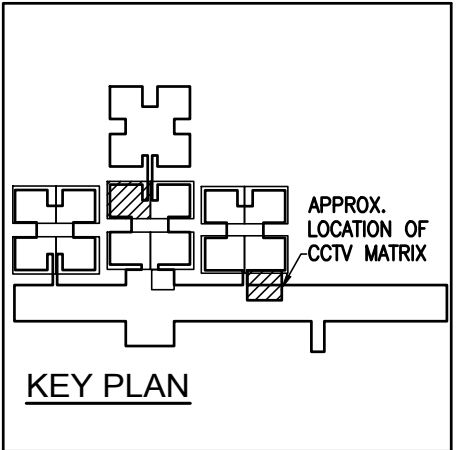
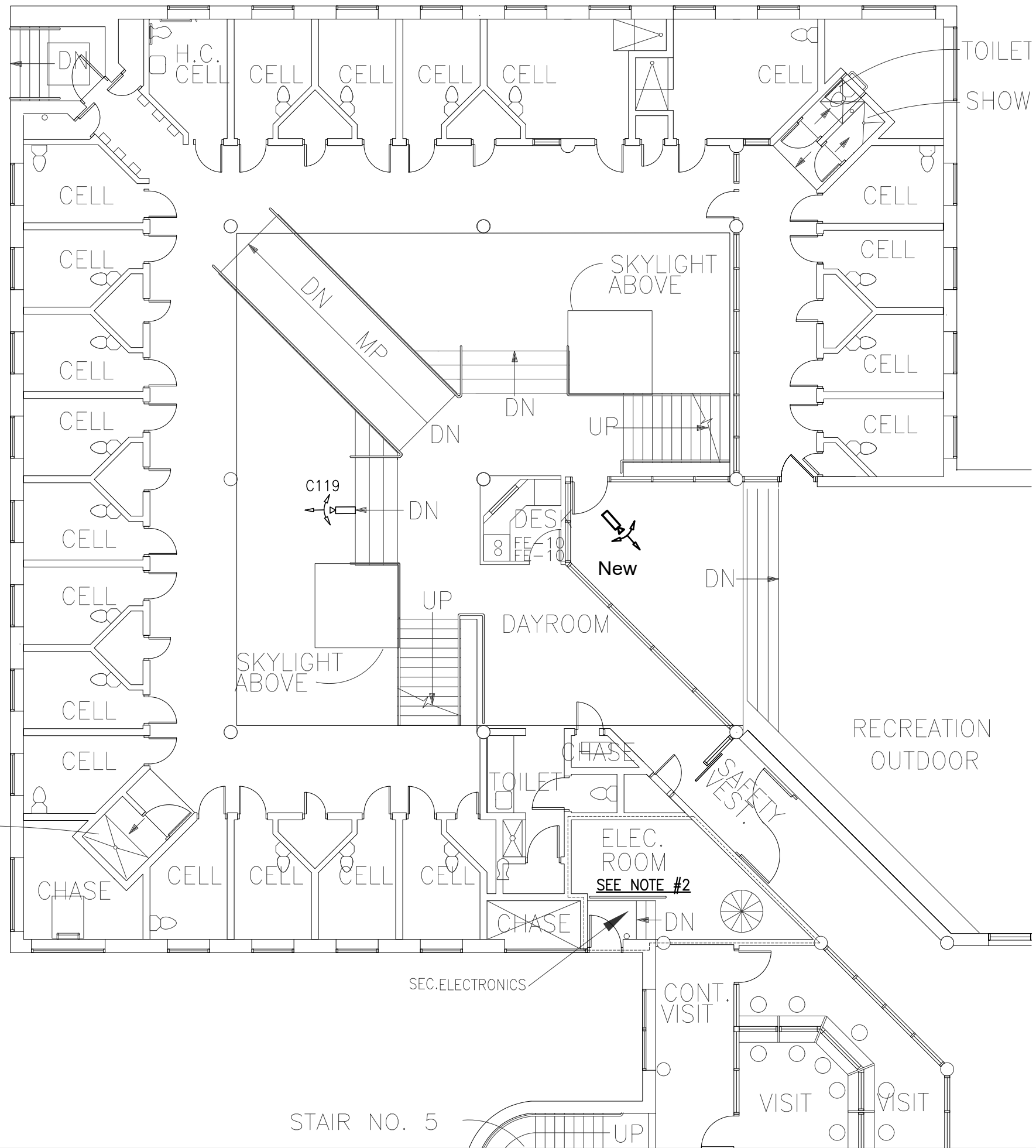
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**RECREATION AREA  
 CLUSTER 5  
 FIRST FLOOR PLAN**

**DET-E4**  
 Sheet Number



Checked By: BH  
 Scale: 3/32"=1'-0"  
 Sheet Title  
 RECREATION AREA  
 CLUSTER 3  
 FIRST FLOOR PLAN

**DET-E5**  
 Sheet Number



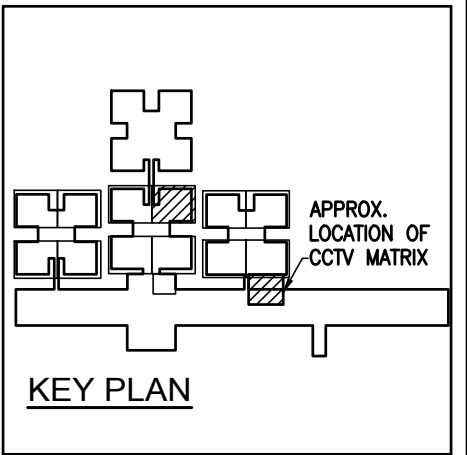
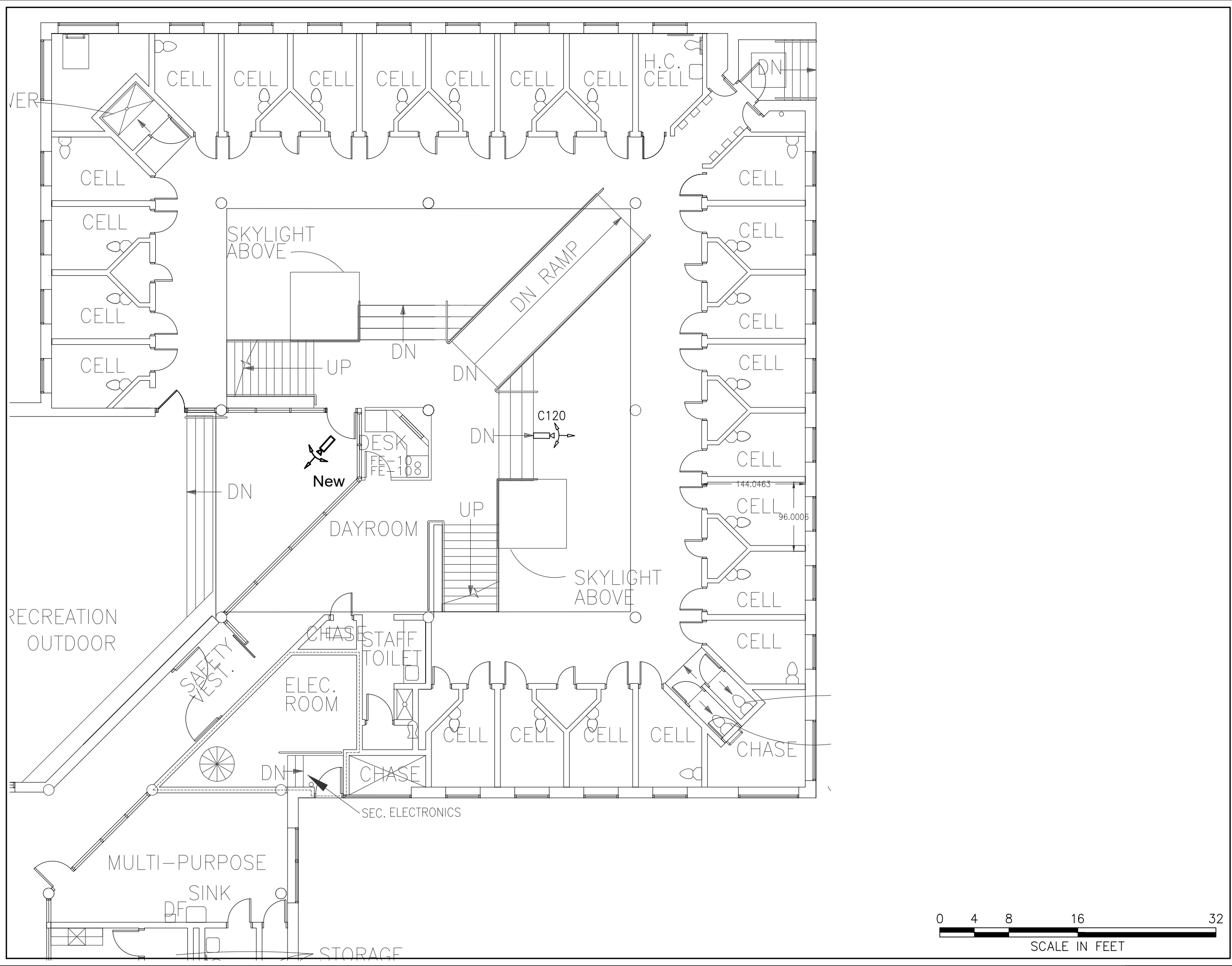
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Sheet Title  
**RECREATION AREA  
 CLUSTER 3  
 FIRST FLOOR PLAN**

**DET-E6**

Sheet Number

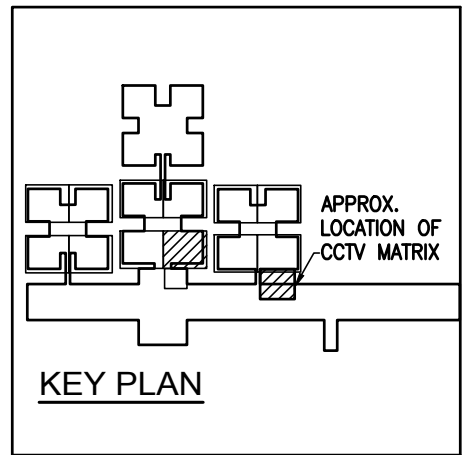
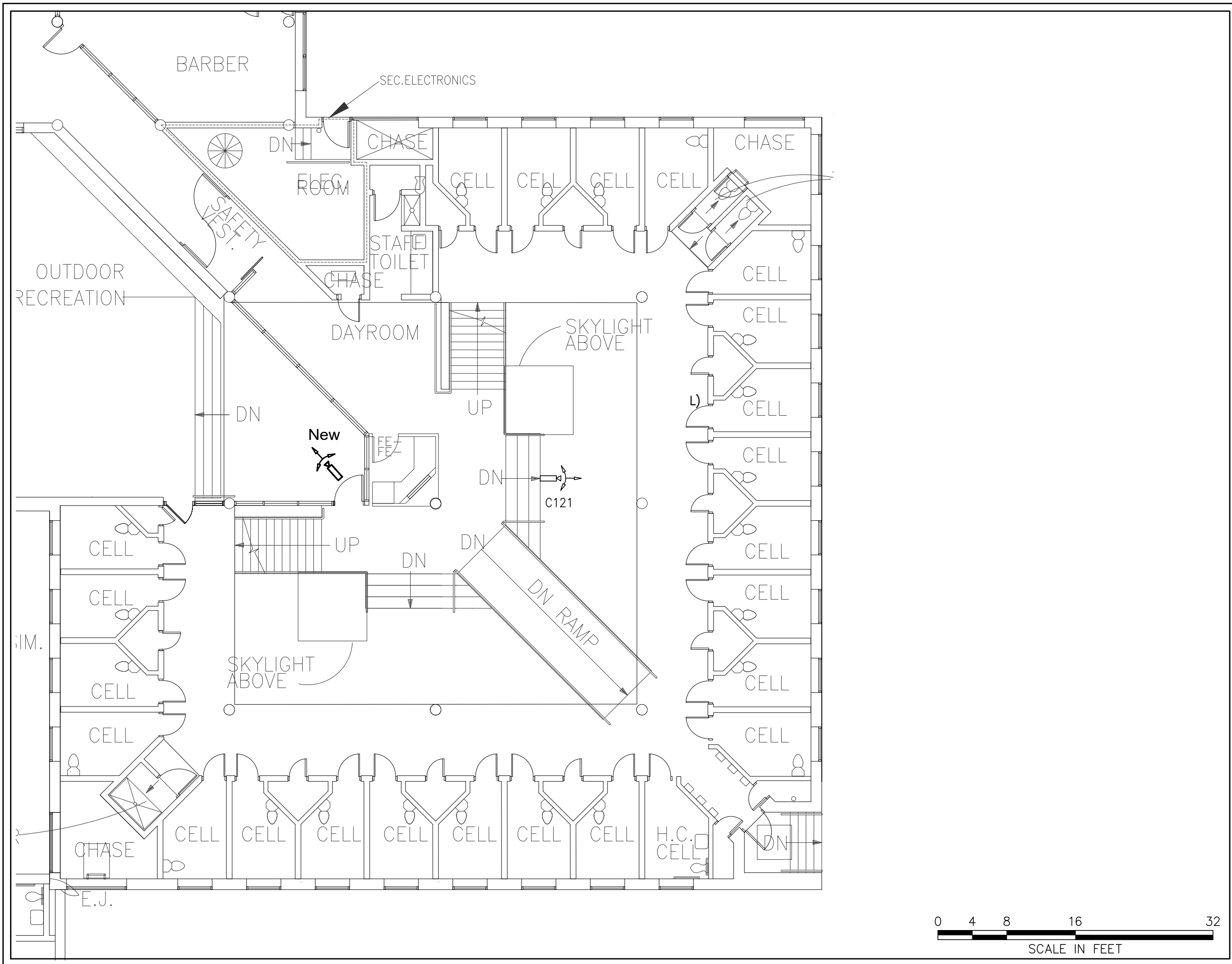


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Sheet Title  
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 CLUSTER 3  
 FIRST FLOOR PLAN**

**DET-E7**  
 Sheet Number

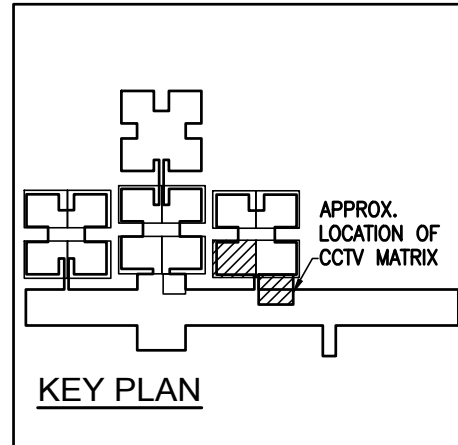
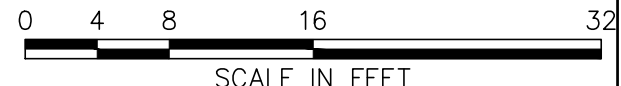
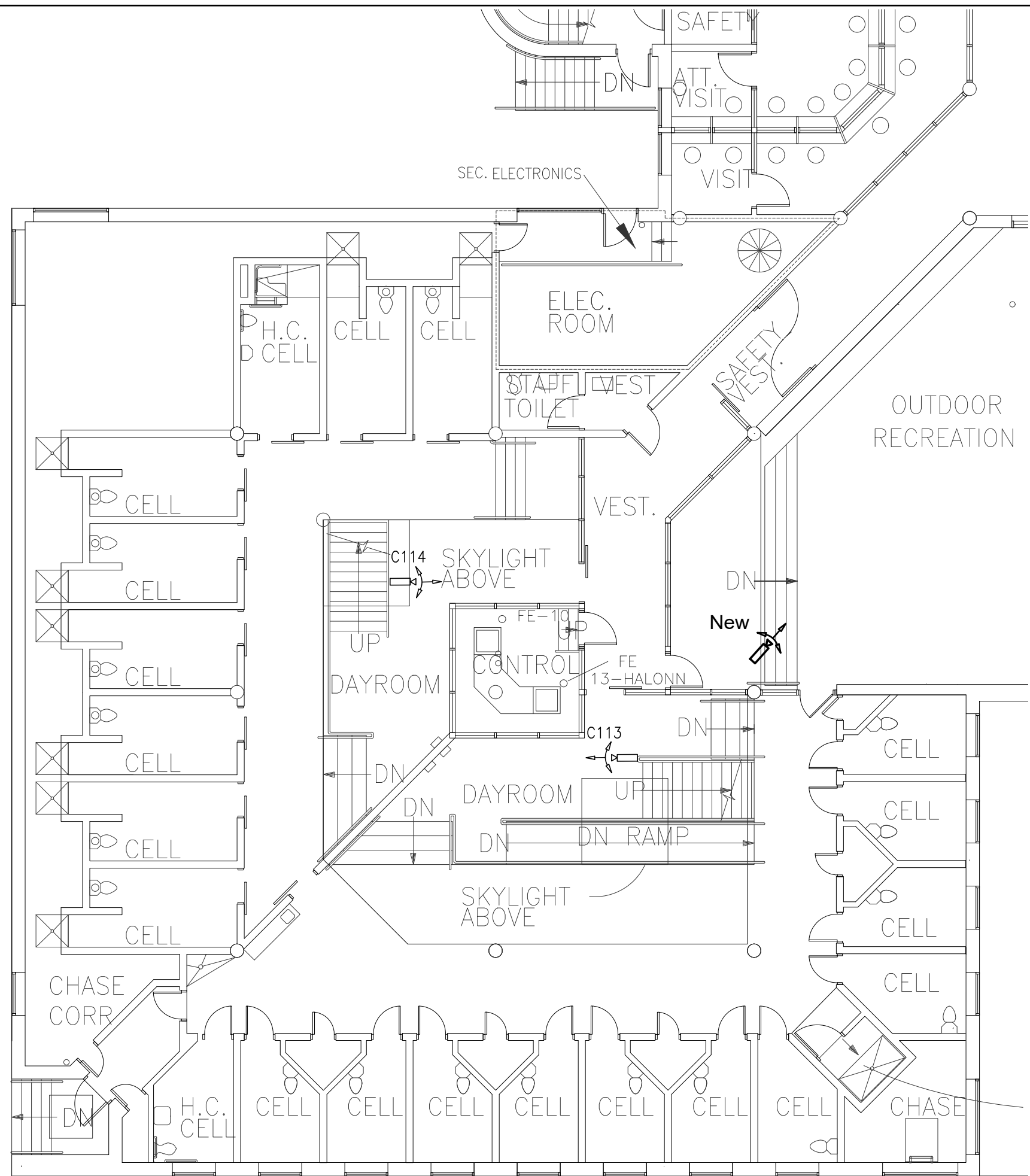




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 CLUSTER 3  
 FIRST FLOOR PLAN**



**DET-E8**  
 Sheet Number

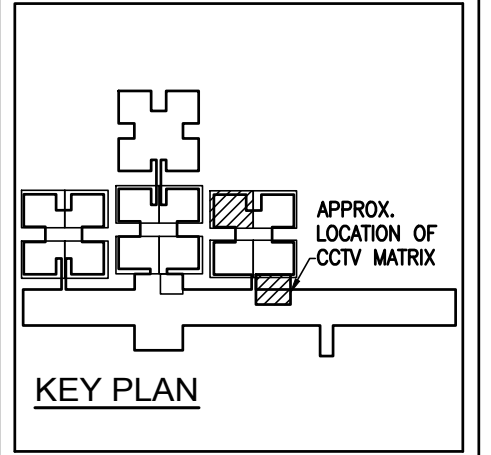
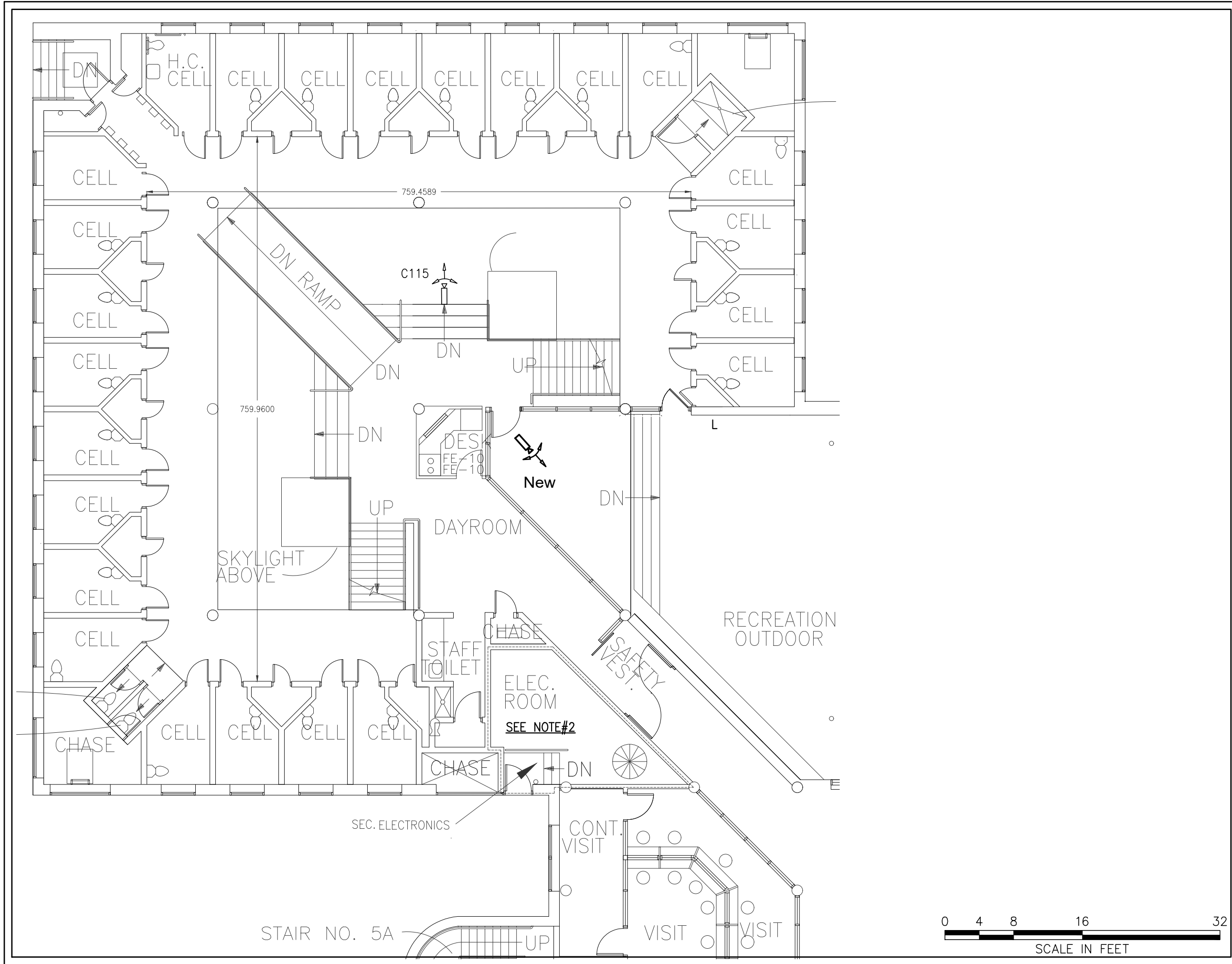


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Sheet Title  
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 CLUSTER 1  
 FIRST FLOOR PLAN**

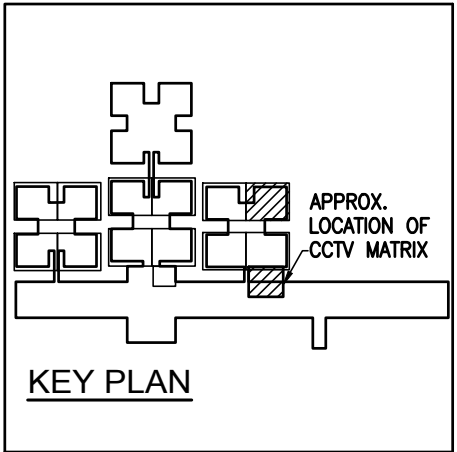
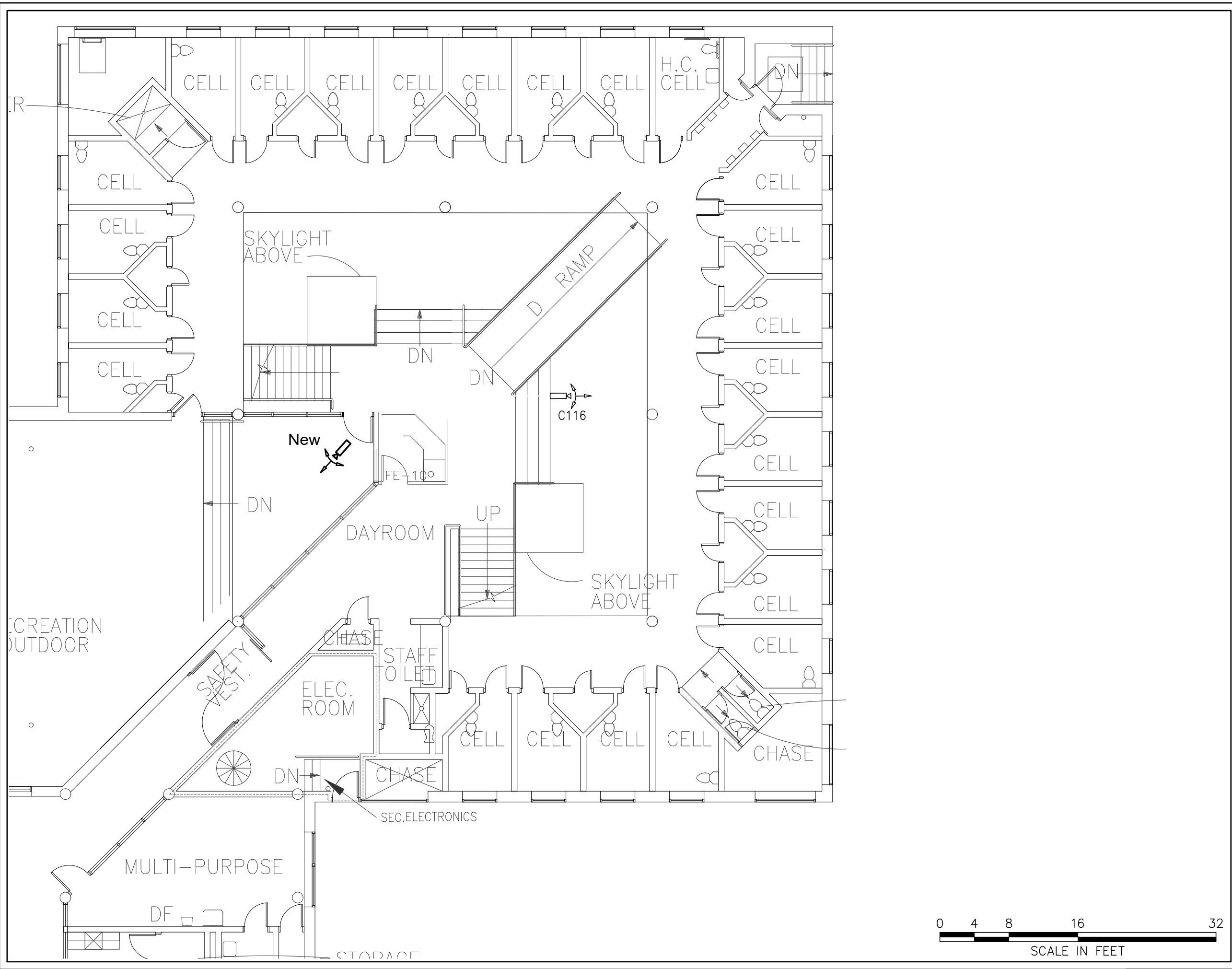
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 Sheet Number



Checked By: BH
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Sheet Title RECREATION AREA CLUSTER 1 FIRST FLOOR PLAN
<b>DET-E10</b>
Sheet Number





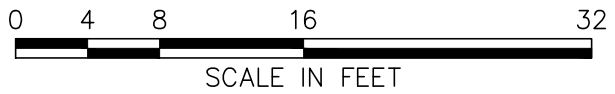


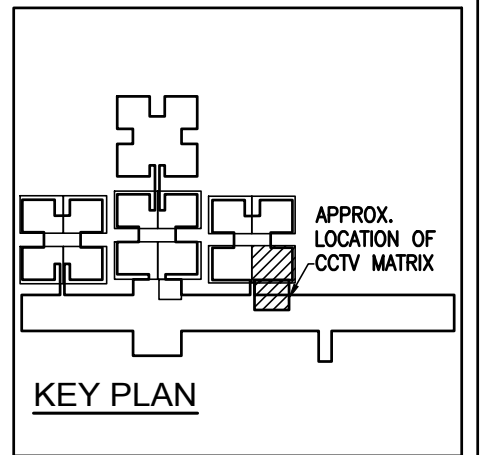
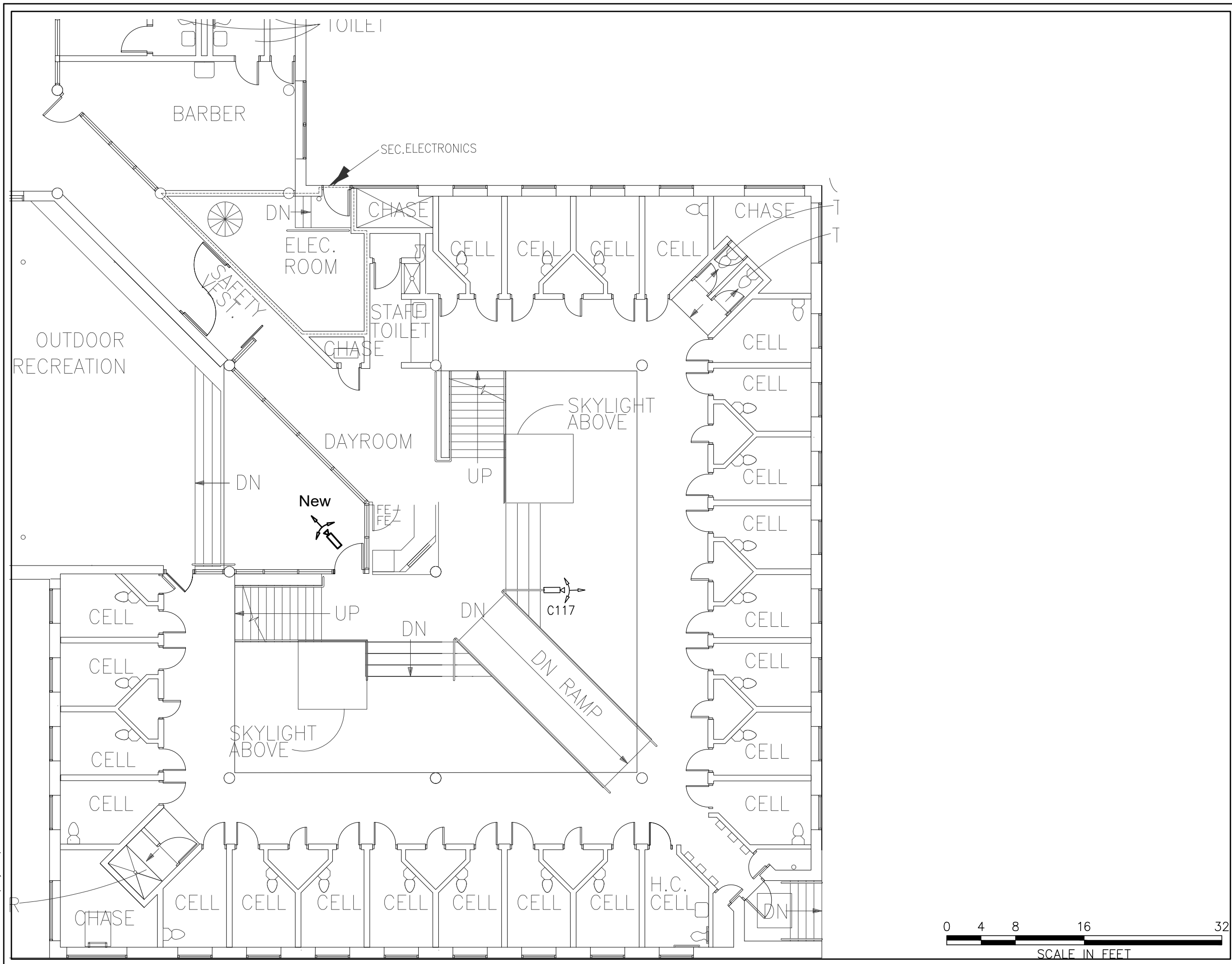
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Sheet Title  
**RECREATION AREA  
 CLUSTER 1  
 FIRST FLOOR PLAN**

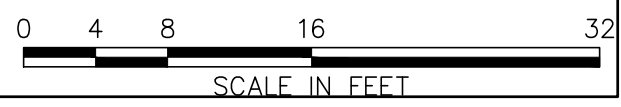
**DET-E11**

Sheet Number





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Scale:
Sheet Title RECREATION AREA CLUSTER 1 FIRST FLOOR PLAN
<b>DET-E12</b>
Sheet Number



# AUTODOME 600 Series Analog PTZ Camera

www.boschsecurity.com



**BOSCH**

Invented for life



- ▶ Choice of 550 TVL 36x or 28x day/night cameras with 12x digital zoom and wide dynamic range
- ▶ Progressive scan provides smooth and clear images when viewing details in a moving image
- ▶ Sodium Vapor White Balance mode restores objects to their original color
- ▶ AutoTrack II automated motion tracking
- ▶ High-impact, heavy-duty, tamper resistant aluminum housing

The AUTODOME 600 Series is an easy to install PTZ camera that delivers superb video in all indoor and outdoor applications. The camera features day/night functionality for high quality images in low light conditions. This discrete, high-speed dome camera ensures reliable, uncompromised functionality in diverse environments across various applications.

### **AUTODOME 600 Series highlights**

The AUTODOME delivers state-of-the-art technology and features that far exceed other PTZ cameras. The cameras achieve a high horizontal resolution of 550 TV lines enabling the reproduction of clear and detailed images.

#### **Wide Dynamic Range**

The AUTODOME features Wide Dynamic Range (WDR) technology that allows for the capture of clear images from both bright and dark areas in the same frame. WDR ensures that bright areas are not saturated and that dark areas are not too dark.

#### **Progressive scan**

The AUTODOME camera is ideally suited for moving imaging applications. The progressive scan technology incorporated into the camera provides smooth and clear images when viewing images from a moving camera.

### **Sodium vapor lamp white balance**

The AUTODOME is an exceptional performer when shooting under a sodium vapor lamp (a street lamp or tunnel lamp, for example). Images under these conditions may have a yellowish tint, which may make identification difficult. In the Sodium Vapor White Balance mode, the AUTODOME automatically compensates for the light from a sodium vapor lamp to restore objects to their original color.

### **System overview**

The AUTODOME 600 Series offers variable pan and tilt speeds, and the AutoPivot feature ensures optimal camera control and viewing at all zoom levels. These high-performance zoom autofocus cameras incorporate the latest digital imaging technology with excellent sensitivity and resolution. With 99 user-defined presets as well as tour and AutoPan modes, The AUTODOME 600 Series is not small on features. The AUTODOME 600 Series adds real intelligence to your video surveillance applications. Equipped with AutoTrack II, Bosch's award-winning motion tracking software, built-in image stabilization, motion detection, and a sophisticated alarm handling "rules"

engine, the AUTODOME 600 Series incorporates advanced, intelligent video features unmatched by any other camera system.

The AUTODOME 600 Series supports standard and optional video and data transmission methods, including Bilinx (over coax and UTP) and fiber optic. Remote control, configuration, and firmware updates can also be performed over these cables, offering you unparalleled control of your cameras. Cable compensation provides extended coaxial and UTP distance runs while preventing the image quality degradation caused by signal losses from long cable lengths.

## Functions

The following are some of the features that make the AUTODOME 600 Series the most flexible PTZ dome camera systems in the security industry.

### High-performance PTZ day/night cameras

Image control and quality are integral aspects of any PTZ dome camera, and the AUTODOME delivers. The AUTODOME 600 Series camera has a 1/4-in. CCD sensor, with 4CIF/D1 resolution and sensitivity to below 1.0 lux and is available with a choice of 28x and the industry-leading 36x optical zoom lens, and all 600 Series systems offer a full 12x digital zoom.

Both camera options provide 550 TVL of horizontal resolution for outstanding clarity and image detail. The cameras also incorporate technology that dramatically improves the dynamic range by 128 times. Also known as WDR (wide-dynamic range), it results in clear image reproduction in extreme high-contrast environments. The AutoScaling (proportional zoom) and AutoPivot (automatically rotates and flips the camera) features ensure optimal control.

Day/night capabilities and outstanding sensitivity make AUTODOME 600 Series cameras exceptional performers in all lighting conditions. In low light, these cameras automatically switch from color to monochrome by removing the IR filter to boost the infrared illumination sensitivity, while maintaining superior image quality. For operation in the darkest conditions, the SensUp control feature automatically reduces the shutter speed to as little as one second. This increases sensitivity by more than 50 times.

### Accurate control and positioning

With super-quick, 360° per-second pan and 100° per-second tilt speeds; the AUTODOME 600 Series outperforms other domes in its class. The 600 Series supports 99 pre-positions and two styles of Guard Tours: Preset and Record/Playback. The preset tour has capability for up to 99 pre-positions with a configurable dwell time between pre-positions, and can be customized as to the order and frequency each preset is visited. The AUTODOME 600 Series also provides support for two recorded tours, which have a combined duration of 15 minutes of movements.

These are recorded macros of an operator's movements, including pan, tilt, and zoom activities, and can be played back in a continuous manner. Supported menu languages include: English, Czech, Dutch, French, German, Italian, Polish, Portuguese, Russian and Spanish.

### AutoTrack II

Bosch introduced the industry's first automated motion tracking system, and now we've made this award-winning technology even better. The AUTODOME 600 Series contains an advanced DSP that provides real-time video processing for incredibly smooth object tracking.

AutoTrack II utilizes Bosch's unique "virtual masking" technology. These "invisible" masks are created to act just like privacy masks, except that only the AutoTrack can see them - and it knows to ignore any motion behind them. This enables the AutoTrack to ignore extraneous background motion, such as a tree blowing in the wind, making it ideal for both indoor and outdoor applications.

### Video motion detection (VMD)

With AUTODOME, you can create a "region of interest" within a preset position where motion is to be detected. The AUTODOME 600 Series supports a total of 10 individual regions of interest (one per pre-position). VMD also takes advantage of virtual masking to ignore areas of unwanted motion.

### Image stabilization

As PTZ cameras continue to improve their optical zoom capabilities, image stabilization becomes critical to eliminate movement caused by unstable camera mounts. A mere quarter-inch of movement of the camera mount can shift the field of view by more than 20 feet when the camera is zoomed to a high value. This can render images unusable.

Image stabilization algorithms included with the AUTODOME 600 Series reduces camera shake in both the vertical and horizontal axis, resulting in exceptional image clarity (pixel displacement up to +/- 10% for frequencies up to 10 Hz). Bosch's unique image stabilization solution does not reduce camera sensitivity, unlike competitive systems.

### Alarm management

The AUTODOME 600 Series takes alarm handling to new levels of flexibility and power.

### Inputs and outputs

The AUTODOME 600 Series can handle seven alarm inputs, two of which are analog inputs that can be programmed for EOLR (End-of-Line Resistor) supervision whenever true security applications require it. These inputs enable the dome to "sense" if the contact is opened or closed and whether the wire has been tampered with (either by being cut or shorted). In addition, the AUTODOME 600 Series supports four outputs: one relay rated at two amps

and three additional open collectors for driving external devices. Each can be programmed individually.

#### Advanced alarm control

The AUTODOME 600 advanced alarm control uses sophisticated rules-based logic to determine how to manage alarms. In its most basic form, a “rule” could define which input(s) should activate which output(s). In a more complex form, inputs and outputs can be combined with pre-defined or user-specified keyboard commands to perform advanced dome functions. There is virtually no limit to the number of combinations that you can program, making the standard software in the dome ready for any application.

#### Superior privacy masking

The AUTODOME 600 Series allows for a total of 24 individual privacy masks, with up to eight displayed in the same scene. Unlike conventional privacy masks, these can each be programmed with three, four, or even five corners to cover more complex shapes. Each mask changes size and shape smoothly and quickly - ensuring that the covered object cannot be seen. You also have a choice of colors: black, white, and blurred. Blurred comes in handy when privacy is an issue, but determining the presence of motion is still required.

#### Fiber Optic Kit

The VGA-FIBER-AN (multimode) is an analog, fiber optic conversion kit for use with 100 and 600 Series AUTODOMES. This module is a video transmitter/data receiver modules designed to be mounted directly into an AUTODOME power supply box.

#### Ease of installation and servicing

The AUTODOME 600 Series has been designed for quick and easy installation; a key feature from Bosch CCTV products. All housings feature recessed screws and latches for increased tamper resistance. AUTODOME in-ceiling housings provide IP54 protection (with an optional kit) and are rated IK 8 (IEC 62262). These housings feature an impact-resistant polycarbonate rugged bubble to protect your camera from vandalism. The rugged bubble can withstand impacts equivalent to a 4.5 kg (10 lb) weight dropped from a height of 3 m (10 ft). AUTODOME pendant housings (indoor and outdoor) are rated to provide IP 66 protection and come fully assembled with a sunshield and ready for wall or pipe applications with the proper mounting hardware (purchased separately). In addition, the pendant housing comes equipped with a low-impact, high-resolution acrylic bubble for enhanced image clarity. Outdoor Pendant housings provide an operating temperature range down to -40°C (-40°F).

**Note:** Bosch offers a full complement of hardware and accessories (as a separate purchase) for corner, mast, roof, pipe, and in-ceiling applications, which allow the AUTODOME to be easily adapted to individual site requirements.

#### Easy upgrades

Bosch’s innovative software, the Configuration Tool for Imaging Devices (CTFID), allows operators or technicians to control the PTZ, change camera settings, and even update firmware from virtually anywhere without need for additional wiring. The AUTODOME 600 Series has advanced built-in diagnostics to simplify service and minimize downtime. Using the On Screen Display (OSD), a technician can quickly and easily check critical parameters (such as internal temperature and input voltage level) to verify that the dome is functioning within acceptable operating limits. If video is not present, a local inspection of three diagnostic LEDs at the camera site can identify the presence of video and control data.

#### Certifications and approvals

Electromagnetic Compatibility (EMC)	Complies with FCC Part 15, ICES-003, and CE regulations, including EN50130-4
Product Safety	Complies with CE regulations, UL, CSA, EN, and IEC Standards
Environmental	In-ceiling: IP54 (with optional VGA-IP54K-IC kit), Plenum rated Pendant: IP66
Impact Resistance	In-ceiling: IK 8

Region	Regulatory compliance/quality marks	
Europe	CE	US-17014-UL (Declaration of Conformity)
USA	UL	UL 60950-1
Canada	CSA	CSA C22.2 No. 60950-1-07

#### Technical specifications

##### Camera 36x Day/Night

Imager	1/4 in.-type Exview HAD CCD (progressive scan)	
Effective Picture Elements	PAL: Approx. 440,000; 752(H) x 582(V) NTSC: Approx. 380,000; 768 (H) x 494 (V)	
Lens	36x Zoom (3.4-122.4 mm) F1.6 to F4.5	
Zoom Movement Speed	NTSC	PAL
• Optical WIDE / Optical TELE - Focus Tracking ON	4.0 sec.	4.0 sec.
• Optical WIDE / Optical TELE - Focus Tracking OFF	2.7 sec.	2.7 sec.

• Optical WIDE / Digital TELE	6.0 sec.	6.2 sec.
• Digital WIDE / Digital TELE	2.1 sec.	2.3 sec.
Focus	Automatic with manual override	
Iris	Automatic with manual override	
Field of View	1.7° to 57.8°	
Video Output	1.0 Vp-p, 75 Ohm	
Gain Control	Auto/Manual/Max. (-3 dB to 28 dB, 2 dB steps)	
Aperture Correction	Horizontal and vertical	
Digital Zoom	12x	
Horizontal Resolution	550 TVL (NTSC, PAL) typical	
Synchronization	Line-Lock (-120° to 120° vertical phase adjust) or internal crystal	
<b>Sensitivity (typical)<sup>1</sup></b>	<b>30 IRE</b>	<b>50 IRE</b>
<b>Day Mode</b>		
SensUp Off	0.66 lux	1.4 lux
SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.04 lux	0.1 lux
<b>Night Mode</b>		
SensUp Off	0.104 lux	0.209 lux
SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.0052 lux	0.0103 lux
Electronic Shutter Speed	1/1 to 1/10,000 sec., 22 steps	
Wide Dynamic Range (WDR)	92 dB (50 dB with WDR Off)	
Signal-to-Noise Ratio (SNR)	>50 dB	
White Balance	2000 K to 10,000 K	

1. Unless otherwise stated, test conditions are: F1.6; shutter = NTSC 1/60s, PAL 1/50s; max AGC; no bubble. Clear bubble adds 0.09 f-stop loss (90% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission).

### Camera 28x Day/Night

Imager	1/4 in.-type Exview HAD CCD (progressive scan)	
Effective Picture Elements	NTSC: 380,000 PAL: 440,000	
Lens	28x Zoom (3.5-98.0 mm) F1.35 to F3.7	
Zoom Movement Speed	NTSC	PAL

• Optical WIDE / Optical TELE - Focus Tracking ON	2.5 sec.	2.5 sec.
• Optical WIDE / Optical TELE - Focus Tracking OFF	1.7 sec.	1.7 sec.
• Optical WIDE / Digital TELE - Focus Tracking ON	4.5 sec.	4.9 sec.
• Optical WIDE / Digital TELE - Focus Tracking OFF	1.7 sec.	1.7 sec.
• Digital WIDE / Digital TELE	2.0 sec.	2.5 sec.
Focus	Automatic with manual override	
Iris	Automatic with manual override	
Field of View	2.1° to 55.8°	
Video Output	1.0 Vp-p, 75 Ohm	
Gain Control	Auto/Manual/Max. (-3 dB to 28 dB, 2 dB steps)	
Aperture Correction	Horizontal and vertical	
Digital Zoom	12x	
Horizontal Resolution	550 TVL	
Synchronization	Line-Lock (-120° to 120° vertical phase adjust) or internal crystal	
<b>Sensitivity (typical)<sup>2</sup></b>	<b>30 IRE</b>	<b>50 IRE</b>
<b>Day Mode</b>		
SensUp Off	0.33 lux	0.66 lux
SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.02 lux	0.04 lux
<b>Night Mode</b>		
SensUp Off	0.066 lux	0.166 lux
SensUp On (NTSC: 1/4s, 15X; PAL 1/3s, 16.7X)	0.0026 lux	0.0082 lux
Electronic Shutter Speed	1/1 to 1/10,000 sec., 22 steps	
Wide Dynamic Range (WDR)	92 dB (50 dB with WDR Off)	
Signal-to-Noise Ratio (SNR)	>50 dB	
White Balance	2000 K to 10,000 K	

2. Unless otherwise stated, test conditions are: F1.6; shutter = NTSC 1/60s, PAL 1/50s; max AGC; no bubble. Clear bubble adds 0.09 f-stop loss (90% light transmission). Tinted bubble adds 0.47 f-stop loss (60% light transmission).

**Mechanical**

	In-Ceiling	Indoor Pendant	Outdoor Pendant
Pan Range	360° cont.	360° cont.	360° cont.
Tilt Angle	1° above horizon	18° above horizon	18° above horizon
Variable Speed	0.1°/s-120°/s	0.1°/s-120°/s	0.1°/s-120°/s
Pre-position Speed	Pan: 360°/s Tilt: 100°/s	Pan: 360°/s Tilt: 100°/s	Pan: 360°/s Tilt: 100°/s
Preset Accuracy	± 0.1° typ.	± 0.1° typ.	± 0.1° typ.

**Electrical**

	In-Ceiling	Indoor Pendant	Outdoor Pendant
Input Voltage	21-30 VAC 50/60 Hz	21-30 VAC 50/60 Hz	21-30 VAC 50/60 Hz
Power Consumption (typical)	15 W / 27 VA	15 W / 27 VA	51 W / 55 VA <sup>3</sup>

**Surge Suppression**

Protection on Video	Peak current 10 kA (Gas Tube Arrester)
Protection on Biphase	Peak current 10 A, peak power 300 W (8/20 µs)
Protection on RS-232/485	ESD protection ± 15 KV human body model
Protection on Alarm Inputs	Peak current 17 A, peak power 300 W (8/20 µs)
Protection on Alarm Outputs	Peak current 2 A, peak power 300 W (8/20 µs)
Protection on Relay Outputs	Peak current 7.3 A, peak power 600 W (10/1000 µs)
Protection on Power Input (Dome)	Peak current 7.3 A, peak power 600 W (10/1000 µs)
Protection on Power Output (Arm Power Supply)	Peak current 21.4 A, peak power 1500 W (10/1000 µs)

**Fiber Optic Kits**

VGA-FIBER-AN	
Description	Multimode Fiber Optic Module
Compatible Receiver	LTC 4629 Series

Optical Fiber Compatibility	50/125 µm, 62.5/125 µm, low loss multimode glass fiber, rated for a minimum system bandwidth of 20 MHz
Max. Distance	4.0 km (2.5 miles)
Optical Budget	14 dB
Connector	One (1) ST connector
Wavelength (video/data)	850 nm / 1310 nm

**Miscellaneous**

Sectors/Titling	16 independent sectors with 20-character titles/sector
Masking	24 individually configurable privacy masks
Pre-positions	99, each with 20-character titles
Camera Setup/Control	Biphase, RS-232, RS-485, Bilinx (coax)
Communications Protocols	Biphase, Bilinx, Pelco P, and Pelco D
Guard Tours	Two (2) types of tours: <ul style="list-style-type: none"> <li>Recorded tours - two (2), total duration 15 minutes</li> <li>Preset tour - one (1), consisting of up to 99 scenes, consecutively and (1) customized up to 99 scenes</li> </ul>
Supported Languages	English, Czech, Dutch, French, German, Italian, Polish, Portuguese, Russian and Spanish

**Cable Compensation**

Max Distance	With Pre-comp OFF	With Pre-comp ON
RG-59/U	1000 ft (300 m)	2000 ft (600 m)
RG-6/U	1500 ft (450 m)	3000 ft (900 m)
RG-11/U	2000 ft (600 m)	4000 ft (1200 m)
Cat 5/UTP (Passive receiver)	750 ft (225 m)	1500 ft (450 m)

**User Connections**

Power, Camera	21-30 VAC, 50/60 Hz
Power, Heater	21-30 VAC, 50/60 Hz
Control Data	Biphase ± RS-232 RX/TX or RS-485 ± - optional control data (dip switch selectable)
Video	BNC/UTP
Audio Line In	9 K Ohm typ, 5.5 Vp-p max

EOLR Alarm Inputs (2)	Programmable for “normally open”, “normally closed”, “normally open-supervised”, “normally closed-supervised”
Alarm Inputs (5)	Programmable for “normally open” or “normally closed”
Relay Out (1)	Dry contact output rating: 2 A @ 30 VAC
Open Collector Outputs (3)	32 VDC@150 ma max.

### Environmental

	In-Ceiling	Indoor Pendant	Outdoor Pendant
Design Rating	IP54, <sup>4</sup> Plenum rated	IP66 <sup>5</sup>	IP66 <sup>5</sup>
Operating Temp.	-10°C to 40°C (14°F to 104°F)	-10°C to 40°C (14°F to 104°F)	-40°C to 50°C (-40°F to 122°F)
Storage Temp.	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
Humidity	0% to 90% relative, non- condensing	0% to 90% relative, non- condensing	0% to 100% relative, condensing

4. With optional VGA-IP54K-IC kit.

5. Meets requirements for NEMA 4X certification with use of a polycarbonate bubble. Meets requirements for NEMA 4X, except impact test, with use of an acrylic bubble.

### Construction

Dimensions	See dimensional drawings
Weight	
• In-ceiling	2.66 kg (5.86 lb)
• Indoor Pendant	2.88 kg (6.3 lb)
• Outdoor Pendant	3.32 kg (7.3 lb)
Bubble Size	153.1 mm diameter (6.03 in.)
Construction Material	
• Housing	Cast aluminum
• Bubble	Pendant: Acrylic (high-resolution) In-ceiling: Polycarbonate (rugged)
Color	White (RAL 9003)
Standard Finish	Powder coated, sand finish

### Mounts/Accessories

#### Bubbles

##### In-ceiling

Clear rugged polycarbonate	VGA-BUBBLE-CCLR
Tinted rugged polycarbonate	VGA-BUBBLE-CTIR

##### Pendant

Clear rugged polycarbonate	VGA-BUBBLE-PCLR
Tinted rugged polycarbonate	VGA-BUBBLE-PTIR
Clear high-resolution acrylic	VGA-BUBBLE-PCLA
Tinted high-resolution acrylic	VGA-BUBBLE-PTIA

#### Pendant Arm Mounts

Wall Arm (No Transformer)	VG4-A-PA0
Wall Arm (120/230 VAC Transformer)	VG4-A-PA1 / VG4-A-PA2
Pendant Arm with Wiring	VGA-PEND-ARM
Mounting plate for VGA-PEND-ARM	VGA-PEND-WPLATE
Trim skirt for AUTODOME Series Power Supplies	VG4-A-TSKIRT

#### Optional Mounting Plates for Arm Mounts

Corner Mounting Plate	VG4-A-9542
Mast (Pole) Mounting Plate	VG4-A-9541

#### Pendant Pipe Mounts

Pipe Mount Cap	VG4-A-9543
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#### Pendant Roof Mounts

Roof (Parapet) Mount (VG4-A-9543 Pipe Mount Cap required. Available separately.)	VGA-ROOF-MOUNT (1.5-inch NPT tapered male threads)
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#### Optional Mounting Plates for Roof Mounts

Flat Roof Adapter for Parapet Mount	LTC 9230/01
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#### In-ceiling Support Kits

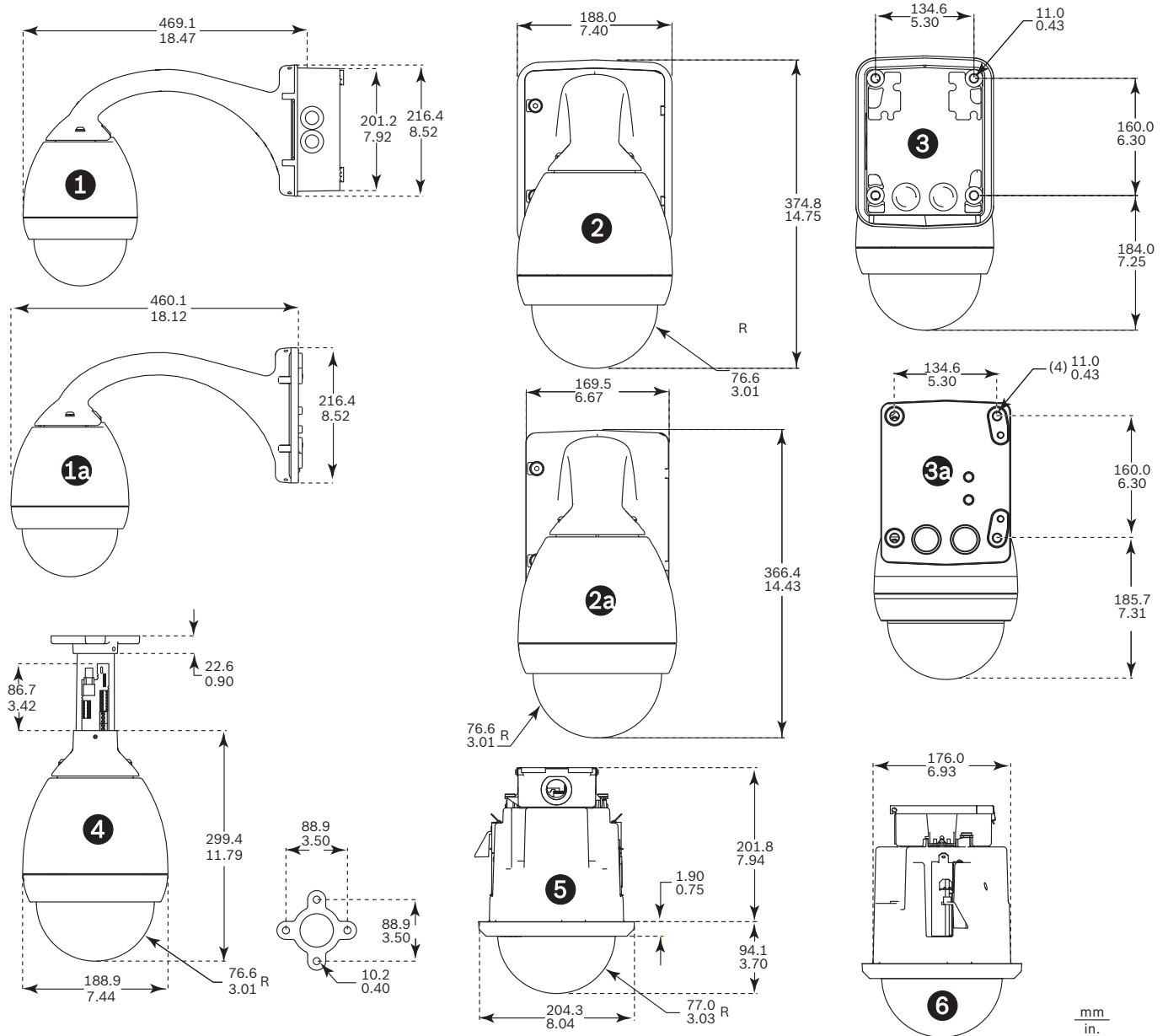
Bracket for suspended or drop ceilings	VGA-IC-SP
Gasket kit for IP54 certification	VGA-IP54K-IC

#### Power Supplies

Outdoor Power Supply Box, no transformer	VG4-A-PSU0
Outdoor Power Supply Box (120/230 VAC Transformer)	VG4-A-PSU1 / VG4-A-PSU2
Fiber Optic Kit	VGA-FIBER-AN



**Dimensions: Indoor AUTODOMES**



**Indoor System Dimensions**

**Reference Description**

- 1 Wall Mount - Side with power supply
- 1a Wall/Mast Mount - Side with VGA-PEND-WPLATE
- 2 Wall Mount - Front with power supply and trim skirt
- 2a Wall Mount - Front with power supply

3 Wall Mount - Back with power supply and trim skirt

3a Wall Mount - Back with power supply

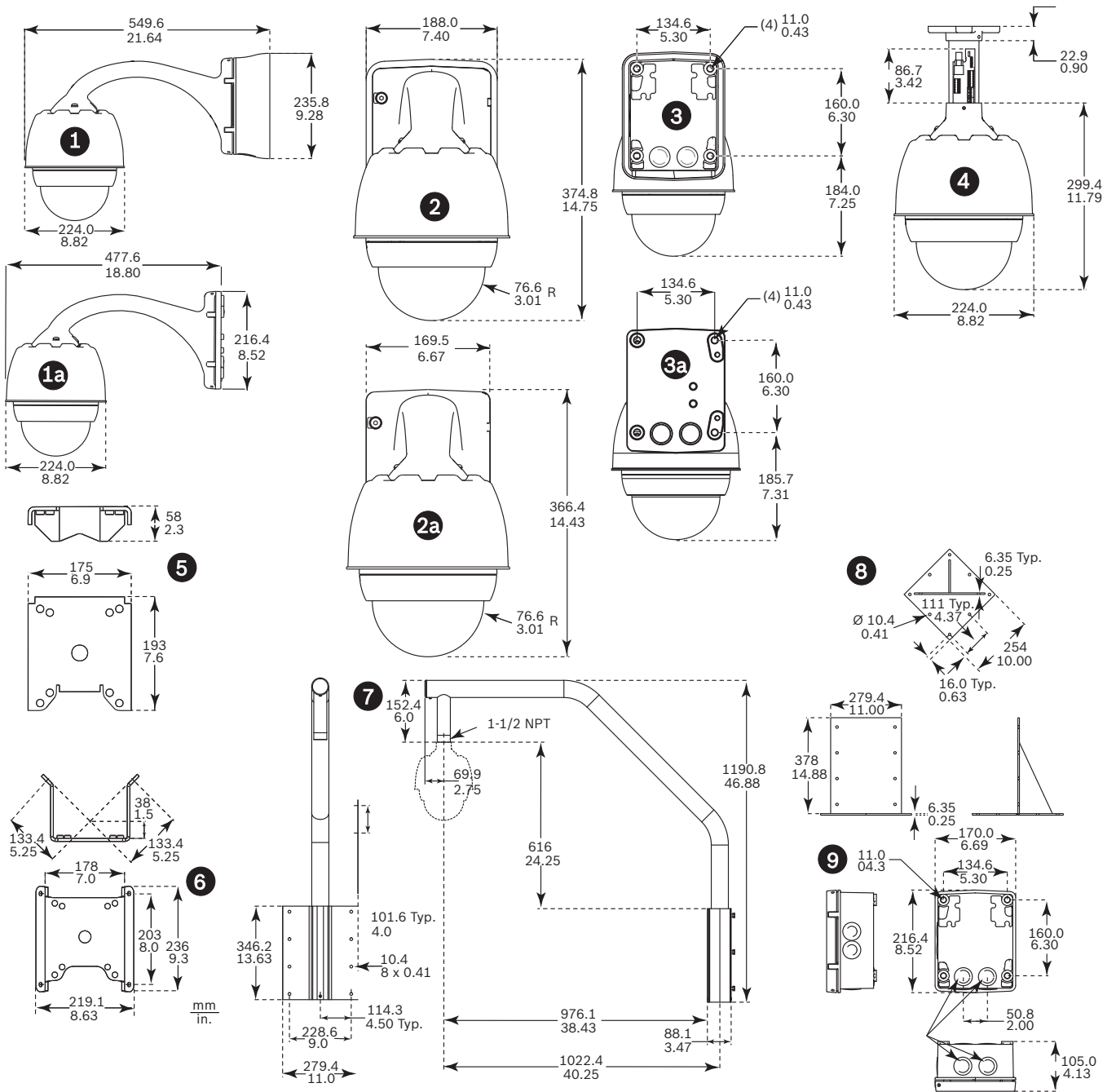
4 Pipe Mount

5 In-ceiling Mount - Front

6 In-ceiling Mount - Side

mm  
in.

**Dimensions: Outdoor AUTODOMES**



**Outdoor System Dimensions**

**Reference**    **Description**

- 1            Wall Mount - Side with power supply and trim skirt
- 1a          Wall/Mast Mount - Side with VGA-PEND-WPLATE
- 2            Wall Mount - Front with power supply and trim skirt
- 2a          Wall Mount - Front with power supply
- 3            Wall Mount - Back with power supply and trim skirt
- 3a          Wall Mount - Back with power supply

- 4            Pipe Mount
- 5            Mast Mount
- 6            Corner Mount
- 7            Roof Mount
- 8            Roof Mount Adapter
- 9            Power Supply for Pipe and Roof Mounts

### Ordering information

**VG5-613-CCS G5 600 28X DN STD INCEIL CLEAR, PAL**  
Analog 28x PAL camera, in-ceiling housing with a clear polycarbonate bubble  
Order number **VG5-613-CCS**

**VG5-623-CTS G5 600 28X DN STD INCEIL TINT, NTSC**  
Analog 28x NTSC camera, in-ceiling housing with a tinted polycarbonate bubble  
Order number **VG5-623-CTS**

**VG5-613-ECS G5 600 28X DN STD OUTDR PEND CLEAR PAL**  
Analog 28x PAL camera, outdoor pendant housing with a clear acrylic bubble  
Order number **VG5-613-ECS**

**VG5-613-PCS G5 600 28X DN STD INDR PEND CLEAR PAL**  
Analog 28x PAL camera, indoor pendant housing with a clear acrylic bubble  
Order number **VG5-613-PCS**

**VG5-614-ECS G5 600 36X DN STD OUTDR PEND CLEAR PAL**  
Analog 36x PAL camera, outdoor pendant housing with a clear acrylic bubble  
Order number **VG5-614-ECS**

**VG5-614-PCS G5 600 36X DN STD INDR PEND CLEAR PAL**  
Analog 36x PAL camera, indoor pendant housing with a clear acrylic bubble  
Order number **VG5-614-PCS**

**VG5-623-ECS AUTODOME 600 Series 28x NTSC Outdoor Pendant Camera**  
Analog 28x NTSC camera, outdoor pendant housing with a clear acrylic bubble  
Order number **VG5-623-ECS**

**VG5-623-PCS G5 600 28X DN STD INDR PEND CLEAR NTSC**  
Analog 28x NTSC camera, indoor pendant housing with a clear acrylic bubble  
Order number **VG5-623-PCS**

**VG5-624-ECS G5 600 36X DN STD OUTDR PEND CLEAR NTSC**  
Analog 36x NTSC camera, outdoor pendant housing with a clear acrylic bubble  
Order number **VG5-624-ECS**

**VG5-624-PCS G5 600 36X DN STD INDR PEND CLEAR NTSC**  
Analog 36x NTSC camera, indoor pendant housing with a clear acrylic bubble  
Order number **VG5-624-PCS**

### Accessories

**VG4-A-PA0 Pendant arm, power box, 24VAC, AUTODOME**  
Pendant arm mount with power supply box for an AUTODOME Series camera, no transformer, white  
Order number **VG4-A-PA0@1**

**VG4-A-PA1 Pendant arm, power box, 120VAC, AUTODOME**  
Pendant arm mount with power supply box for an AUTODOME Series camera with a 120 VAC transformer, white  
Order number **VG4-A-PA1**

**VG4-A-PA2 Pendant arm, power box, 230VAC, AUTODOME**  
Pendant arm mount with power supply box for an AUTODOME Series camera with a 230 VAC transformer, white  
Order number **VG4-A-PA2@1**

**VGA-PEND-ARM Pendant arm with wiring, for AUTODOME**  
Compatible with an AutoDome Series pendant housing  
Order number **VGA-PEND-ARM@1**

**VGA-PEND-WPLATE Mounting plate for VGA-PEND-ARM**  
Mounting plate for VGA-PEND-ARM, compatible with an AutoDome Series camera  
Order number **VGA-PEND-WPLATE**

**VGA-ROOF-MOUNT Roof parapet mount for AUTODOME series**  
Roof parapet mount, white  
VG5-6xx/7xxx cameras require VG4-A-9543 Pipe Mount (sold separately).  
NEZ-5130-/NEZ-5230- cameras require NDA-ADPTR-NPTMET (sold separately)  
Order number **VGA-ROOF-MOUNT**

**LTC 9230/01 Roof mount adapter**  
Flat Roof Mount Adapter for mounting a unit in an upright position on a flat surface.  
Order number **LTC 9230/01**

**VG4-A-9541 Pole mount adapter**  
Pole mount adapter for an AUTODOME pendant arm or a DINION imager, designed for poles with a diameter of 100-380 mm (4-15 in.), white  
Order number **VG4-A-9541**

**VG4-A-9542 Corner mount adapter for AUTODOME**  
Corner mount adapter for an AUTODOME pendant arm or a DINION imager  
Order number **VG4-A-9542**

**VG4-A-9543 Pipe mount for AUTODOME , white**  
Pipe mount, white, for an AutoDome Series pendant housing  
Order number **VG4-A-9543**

**VGA-IP54K-IC In-ceiling IP54 kit for AUTODOME**

Gasket kit for AutoDome 100 and 600 Series, AutoDome In-ceiling mounts required for IP54 environmental rating.

Order number **VGA-IP54K-IC**

**VGA-IC-SP Suspended ceiling support kit, 7"**

Suspended ceiling support kit for dome cameras. Aperture Ø177 mm (Ø7 in). Maximum supported weight 11.3 kg (25 lb).

Order number **VGA-IC-SP**

**VG4-A-PSU0 Power supply, 24VAC**

Power supply, 24 VAC input, for a PTZ camera in the AUTODOME Series. White, aluminum enclosure with cover, rated IP66 and IK 08. 100 W output. Optional trim skirt (sold separately).

Order number **VG4-A-PSU0**

**VG4-A-PSU1 PSU, 120VAC, for AUTODOME, MIC7000**

Power supply, 120VAC input, 24VAC output @ 96VA. Suitable for powering AUTODOME, MIC IP 7000, and MIC IP fusion 9000i cameras. White aluminum enclosure with cover. IP66 ingress. IK10 impact.

Order number **VG4-A-PSU1**

**VG4-A-PSU2 Power supply, 230VAC, AUTODOME, MIC7000**

Power supply, 230VAC input, 24VAC output @ 96VA. Suitable for powering AUTODOME, MIC IP 7000, and MIC IP fusion 9000i cameras. White aluminum enclosure with cover. IP66 ingress. IK10 impact.

Order number **VG4-A-PSU2**

**VG4-SBOX-COVER COVER FOR PSU BOX**

Cover for AUTODOME Power Supply Boxes, white

Order number **VGA-SBOX-COVER**

**VGA-FIBER-AN Fiber optic kit, multimode, AUTODOME**

Analog multimode video transmitter/data receiver fiber optic kit

Order number **VGA-FIBER-AN**

**VG4-A-TSKIRT Trim skirt for AUTODOME power supply box**

Trim skirt for the following AutoDome Series power supply boxes:

VG4-A-PSU0, VG4-A-PSU1, and VG4-A-PSU2

Order number **VG4-A-TSKIRT**

**VGA-BUBBLE-CCLR Bubble, in-ceiling, clear, rugged**

Impact resistant polycarbonate bubble

Order number **VGA-BUBBLE-CCLR**

**VGA-BUBBLE-CTIR Bubble, in-ceiling, tinted, rugged**

Impact resistant polycarbonate bubble

Order number **VGA-BUBBLE-CTIR**

**VGA-BUBBLE-PCLR Bubble, pendant, clear, rugged**

Impact resistant polycarbonate bubble

Order number **VGA-BUBBLE-PCLR**

**VGA-BUBBLE-PTIR Bubble, pendant, tinted, rugged**

Impact resistant polycarbonate bubble

Order number **VGA-BUBBLE-PTIR**

**VGA-BUBBLE-PCLA Bubble, pendant, clear**

Low-impact acrylic bubble

Order number **VGA-BUBBLE-PCLA**

**VGA-BUBBLE-PTIA Bubble, pendant, tinted**

Low-impact acrylic bubble

Order number **VGA-BUBBLE-PTIA**

**Software Options****VP-CFGSFT CONFIG TOOL SW & ADAPTER**

Camera configuration software for use with Bilinix cameras

Order number **VP-CFGSFT**

**Represented by:****Europe, Middle East, Africa:**

Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
emea.securitysystems@bosch.com  
emea.boschsecurity.com

**Germany:**

Bosch Sicherheitssysteme GmbH  
Robert-Bosch-Ring 5  
85630 Grasbrunn  
Germany  
www.boschsecurity.com

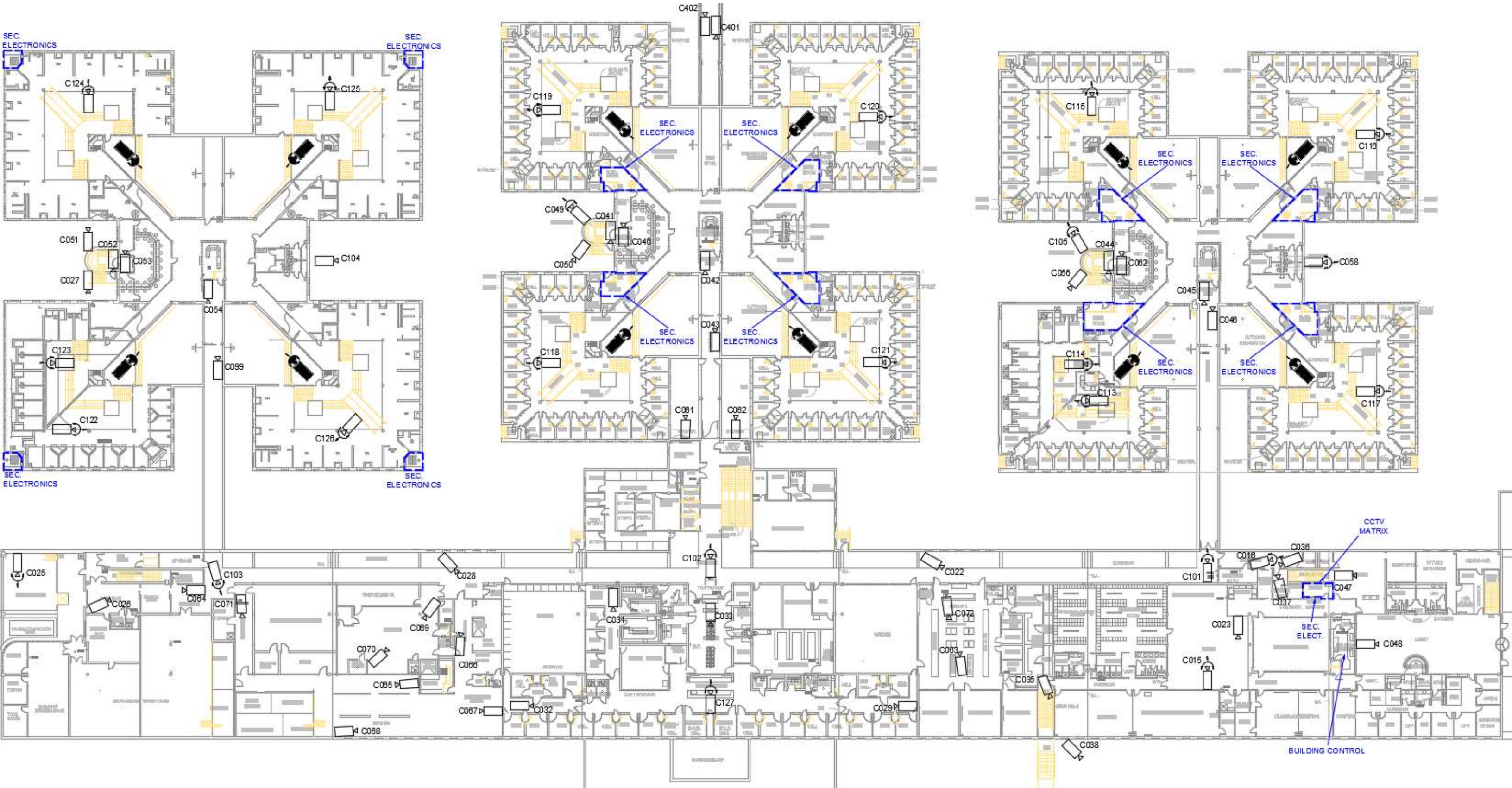
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Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
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**Asia-Pacific:**

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Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia

# Attachment C



# FLEXIDOME AN outdoor 5000

www.boschsecurity.com



**BOSCH**

Invented for life



- ▶ Ultra high resolution 960H sensor
- ▶ High Dynamic Range to see bright and dark details simultaneously
- ▶ High impact, vandal-resistant, weatherproof housing
- ▶ Bilinx communication for remote set-up and control
- ▶ Easy to install

The FLEXIDOME 5000 camera is the ultimate solution for virtually any indoor or outdoor surveillance application. This vandal-resistant dome camera uses a high performance 960H 1/3-inch CCD sensor with a resolution of 720TVL. The sensor, the high dynamic range engine and the advanced image processing technology combine to provide a detailed image with outstanding accuracy in color reproduction even under harsh lighting conditions. True day/night performance ensures the highest image quality possible at any time, day or night. The camera is easy to install and ready to use, and offers the best solution for demanding scene conditions.

## System overview

The cast-aluminum housing, polycarbonate dome, and hardened inner liner can withstand the equivalent of 55 kg (120 lbs) of force. The enclosure contains the full-featured camera and integral varifocal lens. Ideal for outdoor use, the cameras are protected against water and dust to IP66 and NEMA Type 4X standards. The camera enclosure provides the extra protection necessary for applications such as schools, banks, prisons, parking garages, retail and industrial buildings.

Installation is quick and easy, as the camera comes completely assembled and ready to use. Using the proprietary pan/tilt/rotation mechanism, installers can select the exact field of view. Mounting options are numerous, including surface, 4S (USA), wall, corner and suspended ceiling. The compact, sleek design and virtually flush-mount appearance complements any decor.

The camera is supplied ready to operate. Six distinct pre-programmed operational modes are stored in the camera. Recall the mode that suits your application for optimized performance.

## Functions

### Detail in extreme lighting

In harsh lighting, the difference between the brightest and the darkest parts of a scene can be extreme. To produce a clear picture in these conditions, the CCD sensor in the camera generates two images; one long exposure to resolve details in the scene's darkest areas, and one short exposure to resolve details in the scene's brightest areas. The advanced image processing technology in the camera combines these dual shutter images, mixing pixels from each exposure

to produce the most detailed image possible. The superior wide dynamic range for all lighting conditions reveals details previously unseen.

### Day/Night mode

The day/night mode provides enhanced night viewing by increasing the IR sensitivity. The IR filter can switch from color to monochrome automatically by either sensing the illumination level or via the alarm input. The filter can be switched manually via the alarm input, through the camera menu or via the Bilinx coaxial control interface. An internal through-the-lens IR detector enhances the monochrome mode stability, as it prevents reverting to the color mode when IR illumination is dominant. IR contrast is also measured and used to handle reflected IR light in outdoor scenes.

### Ease of installation

The lens wizard helps focus the lens at the maximum opening to ensure proper back-focus is maintained throughout the 24-hour cycle. No special tools or filters are required.

Six independent, pre-programmed operating modes support typical applications, but are fully programmable for individual situations. Switching between modes is easy via Bilinx or the external alarm input.

Several other features are available that make installation easy:

- Video BNC and power connectors on flying leads.
- A built-in test pattern generator produces signals to test and fault-find cables.
- A multi-language On-Screen Display (OSD).
- A high efficiency power supply improves maximum operating temperature

Cable compensation is used to avoid the need for amplifiers in long distance coaxial connections up to 1000 m (3000 ft). It can prevent the image quality degradation caused by signal losses from long cable lengths.

### Bilinx technology

Bilinx is a bidirectional communication capability embedded in the video signal of this camera. Installers can check status, change camera settings and even update firmware from virtually anywhere along the video cable. Bilinx reduces service and installation time, provides for more accurate set-up and adjustment, and improves overall performance. In addition, Bilinx uses the standard video cable to transmit alarm and status messages, providing superior performance without additional installation steps.

### Ideal picture performance

There are many settings available to help fine-tune the picture performance to match your installation environment. These include:

- Smart BLC – automatically and dynamically compensates for strong backlight

- Peak White Invert – reduces glare from highlight areas
- Contrast and sharpness – enhance details in bright or misty scenes
- SensUp – sensitivity is dramatically enhanced by a factor of 10
- Default shutter – improves the motion performance in auto exposure mode
- Dynamic noise reduction – dynamically reduces noise in the picture

### Privacy masking

Fifteen different privacy zones allow specific parts of a scene to be blocked. Pre-program any part of the scene to be masked.

### Video Motion Detection

The built-in video motion detector allows you to select four programmable areas with sensitivity thresholds. When motion is detected, alarms can be displayed in the video signal or an alarm message can be transmitted via Bilinx.

### Lens Options

With this dome camera, there is no compromise between scene coverage and aesthetics of the camera. The camera brings the widest choice of lens selection. Choose lenses between 2.8 to 10.5 mm for wide coverage, 9 to 22 mm VF lens for standard coverage, or 18 to 50 mm for long-rang coverage.

### Typical applications

- Entrance foyer/lobby with glass
- Warehouses and loading bays
- Prisons and correctional facilities
- Airport locations including:
  - baggage handling
  - fuel and equipment storage
- Stadium

## Certifications and approvals

### Electro Magnetic Compatibility

Emission	EN 55022 class B, FCC part 15 class B, EN61000-3-2, EN61000-3-3, EN50121-4
Immunity	EN 50130-4, EN 50121-4
Vibration	IEC 60068-2-6

### Safety

EN60950-1, UL60950-1 (2<sup>ND</sup> edition), CSA C22.2 No. 60950-1-07 (2<sup>ND</sup> edition)

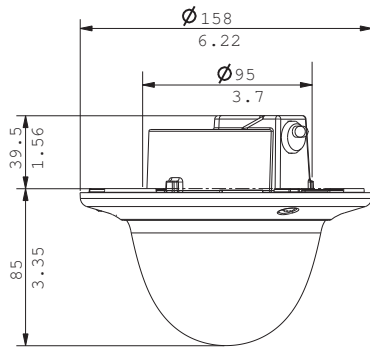
Region	Certification
Europe	CE
USA	UL
	FCC
Canada	CSA

**Installation/configuration notes**

**FLEXIDOME 5000 model overview**

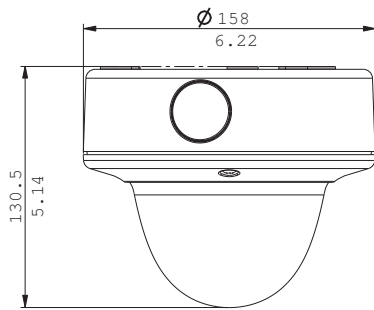
Model	Standard	Lens
VDN-5085-V311	PAL	2.8 to 10.5 mm F1.2
VDN-5085-V321	NTSC	2.8 to 10.5 mm F1.2
VDN-5085-V911	PAL	9 to 22 mm F1.4
VDN-5085-V921	NTSC	9 to 22 mm F1.4
VDN-5085-VA11	PAL	18 to 50 mm F1.5
VDN-5085-VA21	NTSC	18 to 50 mm F1.5

**Flush Mounting**



Dimensions in mm (in.)

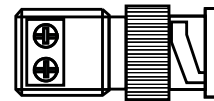
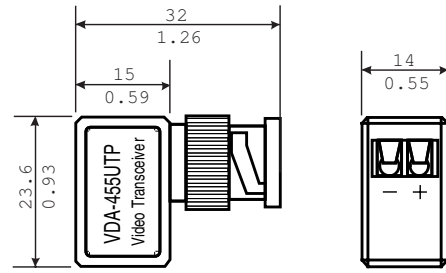
**VDA-455SMB-Surface Mount Box**



Dimensions in mm (in.) for surface mounting

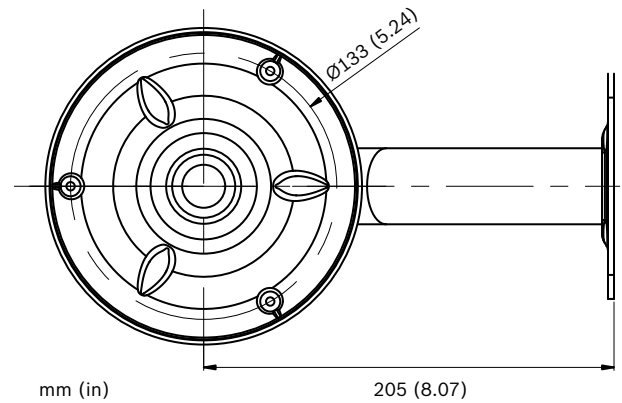
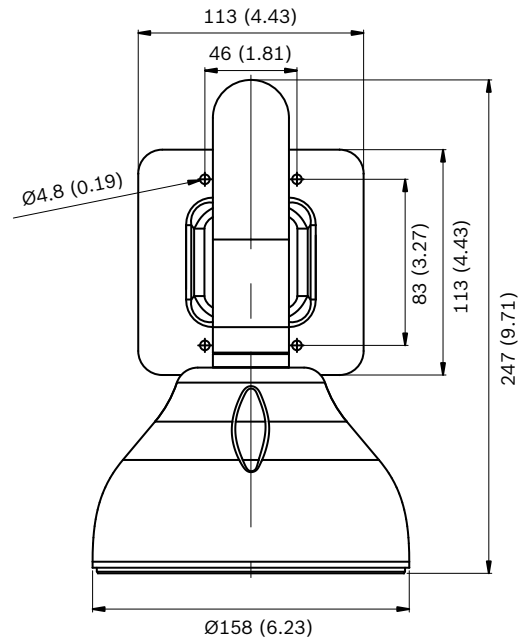
**Accessories (not included)**

**BNC to UTP Transceiver**



Dimensions in mm (in.)

**VDA-WMT-DOME -Pendant Wall Mount**

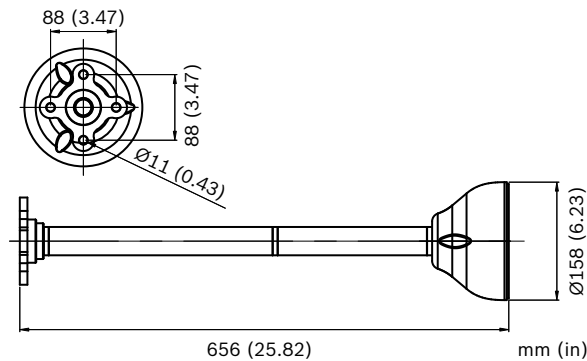


mm (in)

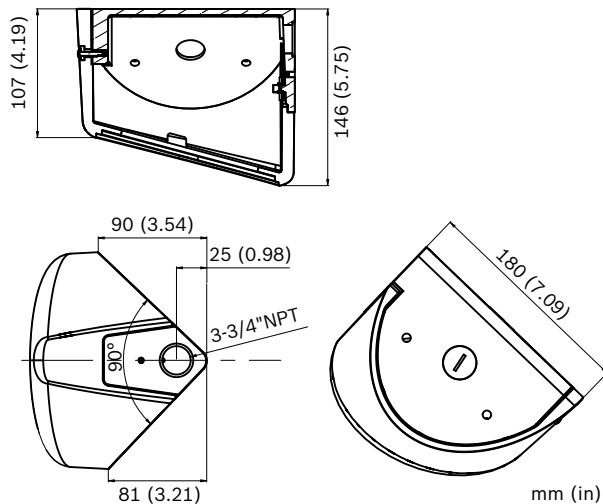
205 (8.07)



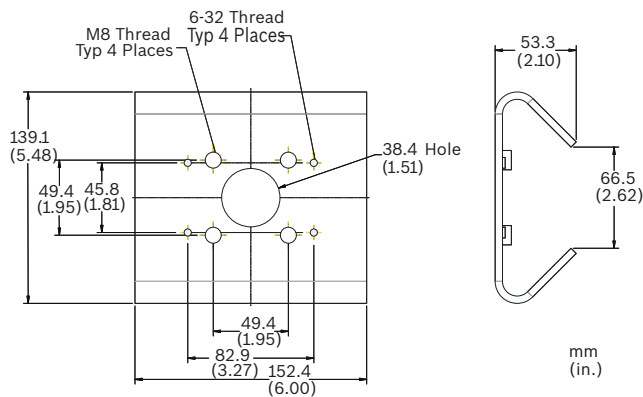
**VDA-PMT-DOME –Pendant Pipe Mount**



**VDA-CMT-DOME –Corner Mount**



**LTC 9213/01 Pole Mount Adapter**



**Technical specifications**

**Electrical**

Model No.	Rated Voltage	Rated Frequency
VDN-5085-V311, VDN-5085-V911, VDN-5085-VA11	12 VDC / 24 VAC	50 Hz

VDN-5085-V321, VDN-5085-V921, VDN-5085-VA21	12 VDC / 24 VAC	60 Hz
Power Consumption	360 mA (12 VDC), 700 mA with heater on 330 mA (24 VAC), 650 mA with heater on	
Image Sensor	960H, 1/3" DS CCD, sensor resolution 720TVL, WDR dual shutter	
System	PAL or NTSC	
Total pixels (H x V)	1020 x 596 (PAL) 1020 x 508 (NTSC)	
Effective pixels (H x V)	976 x 582 (PAL) 976 x 494 (NTSC)	

**Sensitivity Lens 2.8 to 10.5 mm** (3200K, scene reflectivity 89%, transmission 68%, F1.2)"

	Full video (100 IRE)	Usable picture (50 IRE)	Usable picture (30 IRE)
Color	0.7 lx (0.0651 fc)	0.13 lx (0.0121 fc)	0.06 lx (0.00558 fc)
Color + SensUp 10x	0.07 lx (0.00651 fc)	0.013 lx (0.00121 fc)	0.006 lx (0.000558 fc)
Monochrome	0.3 lx (0.0279 fc)	0.06 lx (0.00558 fc)	0.03 lx (0.00279 fc)
Monochrome SensUp 10x	0.03 lx (0.00279 fc)	0.006 lx (0.000558 fc)	0.003 lx (0.000279 fc)

**Sensitivity Lens 9 to 22 mm** (3200K, scene reflectivity 89%, transmission 68%, F1.4)"

	Full video (100 IRE)	Usable picture (50 IRE)	Usable picture (30 IRE)
Color	1 lx (0.0930 fc)	0.17 lx (0.0158 fc)	0.08 lx (0.00744 fc)
Color + SensUp 10x	0.1 lx (0.00930 fc)	0.017 lx (0.00158 fc)	0.008 lx (0.000744 fc)
Monochrome	0.4 lx (0.0372 fc)	0.08 lx (0.00744 fc)	0.04 lx (0.00372 fc)
Monochrome SensUp 10x	0.04 lx (0.00372 fc)	0.008 lx (0.000744 fc)	0.004 lx (0.000372 fc)

**Sensitivity Lens 18 to 50 mm** (3200K, scene reflectivity 89%, transmission 68%, F1.5)"

	Full video (100 IRE)	Usable picture (50 IRE)	Usable picture (30 IRE)
Color	1.1 lx (0.102 fc)	0.2 lx (0.0186 fc)	0.09 lx (0.00836 fc)
Color + SensUp 10x	0.11 lx (0.0102 fc)	0.02 lx (0.00186 fc)	0.009 lx (0.000836 fc)

Monochrome	0.5 lx (0.0465 fc)	0.09 lx (0.00836 fc)	0.05 lx (0.00465 fc)
Monochrome SensUp 10x	0.05 lx (0.00465 fc)	0.009 lx (0.000836 fc)	0.005 lx (0.000465 fc)
Signal-to-Noise Ratio	>54 dB		
Video Output	Composite video 1 Vpp, 75 ohm		
Synchronization	Internal, Line Lock		
Shutter	Auto (1/50 [1/60] to 1/100000) selectable, fixed, flickerless, default		
Sensitivity Up	Adjustable from Off up to 10x		
Day/Night	Color, Mono, Auto		
Dynamic Engine	XF-Dynamic, HDR, Smart BLC		
Dynamic Range	94 dB (WDR)		
Dynamic Noise Reduction	2D-NR, 3D-NR		
AGC	AGC On or Off (0 – 40 dB) selectable		
Smart BLC	On/Off		
Peak White Invert	On/Off		
White Balance	ATW Indoor, ATW Outdoor, ATW hold and Manual		
Contrast Enhancement	Low, Medium, High		
Sharpness	Sharpness enhancement level selectable		
Alarm Output	VMD or Bilinx		
Cable Compensation	Up to 1000 m (3000 ft) coax without external amplifiers (automatic set-up in combination with Bilinx coaxial communication)		
Camera ID	17 character editable string, position selectable		
Test Pattern Generator	Color bar, Raster, Impulse, Cross Impulse, Cross hatch,		
Modes	6 preset programmable modes		
Remote Control	Bilinx coaxial bi-directional communication		
Video Motion Detection	4 areas, fully programmable		
Privacy Masking	15 independent areas, fully programmable		
E-Zoom	Up to 16x		
Digital Image Stabilizer	On/Off		
Controls	OSD with soft-key operation		
OSD Language	English, French, German, Spanish, Portuguese, Simplified Chinese, Russian		

## Optical

Varifocal	Manual zoom and focus adjustment
Iris control	Automatic iris control

## Viewing angle

2.8 to 10.5 mm	Wide 101.8° x 73.7° (H x V) Tele 27.4° x 20.6° (H x V)
9 to 22 mm	Wide: 32.1° x 23.3° (H x V) Tele: 13.1° x 9.8° (H x V)
18 to 50 mm	Wide: 14.6° x 10.9° (H x V) Tele: 5.6° x 4.2° (H x V)

## Mechanical

Dimensions	See drawings
Weight	750 g (1.65 lb)
Mounting	Flush on hollow surface with three (3) screws in a 4S electrical box
Color	White (RAL9010) trim ring with black inner liner
Adjustment range	360° pan, 90° tilt, ±90° azimuth
Dome bubble	Polycarbonate, clear with UV blocking anti-scratch coating
Trim ring	Aluminum

## Environmental

Operating temperature default (with heater off)	-30 °C to +55 °C (-22 °F to +131 °F)
Operating temperature (with heater on)	-50 °C to +55 °C (-58 °F to +131 °F)
Storage temperature	-55 °C to +70 °C (-67 °F to +158 °F)
Operating humidity	5% to 93% relative humidity
Storage humidity	Up to 98% relative humidity
Impact protection	IEC 60068-2-75 test Eh, 50 J EN 50102, exceeding IK 10
Water/dust protection	IP66 and NEMA Type-4X

## Ordering information

### FLEXIDOME AN outdoor 5000

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 2.8 to 10.5 mm lens; 50 Hz; PAL  
Order number **VDN-5085-V311**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 2.8 to 10.5 mm lens; 60 Hz; NTSC  
Order number **VDN-5085-V321**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 9 to 22 mm lens; 50 Hz; PAL  
Order number **VDN-5085-V911**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 9 to 22 mm lens; 60 Hz; NTSC  
Order number **VDN-5085-V921**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 18 to 55 mm lens; 50 Hz; PAL  
Order number **VDN-5085-VA11**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 18 to 55 mm lens; 60 Hz; NTSC  
Order number **VDN-5085-VA21**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 2.8 to 10.5 mm lens; surface mount; 50 Hz; PAL  
Order number **VDN-5085-V311S**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 2.8 to 10.5 mm lens; surface mount; 60 Hz; NTSC  
Order number **VDN-5085-V321S**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 9 to 22 mm lens; surface mount; 50 Hz; PAL  
Order number **VDN-5085-V911S**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 9 to 22 mm lens; surface mount; 60 Hz; NTSC  
Order number **VDN-5085-V921S**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 18 to 50 mm lens; surface mount; 50 Hz; PAL  
Order number **VDN-5085-VA11S**

**FLEXIDOME AN outdoor 5000**

960H analog outdoor WDR dome camera. IP66; IK10; 12VDC/24VAC; true day/night; 720 TVL; 3-axis adjustment; 4-zone motion detect; 15-zone privacy mask; varifocal 18 to 50 mm lens; surface mount; 60 Hz; NTSC  
Order number **VDN-5085-VA21S**

**Accessories****VDA-455SMB**

High impact surface mount box for dome cameras  
Order number **VDA-455SMB**

**VDA-455UTP**

Adaptor for UTP twisted pair output  
Order number **VDA-455UTP**

**S1460 Service/Monitor Cable**

2.5 mm jack to BNC video connector cable. 1 m  
Order number **S1460**

**VDA-WMT-DOME Wall Pendant Mount Bracket**

Wall pendant mount bracket for FlexiDome cameras  
Order number **VDA-WMT-DOME**

**VDA-CMT-DOME Corner Mount Bracket**

Corner mount bracket for FlexiDome cameras  
Order number **VDA-CMT-DOME**

**VDA-PMT-DOME Pendant Pipe Mount Bracket**

Pendant pipe mount bracket for FlexiDome cameras  
Order number **VDA-PMT-DOME**

**LTC 9213/01 Pole Mount Adapter**

Flexible pole mount adapter for camera mounts. Max. 9 kg (20 lb); 3 to 15 inch diameter pole; stainless steel straps  
Order number **LTC 9213/01**

**UPA-2420-50 Power Supply**

Power supply for cameras. 220 VAC, 50 Hz In; 24 VAC, 20 VA Out  
Order number **UPA-2420-50**

**UPA-2430-60 Power Supply**

Power supply for camera. 120 VAC, 60 Hz; 24 VAC, 30 VA Out

Order number **UPA-2430-60**

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**UPA-2450-50 Power Supply, 220 V, 50 Hz**

Indoor power supply for camera. 220 VAC, 50 Hz In; 24 VAC, 50 VA Out

Order number **UPA-2450-50**

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**UPA-2450-60 Power Supply, 120 V, 60 Hz**

Indoor power supply for camera. 120 VAC, 60 Hz In; 24 VAC, 50 VA Out

Order number **UPA-2450-60**

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**VDA-455TBL Tinted bubble**

Tinted bubble for FlexiDome series

Order number **VDA-455TBL**

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**VDA-455CBL Clear bubble**

Clear Bubble for FlexiDome series

Order number **VDA-455CBL**

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**EX12LED-3BD-8M Infrared Illuminator**

Mini IR 850 nm illuminator. LED array; 3D Diffuser; black; 17 m HFOV; 30° beam pattern

Order number **EX12LED-3BD-8M**

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**EX12LED-3BD-8W Infrared Illuminator**

Mini IR 850 nm illuminator. LED array; 3D Diffuser; black; 16 m HFOV; 60° beam pattern

Order number **EX12LED-3BD-8W**

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**EX12LED-3BD-9M Infrared Illuminator**

Mini IR 940 nm illuminator. LED array; 3D Diffuser; black; 17 m HFOV; 30° beam pattern

Order number **EX12LED-3BD-9M**

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**EX12LED-3BD-9W Infrared Illuminator**

Mini IR 940 nm illuminator. LED array; 3D Diffuser; black; 16 m HFOV; 60° beam pattern

Order number **EX12LED-3BD-9W**

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**TC8235GIT Ground Loop Isolation Transformer**

Order number **TC8235GIT**

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**Software Options****VP-CFGSFT Configuration Software**

Configuration software for cameras using Bilinx. VP-USB adaptor

Order number **VP-CFGSFT**

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# DIVAR hybrid 5000 recorder

www.boschsecurity.com



**BOSCH**  
Invented for life



- ▶ Hybrid recording of up to 16 IP and 16 analog channels
- ▶ Extended rack-mount unit with advanced connections
- ▶ 12 MP IP camera support for view and playback
- ▶ Separate internet and IP camera networks
- ▶ RAID 1 and 5 support

The DIVAR hybrid recorders can simultaneously record and view video from traditional analog cameras as well as the latest IP cameras. The recorder can be connected to the following camera configurations:

- a maximum 32 IP cameras recording at resolutions up to 12MP
- a maximum 16 analog cameras recording at resolutions up to 960H
- a combination of maximum 16 analog cameras and maximum 16 IP cameras

These advanced technologies, coupled with efficient network data transmission, deliver the high security and reliability required for modern surveillance systems. Simultaneous remote or local monitoring, recording, archive and playback functions are guided by simple menu selections and operator commands. The recorders can be installed with a maximum of 4 internal HDDs for video storage. Another option is two HDDs for storage, plus a DVD burner for video export.

## Functions

### Latest video compression technology

The DIVAR supports H.264 video compression technology and is H.265-ready for the newest H.265 technology cameras to be released by Bosch. This technology dramatically reduces bandwidth and storage requirements while still delivering superb image and audio quality. Equipped with this newest

video technology, DIVAR gives you the full benefits of the latest high-resolution cameras. The proof is in the pixels.

### Camera IP support

The recorder supports Bosch IP cameras (and 3<sup>rd</sup> party IP cameras) complying to the ONVIF Profile S specifications.

The recorder only supports IP cameras with a firmware version 6.30 or higher.

### Simultaneous record and view

The DIVAR records multiple video and audio signals while simultaneously providing live multi-screen viewing and playback. Comprehensive search and playback functions provide quick recall and viewing of recorded video.

### Simple operation

The DIVAR is very easy to install and use. Simply connect the cameras, apply power, and follow the simple Install Wizard steps for initial setup. The unit can then record automatically with no further intervention required.

### DDNS

Bosch offers its customers free Dynamic Domain Name Services (DDNS) for access to network-connected devices via a "friendly" hostname without the need for

costly static IP addresses. This makes it easier for uninterrupted access to important video from devices regardless of their location.

### Alarms

All models have extensive alarm handling functions and telemetry control. Alarm functions include local inputs and relay outputs, plus motion detection in user-defined areas. If an alarm is detected, the DIVAR can:

- send an e-mail notification and/or FTP push
- sound a buzzer and/or display a warning
- activate local alarm output

### Local control

The unit can be easily operated and programmed via the on-screen display menu system using:

- the supplied mouse
- the front panel control keys
- the supplied remote control

### Inputs and outputs

Video inputs, audio inputs/output, and alarm inputs/outputs are located on the rear panel.

Two video connectors (VGA/HDMI) provide simultaneous output for monitor A for live display (with zoom) and playback (display can be frozen and zoomed). The displays allow full-screen, multi-screen, and sequenced viewing.

### Network control

Use the PC software or built-in web application via a network for live viewing, playback, and configuration.

### Watermark

The DIVAR includes an authenticity check for both local and remote archives, ensuring recording integrity. An Archive Player is provided for playback of secure video files and to check if video is authentic.

### Smartphone App

A DIVAR Viewer App from Bosch for iOS and Android devices is available for:

- live and playback viewing
- recorder configuration
- PTZ control

This means you can watch live video from cameras connected to the DVR from anywhere in the world. You can also control focus, pan, tilt and zoom on PTZ-enabled cameras.

### Dome control

The DIVAR can control pan/tilt/zoom (PTZ) equipment using commands sent via IP connection (using ONVIF protocol for supported devices).

### Intuikey keyboard

One Bosch Intuikey keyboard can be connected to this unit to control dome cameras.

### RAID software

Units installed with 2 HDDs can support RAID 1 software for mirroring drives. Units installed with 4 HDDs can support RAID 5 software.

Using RAID has a large impact on the system performance. To keep the playback smooth, Bosch recommends to limit the playback to 4 channels.

### Supported protocols

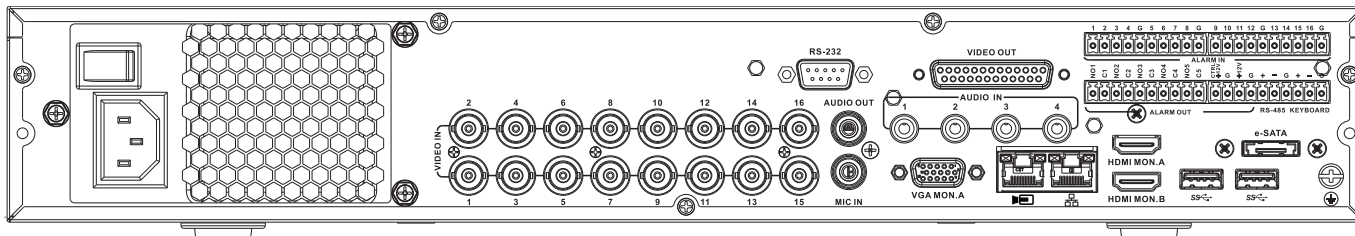
The DIVAR supports Bosch protocol and Pelco P and D protocol.




## Certifications and approvals

Standards		
Alarm	EN 50130-5:2011, Alarm systems - Part 5: Environmental test methods, Class I, Fixed equipment	
Lightning protection	To ALL long input / output - and supply-wiring. Alarm inputs and relay output, Video inputs and Outputs, dome-control outputs, power-cable, Audio In/Out. ± 0.5, 1kV line to line, ± 0.5, 1 and 2kV line to earth	
EMC + Safety - Europe		
EU Directives	2014/35/EU (LVD), 2014/30/EU (EMC), 2011/65/EU (RoHS)	
EMC Emission	EN 55032:2012/AC2013, class B	
EMC Immunity	EN 50130-4:2011/A1:2014	
EMC mains Harmonics	EN 61000-3-2:2014	
EMC Mains fluctuations	EN 61000-3-3:2013	
LVD Safety	CB scheme + IEC/EN/UL 62368-1:2014/AC:2015	
RoHS	EN 50581:2012	
EMC + Safety - USA and Canada		
EMC USA	47CFR part 15 (FCC), Class B	
Safety USA (UL, cUL)	UL 62368-1, Edition 2, Dec 1, 2014	
Safety Canada	CAN/CSA-C22.2 No. 62368-1	
India		
BIS (Bureau of Indian Standards)	BIS registration for external Power adapter (comes / packed with the main product)	
Australia		
ACMA EMC	RCM logo on product label	
Region	Regulatory compliance/quality marks	
Australia	RCM	DOC SAL hybrid 5000
	RCM	DOC SAL Variant hybrid 5000
Europe	CE	ST-VS 2016-E-087

Region	Regulatory compliance/quality marks	
USA	UL	FCC & UL
	FCC	FCC & UL

### Installation/configuration notes



<b>VIDEO IN</b>	16 BNC for connecting max. 16 analog cameras
	Max. 16 IP cameras connected with external switch (if no analog cameras are connected, an extra 16 IP cameras can be connected)
	RJ45 Ethernet connection (10/100/1000Base-T according to IEEE802.3)
<b>VGA MON.A</b>	1 D-SUB (Monitor output)
<b>HDMI MON.A</b>	1 HDMI (Monitor output)
<b>HDMI MON.B</b>	1 HDMI (output for spot monitor that supports live multiscreen)
<b>ALARM IN</b>	16 screw terminal inputs, cable diameter AWG26-16 (0.4–1.29 mm)
<b>ALARM OUT</b>	6 screw terminal outputs, cable diameter AWG26-16 (0.4–1.29 mm)
<b>AUDIO IN</b>	4 RCA (Audio inputs)
<b>AUDIO OUT</b>	1 RCA (Audio output)
<b>MIC IN</b>	1 RCA (Audio input)
<b>RS-485</b>	Screw terminal output (Dome control)
<b>KEYBOARD</b>	Screw terminal output (Keyboard)
<b>VIDEO OUT</b>	D-sub (loop through to other devices)
<b>RS-232</b>	DB9 male, 9-pin D-type (Dome control)
	Two USB (3.0) connectors for mouse or USB memory device; one USB (2.0) also on front panel
<b>eSATA</b>	For backup/memory device
Power input with On/Off switch	100~240 VAC, 50-60 Hz, 1.9 A, 75 W
	Ground connection

### Technical specifications

#### Mechanical

Dimensions (WxDxH) 440 x 408 x 76 mm (17.3 x 16.1 x 3.0 in)

Weight (excluding HDD(s) and DVD) 6.67 kg (14.7 lb) approx.

#### Power

AC input 100–240 VAC; 50-60 Hz; 1.9 A, 75 W

RTC battery on main PCB Lithium CR2032, 3 VDC

Maximum power consumption (no HDD) 20 W

#### Environmental

Operating temperature (incl. HDD(s) and DVD) +0°C to +40°C (+32°F to +104°F)

Storage temperature -40°C to +70°C (-40°F to +158°F)

Operating humidity <93% non-condensing

Storage humidity <95% non-condensing

#### Video storage

Internal (option) Max. 4 SATA HDD or 2 SATA HDD + 1 DVD (R/RW)  
Max. capacity per HDD: 6 TB  
Max. supported speed per HDD: 6 Gb/s

External (option) eSATA-connected storage device

**Alarms and detections**

Motion detection set by camera	Essential or Intelligent Video Analytics (IVA), Motion +
Alarm activations	Video loss, motion detection, input alarm, system alarm
Events triggered by alarm	Recording, PTZ movement, alarm out, email, buzzer, screen message, Mon A and B activated,
Inputs	16 inputs configurable NO/NC, max. input voltage 5 VDC
Outputs	5 relay outputs, 1 open collector
Relay contact	Max. rated, 30 VDC, 2 A continuous or 125 VAC, 1 A (activated)

**Exporting**

DVD (optional)	Built-in DVD+R/RW writer
USB	Flash memory or external HDD (FAT32)
Network	Web Client software or Video Client

**Playback**

Multi-channel	Simultaneous 1/4/9/16 channels
Mode	Forward, reverse, slow play, fast play, frame-by-frame
Search	Time, channel, type, smart
Network	Video Client, Web client, App
Restrict	Restrict video by user rights for viewing
Protection	Protect video against overwriting
Retention time	Automatically delete recordings after 1 to 365 days

**Recording**

Decoding compression	H.265/H.264/MJPEG
Speed	Max. 30 IPS per channel, configurable
Bit rate	16 kbps to 24 Mbps per channel
Record interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec
Mode	Manual, Scheduled (regular, motion detection, alarm), Stop

**Network control**

Ethernet	RJ45 port (10/100/1000 Mbps)
PC software	Video Client, Web client
APPS	iPhone, Android

**Network control**

User access	Maximum 128 users. Bosch advises a maximum of 4 simultaneous connections. More connections can cause performance limitations.
Protocols	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS/DDNS, IP Filter, PPPoE, FTP

**Video performance**

Maximum camera inputs	16 analog + 16 IP or 32 IP
Maximum incoming bandwidth	320 Mbps
Maximum recording bandwidth	256 Mbps
Maximum transmission bandwidth	128 Mbps
Resolution IP camera	12MP, 8MP, 6MP, 5MP, 3MP, 1.3MP, 1080p, 720p
Resolution analogue camera	960H, D1, HD1, CIF, QCIF
Resolution IP camera	3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768
Resolution analogue PAL	970x576, 704x576, 352x576, 352x288, 176x144
Resolution analogue NTSC	960x480, 704x480, 352x480, 352x240, 176x120
OSD	Camera title, Time, Video loss, Motion detection, Recording, PTZ

**Audio**

Input	4 channel (via RCA) 200 to 3000 mV, 10 kOhm
MIC Input	1 channel (via RCA) 200 to 3000 mV, 10 kOhm
Output	1 channel (via RCA) 200 to 3000 mV, 5 kOhm
Direction	Bidirectional (audio input and output connected via device)



## Ordering information

### **DRH-5532-400N00 Recorder 16ch IP/16ch AN 1.5U w/o HDD**

High-resolution recorder for IP and analog surveillance systems.

Recorder 16ch IP/16ch AN 1.5U w/o HDD

Order number **DRH-5532-400N00**

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### **DRH-5532-414N00 Recorder 16ch IP/16ch AN 1.5U 1x4TB**

High-resolution recorder for IP and analog surveillance systems.

Combination of up to 16 IP and 16 analog camera channels.

1 HDD (4 TB)

Order number **DRH-5532-414N00**

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### **DRH-5532-214D00 Recorder 16ch IP/16ch AN 1.5U 1x4TB DVD**

High-resolution recorder for IP and analog surveillance systems.

Combination of up to 16 IP and 16 analog camera channels.

1 HDD (4 TB); 1 DVD

Order number **DRH-5532-214D00**

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## Accessories

### **DVR-XS100-A 24/7 SURVEILLANCE HDD EXPANSION 1TB**

Storage expansion kit. 1 TB

Order number **DVR-XS100-A**

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### **DVR-XS200-A 24/7 SURVEILLANCE HDD EXPANSION 2TB**

Storage expansion kit. 2 TB

Order number **DVR-XS200-A**

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### **DVR-XS300-A 24/7 SURVEILLANCE HDD EXPANSION 3TB**

Storage expansion kit. 3 TB

Order number **DVR-XS300-A**

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### **DVR-XS400-A 24/7 SURVEILLANCE HDD EXPANSION 4TB**

Storage expansion kit. 4 TB

Order number **DVR-XS400-A**

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### **DVR-XS600-A 24/7 SURVEILLANCE HDD EXPANSION 6TB**

24/7 SURVEILLANCE HDD EXPANSION 6TB

Order number **DVR-XS600-A**

---

### **DVR-XS-DVD-B DVD writer Expansion kit B**

DVD writer Expansion kit B

Order number **DVR-XS-DVD-B**

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## R2416UL Series AC CCTV Rack Power Supplies

### Description

Altronix R2416UL Series Rack Mount CCTV Power Supplies provide 24VAC or 28VAC distributed via sixteen (16) fuse or PTC protected outputs for powering CCTV cameras, heaters, and other video accessories.



R2416UL

### Key Features

- Sixteen (16) fuse or PTC protected outputs.
- 24VAC or 28VAC outputs.
- Surge protection.
- Individual power LED indicators.
- Illuminated power disconnect circuit breaker with manual reset.
- Removable terminal blocks with locking screw flanges.
- Spare fuses provided (all models with primary and/or secondary fuses).
- UL Listed in the U.S. and Canada.
- CE Approved.
- Lifetime Warranty / Made in the U.S.A.

### R2416UL Series Power Supply Configuration Reference Chart

Altronix Model Number	Output Voltage (VAC)	Total Output Current (Power)	Number of Outputs	PTC Protected Power-Limited Outputs (auto-resettable)	Fuse Protected Outputs	Output Current (max per output)	Main Fuse Ratings	115VAC 50/60Hz Input Current
R2416UL	24VAC	7A	16	-	✓	3.5A	3.5A/ 250V	2.9A
	28VAC	6A						
R2416ULCB	24VAC	7A		✓	-	2.5A		
	28VAC	6A						
R2416300UL	24VAC	12.5A		-	✓	3.5A		3A
	28VAC	10A						
R2416300ULCB	24VAC	12.5A		✓	-	2.5A		
	28VAC	10A						
R2416600UL*	24VAC	25A	-	✓	3.5A		6A	
	28VAC	20A						
R2416600ULCB	24VAC	25A	✓	-	2.5A			
	28VAC	20A						

\*24VAC models: Outputs 1-8 provide 12.5A (300VA) max. Outputs 9-16 provide 12.5A (300VA) max.

\*28VAC models: Outputs 1-8 provide 10A (280VA) max. Outputs 9-16 provide 10A (280VA) max.

# R2416UL Series

## AC CCTV Rack Power Supplies



### Specifications

#### Input

Voltage 115VAC, 50/60Hz.  
 Fusing See Reference Chart.

#### Outputs

Voltage 24VAC or 28VAC  
 Current Varies, see Reference Chart  
 Protection Fused 3.5A / PTC 2.5A

#### Indicators (LED)

Output Sixteen (16) individual LEDs.

#### Agency Listings

Commercial CCTV Equipment UL2044  
 Audio, Video and Similar Equipment CSA Standard C22.2 No.1-98  
 CE European Conformity

#### Physical and Environmental

2U rack mount chassis for use in standard EIA 19" rack.

#### Dimensions (H x W x D):

3.26" x 19.125" x 8.5" (83mm x 486mm x 216mm).

#### Weight:

Model	Product Weight	Shipping Weight
R2416UL(CB)	16.15 lbs. (7.33 kg)	17.15 lbs. (7.78 kg)
R2416300UL(CB)	17.2 lbs. (7.80 kg)	18.2 lbs. (8.26 kg)
R2416600UL(CB)	23.0 lbs. (10.43 kg)	24.0 lbs. (10.89 kg)

#### Temperature:

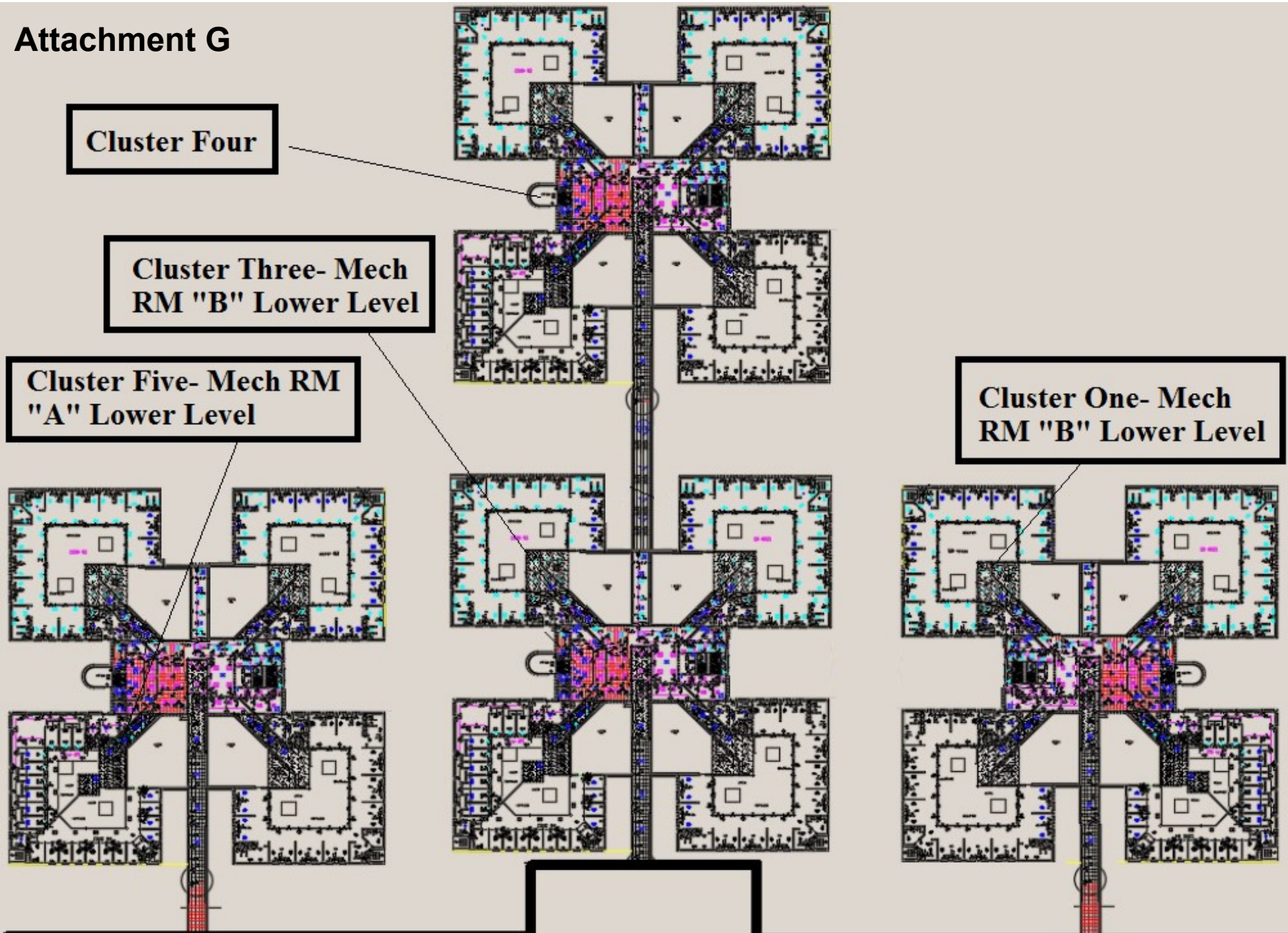
Operating 0°C to 49°C (32°F to 120°F).  
 Storage -20°C to 70°C (-4°F to 158°F).

Relative Humidity 85% +/-5%.

#### BTU/Hr. (approx.):

Model	24VAC	28VAC
R2416UL(CB)	90	90
R2416300UL(CB)	156	143
R2416600UL(CB)	307	287

# Attachment G



**Direct the contractor to add PTZ power supplies in the mechanical rooms listed per POD. Each POD mechanical room has a power strip for the power supplies to be added.  
\*Contractor to provide a cord with ground from the supply to plug into the power strip.**



**Part Number: 1505A**

Serial Digital Coax, RG59, #20 Solid BC, Foil + 95% TC Braid, CMR

### Product Description

Low Loss Serial Digital Coax, Riser-CMR, RG59 20 AWG solid bare copper conductor, foam HDPE core, Duofoil®+95% tinned copper braid, PVC jacket

### Technical Specifications

#### Product Overview

Environmental Space:	Outdoor - Aerial
Suitable Applications:	SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p

#### Physical Characteristics (Overall)

##### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BC - Bare Copper	0.032 in	1

Conductor Count:	1
Conductor Size:	20 AWG

##### Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.145 in

##### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum Foil-Polyester Tape-Aluminum Foil	Duofoil®	100 %
Braid	2	TC - Tinned Copper		95 %

##### Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.233 in

#### Electrical Characteristics

##### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
10 Ohm/1000ft	3.8 Ohm/1000ft

##### Capacitance

Nom. Capacitance Conductor to Shield
16.3 pF/ft

Shielding:	Foil + Braid(s)
------------	-----------------

##### Inductance

Nominal Inductance
0.107 µH/ft

##### Impedance

Nominal Characteristic Impedance
75 Ohm

##### Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 6000 MHz	15 dB

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.3 dB/100ft
3.6 MHz	0.6 dB/100ft
5 MHz	0.63 dB/100ft
6 MHz	0.69 dB/100ft
7 MHz	0.74 dB/100ft
10 MHz	0.9 dB/100ft
12 MHz	0.91 dB/100ft
25 MHz	1.3 dB/100ft
67.5 MHz	2.05 dB/100ft
71.5 MHz	2.1 dB/100ft
88.5 MHz	2.2 dB/100ft
100 MHz	2.3 dB/100ft
135 MHz	2.7 dB/100ft
143 MHz	2.8 dB/100ft
180 MHz	3.1 dB/100ft
270 MHz	3.8 dB/100ft
360 MHz	4.4 dB/100ft
540 MHz	5.5 dB/100ft
720 MHz	6.4 dB/100ft
750 MHz	6.5 dB/100ft
1000 MHz	7.6 dB/100ft
1500 MHz	9.5 dB/100ft
2000 MHz	11.2 dB/100ft
2250 MHz	11.9 dB/100ft
3000 MHz	14.0 dB/100ft
4500 MHz	17.5 dB/100ft
6000 MHz	21.1 dB/100ft

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82 %

#### Voltage

UL Voltage Rating
300V RMS

Electrical Characteristics Notes:	TDR Impedance: 75 +/- 1.5 Ohms
Other Electrical Characteristic 2:	Return Loss: Fixed bridge and termination

#### Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +75°C

#### Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	31 lbs/1000ft
Max Recommended Pulling Tension:	52 lbs
Min Bend Radius/Minor Axis:	2.5 in

#### Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca
RG Type:	59/U Type
RG / Series Type:	59/U Type

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

## Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
UL Voltage Rating:	300 V RMS

## Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1506A

## Part Number

Related Parts:	1505BNCHD3
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## Variants

Item #	Color	Footnote
1505A N3U1640		
1505A.00152	BLACK	
1505A.001525	BLACK	
1505A.00305	BLACK	
1505A 0101000	BLACK	C
1505A 010500	BLACK	C
1505A 0105000	BLACK	C N
1505A 010N1000	BLACK	
1505A 010N1000	BLACK	
1505A 0061000	BLUE, LIGHT	C
1505A 006500	BLUE, LIGHT	C
1505A 0065000	BLUE, LIGHT	C N
1505A 006N1000	BLUE, LIGHT	
1505A 006N1000	BLUE, LIGHT	
1505A.05152	BLUE, RAL 5015	
1505A.051525	BLUE, RAL 5015	
1505A.05305	BLUE, RAL 5015	
1505A 0011000	BROWN	C
1505A 0015000	BROWN	C N
1505A 001N1000	BROWN	
1505A 001N1000	BROWN	
1505A 0081000	GRAY	C
1505A 0085000	GRAY	C N
1505A 008N1000	GRAY	
1505A 008N1000	GRAY	
1505A.081525	GRAY, SLATE	
1505A.08305	GRAY, SLATE	



1505A.061525	GREEN	
1505A.06305	GREEN	
1505A N3U1000	GREEN, MIL	C
1505A N3U5000	GREEN, MIL	C N
1505A N3UN1000	GREEN, MIL	
1505A N3UN1000	GREEN, MIL	
1505A.031525	ORANGE	
1505A.03305	ORANGE	
1505A 0025000	ORANGE	C N
1505A 0031000	ORANGE	C
1505A 0035000	ORANGE	C N
1505A 003N1000	ORANGE	
1505A 003N1000	ORANGE	
1505A 0021000	RED	C
1505A 002500	RED	C
1505A 002N1000	RED	
1505A 002N1000	RED	
1505A.02152	RED, RAL 3000	
1505A.021525	RED, RAL 3000	
1505A.02305	RED, RAL 3000	
1505A.01152	VIOLET	
1505A.011525	VIOLET	
1505A.01305	VIOLET	
1505A 0071000	VIOLET	C
1505A 0075000	VIOLET	C N
1505A 007N1000	VIOLET	
1505A 007N1000	VIOLET	
1505A.071525	WHITE	
1505A.07305	WHITE	
1505A 0091000	WHITE	C
1505A 0095000	WHITE	C N
1505A 009N1000	WHITE	
1505A 009N1000	WHITE	
1505A 0041000	YELLOW	C
1505A 0045000	YELLOW	C N
1505A 004N1000	YELLOW	
1505A 004N1000	YELLOW	
1505A.041525	YELLOW, RAL 1021	
1505A.04305	YELLOW, RAL 1021	

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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**Part Number: 7731ANH**

**COAX RG11/U LSZH-C HDTV PRECISION VIDEO**

## Product Description

COAX [1.6/7.2] RG11/U LSZH-C HDTV CLASSICS PRO

## Technical Specifications

### Product Overview

Environmental Space:	Indoor - Euroclass Cca
Suitable Applications:	Low loss HDTV/SDI Digital coax used in analog and digital video circuits and high quality applications; The cable is UV-resistant and suitable for indoor and outdoor use

### Physical Characteristics (Overall)

#### Conductor

Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
Solid	BC - Bare Copper	1.63 mm	0.03 mm	1

Conductor Count:	1
Conductor Size:	14 AWG

#### Insulation

Type	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	Foamed Polyethylene	7.11 mm	0.15 mm

#### Outer Shield Material

Type	Layer	Material	Coverage [%]	Min. Overlap	Nominal Diameter	Coverage +/- Tolerance
Tape	1	Aluminum / Polyester / Aluminum		2 mm		
Braid	2	Tinned copper	95 %		7.95 mm	5 %

#### Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance
LSZH / FRNC	10.2 mm	0.2 mm

### Construction and Dimensions

Min Elongation at Break of Jacket:	125 %
Min Tensile Strength of Jacket:	9 MPa

### Electrical Characteristics

#### Conductor DCR

Max. Conductor DCR	Max. Shield DCR
8.2 Ohm/km	4.9 Ohm/km

#### Capacitance

Nom. Capacitance	Capacitance Tolerance
53 pF/m	2 pF/m

Shielding:	Foil + Braid(s)
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#### Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
75 Ohm	3 Ohm

### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.5 dB/100m
10 MHz	1.5 dB/100m
71.5 MHz	3.6 dB/100m
135 MHz	4.8 dB/100m
270 MHz	6.9 dB/100m
360 MHz	8 dB/100m
540 MHz	10 dB/100m
720 MHz	11.7 dB/100m
750 MHz	12 dB/100m
1000 MHz	14.1 dB/100m
1500 MHz	18 dB/100m
2250 MHz	22.6 dB/100m
3000 MHz	26.9 dB/100m
4500 MHz	34.1 dB/100m

### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance
397 ns/ft	84 %	2 %

### High Freq

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 850 MHz	23 dB
850 - 3000 MHz	21 dB

### Voltage

Voltage Test Dielectric
2 kV DC

### Temperature Range

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-30°C To +70°C
Operating Temp Range:	-30°C To +70°C

### Mechanical Characteristics

Max Recommended Pulling Tension:	650 N
Min Bend Radius (W/o Pulling Strength):	100 mm

### Standards

CPR Euroclass:	Cca-s1,d1,a1
CENELEC Compliance:	EN 50117-1
RG Type:	11/U Type
RG / Series Type:	11/U Type

### Flammability, LS0H, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-3-24
Other Flammability:	CEI 20-22-3
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

### Part Number

### Variants

Item #	Color
7731ANH.001000	BLACK
7731ANH.001219	BLACK
7731ANH.00305	BLACK
7731ANH.00500	BLACK
7731ANH.00600	BLACK
7731ANH.00650	BLACK

7731ANH.00750	BLACK
7731ANH.00800	BLACK
7731ANH.009999	BLACK
7731ANH.00M30	BLACK
7731ANH.00M365	BLACK
7731ANH.00M50	BLACK
7731ANH.01305	BLACK
7731ANH.01500	BLACK
7731ANH.051219	BROWN
7731ANH.059999	BROWN
7731ANH.04500	CREAM
7731ANH.021000	GREEN
7731ANH.021219	GREEN
7731ANH.02500	GREEN
7731ANH.029999	GREEN
7731ANH.022000	GREEN
7731ANH.024444	GREEN
7731ANH.031000	VIOLET
7731ANH.03500	VIOLET

## History

Revision Number:	5
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# Attachment J

## WAGE SCALE

In accordance with Texas Government Code, Title 10, Section 2258, Prevailing Wage Rates, the general prevailing wage rate has been determined for this locality for the craft or type of workman needed to execute work of a similar character of the project listed herein. The Contractor shall pay the prevailing wage rate in this locality to all his/her employees and subcontractors performing work on this project, and in no event shall the Contractor pay less than the rate shown in the following schedule.

General Decision Number: TX180289 01/12/2018 TX289

Superseded General Decision Number: TX20170289

State: Texas

Construction Type: Building

County: Collin County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
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0	01/05/2018
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1	01/12/2018
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ASBE0021-011 06/01/2016

Rates	Fringes
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ASBESTOS WORKER/HEAT & FROST INSULATOR (Duct, Pipe and Mechanical System Insulation)....\$ 24.32	7.52
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BOIL0074-003 01/01/2017

Attachment J

	Rates	Fringes
BOILERMAKER.....	\$ 28.00	22.35

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 CARP1421-002 04/01/2016

	Rates	Fringes
MILLWRIGHT.....	\$ 26.60	8.65

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 \* ELEV0021-006 01/01/2018

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 39.97	32.645+a+b

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Veterans Day.

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 ENGI0178-005 06/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(1) Tower Crane.....	\$ 29.00	10.60
(2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above.....	\$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under.....	\$ 27.50	10.60

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 IRON0263-005 06/01/2017

	Rates	Fringes
IRONWORKER (ORNAMENTAL AND STRUCTURAL).....	\$ 23.25	7.32

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 PLUM0100-005 11/01/2017

	Rates	Fringes
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Attachment J

HVAC MECHANIC (HVAC Unit Installation Only).....	\$ 30.84	11.51
PIPEFITTER (Excludes HVAC Pipe Installation).....	\$ 30.84	11.51
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SUTX2014-015 07/21/2014		
	Rates	Fringes
BRICKLAYER.....	\$ 21.06	0.00
CARPENTER, Excludes Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 15.78	0.00
CAULKER.....	\$ 15.16	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 13.04	0.00
DRYWALL HANGER AND METAL STUD INSTALLER.....	\$ 13.00	0.00
ELECTRICIAN (Alarm Installation Only).....	\$ 20.93	3.86
ELECTRICIAN (Communication Technician Only).....	\$ 15.35	1.39
ELECTRICIAN (Low Voltage Wiring Only).....	\$ 17.04	1.39
ELECTRICIAN, Excludes Low Voltage Wiring and Installation of Alarms/Sound and Communication Systems.....	\$ 20.01	2.69
FORM WORKER.....	\$ 11.89	0.00
GLAZIER.....	\$ 16.46	3.94
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine).....	\$ 10.04	2.31
INSTALLER - SIDING (METAL/ALUMINUM/VINYL).....	\$ 14.74	0.00

## Attachment J

INSTALLER - SIGN.....	\$ 15.50	0.00
INSULATOR - BATT.....	\$ 13.00	0.00
IRONWORKER, REINFORCING.....	\$ 12.29	0.00
LABORER: Common or General.....	\$ 10.52	0.00
LABORER: Mason Tender - Brick...	\$ 10.54	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 10.93	0.00
LABORER: Pipelayer.....	\$ 13.00	0.35
LABORER: Plaster Tender.....	\$ 12.22	0.00
LABORER: Roof Tearoff.....	\$ 11.28	0.00
LABORER: Landscape and Irrigation.....	\$ 10.55	0.00
LATHER.....	\$ 16.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 12.83	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 13.93	0.00
OPERATOR: Bulldozer.....	\$ 18.29	1.31
OPERATOR: Drill.....	\$ 15.69	0.50
OPERATOR: Forklift.....	\$ 13.21	0.81
OPERATOR: Grader/Blade.....	\$ 13.03	0.00
OPERATOR: Loader.....	\$ 13.46	0.85
OPERATOR: Mechanic.....	\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 18.44	0.00



## Attachment J

OPERATOR: Roller.....	\$ 15.04	0.00
PAINTER (Brush, Roller and Spray), Excludes Drywall Finishing/Taping.....	\$ 13.35	5.10
PAINTER: Drywall Finishing/Taping Only.....	\$ 14.24	3.83
PIPEFITTER (HVAC Pipe Installation Only).....	\$ 20.45	4.00
PLASTERER.....	\$ 16.58	0.00
PLUMBER, Excludes HVAC Pipe Installation.....	\$ 22.46	4.06
ROOFER.....	\$ 17.19	0.00
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 21.13	4.79
SHEET METAL WORKER, Excludes HVAC Duct Installation.....	\$ 24.88	5.97
SPRINKLER FITTER (Fire Sprinklers).....	\$ 37.50	0.00
TILE FINISHER.....	\$ 11.22	0.00
TILE SETTER.....	\$ 14.25	0.00
TRUCK DRIVER: 1/Single Axle Truck.....	\$ 16.00	0.81
TRUCK DRIVER: Dump Truck.....	\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck.....	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....	\$ 12.50	0.00
TRUCK DRIVER: Water Truck.....	\$ 12.00	4.11

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

## Attachment J

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate

## Attachment J

based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division

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U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

**PAYMENT BOND**

STATE OF TEXAS            §  
COUNTY OF COLLIN       §

**KNOW ALL MEN BY THESE PRESENTS:**

That \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, and fully authorized to transact business in the State of Texas, whose address is \_\_\_\_\_ of the City of \_\_\_\_\_ County of \_\_\_\_\_, and State of \_\_\_\_\_, (hereinafter referred to as "Principal"), and \_\_\_\_\_ (hereinafter referred to as "Surety", a corporation organized under the laws of the State of \_\_\_\_\_ and authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto \_\_\_\_\_ (hereinafter referred to as "Owner") and unto all persons, firms and corporations who may furnish materials for or perform labor upon the buildings, structures or improvements referred to in the attached Contract, in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) (not less than 100% of the approximate total amount of the Contract as evidenced in the proposal) in lawful money of the United States, for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents:

**WHEREAS**, the Principal has entered into a certain written contract with the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2018, to which said Contract is hereby referred to and made a part hereof and as fully and to the same extent as if copied at length herein for the construction of IFB 2018-272, New Camera Installation at Detention Facility Book-In and Recreation Areas

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH**, that the bond guarantees the full and proper protection of all claimants supplying labor and material in the prosecution of the work provided for in said Contract and for the use of each claimant, and that conversely should the Principal faithfully perform said Contract and in all respects duly and faithfully observe and perform all and singular the covenants, conditions, and agreements in and by said Contract, agreed to by the Principal, and according to the true intent and meaning of said Contract and the claims and specifications hereto annexed, and any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modification to Surety being hereby waived, then this obligation shall be void; otherwise, to remain in full force and effect. Provided further, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

**"PROVIDED, HOWEVER**, that this bond is executed pursuant to the provisions Texas Government Code, Chapter 2253, as amended, and Chapter 3503 of the Texas Insurance Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said articles to the same extent as if they were fully copied at length herein.

Surety, for value received, stipulates and agrees that the bond shall automatically be increased by the amount of any Change Order or supplemental agreement which increases the Contract price with or without notice to the Surety and that no change, extension of time, alteration or addition to the terms of the Contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder.

The undersigned and designated agent is hereby designated by Surety herein as the agent resident to whom any requisite notice may be delivered and on whom service of process may be had in matters arising out of such suretyship.

**IN WITNESS WHEREOF**, the said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_ 2018.

**WITNESS**

\_\_\_\_\_

**PRINCIPAL**

\_\_\_\_\_

Printed/Typed Name \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

**WITNESS**

\_\_\_\_\_

**SURETY**

\_\_\_\_\_

Printed/Typed Name \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

The Resident Agent of the Surety for delivery of notice and service of process is:  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_

**Note:**     Date of Bond must NOT be prior to date of contract.

**PERFORMANCE BOND**

STATE OF TEXAS           §  
COUNTY OF COLLIN       §

**KNOW ALL MEN BY THESE PRESENTS:**

That \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_, and fully authorized to transact business in the State of Texas, whose address is \_\_\_\_\_ of the City of \_\_\_\_\_ County of \_\_\_\_\_, and State of \_\_\_\_\_, (hereinafter referred to as "Principal"), and \_\_\_\_\_ (hereinafter referred to as "Surety", a corporation organized under the laws of the State of \_\_\_\_\_ and authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto \_\_\_\_\_ (hereinafter referred to as "Owner") and unto all persons, firms and corporations who may furnish materials for or perform labor upon the buildings, structures or improvements referred to in the attached Contract, in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) (not less than 100% of the approximate total amount of the Contract as evidenced in the proposal plus 10-percent of the stated penal sum as an additional sum of money representing additional court expenses, attorneys' fees, and liquidated damages arising out of or connected with the below identified Contract) in lawful money of the United States, for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents:

**WHEREAS**, the Principal has entered into a certain written contract with the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2018, to which said Contract is hereby referred to and made a part hereof and as fully and to the same extent as if copied at length herein for the construction of IFB 2018-272, New Camera Installation at Detention Facility Book-In and Recreation Areas

**CONDITION OF THIS OBLIGATION IS SUCH**, that if the said Principal fully and faithfully executes the work and performance of the Contract in accordance with the plans specifications, and Contract Documents, including any extensions thereof which may be granted with or without notice to Surety, during the original term thereof, and during the life of any guaranty required under the Contract, and according to the true intent and meaning of said Contract and the plans and specifications hereto annexed, if the Principal shall repair and/or replace all defects due to faulty materials or workmanship that appear within a period of one year from the date of final completion and final acceptance of the work by OWNER; and if the Principal shall fully indemnify and save harmless the OWNER from all costs and damages which OWNER may suffer by reason of failure to so perform herein and shall fully reimburse and repay OWNER all outlay and expense which the OWNER may incur in making good any default or deficiency, then this obligation shall be void; otherwise, to remain in full force and effect; and in case said CONTRACTOR shall fail to do so, it is agreed that the OWNER may do said work and supply such materials and charge the same against said CONTRACTOR and Surety on this obligation. Provided further, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

**"PROVIDED, HOWEVER**, that this bond is executed pursuant to the provisions Texas Government Code, Chapter 2253, as amended, and Chapter 3503 of the Texas Insurance Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of said articles to the same extent as if they were fully copied at length herein.

Surety, for value received, stipulates and agrees that the bond shall automatically be increased by the amount of any Change Order or supplemental agreement which increases the Contract price with or without notice to the Surety, but in no event shall a Change Order or Supplemental Agreement which reduces the Contract price decrease the penal sum of the Bond. And further that no change, extension of time, alteration, or addition to the terms of the Contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder.

Surety agrees that the bond provides for the repairs and/or replacement of all defects due to faulty materials and workmanship that appear within a period of one (1) year from the date of completion and acceptance of the improvement by the OWNER.

The undersigned and designated agent is hereby designated by Surety herein as the agent resident to whom any requisite notice may be delivered and on whom service of process may be had in matters arising out of such suretyship.

**IN WITNESS WHEREOF**, the said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_ 2018.

**WITNESS**

\_\_\_\_\_

**PRINCIPAL**

\_\_\_\_\_

Printed/Typed Name \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

**SURETY**

\_\_\_\_\_

Printed/Typed Name \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

**WITNESS**

\_\_\_\_\_

The Resident Agent of the Surety for delivery of notice and service of process is:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

**Note:** Date of Bond must NOT be prior to date of contract.

# CONSTRUCTION CONTRACT

This FIXED PRICE CONSTRUCTION CONTRACT BETWEEN OWNER AND CONTRACTOR (the "Contract") is made and entered into by and between COLLIN COUNTY, a political subdivision of the State of Texas (the "Owner") and \_\_\_\_\_

\_\_\_\_\_ (the "Contractor"). This Contract is executed under seal, and shall be effective on \_\_\_\_\_ ("Effective Date").

This Contract is for the construction of a project identified as IFB 2018-272, New Camera Installation at Detention Facility Book-In and Recreation Areas (the "Project").

NOW, THEREFORE, in consideration of the mutual promises, covenants and agreements stated herein, and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree:

## 1. DOCUMENTS INCORPORATED BY REFERENCE

This Contract includes the plans and specifications for the Project identified thereon as such, plus the following (if any): \_\_\_\_\_

\_\_\_\_\_, all of which are hereby incorporated herein by reference and made a part hereof. Change Orders issued hereafter, and any other amendments executed by the Owner and the Contractor, shall become and be a part of this Contract. Documents not included or expressly contemplated in this Paragraph 1 do not, and shall not, form any part of this Contract. **Notwithstanding, no deviations in the Contractor's Executed Bid form from the Invitation to Bid, Construction Plans or other Contract documents prepared by the County shall be incorporated herein unless expressly provided in this Contract. Any conflict with the Contractor's Executed Bid Form and the Invitation to Bid, Construction Plans and other contract documents prepared by the County shall be construed in favor of the contract documents prepared by the County.**

## 2. REPRESENTATIONS OF THE CONTRACTOR

In order to induce the Owner to execute this Contract and recognizing that the Owner is relying thereon, the Contractor, by executing this Contract, makes the following express representations to the Owner:

(A) The Contractor is fully qualified to act as the contractor for the Project and has, and shall maintain, any and all licenses, permits or other authorizations necessary to act as the contractor for, and to construct, the Project;

(B) The Contractor has become familiar with the Project site and the local conditions under which the Project is to be constructed and operated;

(C) The Contractor has received, reviewed and carefully examined all of the documents which make up this Contract, including, but not limited to, the plans and specifications, and has found them in all respects to be complete, accurate, adequate, consistent, coordinated and sufficient for construction.

(D) Contractor warrants good right and title to all material, supplies, and equipment installed or incorporated in the work and agrees upon completion of all work to deliver to Owner all material, supplies, and equipment installed or incorporated in the work constructed free of any claims, liens, or charges.

## 3. INTENT AND INTERPRETATION

With respect to the intent and interpretation of this Contract, the Owner and the Contractor agree as follows:

(A) This Contract, together with the Contractor's and Surety's Payment, Performance Bonds, and Maintenance Bonds for the Project, if any, constitute the entire and exclusive agreements between the parties with reference to the Project, and said Contract supersedes any and all prior discussions, communications, representations, understandings, negotiations, or agreements. This Contract also supersedes any bid documents;

(B) Anything that may be required, implied or inferred by the documents which make up this Contract, or any one or more of them, shall be provided by the Contractor for the Contract Price;

(C) Nothing contained in this Contract shall create, nor be interpreted to create, privity or any other relationship whatsoever between the Owner and any person except the Contractor;

(D) When a word, term, or phrase is used in this Contract, it shall be interpreted or construed first, as defined herein; second, if not defined, according to its generally accepted meaning in the construction industry; and third, if there is no generally accepted meaning in the construction industry, according to its common and customary usage;

(E) The words "include", "includes", or "including", as used in this Contract, shall be deemed to be followed by the phrase, "without limitation";

(F) The specification herein of any act, failure, refusal, omission, event, occurrence or condition as constituting a material breach of this Contract shall not imply that any other, non-specified act, failure, refusal, omission, event, occurrence or condition shall be deemed not to constitute a material breach of this Contract;

(G) The Contractor shall have a continuing duty to read, examine, review, compare and contrast each of the documents which make up this Contract, shop drawings, and other submittals and shall give written notice to the Owner of any conflict, ambiguity, error or omission which the Contractor may find with respect to these documents before proceeding with the affected work. The express or implied approval by the Owner of any shop drawings or other submittals shall not relieve the Contractor of the continuing duties imposed hereby, nor shall any such approval be evidence of the Contractor's compliance with this Contract. The Owner has prepared, or had someone prepare, documents for the Project, including the plans and specifications for the Project, which are accurate, adequate, consistent, coordinated and sufficient for construction. HOWEVER, THE OWNER MAKES NO REPRESENTATION OR WARRANTY OF ANY NATURE WHATSOEVER TO THE CONTRACTOR CONCERNING SUCH DOCUMENTS. The Contractor again hereby acknowledges and represents that it has received, reviewed and carefully examined such documents, has found them to be complete, accurate, adequate, consistent, coordinated and sufficient for construction, and that the Contractor has not, does not, and will not rely upon any representations or warranties by the Owner concerning such documents, as no such representations or warranties have been or are hereby made;

(H) In the event of any conflict, discrepancy, or inconsistency among any of the documents which make up this Contract, the following shall control:

- (1) As between figures given on plans and scaled measurements, the figures shall govern;
- (2) As between large scale plans and small scale plans, the large scale plans shall govern;
- (3) As between plans and specifications, the requirements of the specifications shall govern;
- (4) As between this document and the plans or specifications, this document shall govern.

(I) The Owner's representative shall be the project manager.

#### 4. OWNERSHIP OF THE DOCUMENTS WHICH MAKE UP THE CONTRACT

The documents which make up this Contract, and each of them, as well as any other documents furnished by the Owner, shall remain the property of the Owner. The Contractor shall have the right to keep one (1) copy of the Contract upon completion of the Project; provided, however, that in no event shall the Contractor use, or permit to be used, any portion or all of such Contract on other projects without the Owner's prior written authorization.

#### 5. CONTRACTOR'S PERFORMANCE

The Contractor shall perform all of the work required, implied or reasonably inferable from this Contract including, but not limited to, the following:

(A) Construction of the Project;



(B) The furnishing of any required surety bonds and insurance;

(C) The provision or furnishing, and prompt payment therefor, of labor, supervision, services, materials, supplies, equipment, fixtures, appliances, facilities, tools, transportation, storage, power, fuel, heat, light, cooling, or other utilities, required for construction and all necessary building permits and other permits required for the construction of the Project; and

(D) The creation and submission to the Owner of detailed and comprehensive as-built drawings depicting all as-built construction. Said as-built drawings shall be submitted to the Owner upon final completion of the Project and receipt and approval of same by the Owner shall be a condition precedent to final payment to the Contractor.

## 6. TIME FOR CONTRACTOR'S PERFORMANCE

(A) The Contractor shall commence the performance of this Contract on \_\_\_\_\_ and shall diligently continue its performance to and until final completion of the Project. The Contractor shall accomplish Substantial Completion of the Project on or before \_\_\_\_\_ (\_\_\_\_\_) days from notice to proceed;

(B) The Contractor shall pay the Owner the sum of One Hundred Seventy-Five (\$175.00) per day for each and every calendar day of unexcused delay in achieving Substantial Completion beyond the date set forth herein for Substantial Completion. Any sums due and payable hereunder by the Contractor shall be payable, not as a penalty, but as liquidated damages representing an estimate of delay damages likely to be sustained by the Owner, estimated at the time of executing this Contract. When the Owner reasonably believes that Substantial Completion will be inexcusably delayed, the Owner shall be entitled, but not required, to withhold from any amounts otherwise due the Contractor an amount then believed by the Owner to be adequate to recover liquidated damages applicable to such delays. If and when the Contractor overcomes the delay in achieving Substantial Completion, or any part thereof, for which the Owner has withheld payment, the Owner shall promptly release to the Contractor those funds withheld, but no longer applicable, as liquidated damages;

(C) The term "Substantial Completion", as used herein, shall mean that point at which the Project is at a level of completion in strict compliance with this Contract such that the Owner or its designee can enjoy beneficial use or occupancy and can use or operate it in all respects, for its intended purpose. Partial use or occupancy of the Project shall not result in the Project being deemed substantially complete, and such partial use or occupancy shall not be evidence of Substantial Completion;

(D) All limitations of time set forth herein are material and are of the essence of this Contract.

## 7. FIXED PRICE AND CONTRACT PAYMENTS

(A) The Owner shall pay, and the Contractor shall accept, as full and complete payment for the Contractor's timely performance of its obligations hereunder the fixed price of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_). The price set forth in this Subparagraph 7(A) shall constitute the Contract Price, which shall not be modified except by Change Order as provided in this Contract.

This fixed price above is based on the quantities indicated based on the actual scope of the project as shown on the construction plans. Should the quantities of any of the items of the work as listed in the executed Proposal and Bid Form be increased, the Contractor shall perform the additional work at the unit bid prices submitted.

Should the quantities of any of the items of the work as listed in the executed Proposal and Bid Form be decreased, the Fixed Price shall be reduced accordingly based on the above unit bid prices and the Contractor shall make no claim for anticipated profits or lost overhead for any decrease in quantities. Payments will be made on actual quantities installed, as measured in place;

(B) Within ten (10) calendar days of the effective date hereof, the Contractor shall prepare and present to the Owner the Contractor's Schedule of Values apportioning the Contract Price among the different elements of the Project for

purposes of periodic and final payment. The Contractor's Schedule of Values shall be presented in whatever format, with such detail, and backed up with whatever supporting information the Owner requests. The Contractor shall not imbalance its Schedule of Values nor artificially inflate any element thereof. The violation of this provision by the Contractor shall constitute a material breach of this Contract. The Contractor's Schedule of Values will be utilized for the Contractor's Payment Requests but shall only be so utilized after it has been acknowledged in writing by the Owner;

(C) The Owner shall pay the Contract Price to the Contractor in accordance with the procedures set forth in this Paragraph 7. On or before the 1st day of each month after commencement of performance, but no more frequently than once monthly, the Contractor may submit a Payment Request for the period ending the 25th day of the month to the following:

Bill Burke  
Building Projects Manager  
Collin County Construction and Projects  
4600 Community Ave.  
McKinney, TX 75071

In accordance with the Texas Prompt Payment Act and the Owner's receipt of a properly submitted and correct Application for Payment, and the issuance of a Certificate for Payment, the Owner shall make payment to the Contractor, in the amount approved by the Owner less 5% retainage. Such payment shall be adjusted for work that is incomplete or not in accordance with the Contract Documents, or that is the subject of a separate contract, or subcontract or supplier claim or lien against the Contractor or the payment bonds for the project. Notwithstanding anything herein to the contrary, Contractor shall not be paid for equipment and materials until after installation.

Each such Payment Request shall be signed by the Contractor and shall constitute the Contractor's representation that the quantity of work has reached the level for which payment is requested, that the work has been properly installed or performed in strict compliance with this Contract, and that the Contractor knows of no reason why payment should not be made as requested. Thereafter, the Owner shall review the Payment Request and may also review the work at the Project site or elsewhere to determine whether the quantity and quality of the work is as represented in the Payment Request and is as required by this Contract. The Owner shall approve in writing the amount which, in the opinion of the Owner, is properly owing to the Contractor. The amount of each such payment shall be the amount approved for payment by the Owner less such amounts, if any, otherwise owing by the Contractor to the Owner or which the Owner shall have the right to withhold as authorized by this Contract. The submission by the Contractor of a Payment Request also constitutes an affirmative representation and warranty that all work for which the Owner has previously paid is free and clear of any lien, claim, or other encumbrance from subcontractors, materialmen, suppliers and other person or entity who has, or might have a claim against the Owner for the work done on the Owner's property. Furthermore, the Contractor warrants and represents that, upon payment of the Payment Request submitted, title to all work included in such payment shall be vested in the Owner;

(D) When payment is received from the Owner, the Contractor shall immediately pay all subcontractors, materialmen, laborers and suppliers the amounts they are due for the work covered by such payment. In the event the Owner becomes informed that the Contractor has not paid a subcontractor, materialman, laborer, or supplier within 10 days after the Contractor's receipt of payment, the Owner shall have the right, but not the duty, to issue future checks and payment to the Contractor of amounts otherwise due hereunder naming the Contractor and any such subcontractor, materialman, laborer, or supplier as joint payees. Such joint check procedure, if employed by the Owner, shall create no rights in favor of any person or entity beyond the right of the named payees to payment of the check and shall not be deemed to commit the Owner to repeat the procedure in the future;

(E) Neither payment to the Contractor, utilization of the Project for any purpose by the Owner, nor any other act or omission by the Owner shall be interpreted or construed as an acceptance of any work of the Contractor not strictly in compliance with this Contract;

(F) The Owner shall have the right to refuse to make payment and, if necessary, may demand the return of a portion or all of the amount previously paid to the Contractor due to:

(1) The quality of a portion, or all, of the Contractor's work not being in accordance with the requirements of this Contract;

(2) The quantity of the Contractor's work not being as represented in the Contractor's Payment Request, or otherwise;

(3) The Contractor's rate of progress being such that, in the Owner's opinion, Substantial Completion or final completion, or both, may be inexcusably delayed;

(4) The Contractor's failure to use Contract funds, previously paid the Contractor by the Owner, to pay Contractor's Project-related obligations including, but not limited to, subcontractors, laborers and material and equipment suppliers;

(5) Claims made, or likely to be made, against the Owner or its property;

(6) Loss caused by the Contractor;

(7) The Contractor's failure or refusal to perform any of its obligations to the Owner. In the event that the Owner makes written demand upon the Contractor for amounts previously paid by the Owner as contemplated in this Subparagraph 7(F), the Contractor shall promptly comply with such demand;

(G) If within thirty (30) days from the date payment to the Contractor is due, the Owner, without cause or basis hereunder, fails to pay the Contractor any amounts then due and payable to the Contractor, the Contractor shall have the right to cease work until receipt of proper payment after first providing ten (10) days' written notice of its intent to cease work to the Owner.

(H) When Substantial Completion has been achieved, the Contractor shall notify the Owner in writing and shall furnish to the Owner a proposed punch list listing of those matters yet to be finished. The Owner will thereupon conduct an inspection to confirm that the work is in fact substantially complete and shall upon determining that the work is substantially complete, shall review and revise, if necessary, the proposed punch list. Upon its confirmation that the Contractor's work is substantially complete, the Owner will so notify the Contractor in writing and will therein set forth the date of Substantial Completion and furnish the final punch list of items that need to be completed for final completion. If the Owner, through its inspection, fails to find that the Contractor's work is substantially complete, and is required to repeat all, or any portion, of its Substantial Completion inspection, the Contractor shall bear the cost of such repeat inspection(s) which cost may be deducted by the Owner from any payment then or thereafter due to the Contractor. Guarantees and equipment warranties required by this Contract shall commence on the date of Substantial Completion. Upon Substantial Completion, the Owner shall pay the Contractor an amount sufficient to increase total payments to the Contractor to ninety percent (90%) of the Contract Price less any amounts attributable to liquidated damages, and less the reasonable costs as determined by the Owner for completing all incomplete work, correcting and bringing into conformance all defective and nonconforming work, and handling any outstanding or threatened claims;

(I) When the Project is finally complete and the Contractor is ready for a final inspection, it shall notify the Owner thereof in writing. Thereupon, the Owner will perform a final inspection of the Project. If the Owner confirms that the Project is complete in full accordance with this Contract and that the Contractor has performed all of its obligations to the Owner hereunder, the Owner will furnish a final Approval for Payment and the Contractor is entitled to the remainder of the unpaid Contract Price, less any amount withheld pursuant to this Contract. If the Owner is unable to issue its final Approval for Payment and is required to repeat its final inspection of the Project, the Contractor shall bear the cost of such repeat inspection(s), which costs may be deducted by the Owner from the Contractor's final payment;

(J) If the Contractor fails to achieve final completion within 30 days of (i) Substantial Completion, or (ii) the Owner's delivery to the Contractor of the punch list described in Subparagraph 7(H) herein, whichever is later, the Contractor shall pay the Owner the sum of One Hundred Seventy-Five (\$175.00) per day for each and every calendar day of unexcused delay in achieving final completion beyond the date set forth herein for final completion of the work. Any sums due and payable hereunder by the Contractor shall be payable, not as a penalty, but as liquidated damages

representing an estimate of delay damages likely to be sustained by the Owner, estimated at or before the time of executing this Contract. When the Owner reasonably believes that final completion will be inexcusably delayed, the Owner shall be entitled, but not required, to withhold from any amounts otherwise due the Contractor an amount then believed by the Owner to be adequate to recover liquidated damages applicable to such delays. If and when the Contractor overcomes the delay in achieving final completion, or any part thereof, for which the Owner has withheld payment, the Owner shall promptly release to the Contractor those funds withheld, but no longer applicable, as liquidated damages;

(K) Prior to being entitled to receive final payment, and as a condition precedent thereto, the Contractor shall furnish the Owner, in the form and manner required by Owner, if any:

- (1) An affidavit that all of the Contractor's obligations to subcontractors, laborers, equipment or material suppliers, or other third parties in connection with the Project, have been paid or otherwise satisfied;
- (2) If applicable, consent(s) of surety to final payment;
- (3) All product warranties, operating manuals, instruction manuals and other record documents, drawings (including as-built drawings), satisfactory test results and things customarily required of the Contractor, or expressly required herein or set forth in the bid documents, as a part of or prior to Project closeout;

(L) The final Certificate for Payment will not be issued until all such warranties and guaranties have been received and accepted by the Owner, and a Certificate of Acceptance is issued.

## 8. INFORMATION AND MATERIAL SUPPLIED BY THE OWNER

(A) The Owner shall furnish to the Contractor, prior to the execution of this Contract, any and all written and tangible material in its possession concerning conditions below ground at the site of the Project. Such written and tangible material is furnished to the Contractor only in order to make complete disclosure of such material as being in the possession of the Owner and for no other purpose. By furnishing such material, the Owner does not represent, warrant, or guarantee its accuracy either in whole, in part, implicitly or explicitly, or at all, and shall have no liability therefor. The Owner shall also furnish, if appropriate, the legal description of the Project site, and any required survey;

(B) The Owner shall obtain all required authorizations, approvals, easements, and the like excluding the building permit and other permits or fees required of the Contractor by this Contract, or permits and fees customarily the responsibility of the Contractor;

(C) The Owner will provide the Contractor one (1) copy of the complete Contract. The Contractor will be charged, and shall pay the Owner, the actual cost of duplication for any additional copy of the Contract which it may require.

## 9. CEASE AND DESIST ORDER

In the event the Contractor fails or refuses to perform the work as required herein, the Owner may instruct the Contractor to cease and desist from performing further work in whole or in part. Upon receipt of such instruction, the Contractor shall immediately cease and desist as instructed by the Owner and shall not proceed further until the cause for the Owner's instructions has been corrected, no longer exists, or the Owner instructs that the work may resume. In the event the Owner issues such instructions to cease and desist, and in the further event that the Contractor fails and refuses within seven (7) days of receipt of same to provide adequate assurance to the Owner that the cause of such instructions will be eliminated or corrected, then the Owner shall have the right, but not the obligation, to carry out the work with its own forces, or with the forces of another contractor, and the Contractor shall be fully responsible and liable for the costs of performing such work by the Owner. The rights set forth herein are in addition to, and without prejudice to, any other rights or remedies the Owner may have against the Contractor.

## 10. DUTIES, OBLIGATIONS AND RESPONSIBILITIES OF THE CONTRACTOR

In addition to any and all other duties, obligations and responsibilities of the Contractor set forth in this Contract, the Contractor shall have and perform the following duties, obligations and responsibilities to the Owner:

(A) The Contractor is again reminded of its continuing duties set forth in Subparagraph 3(G), which are by reference hereby incorporated in this Subparagraph 10(A). The Contractor shall not perform work without adequate plans and specifications, or, as appropriate, approved shop drawings, or other submittals. If the Contractor performs work knowing or believing it involves an error, inconsistency or omission in the Contract without first providing written notice to the Owner, the Contractor shall be responsible for such work and pay the cost of correcting same;

(B) All work shall strictly conform to the requirements of this Contract;

(C) The work shall be strictly supervised, the Contractor bearing full responsibility for any and all acts or omissions of those engaged in the work on behalf of the Contractor;

(D) The Contractor hereby warrants that all labor furnished under this Contract shall be competent to perform the tasks undertaken, that the product of such labor shall yield only first-class results, that all materials and equipment provided shall be new and of high quality, that the completed work will be complete, of high quality, without defects, and that all work strictly complies with the requirements of this Contract. Any work not strictly complying with the requirements of this Subparagraph shall constitute a breach of the Contractor's warranty;

(E) The Contractor shall obtain and pay for all required permits, fees and licenses customarily obtained by the Contractor. The Contractor shall comply with all legal requirements applicable to the work;

(F) The Contractor shall employ and maintain at the Project site only competent supervisory personnel. Key supervisory personnel assigned by the Contractor to this Project are as follows:

NAME FUNCTION

_____	_____
_____	_____
_____	_____

So long as the individuals named above remain actively employed or retained by the Contractor, they shall perform the functions indicated next to their names unless the Owner agrees to the contrary in writing. In the event one or more individuals not listed above subsequently assumes one or more of those functions listed above, the Contractor shall be bound by the provisions of this Subparagraph 10(F) as though such individuals had been listed above;

(G) The Contractor, within fifteen (15) days of commencing the work, shall provide to the Owner, and comply with, the Contractor's schedule for completing the work. Such schedule shall be in a form acceptable to the Owner. The Contractor's schedule shall be updated no less frequently than monthly (unless the parties otherwise agree in writing) and shall be updated to reflect conditions encountered from time to time and shall apply to the total Project. Each such revision shall be furnished to the Owner. Strict compliance with the requirements of this Subparagraph 10(G) shall be a condition precedent to payment to the Contractor, and failure by the Contractor to strictly comply with said requirements shall constitute a material breach of this Contract;

(H) The Contractor shall keep an updated copy of this Contract at the site. Additionally, the Contractor shall keep a copy of approved shop drawings and other submittals. All of these items shall be available to the Owner at all regular business hours. Upon final completion of the work, all of these items shall be finally updated and provided to the Owner and shall become the property of the Owner;

(I) Shop drawings and other submittals from the Contractor do not constitute a part of the Contract. The Contractor shall not do any work requiring shop drawings or other submittals unless such shall have been approved in writing by the Owner. All work requiring approved shop drawings or other submittals shall be done in strict compliance with such approved documents. However, approval by the Owner shall not be evidence that work installed pursuant thereto conforms to the requirements of this Contract. The Owner shall have no duty to review partial submittals or incomplete submittals. The Contractor shall maintain a submittal log which shall include, at a minimum, the date of each submittal, the date of any resubmittal, the date of any approval or rejection, and the reason for any approval or rejection. The

Contractor shall have the duty to carefully review, inspect and examine any and all submittals before submission of same to the Owner;

(J) The Contractor shall maintain the Project site in a reasonably clean condition during performance of the work. Upon final completion, the Contractor shall thoroughly clean the Project site of all debris, trash and excess materials or equipment;

(K) At all times relevant to this Contract, the Contractor shall permit the Owner to enter upon the Project site and to review or inspect the work without formality or other procedure.

## 11. INDEMNITY

Contractor shall indemnify and hold the County, and its officers and employees, harmless from liabilities, damages, losses and costs, including, but not limited to, attorneys' fees, to the extent caused by the negligence, recklessness or intentional wrongful conduct of Contractor or other persons employed or utilized by Contractor in the performance of the Contract; provided however, that this indemnification shall be limited to the amount of this Contract.

## 12. NO DESIGN PROFESSIONAL

There is no architect or consulting engineer acting as Owner's agent including inspection of work or progress of Contractor in this contract. Accordingly, the Owner shall have the following duties and responsibilities:

(A) The Owner shall draft proposed Change Orders;

(B) The Owner shall approve, or respond otherwise as necessary concerning shop drawings or other submittals received from the Contractor;

(C) The Owner shall be authorized to refuse to accept work which is defective or otherwise fails to comply with the requirements of this Contract. If the Owner deems it appropriate, the Owner shall be authorized to call for extra inspection or testing of the work for compliance with requirements of this Contract;

(D) The Owner shall review the Contractor's Payment Requests and shall approve in writing those amounts which, in the opinion of the Owner, are properly owing to the Contractor as provided in this Contract;

(E) The Owner shall, upon written request from the Contractor, perform those inspections required in Paragraph 7 hereinabove;

## 13. CLAIMS BY THE CONTRACTOR

Claims by the Contractor against the Owner are subject to the following terms and conditions:

(A) All Contractor claims against the Owner shall be initiated by a written claim submitted to the Owner. Such claim shall be received by the Owner no later than seven (7) calendar days after the event, or the first appearance of the circumstances, causing the claim, and same shall set forth in detail all known facts and circumstances supporting the claim;

(B) The Contractor and the Owner shall continue their performance hereunder regardless of the existence of any claims submitted by the Contractor;

(C) In the event the Contractor discovers previously concealed and unknown site conditions which are materially at variance from those typically and ordinarily encountered in the general geographical location of the Project, the Contract Price shall be modified, either upward or downward, upon the written claim made by either party within seven (7) calendar days after the first appearance to such party of the circumstances. As a condition precedent to the Owner having any liability to the Contractor due to concealed and unknown conditions, the Contractor must give the

Owner written notice of, and an opportunity to observe, such condition prior to disturbing it. The failure by the Contractor to give the written notice and make the claim as provided by this Subparagraph 13(C) shall constitute a waiver by the Contractor of any rights arising out of or relating to such concealed and unknown condition;

(D) In the event the Contractor seeks to make a claim for an increase in the Contract Price, as a condition precedent to any liability of the Owner therefor, the Contractor shall strictly comply with the requirements of Subparagraph 13(A) above and such claim shall be made by the Contractor before proceeding to execute any additional or changed work. Failure of the condition precedent to occur shall constitute a waiver by the Contractor of any claim for additional compensation;

(E) In connection with any claim by the Contractor against the Owner for compensation in excess of the Contract Price, any liability of the Owner for the Contractor's cost shall be strictly limited to direct cost incurred by the Contractor and shall in no event include indirect cost or consequential damages of the Contractor. The Owner shall not be liable to the Contractor for claims of third-parties including subcontractors, unless and until liability of the Contractor has been established therefor in a court of competent jurisdiction;

(F) In the event the Contractor should be delayed in performing any task which at the time of the delay is then critical, or which during the delay becomes critical, as the sole result of any act or omission by the Owner or someone acting in the Owner's behalf, or by Owner-authorized Change Orders, unusually bad weather not reasonably anticipatable, fire or other Acts of God, the date for achieving Substantial Completion, or, as applicable, final completion, shall be appropriately adjusted by the Owner upon the written claim of the Contractor to the Owner. A task is critical within the meaning of this Subparagraph 13(F) if, and only if, said task is on the critical path of the Project schedule so that a delay in performing such task will delay the ultimate completion of the Project. Any claim for an extension of time by the Contractor shall strictly comply with the requirements of Subparagraph 13(A) above. If the Contractor fails to make such claim as required in this Subparagraph 13(F), any claim for an extension of time shall be waived.

#### 14. SUBCONTRACTORS

The Contractor shall identify to the Owner, in writing, those parties intended as subcontractors on the Project. The Owner shall, in writing, state any objections the Owner may have to one or more of such subcontractors. The Contractor shall not enter into a subcontract with an intended subcontractor with reference to whom the Owner objects. All subcontracts shall afford the Contractor rights against the subcontractor which correspond to those rights afforded to the Owner against the Contractor herein, including those rights of Contract termination as set forth herein below.

#### 15. CHANGE ORDERS

One or more changes to the work within the general scope of this Contract may be ordered by Change Order. The Contractor shall proceed with any such changes, and same shall be accomplished in strict accordance with the following terms and conditions:

(A) Change Order shall mean a written order to the Contractor executed by the Owner after execution of this Contract, directing a change in the work and may include a change in the Contract Price or the time for the Contractor's performance, or any combination thereof;

(B) Any change in the Contract Price resulting from a Change Order shall be determined as follows:

(1) By mutual agreement between the Owner and the Contractor as evidenced by (a) the change in the Contract Price being set forth in the Change Order, (b) such change in the Contract Price, together with any conditions or requirements relating thereto, being initialed by both parties and (c) the Contractor's execution of the Change Order, or,

(2) If no mutual agreement occurs between the Owner and the Contractor, the change in the Contract Price, if any, shall be derived by determining the reasonable actual costs incurred or savings achieved, resulting from revisions in the work. Such reasonable actual costs or savings shall include a component for direct jobsite

overhead and profit but shall not include home-office overhead or other indirect costs or components. Any such costs or savings shall be documented in the format and with such content and detail as the Owner requires.

(C) The execution of a Change Order by the Contractor shall constitute conclusive evidence of the Contractor's agreement to the ordered changes in the work, this Contract as thus amended, the Contract Price and the time for performance by the Contractor. The Contractor, by executing the Change Order, waives and forever releases any claim against the Owner for additional time or compensation for matters relating to or arising out of or resulting from the work included within or affected by the executed Change Order;

(D) The Contractor shall notify and obtain the consent and approval of the Contractor's surety with reference to all Change Orders if such notice, consent or approvals are required by the Owner, the Contractor's surety or by law. The Contractor's execution of the Change Order shall constitute the Contractor's warranty to the Owner that the surety has been notified of, and consents to, such Change Order and the surety shall be conclusively deemed to have been notified of such Change Order and to have expressly consented thereto.

(E) The owner's representative in this agreement is the project manager. No change orders or other modifications to this agreement shall be effective unless in writing and signed by the Purchasing Agent.

## 16. DISCOVERING AND CORRECTING DEFECTIVE OR INCOMPLETE WORK

(A) In the event that the Contractor covers, conceals or obscures its work in violation of this Contract or in violation of a directive from the Owner, such work shall be uncovered and displayed for the Owner's inspection upon request, and shall be reworked at no cost in time or money to the Owner;

(B) If any of the work is covered, concealed or obscured in a manner not covered by Subparagraph 16(A) above, it shall, if directed by the Owner, be uncovered and displayed for the Owner's inspection. If the uncovered work conforms strictly to this Contract, the costs incurred by the Contractor to uncover and subsequently, replace such work shall be borne by the Owner. Otherwise, such costs shall be borne by the Contractor;

(C) The Contractor shall, at no cost in time or money to the Owner, correct work rejected by the Owner as defective or failing to conform to this Contract. Additionally, the Contractor shall reimburse the Owner for all testing, inspections and other expenses incurred as a result thereof;

(D) In addition to its warranty obligations set forth elsewhere herein, the Contractor shall be specifically obligated to correct any and all defective or nonconforming work for a period of twelve (12) months following final completion upon written direction from the Owner.

(E) The Owner may, but shall in no event be required to, choose to accept defective or nonconforming work. In such event, the Contract Price shall be reduced by the greater of (1) the reasonable costs of removing and correcting the defective or nonconforming work, and (2) the difference between the fair market value of the Project as constructed and the fair market value of the Project had it not been constructed in such a manner as to include defective or nonconforming work. If the remaining portion of the unpaid Contract Price, if any, is insufficient to compensate the Owner for the acceptance of defective or nonconforming work, the Contractor shall, upon written demand from the Owner, pay the Owner such remaining compensation for accepting defective or nonconforming work.

## 17. TERMINATION BY THE CONTRACTOR

If the Owner repeatedly fails to perform its material obligations to the Contractor for a period of thirty (30) days after receiving written notice from the Contractor of its intent to terminate hereunder, the Contractor may terminate performance under this Contract by written notice to the Owner. In such event, the Contractor shall be entitled to recover from the Owner as though the Owner had terminated the Contractor's performance under this Contract for convenience pursuant to Subparagraph 19(A) hereunder.

## 18. OWNER'S RIGHT TO SUSPEND CONTRACTOR'S PERFORMANCE



(A) The Owner shall have the right at any time to direct the Contractor to suspend its performance, or any designated part thereof, for any reason whatsoever, or without reason, for a cumulative period of up to ten (10) calendar days. If any such suspension is directed by the Owner, the Contractor shall immediately comply with same;

(B) In the event the Owner directs a suspension of performance under this Paragraph 18, through no fault of the Contractor, the Owner shall pay the Contractor as full compensation for such suspension the Contractor's reasonable costs, actually incurred and paid, of:

- (1) demobilization and remobilization, including such costs paid to subcontractors;
- (2) preserving and protecting work in place;
- (3) storage of materials or equipment purchased for the Project, including insurance thereon;
- (4) performing in a later, or during a longer, time frame than that contemplated by this Contract.

## 19. TERMINATION BY THE OWNER

The Owner may terminate this Contract in accordance with the following terms and conditions:

(A) The Owner may, for any reason whatsoever, terminate performance under this Contract by the Contractor for convenience. The Owner shall give written notice of such termination to the Contractor specifying when termination becomes effective. The Contractor shall incur no further obligations in connection with the work and the Contractor shall stop work when such termination becomes effective. The Contractor shall also terminate outstanding orders and subcontracts. The Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders. The Owner may direct the Contractor to assign the Contractor's right, title and interest under termination orders or subcontracts to the Owner or its designee. The Contractor shall transfer title and deliver to the Owner such completed or partially completed work and materials, equipment, parts, fixtures, information and Contract rights as the Contractor has. When terminated for convenience, the Contractor shall be compensated as follows:

- (1) The Contractor shall submit a termination claim to the Owner specifying the amounts due because of the termination for convenience together with costs, pricing or other data required by the Owner. If the Contractor fails to file a termination claim within one (1) year from the effective date of termination, the Owner shall pay the Contractor, an amount derived in accordance with Subparagraph (3) below;
- (2) The Owner and the Contractor may agree to the compensation, if any, due to the Contractor hereunder;
- (3) Absent agreement to the amount due to the Contractor, the Owner shall pay the Contractor the following amounts:
  - (a) Contract prices for labor, materials, equipment and other services accepted under this Contract;
  - (b) Reasonable costs incurred in preparing to perform and in performing the terminated portion of the work, and in terminating the Contractor's performance, plus a fair and reasonable allowance for direct jobsite overhead and profit thereon (such profit shall not include anticipated profit or consequential damages); provided however, that if it appears that the Contractor would have not profited or would have sustained a loss if the entire Contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss, if any;
  - (c) Reasonable costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to Subparagraph 19(A) of this Paragraph. These costs shall not include amounts paid in accordance with other provisions hereof.The total sum to be paid the Contractor under this Subparagraph 19(A) shall not exceed the total Contract Price, as properly adjusted, reduced by the amount of payments otherwise made, and shall in no event include duplication of payment.

(B) If the Contractor does not perform the work, or any part thereof, in a timely manner, supply adequate labor, supervisory personnel or proper equipment or materials, or if it fails to timely discharge its obligations for labor, equipment and materials, or proceeds to disobey applicable law, or otherwise commits a violation of a material provision of this Contract, then the Owner, in addition to any other rights it may have against the Contractor or others, may terminate the performance of the Contractor and assume possession of the Project site and of all materials and equipment at the site and may complete the work. In such case, the Contractor shall not be paid further until the work is complete. After final completion has been achieved, if any portion of the Contract Price, as it may be modified hereunder, remains after the cost to the Owner of completing the work, including all costs and expenses of every nature incurred, has been deducted by the Owner, such remainder shall belong to the Contractor. Otherwise, the Contractor shall pay and make whole the Owner for such cost. This obligation for payment shall survive the termination of the Contract. In the event the employment of the Contractor is terminated by the Owner for cause pursuant to this Subparagraph 19(B) and it is subsequently determined by a Court of competent jurisdiction that such termination was without cause, such termination shall thereupon be deemed a Termination for Convenience under Subparagraph 19(A) and the provisions of Subparagraph 19(A) shall apply.

## 20. INSURANCE

The Contractor shall have and maintain insurance in accordance with the requirements of Exhibit "A" attached hereto and incorporated herein by reference.

## 21. SURETY BONDS

The Contractor shall furnish separate performance, payment, and maintenance bonds to the Owner. Each bond shall set forth a penal sum in an amount not less than the Contract Price. Each bond furnished by the Contractor shall incorporate by reference the terms of this Contract as fully as though they were set forth verbatim in such bonds and shall specifically reference paragraph 16(d) of this agreement. In the event the Contract Price is adjusted by Change Order executed by the Contractor, the penal sum of both the performance bond, payment bond, and maintenance bond shall be deemed increased by like amount. The performance, payment and maintenance bonds furnished by the Contractor shall be in form provided by the Owner and shall be executed by a surety, or sureties, reasonably acceptable to the Owner.

## 22. PROJECT RECORDS

All documents relating in any manner whatsoever to the Project, or any designated portion thereof, which are in the possession of the Contractor, or any subcontractor of the Contractor, shall be made available to the Owner for inspection and copying upon written request by the Owner. Furthermore, said documents shall be made available, upon request by the Owner, to any state, federal or other regulatory authority and any such authority may review, inspect and copy such records. Said records include, but are not limited to, all drawings, plans, specifications, submittals, correspondence, minutes, memoranda, tape recordings, videos, or other writings or things which document the Project, its design, and its construction. Said records expressly include those documents reflecting the cost of construction to the Contractor. The Contractor shall maintain and protect these documents for no less than four (4) years after final completion of the Project, or for any longer period of time as may be required by law or good construction practice.

## 23. APPLICABLE LAW

The law applicable to this Contract is hereby agreed to be the law of the State of Texas and venue shall be Collin County, Texas.

## 24. EXPENSES FOR ENFORCEMENT

In the event either Party hereto is required to employ an attorney to enforce the provisions of this Agreement or is required to commence legal proceedings to enforce the provisions hereof, the prevailing Party shall be entitled to recover from the other, reasonable attorney's fees and court costs incurred in connection with such enforcement, including collection.

25. SUCCESSORS AND ASSIGNS

Each party binds itself, its successors, assigns, executors, administrators or other representatives to the other party hereto and to successors, assigns, executors, administrators or other representatives of such other party in connection with all terms and conditions of this Contract. The Contractor shall not assign this Contract without prior written consent of the Owner.

26. NOTICES

All notices required or permitted hereunder shall be in writing and shall be deemed to have been duly delivered hereunder if mailed by first class certified mail, postage prepaid, to the respective parties at the respective addresses:

Owner:  
Bill Burke  
Construction Projects Director  
4600 Community Ave.  
McKinney, TX 75071

Contractor:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Any party may at any time change its address for such notices by delivering or mailing to the other parties hereto, in the manner provided above, a notice of such change.

**OWNER**  
Collin County

**CONTRACTOR**

\_\_\_\_\_

\_\_\_\_\_

(TYPED NAME)

(TYPED NAME)

By: \_\_\_\_\_  
(SIGNATURE)

By: \_\_\_\_\_  
(SIGNATURE)

Michalyn Rains, CPPO, CPPB  
Purchasing Agent  
2300 Bloomdale Rd., Ste. 3160  
McKinney, TX 75071

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(PRINTED NAME, TITLE & ADDRESS)

\_\_\_\_\_  
(PRINTED NAME, TITLE & ADDRESS)

\_\_\_\_\_  
(DATE OF EXECUTION)

\_\_\_\_\_  
(DATE OF EXECUTION)

## **EXHIBIT "A"**

### Contractor's and Subcontractor's Insurance:

Before commencing work, the vendor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) indicating the coverage to remain in force throughout the term of this contract.

1. Commercial General Liability insurance including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability.
  - Each Occurrence: \$1,000,000
  - Personal & Adv. Injury: \$1,000,000
  - Products/Completed Operation: \$2,000,000
  - General Aggregate: \$2,000,000
  
2. Workers Compensation insurance as required by the laws of Texas, and Employers' Liability.
  - Liability, Each Accident: \$1,000,000
  - Disease-Each Employee: \$500,000
  - Disease – Policy Limit: \$500,000
  
3. Commercial Automobile Liability insurance including owned, non-owned, and hired vehicles used in connection with the contract.
  - Combined Single Limit – Each Accident: \$1,000,000
  
4. Umbrella/Excess Liability insurance.
  - Each Occurrence/Aggregate: \$1,000,000

With reference to the foregoing insurance requirement, the vendor shall endorse applicable insurance policies as follows:

1. A waiver of subrogation in favor of Collin County, its officials, employees, volunteers and officers shall be provided for General Liability, Commercial Automobile Liability and Workers' Compensation.
  
2. The vendor's insurance coverage shall name Collin County as additional insured under the General Liability policy.
  
3. All insurance policies shall be endorsed to require the insurer to immediately notify Collin County of any decrease in the insurance coverage limits.
  
4. All insurance policies shall be endorsed to the effect that Collin County will receive at least thirty (30) days' notice prior to cancellation, non-renewal or termination of the policy.
  
5. All copies of Certificates of Insurance shall reference the project/contract number.

All insurance shall be purchased from an insurance company that meets the following requirements:

1. A financial rating of A+VII or better as assigned by the BEST Rating Company or equivalent.

Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent, and shall contain provisions representing and warranting the following:

1. Sets forth all endorsements and insurance coverages according to requirements and instructions contained herein.
2. Sets forth the notice of cancellation or termination to Collin County.

## **INFORMATION REGARDING CONFLICT OF INTEREST QUESTIONNAIRE**

During the 79<sup>th</sup> Legislative Session, House Bill 914 was signed into law effective September 1, 2015, which added Chapter 176 to the Texas Local Government Code. Recent changes have been made to Chapter 176 pursuant to HB23, which passed the 84<sup>th</sup> Legislative Session. Chapter 176 mandates the public disclosure of certain information concerning persons doing business or seeking to do business with Collin County, including family, business, and financial relationships such persons may have with Collin County officers or employees involved in the planning, recommending, selecting and contracting of a vendor for this procurement.

For a copy of Form CIQ and CIS:

[http://www.ethics.state.tx.us/filinginfo/conflict\\_forms.htm](http://www.ethics.state.tx.us/filinginfo/conflict_forms.htm)

The vendor acknowledges by doing business or seeking to do business with Collin County that he/she has been notified of the requirements under Chapter 176 of the Texas Local Government Code and that he/she is solely responsible for complying with the terms and conditions therein. Furthermore, any individual or business entity seeking to do business with Collin County who does not comply with this practice may risk award consideration of any County contract.

For a listing of current Collin County Officers:

<http://www.collincountytexas.gov/government/Pages/officials.aspx>

The following County employees will be involved in the planning, recommending, selecting, and contracting for the attached procurement:

Department/Evaluation Team:

Bill Burke – Director of Building Projects

Brad Harris – Building Projects Coordinator

Purchasing:

Michalyn Rains, CPPO, CPPB – Purchasing Agent

Michelle Charnoski, CPPB – Assistant Purchasing Agent

J. D. Griffin, CPPB – Buyer II

Commissioners' Court:

Keith Self – County Judge

Susan Fletcher – Commissioner Precinct No. 1

Cheryl Williams – Commissioner Precinct No. 2

John Thomas – Commissioner Precinct No. 3

Duncan Webb – Commissioner Precinct No. 4

**CONFLICT OF INTEREST QUESTIONNAIRE**  
For vendor doing business with local governmental entity

**FORM CIQ**

**This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.**

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

**OFFICE USE ONLY**

Date Received

**1 Name of vendor who has a business relationship with local governmental entity.**

**2**  **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3 Name of local government officer about whom the information is being disclosed.**

\_\_\_\_\_  
Name of Officer

**4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes       No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes       No

**5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

**6**  Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

**7**

\_\_\_\_\_  
Signature of vendor doing business with the governmental entity

\_\_\_\_\_  
Date

## **CONFLICT OF INTEREST QUESTIONNAIRE**

### **For vendor doing business with local governmental entity**

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a):** "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B):**

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

\*\*\*

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

- (i) a contract between the local governmental entity and vendor has been executed;
- or
- (ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

- (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
- (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
- (3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

- (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
- (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

- (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
- (B) that the vendor has given one or more gifts described by Subsection (a); or
- (C) of a family relationship with a local government officer.



CHAPTER 2270 VERIFICATION

I, \_\_\_\_\_, the undersigned representative of  
(PRINT NAME)

\_\_\_\_\_  
(COMPANY)

do hereby verify that the company named-above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

- 1. Does not boycott Israel currently; and
- 2. Will not boycott Israel during the term of the contract.

*Pursuant to Section 2270.001, Texas Government Code:*

- 1. *“Boycott Israel” means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and*
- 2. *“Company” means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.*

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNATURE OF COMPANY REPRESENTATIVE

\_\_\_\_\_  
TITLE

## Request for Taxpayer Identification Number and Certification

**Give Form to the  
 requester. Do not  
 send to the IRS.**

Print or type See Specific Instructions on page 2.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification; check only <b>one</b> of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <b>Note.</b> For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <small>(Applies to accounts maintained outside the U.S.)</small>
	5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	

**Part I Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

**Note.** If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

<b>Social security number</b>												
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<b>or</b>												
<b>Employer identification number</b>												
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**Part II Certification**

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶
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**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.  
**Future developments.** Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at [www.irs.gov/fw9](http://www.irs.gov/fw9).

**Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
  - Form 1099-C (canceled debt)
  - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.
- If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.*
- By signing the filled-out form, you:
- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued).
  - Certify that you are not subject to backup withholding, or
  - Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
  - Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.