

PHOTO A - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel



PHOTO B - BASEMENT EXPOSED CEILING  
Exposed Ceiling In The Basement

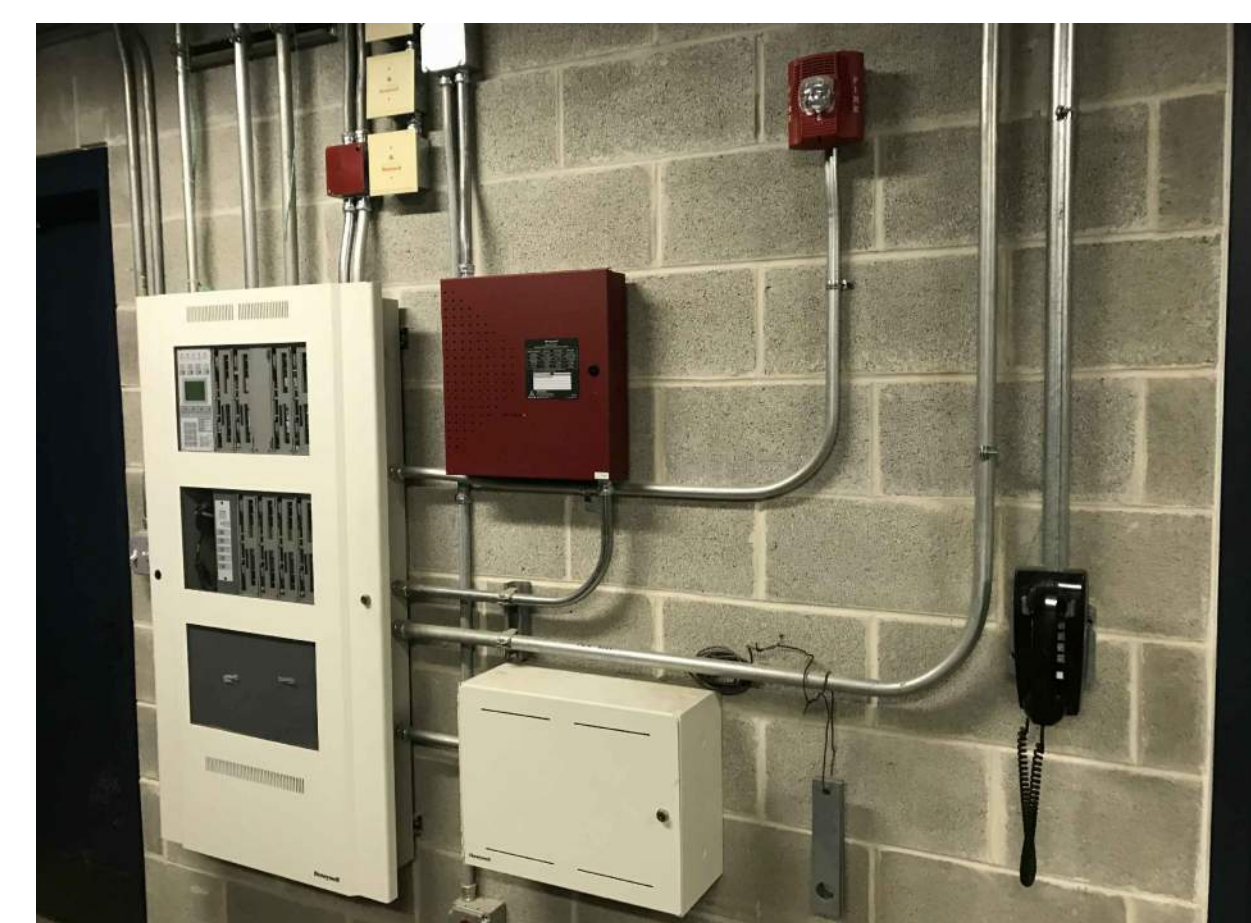


PHOTO C - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel In Basement Electrical Room

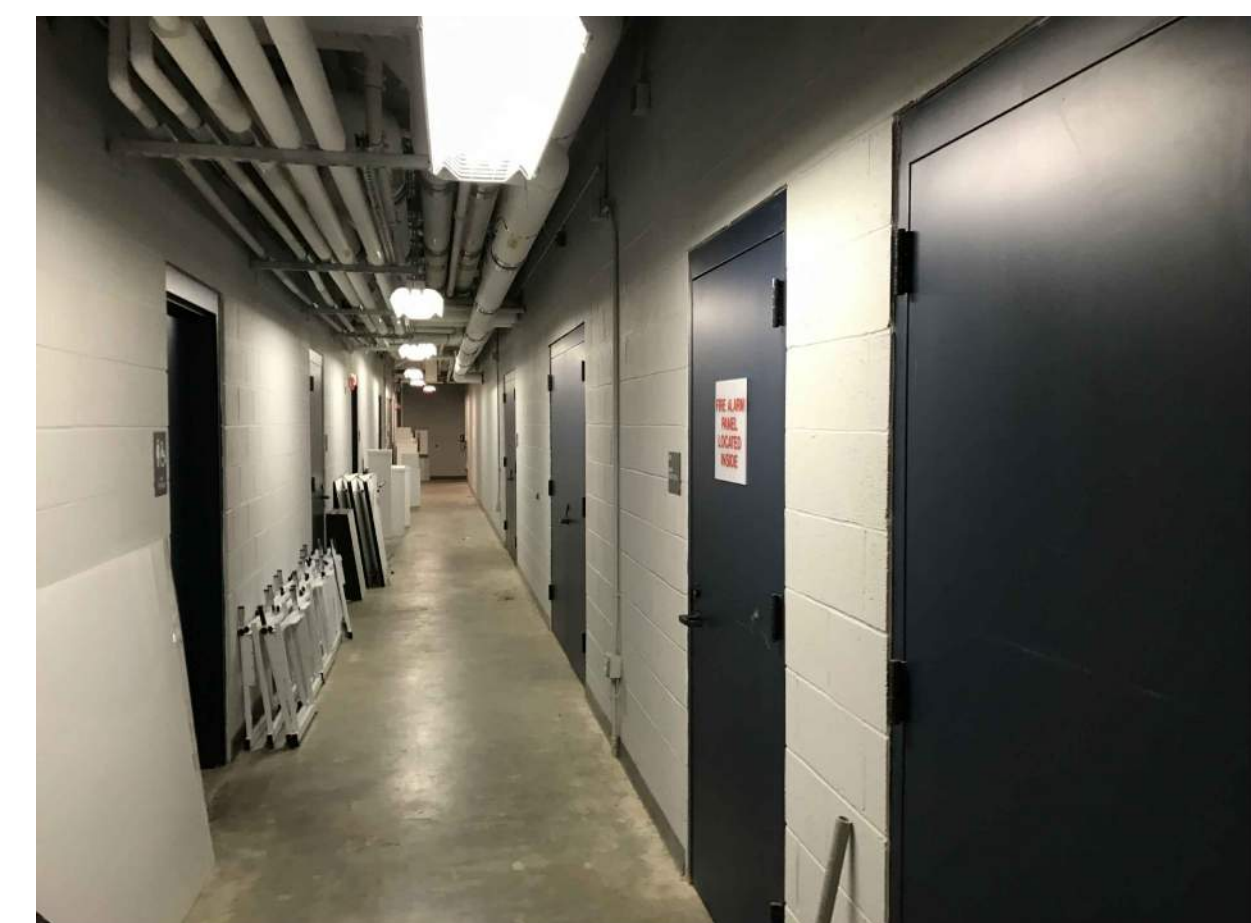
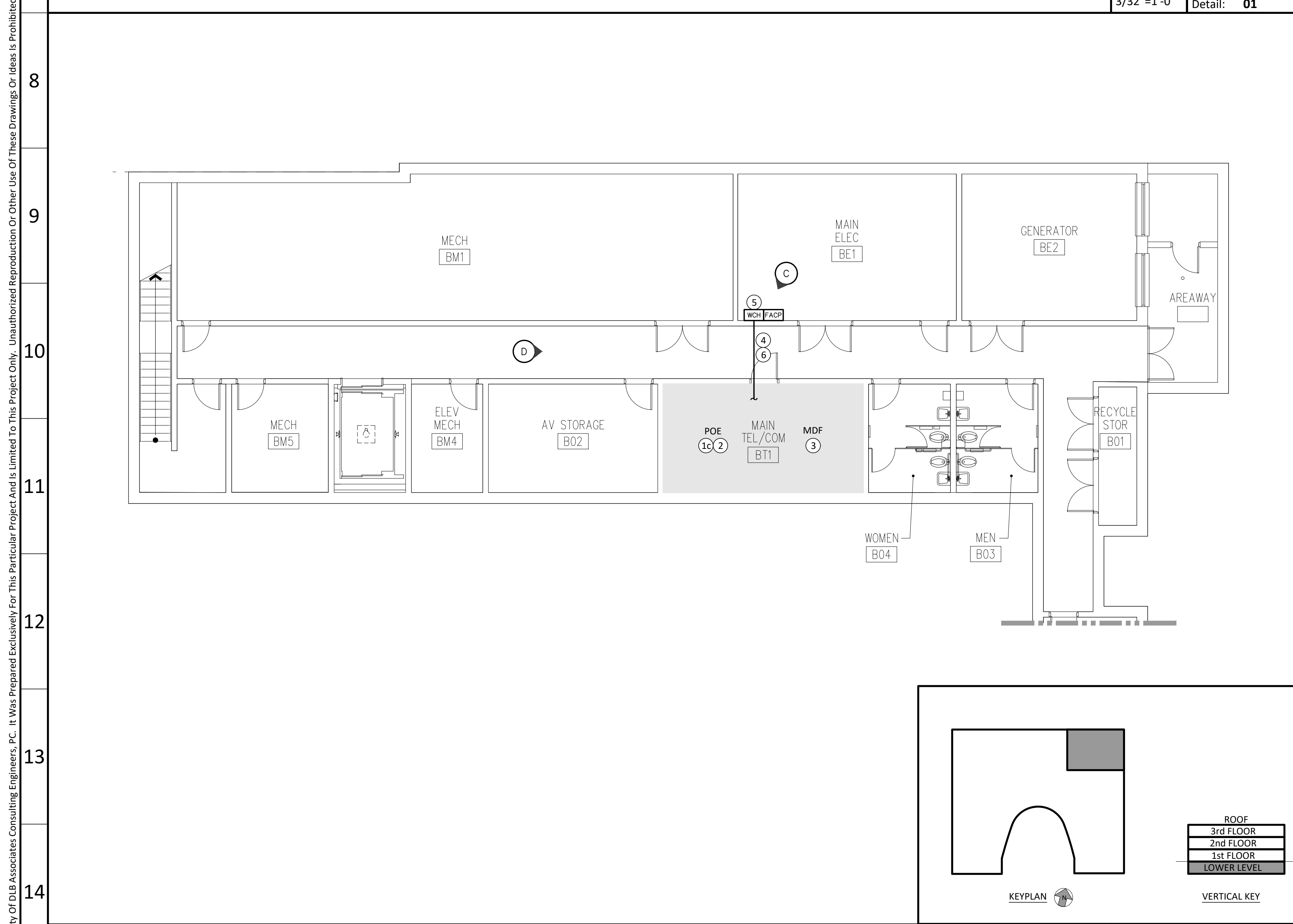


PHOTO D - CORRIDOR CEILING  
Conduit Above Open Ceiling In Basement

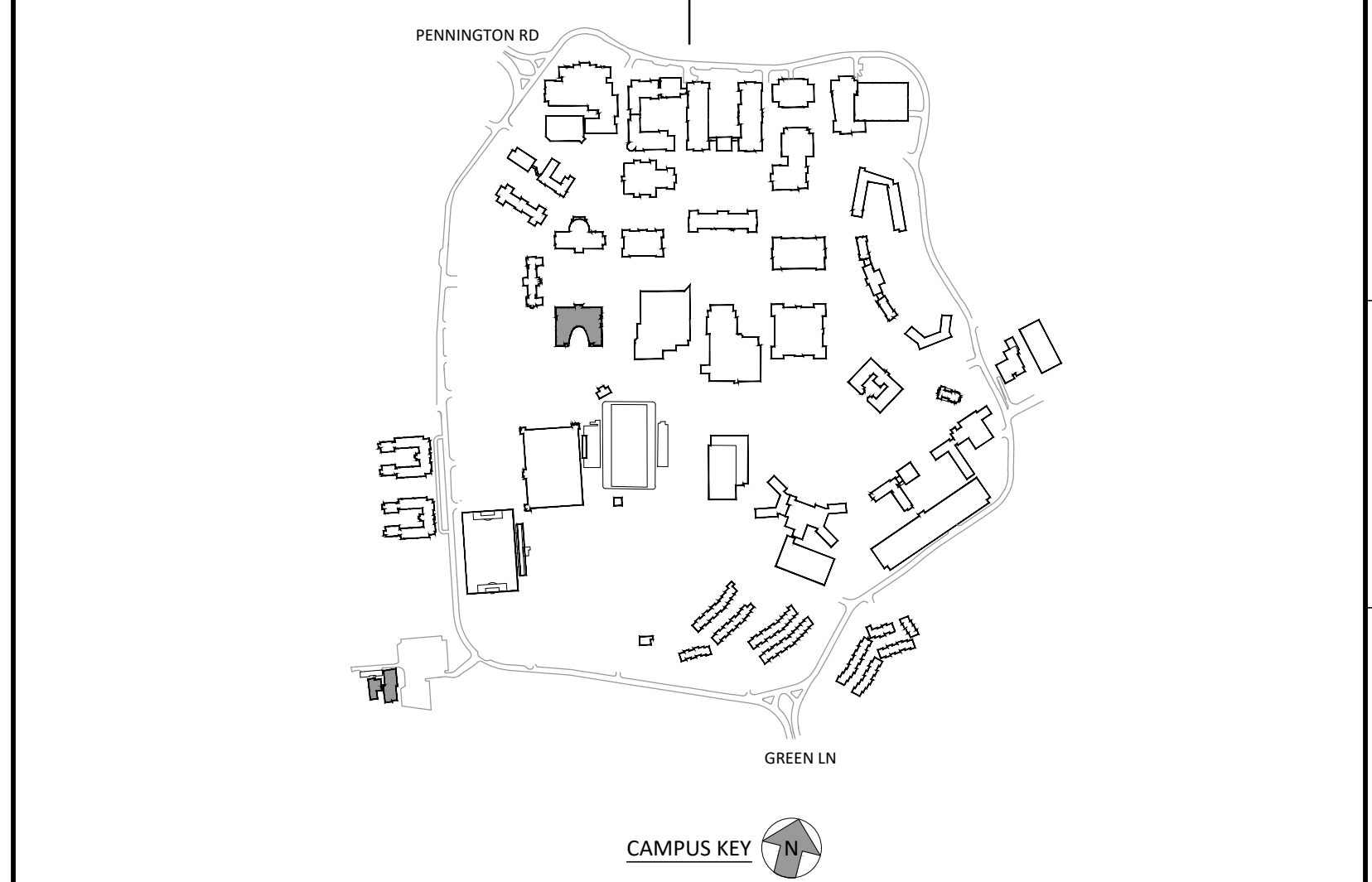


- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  - Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  - Terminate Fiber Within New Cable Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  - Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cable Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  - New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  - Route Fiber Conduit As Close To The Existing Ceiling As Possible.
  - Location Of Admin Splice Cabinet.
  - Coordinate With TCNJ IT Department For Cable Removal For This Building. The Intent Is To Remove The Existing Fiber Cable And To Replace With A Higher Capacity Cable Between Admin Splice To Admin, Admin Splice To Soccer Press Box, Admin Splice To Metzger Garage And Admin To Fire Pump.
  - Route New 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cable Connector Housing To Wall Mounted Connector Housing Located In Records Room For New Life Safety Management System Workstation. Coordinate WCH Location With TCNJ IT Before Installation.
  - Provide New Fire Alarm Network Switch And Fiber Patch Cords As Required For New Life Safety Management System Network Architecture. Coordinate With TCNJ IT Department For Connection Of Switch To Fiber Network.
  - Provide Two Independent Life Safety Management System Workstation Connections From MDF. Coordinate Workstation Locations With TCNJ IT Prior To Installation.

- GENERAL NOTES**
- The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  - New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  - All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  - Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  - All Work And Materials Shall Be New Unless Otherwise Noted.
  - Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
  - Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
  - A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Life Safety Management System		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

30x42

**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724

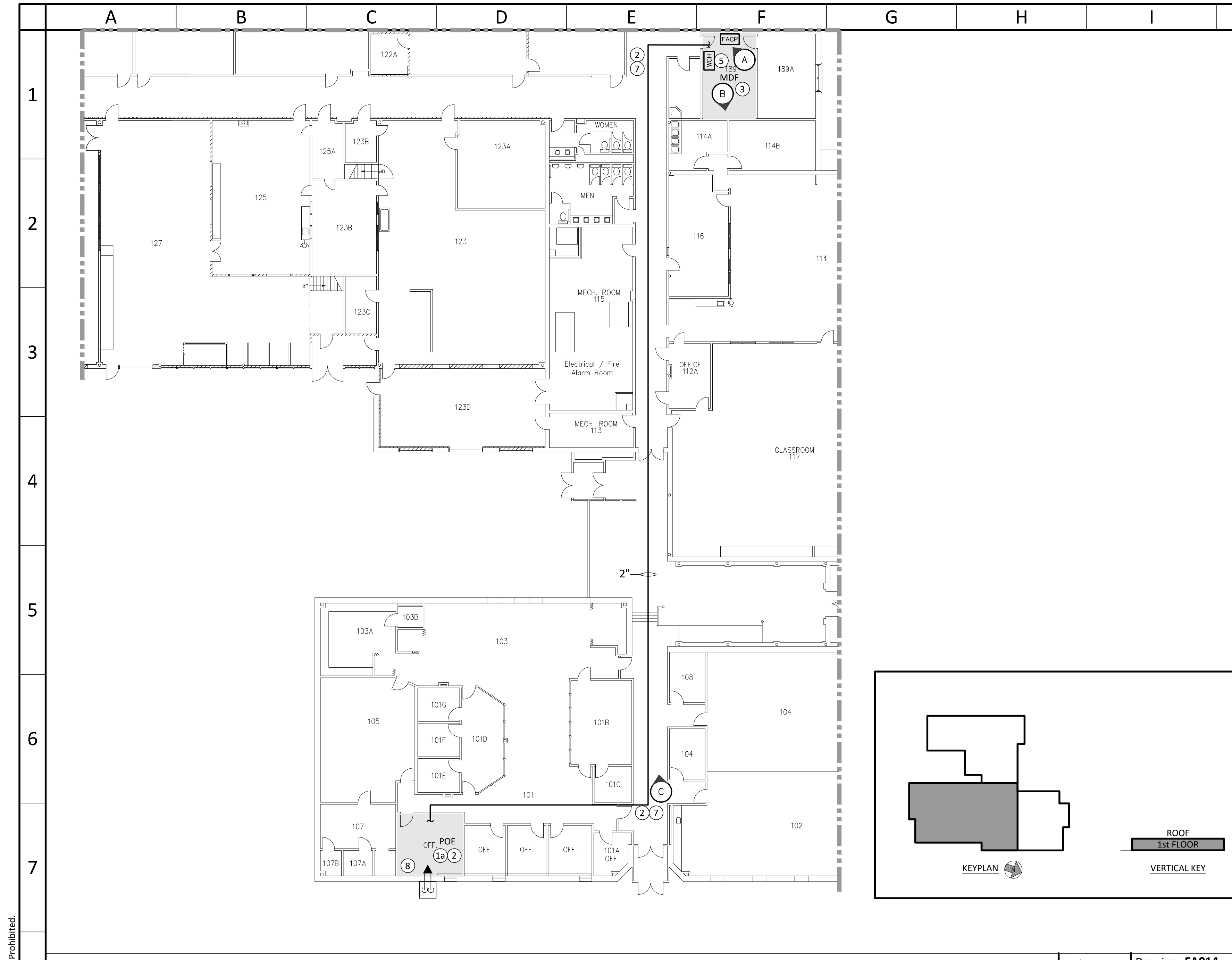
Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

scale	AS SHOWN	drawn by	AM	checked by	SG	date	05/03/2020
title	INTERIOR FIBER ROUTING ADMIN SERVICE BUILDING & AIMM BUILDING FIRE ALARM						
dwg. no.	<b>FA013</b>						

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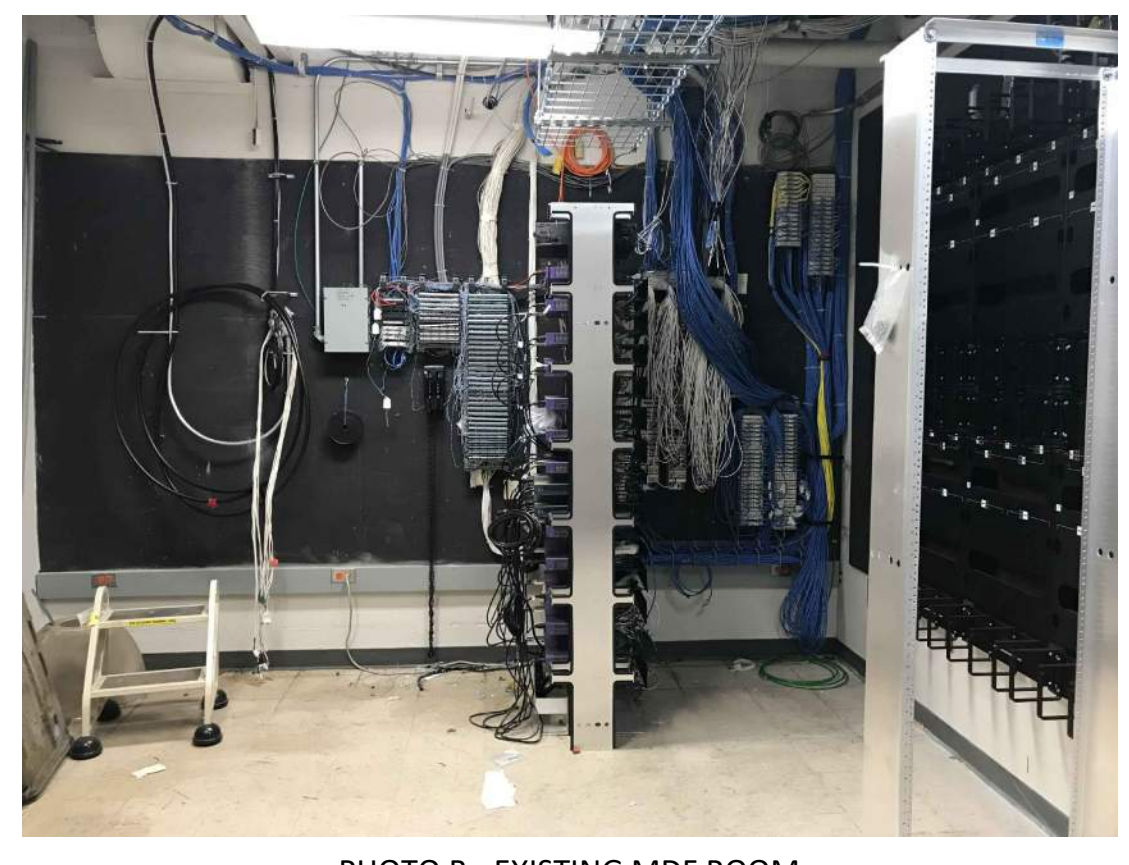




**ARMSTRONG HALL - FIBER LAYOUT** Scale: 1/16"=1'-0" Drawing: FA014 Detail: 01



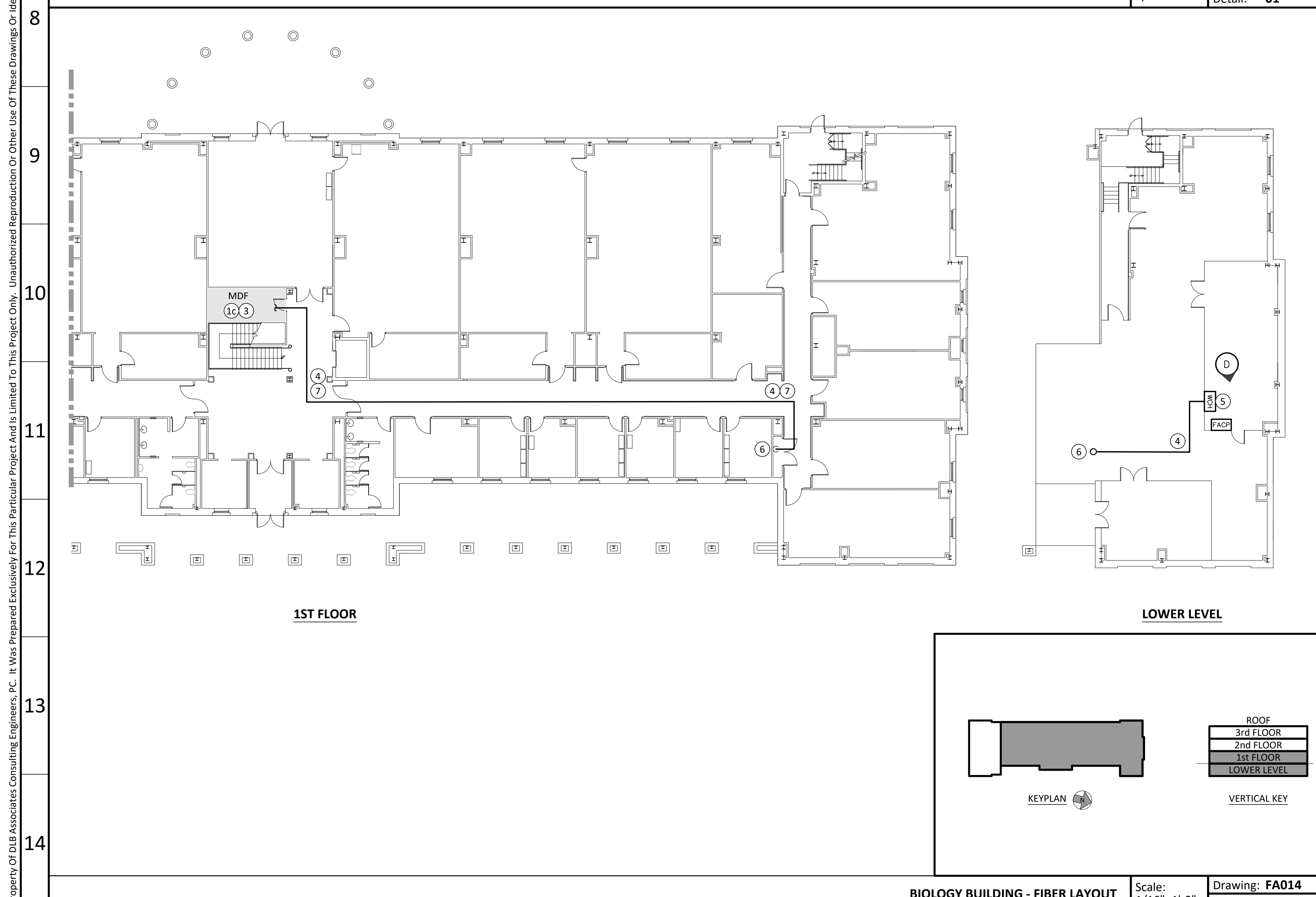
**PHOTO A - EXISTING FIRE ALARM PANEL**  
Existing Fire Alarm Control Panel



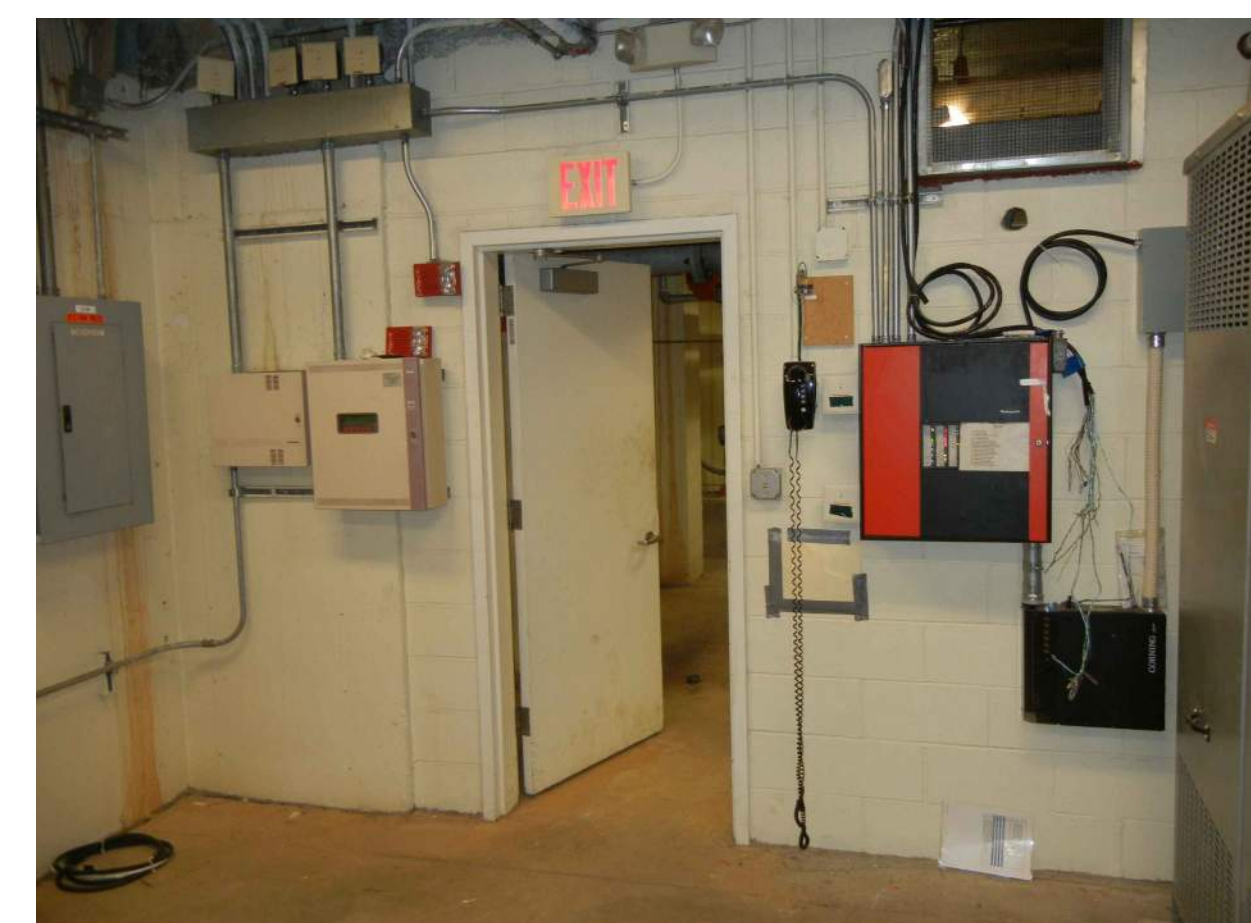
**PHOTO B - EXISTING MDF ROOM**  
Existing MDF in First Floor Electrical Room



**PHOTO C - EXISTING DROP CEILING**  
Route Fiber Pathway Above Existing Drop Ceilings With The Corridor



**BIOLOGY BUILDING - FIBER LAYOUT** Scale: 1/16"=1'-0" Drawing: FA014 Detail: 02



**PHOTO D - EXISTING FIRE ALARM PANEL**  
Existing Fire Alarm Control Panel

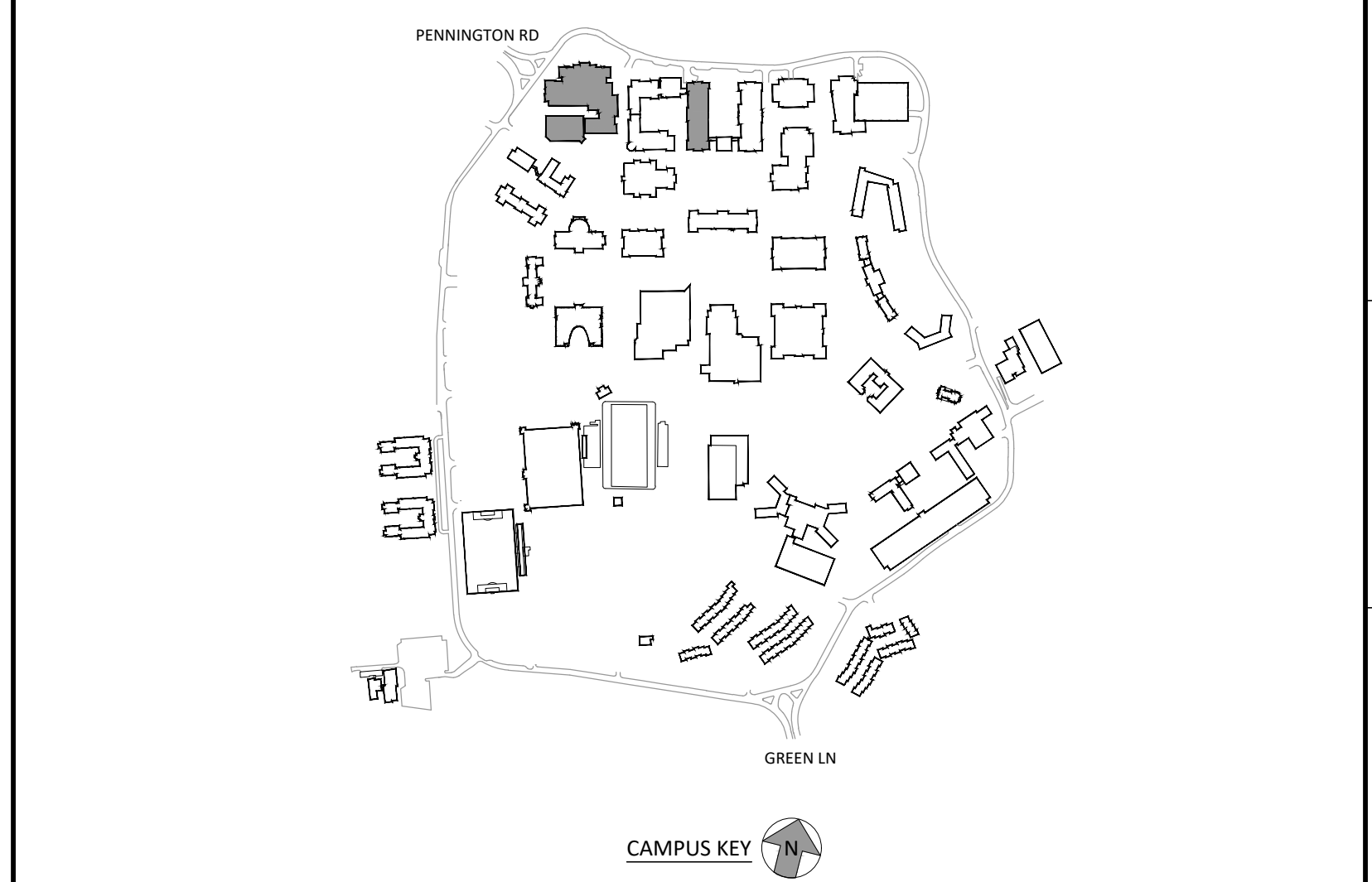


**BUILDING CEILINGS**  
Drop Ceilings Located Throughout The Building. Route Fiber Pathway Above Existing Drop Ceilings

- KEY NOTES (SYMBOLS ①, ②, ETC.)**
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  - Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  - Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  - Terminate Fiber Within New Cable Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  - Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cable Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  - New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  - Core Drill All Floor Penetrations To Route Fiber From MDF On First Floor To Wall Mounted Connector Housing (WCH) In Basement. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  - Route Fiber Pathway Above Drop Ceiling Where Possible.
  - Route Exterior Fiber From Underground Conduit Up The Side Of The Building To Enclosed Weatherproof 24"W x 30"H x 18"D Pullbox. Route From The Pullbox Up The Exterior Of The Building And Into The Interior Space Above Ceiling Line.
- GENERAL NOTES**
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**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
→	New Fiber Pathway	FACP	Fire Alarm Control Panel
⊙	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
⊙	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
FACP	Fire Alarm Control Panel		
WCH	Wall Mounted Connector Housing		
ITRACK	IT Rack		
⊙	Photo Identification Tag		
→	Connect To Existing		
□	MDF / POE		



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**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724

Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
ARMSTRONG HALL & BIOLOGY BUILDING  
FIRE ALARM

scale AS SHOWN drawn by AM checked by SG date 05/03/2020

dwg. no.  
**FA014**

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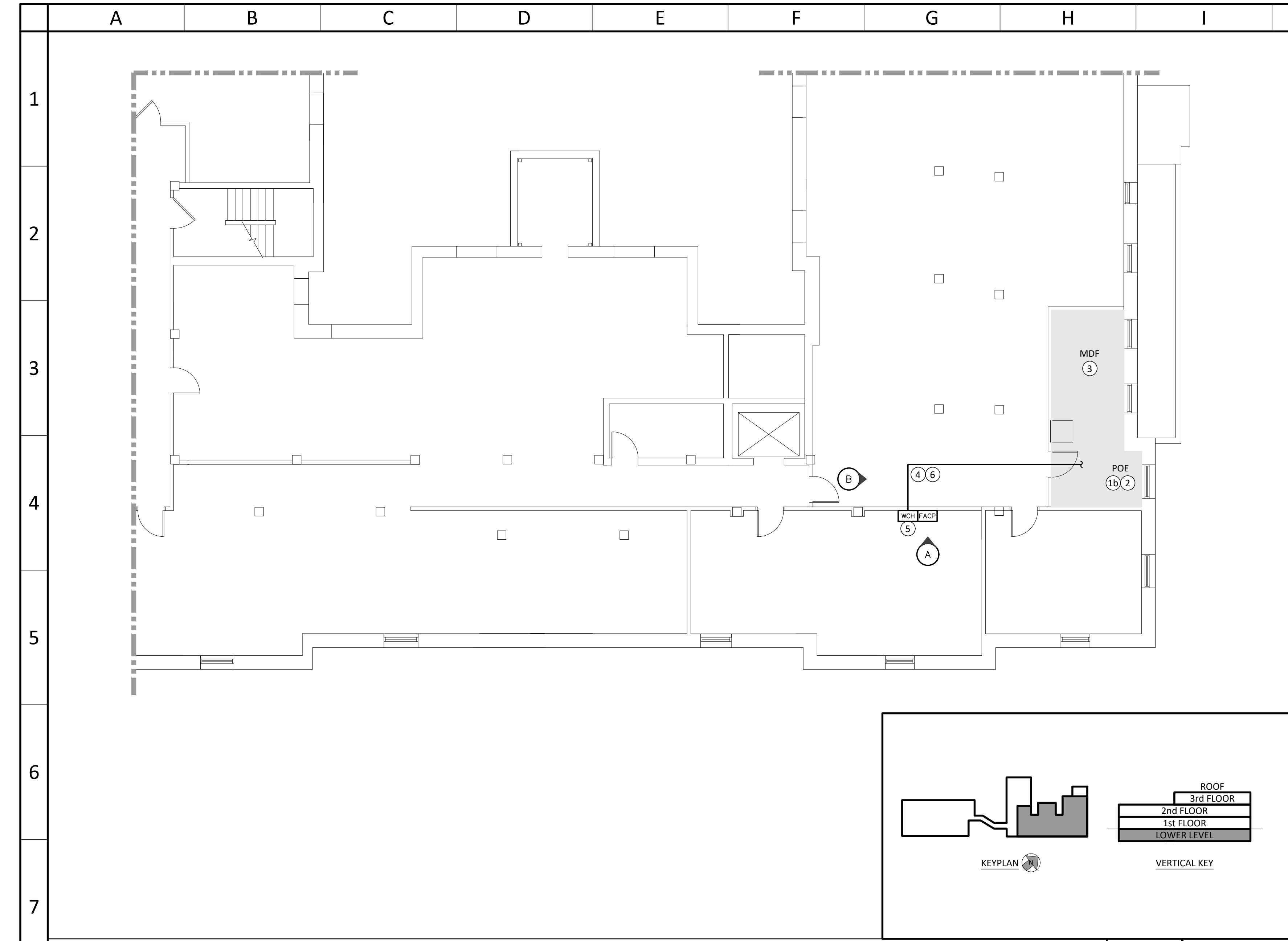


PHOTO A - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel

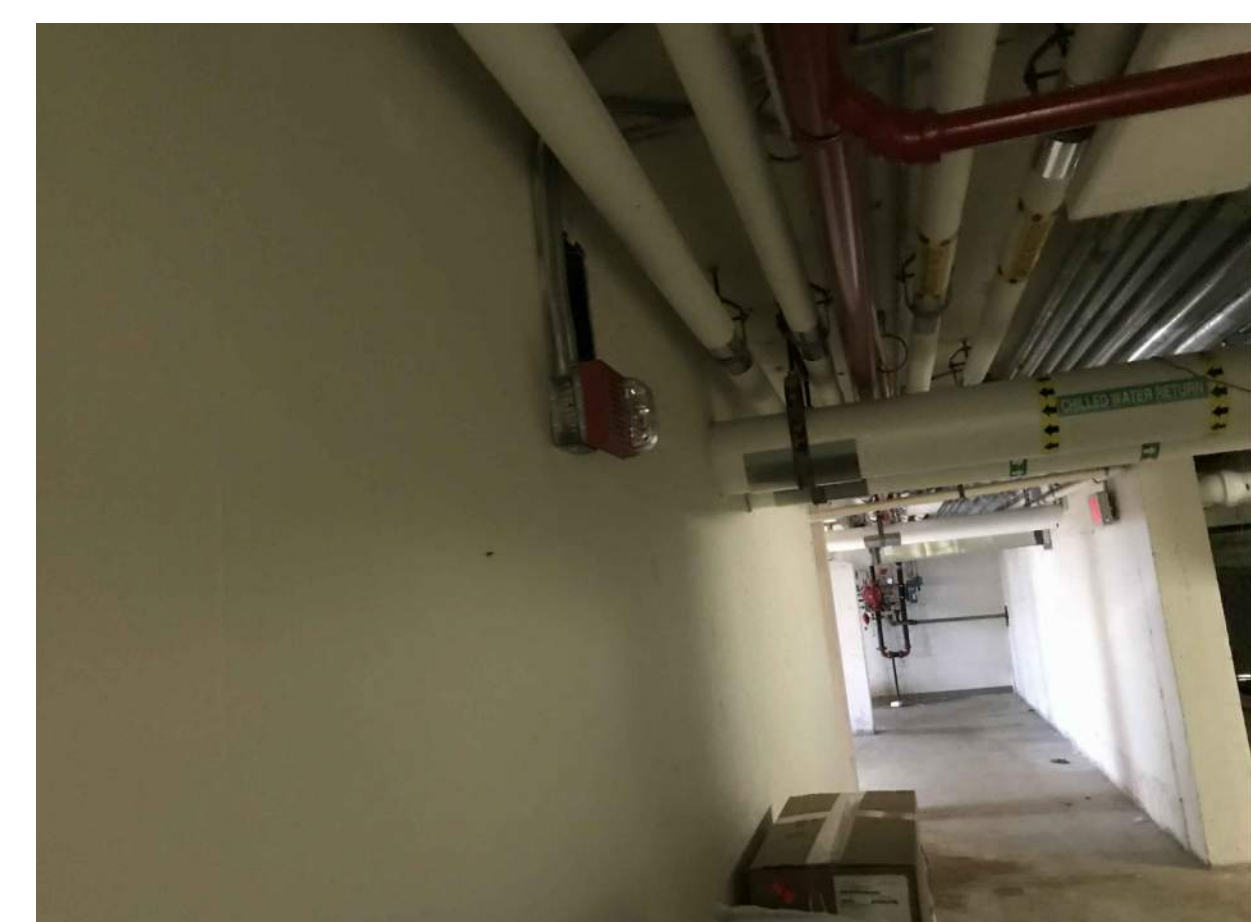


PHOTO B - LOWER LEVEL CEILINGS  
Route Fiber As High As Possible Within Open Ceiling Of The Corridor

**KEY NOTES (SYMBOLS ①, ②, ETC.)**

KEYNOTES 1 THRU 7 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS

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- Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
- Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
- Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
- Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
- Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
- New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
- Route Fiber Conduit As Close To The Existing Ceiling As Possible.
- Core Drill All Floor Penetrations To Route Fiber From MDF On First Floor To Wall Mounted Connector Housing (WCH) In Basement. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.

**GENERAL NOTES**

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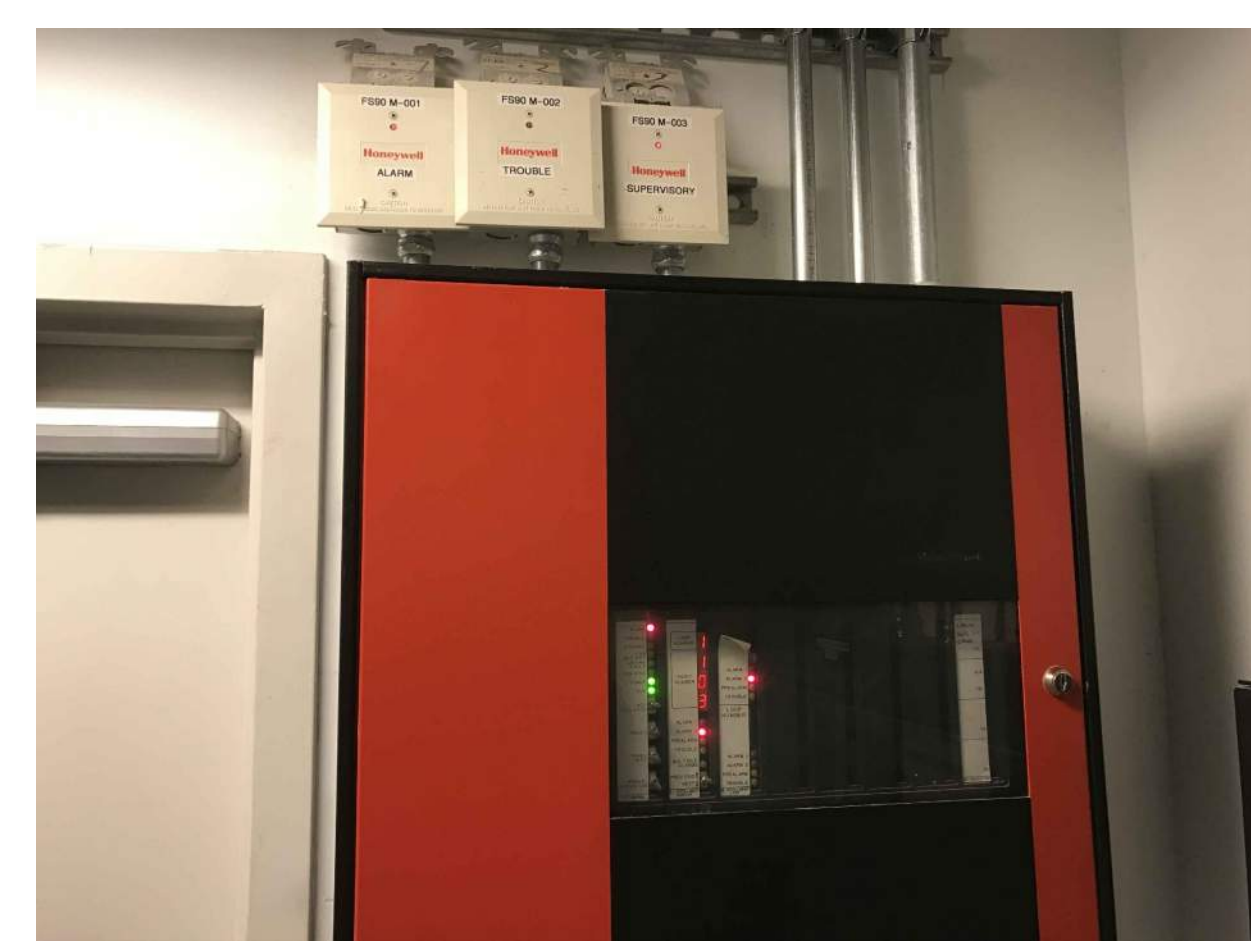
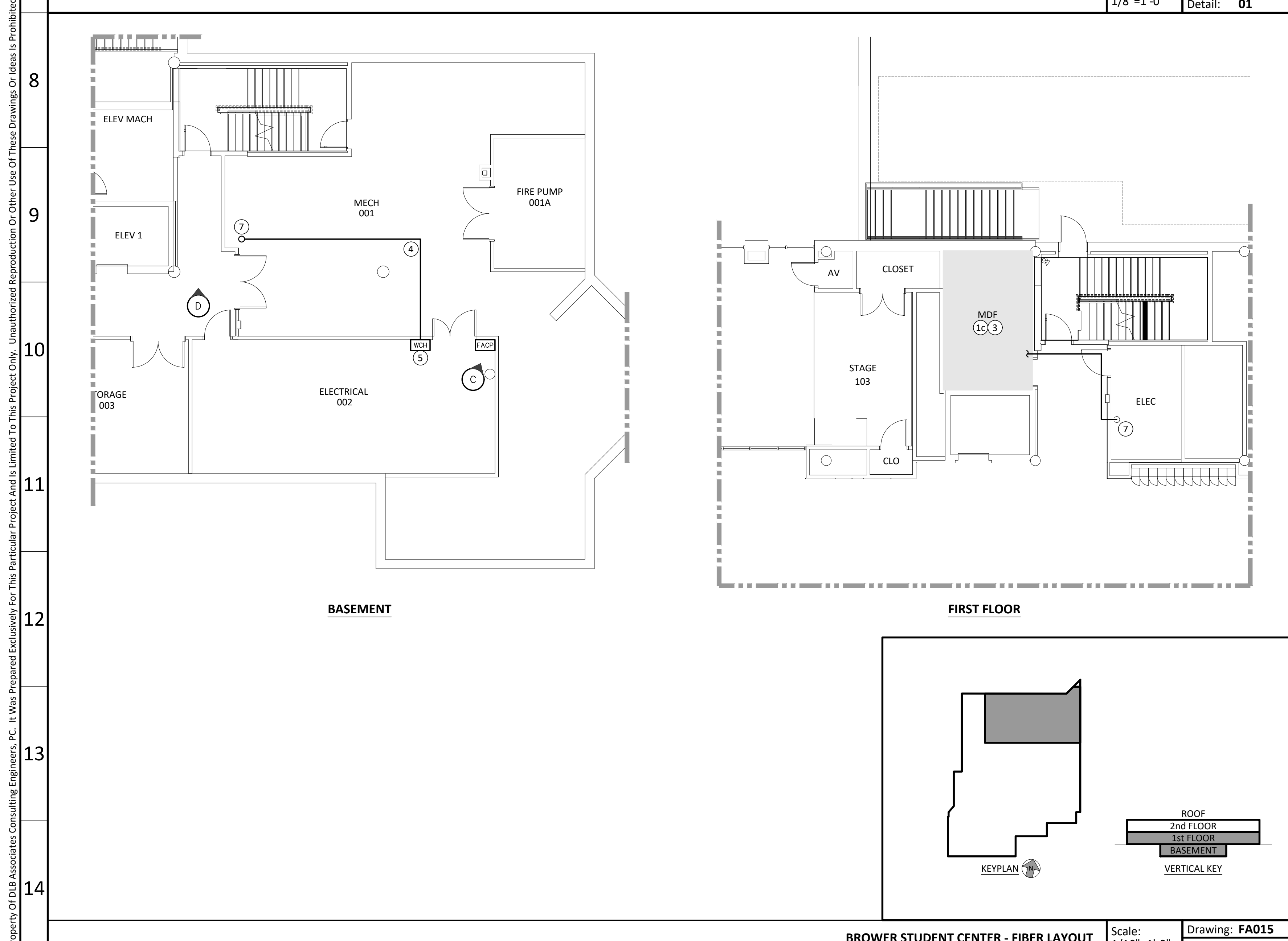


PHOTO C - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel

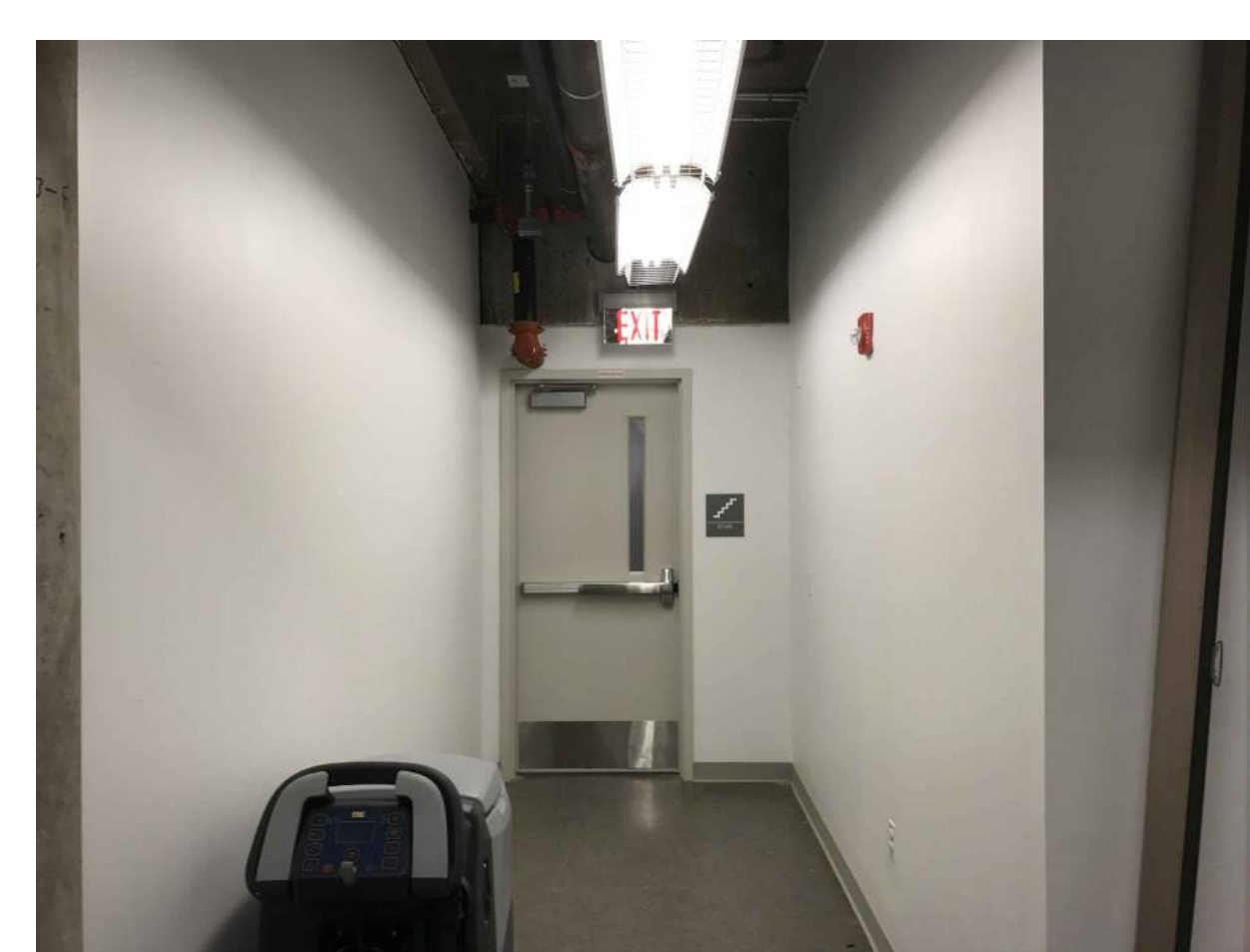


PHOTO D - EXISTING CORRIDOR  
Route Fiber As High As Possible Within Open Ceiling Of The Corridor

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		

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**dlb associates**  
 CONSULTING ENGINEERS, P.C.  
 265 Industrial Way West, Eatontown, N.J. 07724  
 Questions For DLB Call: Anthony Laskosky  
 DLB Project ID: 47211 Phone: 732-927-5038

project  
 TCNJ - CAMPUS FIRE ALARM PROJECT  
 PART A - CABLE INFRASTRUCTURE UPGRADES  
 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

title  
 INTERIOR FIBER ROUTING  
 BLISS HALL & BROWER STUDENT CENTER  
 FIRE ALARM

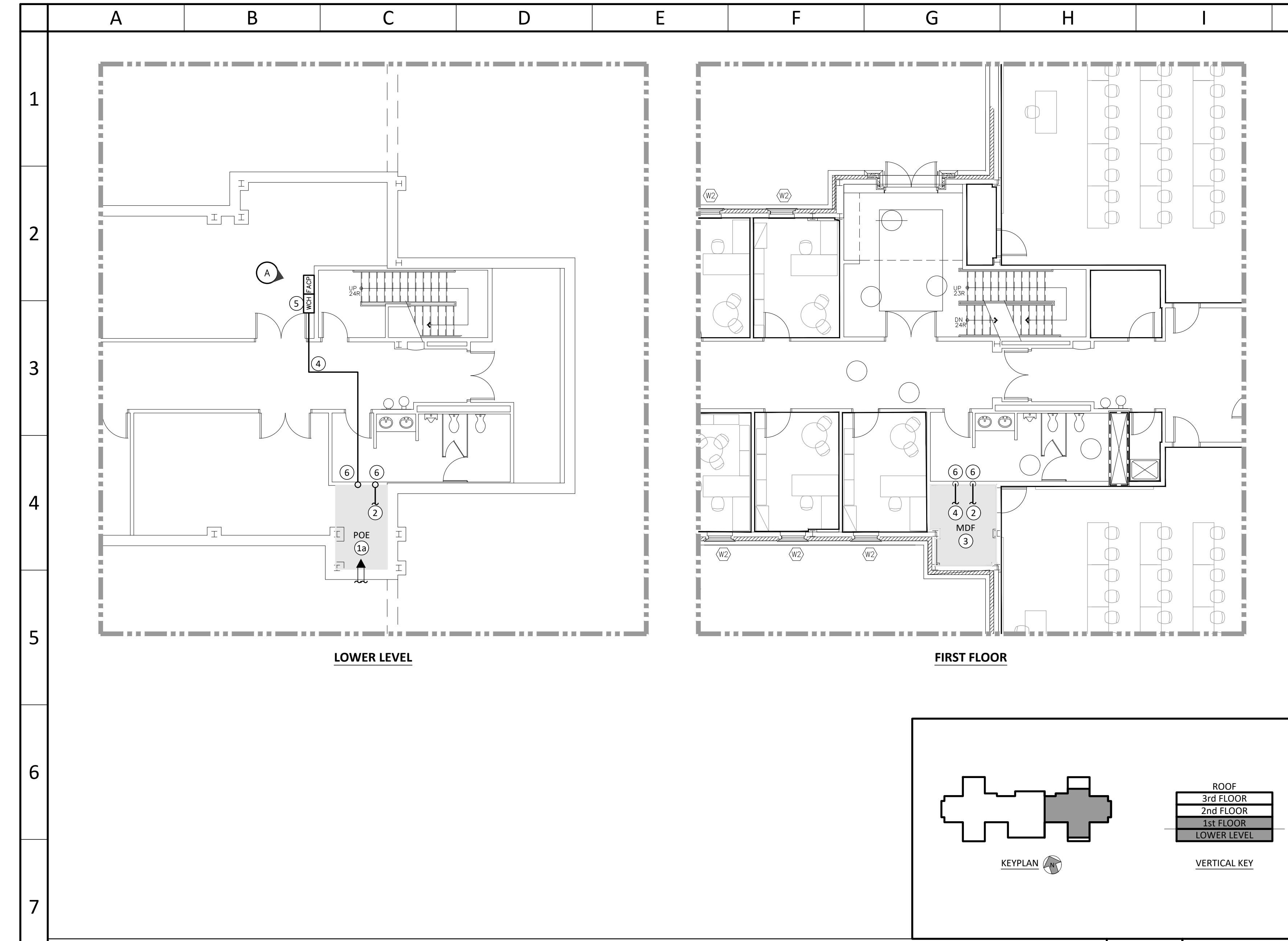
scale AS SHOWN  
 drawn by AM  
 checked by SG  
 date 05/03/2020

dwg. no.  
**FA015**

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**KEY NOTES (SYMBOLS ①, ②, ETC.)**

KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS

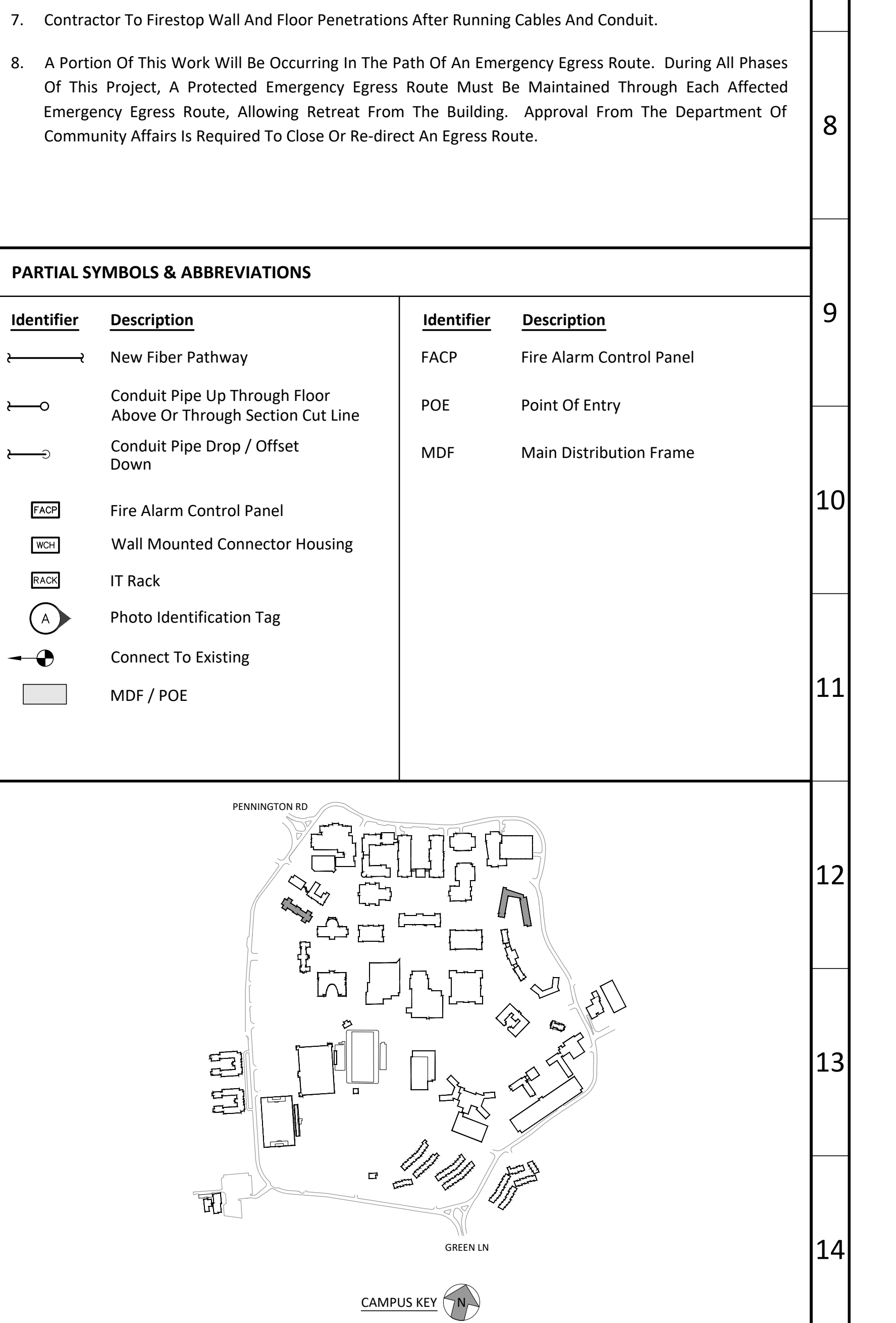
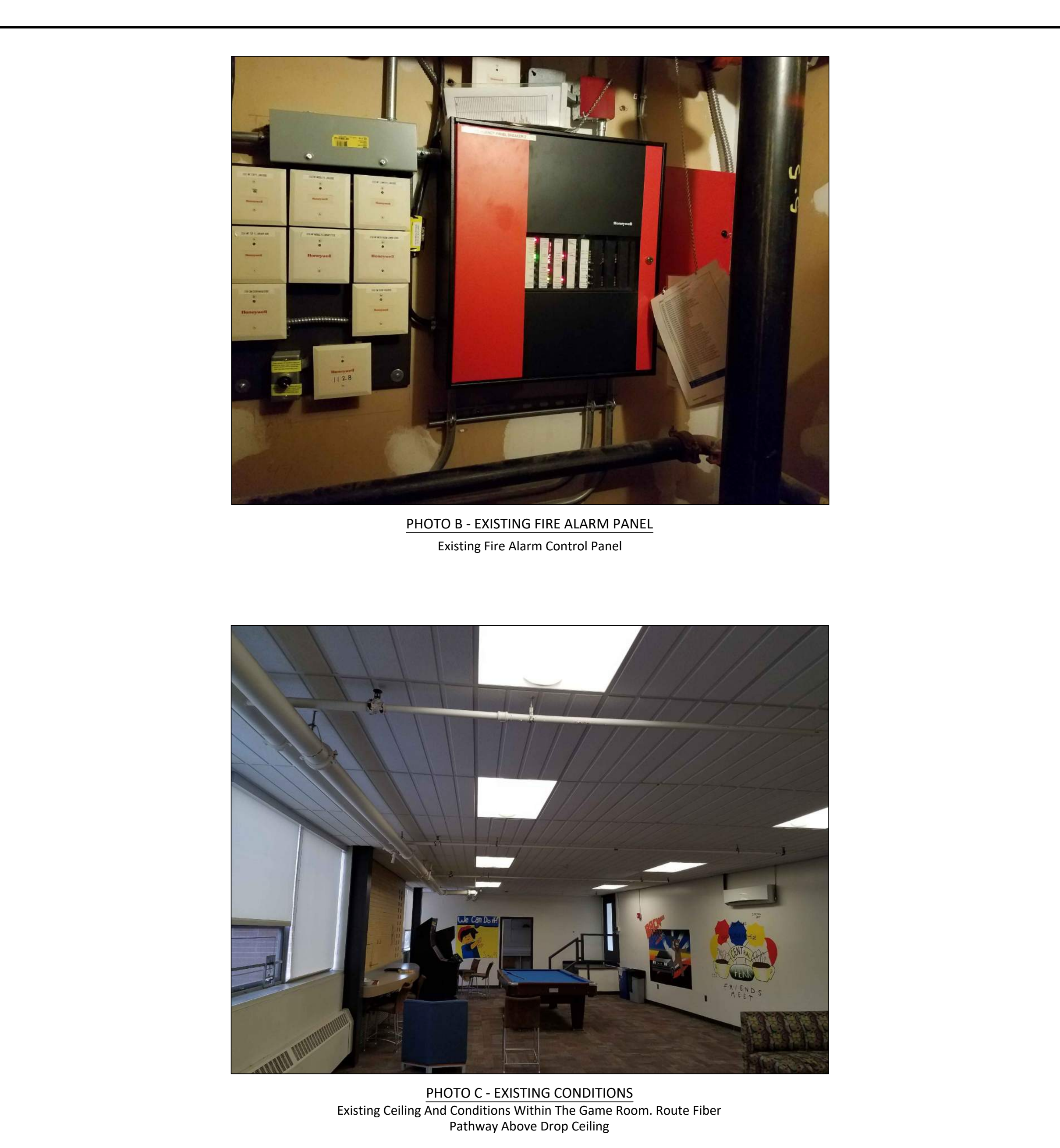
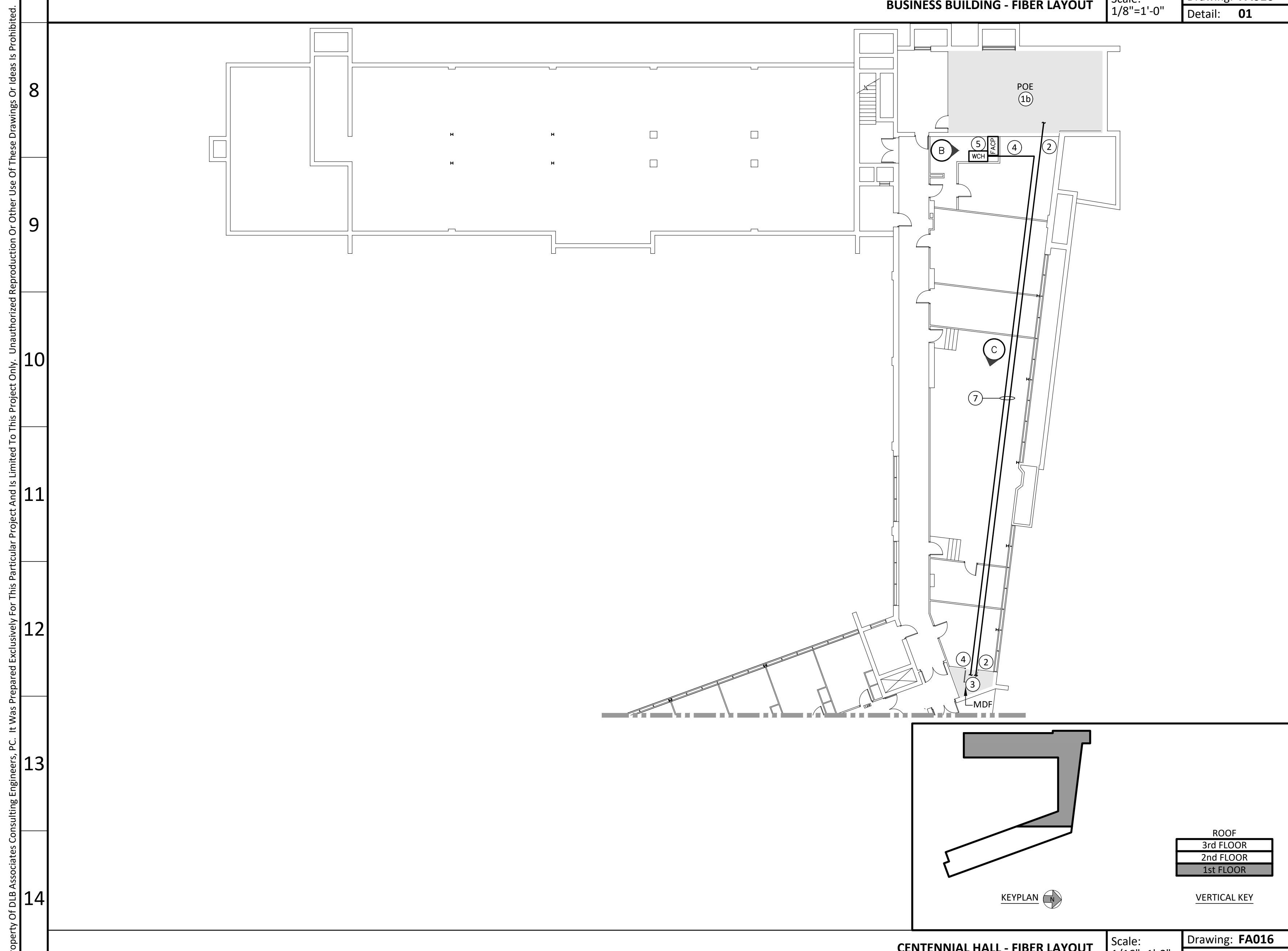
- 1a. Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
- 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
- 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
3. Terminate Fiber Within New Cable Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cable Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
6. Core Drill All Floor Penetrations To Route Fiber From Point Of Entry On Lower Level To Main Distribution Frame (MDF) On First Floor. Route From MDF To Wall Mounted Connector Housing (WCH) In Lower Level Storage Room. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
7. Route Fiber Conduit As Close To The Existing Ceiling As Possible.

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	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



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Scale: 1/16"=1'-0" Drawing: FA016 Detail: 02

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title  
INTERIOR FIBER ROUTING  
BUSINESS BUILDING & CENTENNIAL HALL  
FIRE ALARM

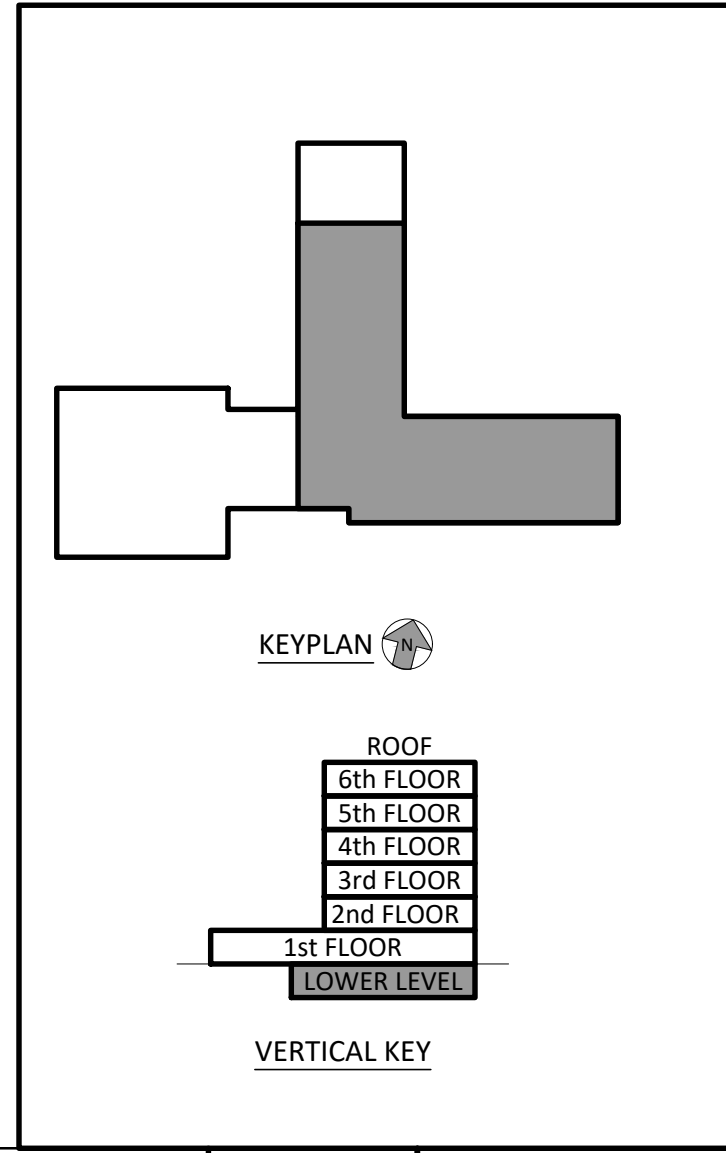
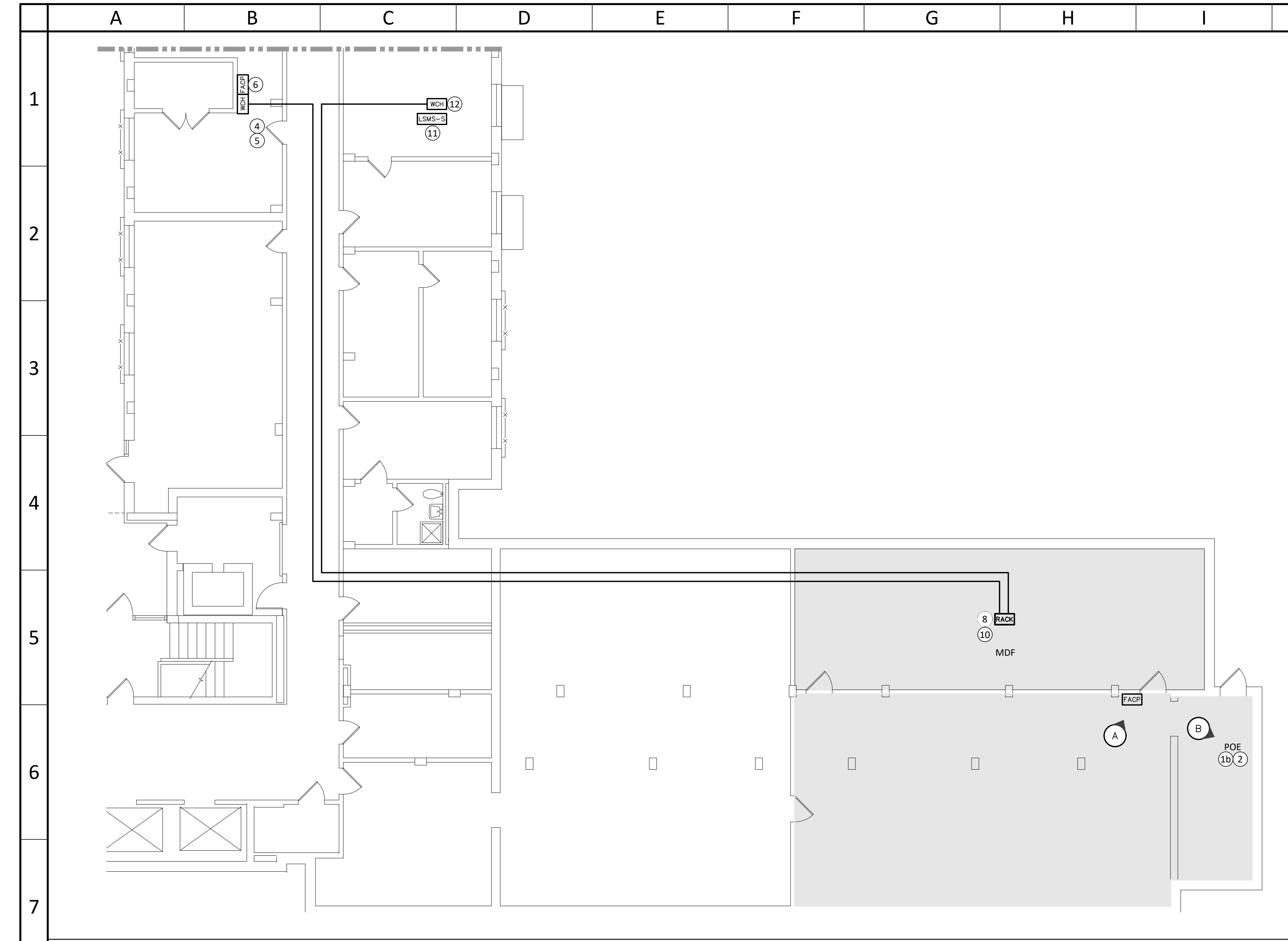
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CROMWELL HALL - FIBER LAYOUT  
Scale: 1/8"=1'-0"  
Drawing: FA017  
Detail: 01



PHOTO A - EXISTING FIRE ALARM CONTROL PANEL  
Honeywell FS90 Addressable Fire Alarm Control Panel With Exposed Conduit Located Within Lower Level Storage Room

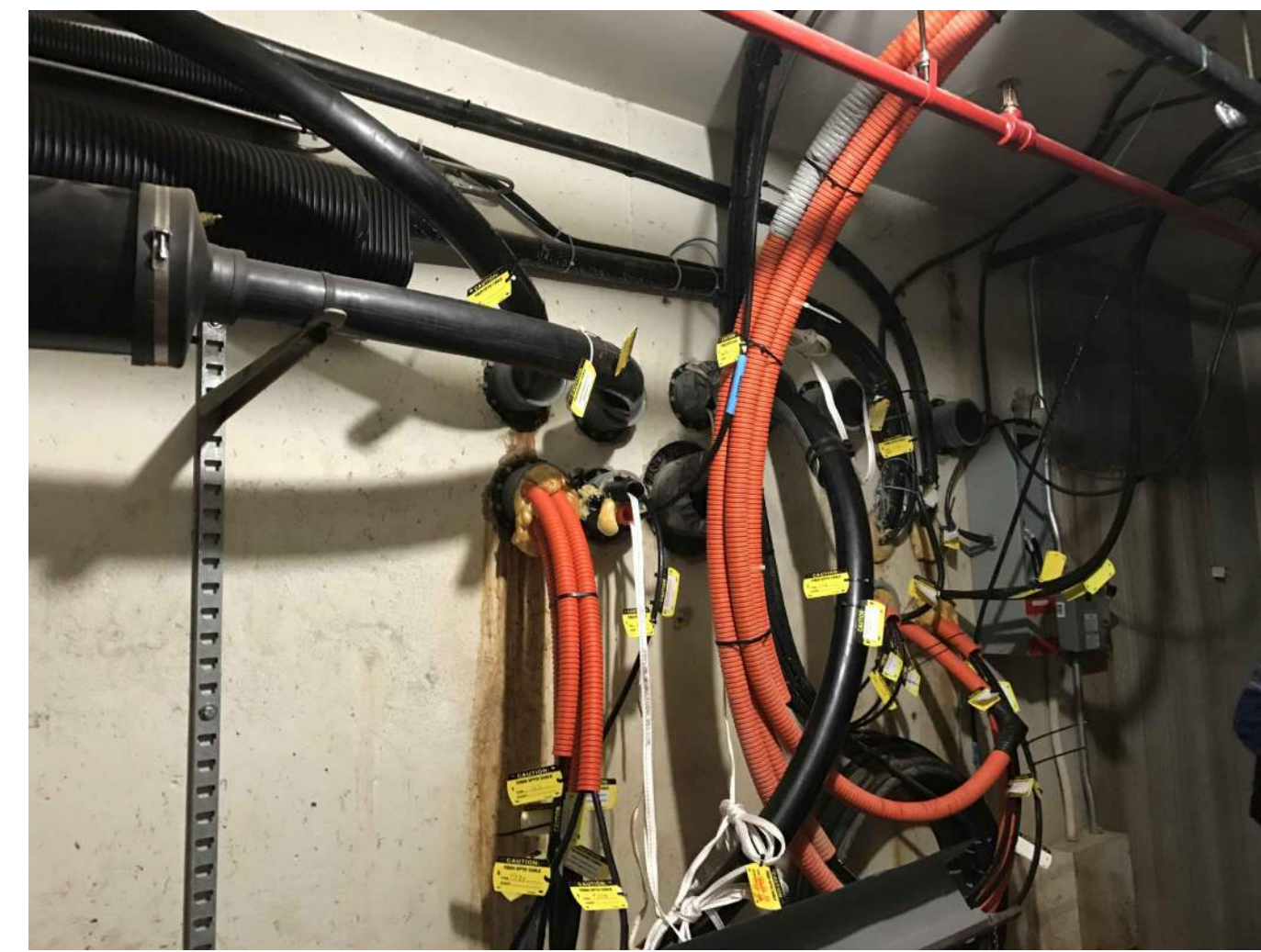


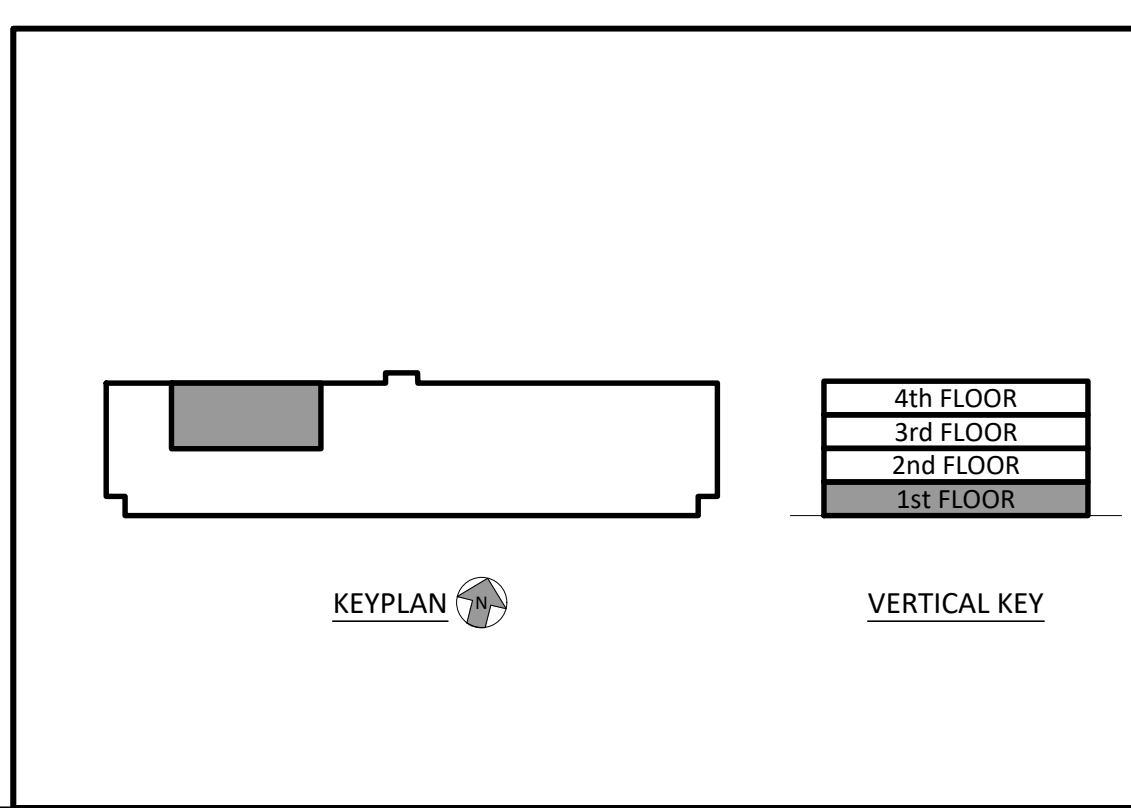
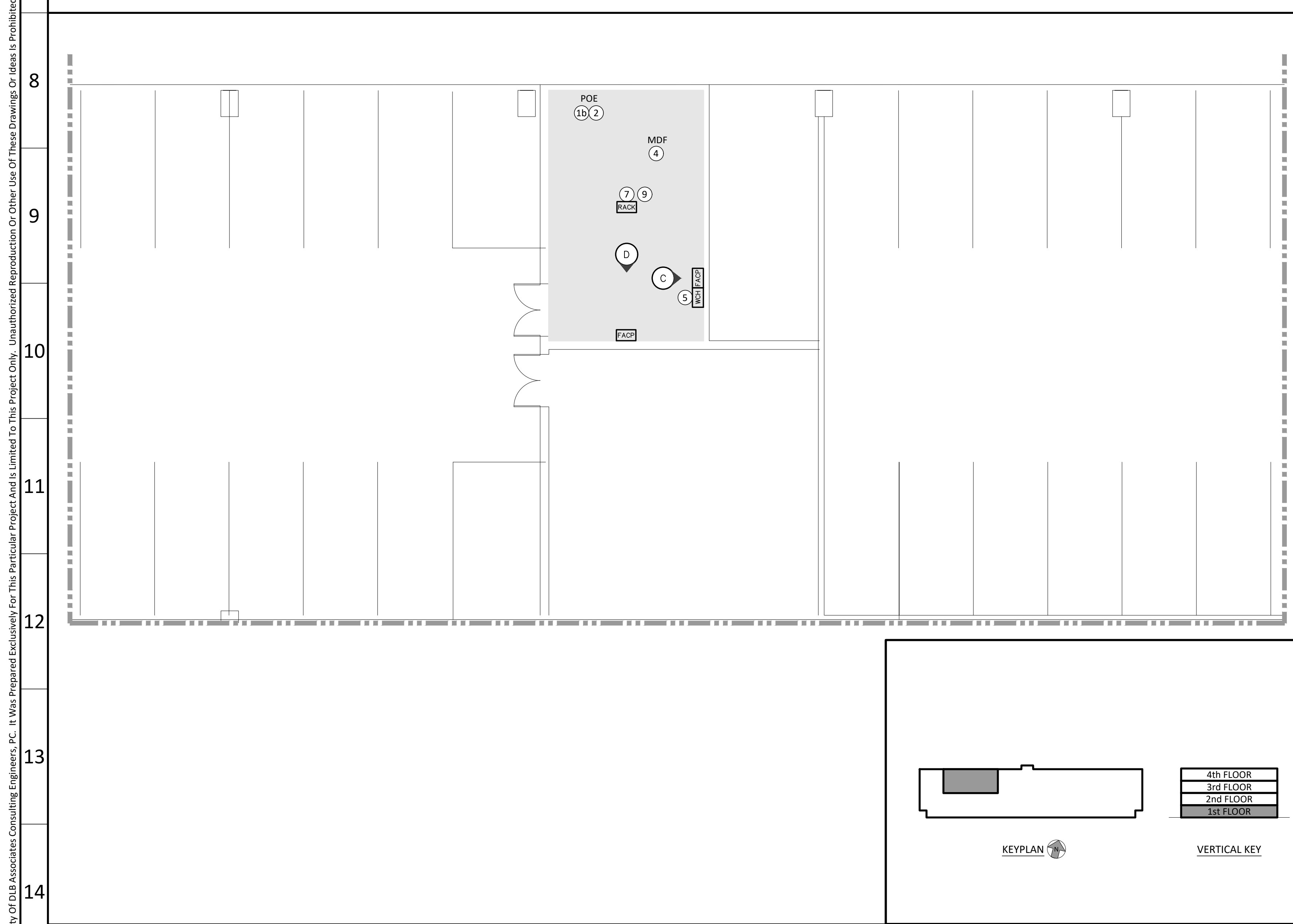
PHOTO B - POINT OF ENTRY  
Existing Fiber Point Of Entry Location Within Lower Level Storage Room

- KEY NOTES (SYMBOLS ①, ②, ETC.)**
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  - Provide Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  - Location Of Base Building Fire Alarm Control Panel (FACP).
  - Provide 30" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  - Provide Two Post Rack. Terminate Fiber Within New Cable Connector Housing Within Rack. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  - Contractor Shall Provide A 120V Circuit For Integral Fan And Light Power Within 30" Deep Cabinet. Circuit Shall Be Provided From Nearest Electrical Distribution Panel With Available Space Utilizing 2#12, #12G In 3/4" Conduit With A 20 Amp, 120V Single Phase Circuit Breaker.
  - Provide New Fire Alarm Network Switch And Fiber Patch Cords As Required For New Life Safety Management System Network Architecture. Coordinate With TCNJ IT Department For Connection Of Switch To Fiber Network.
  - New Life Safety Management System Backup Server Location. Coordinate With TCNJ IT Department For Connection To Switch And Fiber Network.
  - Route Fiber Pathway Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Rack To New Wall Mounted Connector Housing (WCH) At Life Safety Management System Service Location. Coordinate Final Location With TCNJ IT.

- GENERAL NOTES**
- The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  - New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  - All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  - Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  - All Work And Materials Shall Be New Unless Otherwise Noted.
  - Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
  - Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
  - A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway		Photo Identification Tag
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line		Connect To Existing
	Conduit Pipe Drop / Offset Down		MDF / POE
	Fire Alarm Control Panel	FACP	Fire Alarm Control Panel
	Wall Mounted Connector Housing	POE	Point Of Entry
	IT Rack	MDF	Main Distribution Frame
	Life Safety Management System Server		



DECKER GARAGE - FIBER LAYOUT  
Scale: 1/8"=1'-0"  
Drawing: FA017  
Detail: 02



PHOTO C - EXISTING FIRE ALARM CONTROL PANEL  
Honeywell FS90 Addressable Fire Alarm Control Panel And Booster Panel With Exposed Conduit Located Within First Floor Electrical Room

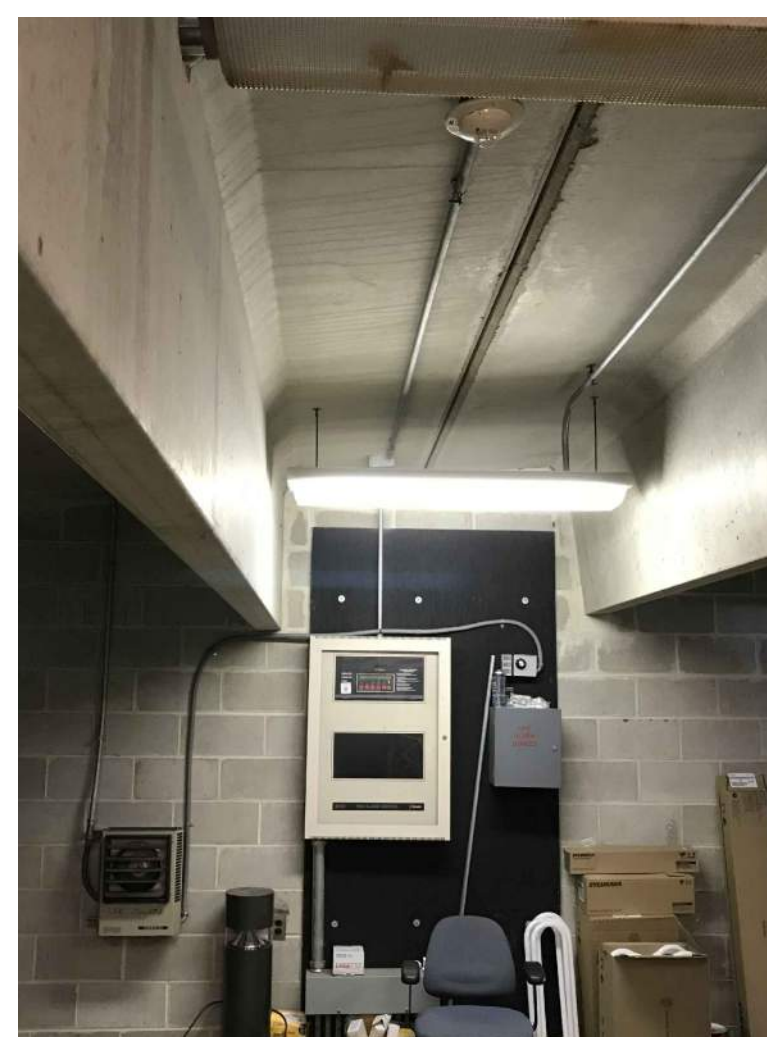
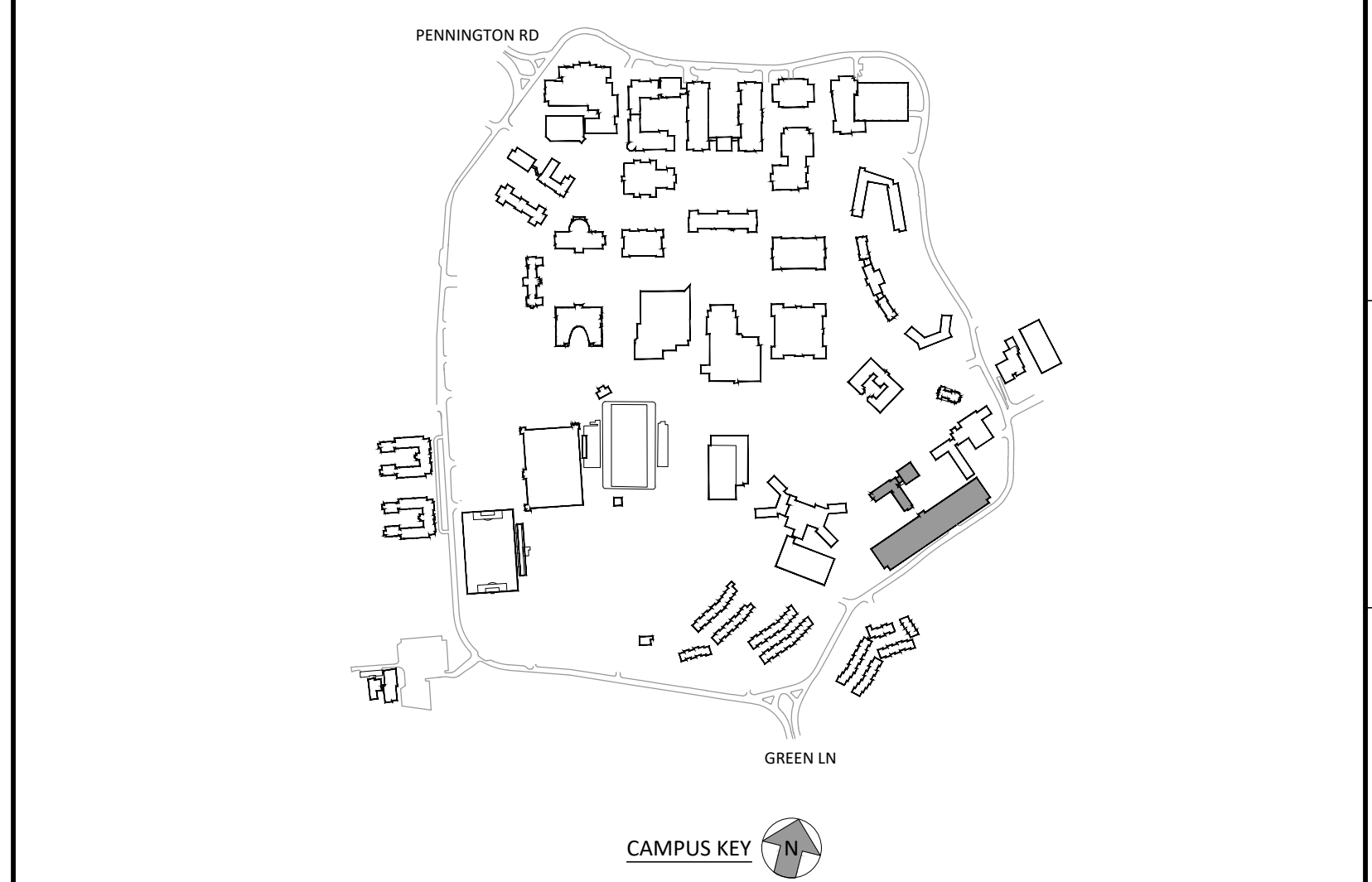


PHOTO D - EXISTING FIRE ALARM CONTROL PANEL  
Simplex 4020 Addressable Fire Alarm Control Panel And Booster Panel With Exposed Conduit Located Within First Floor Electrical Room



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724  
Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

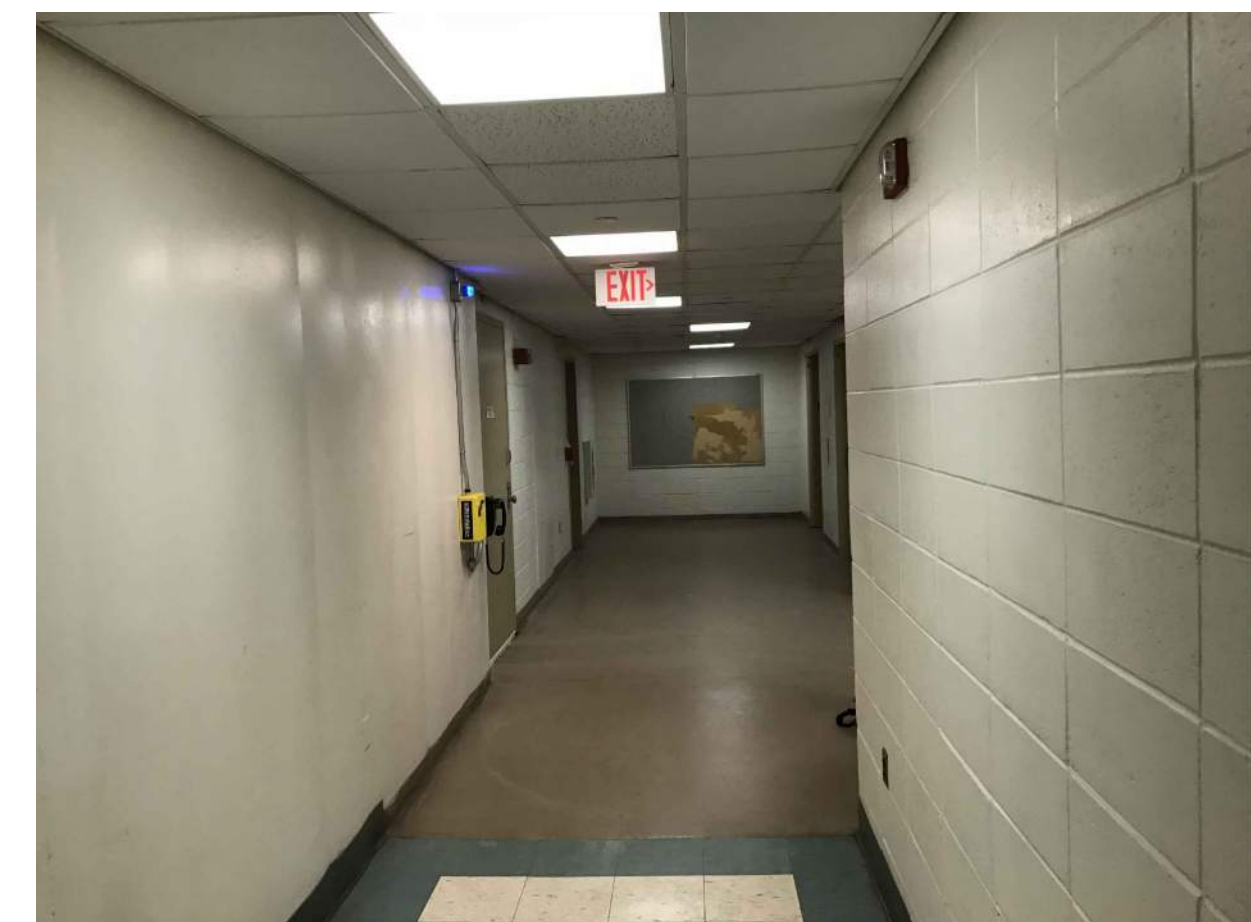
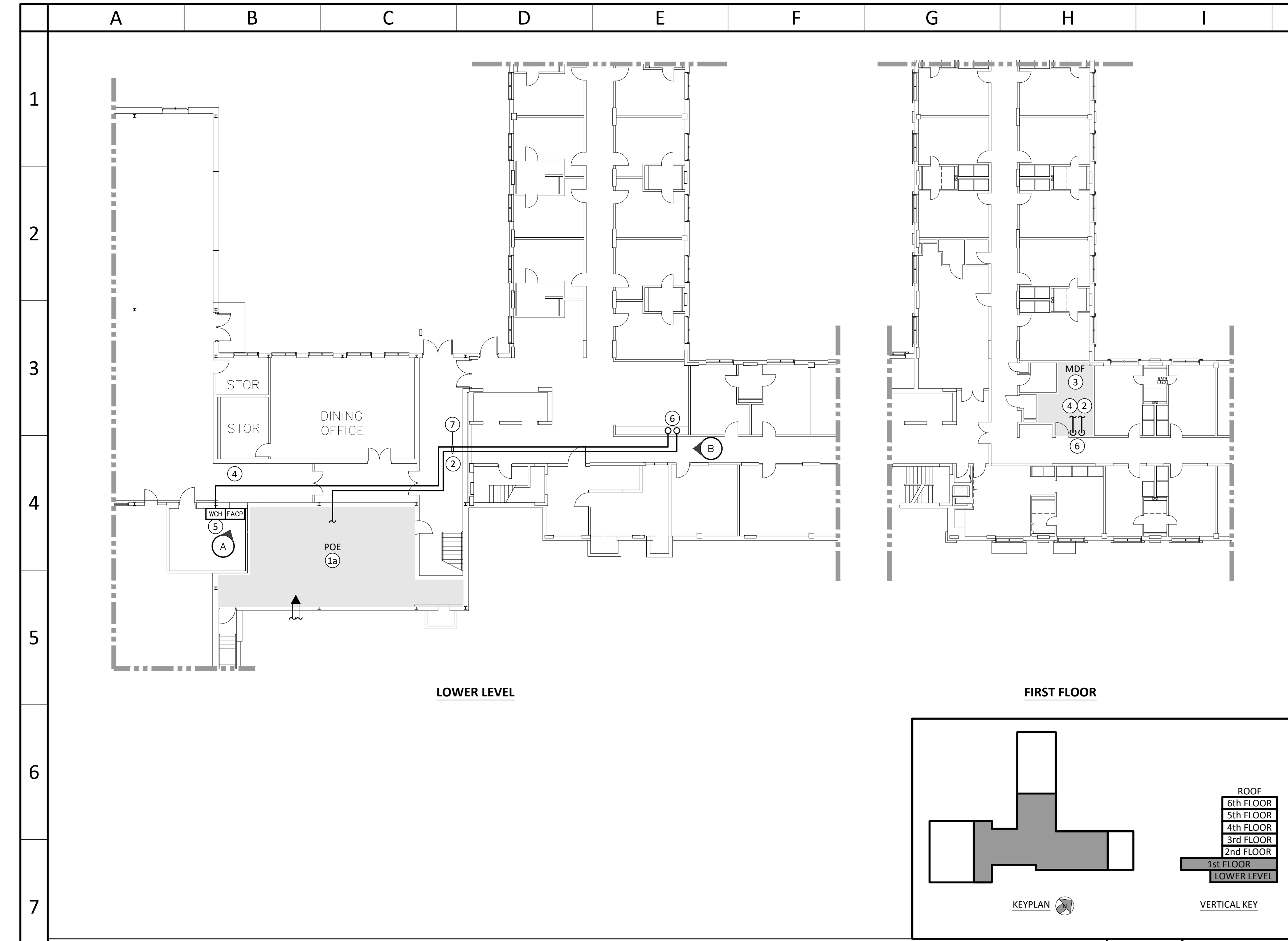
project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
CROMWELL HALL & DECKER GARAGE  
FIRE ALARM  
scale AS SHOWN  
drawn by AM  
checked by SG  
date 05/03/2020  
dwg. no.  
**FA017**

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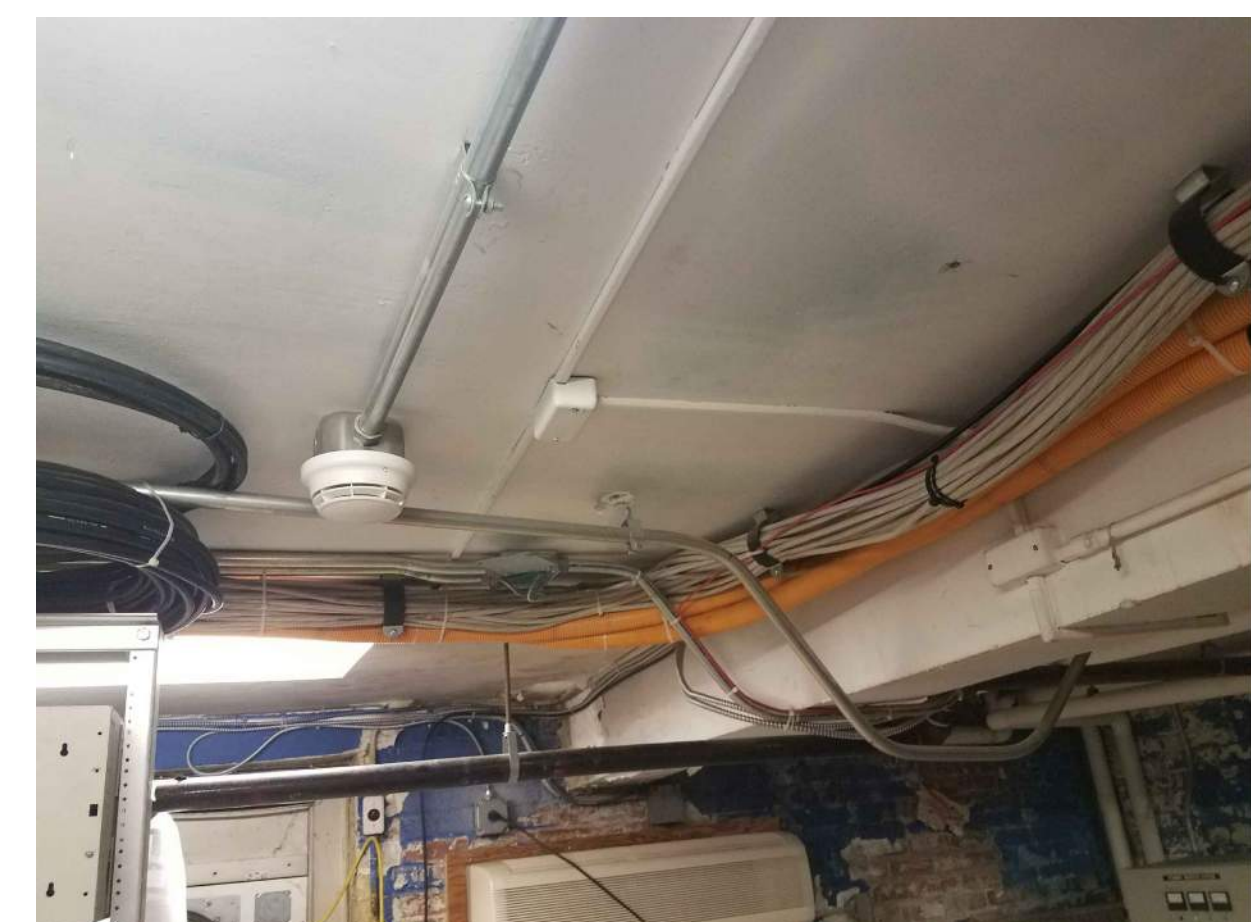
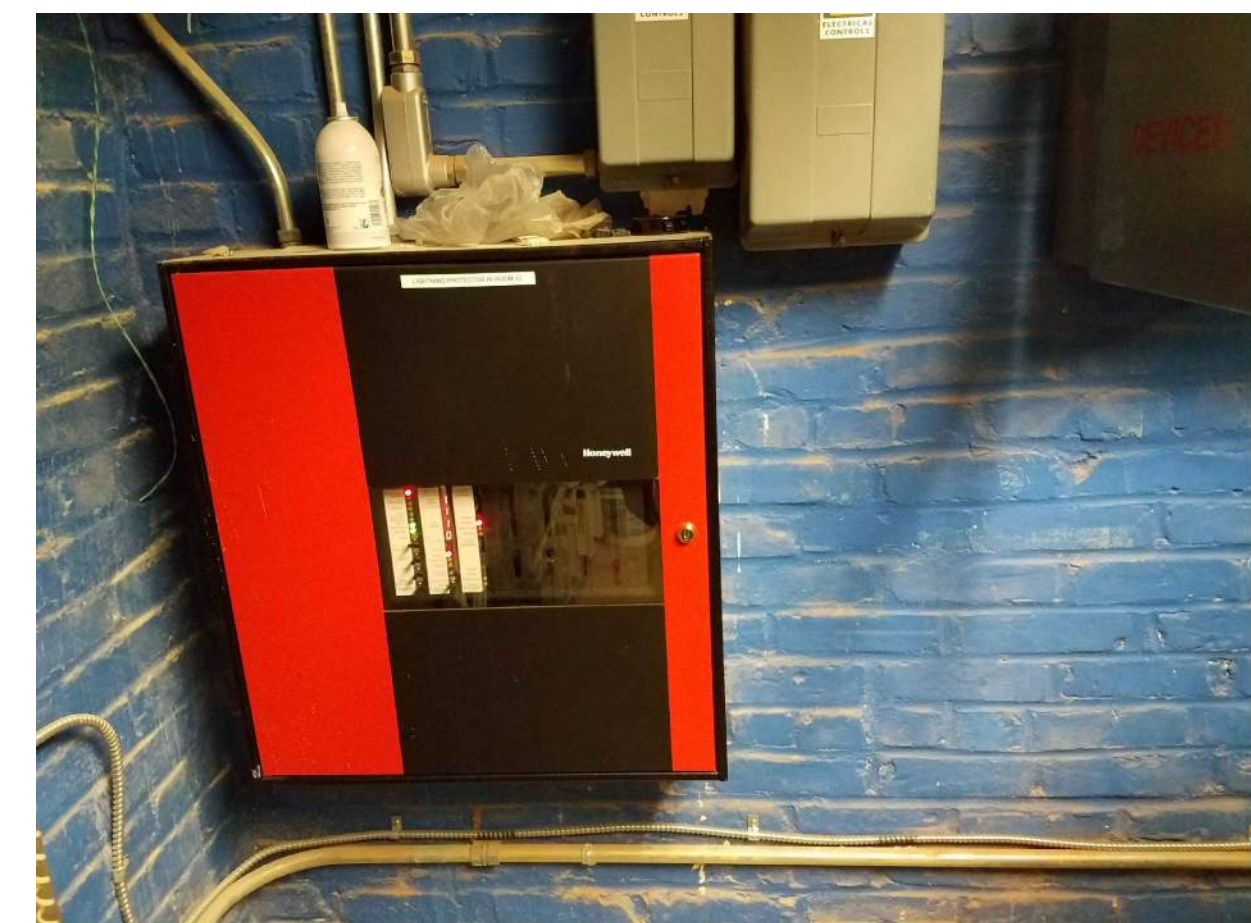
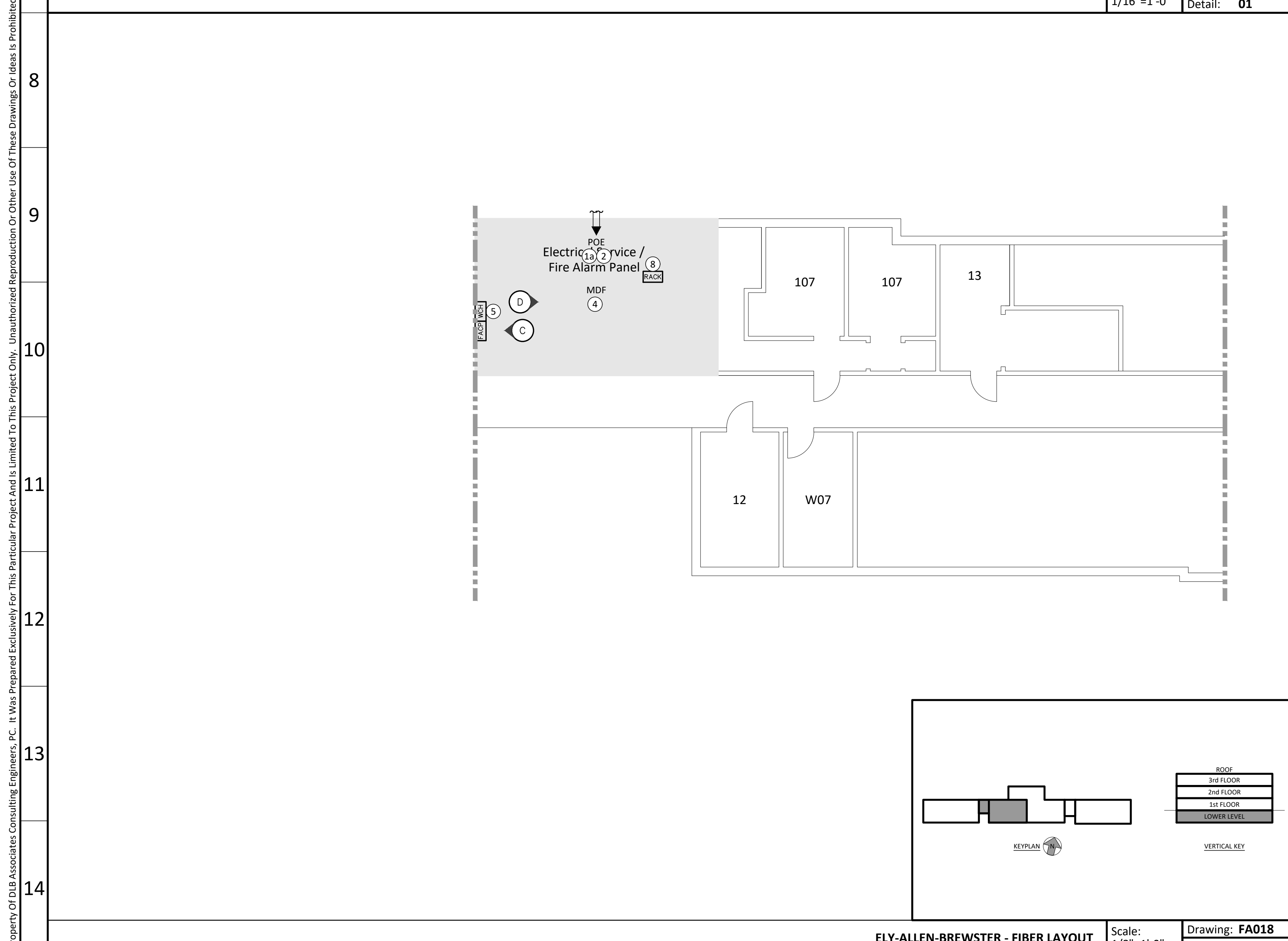
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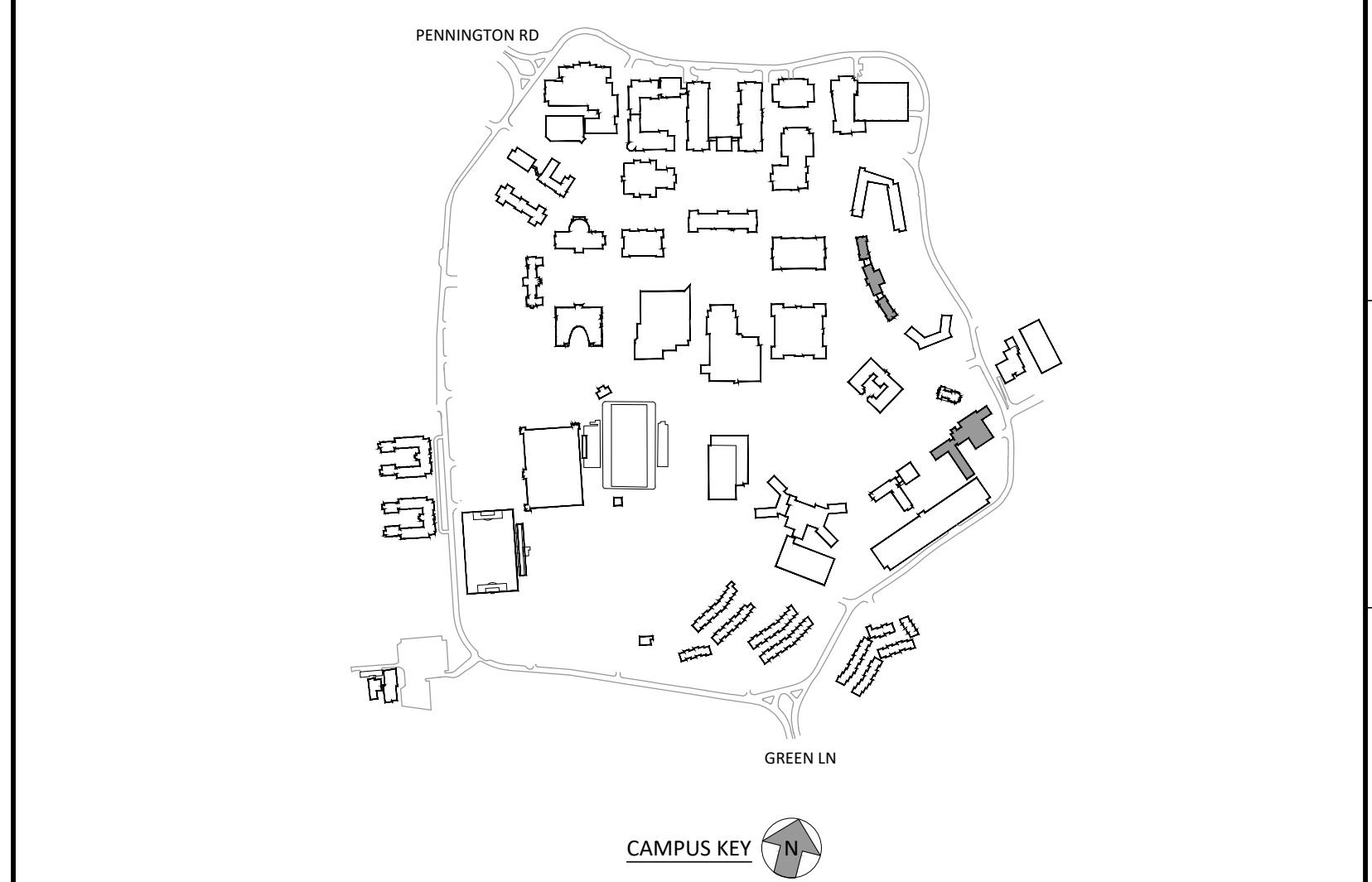
- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- 1a. Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cable Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cable Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Core Drill All Floor Penetrations To Route Fiber From Point Of Entry In Basement To Main Distribution Frame (MDF) On First Floor. Route From MDF To Wall Mounted Connector Housing (WCH) In Basement. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  7. Route Fiber Pathway Above Drop Ceiling Where Possible.
  8. Provide Two Post Rack. Terminate Fiber Within Cable Connector Housing Within Rack. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.

- GENERAL NOTES**
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  2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  5. All Work And Materials Shall Be New Unless Otherwise Noted.
  6. Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
  7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
  8. A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.



**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
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**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724

Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
DECKER HALL & ELY-ALLEN-BREWSTER  
FIRE ALARM

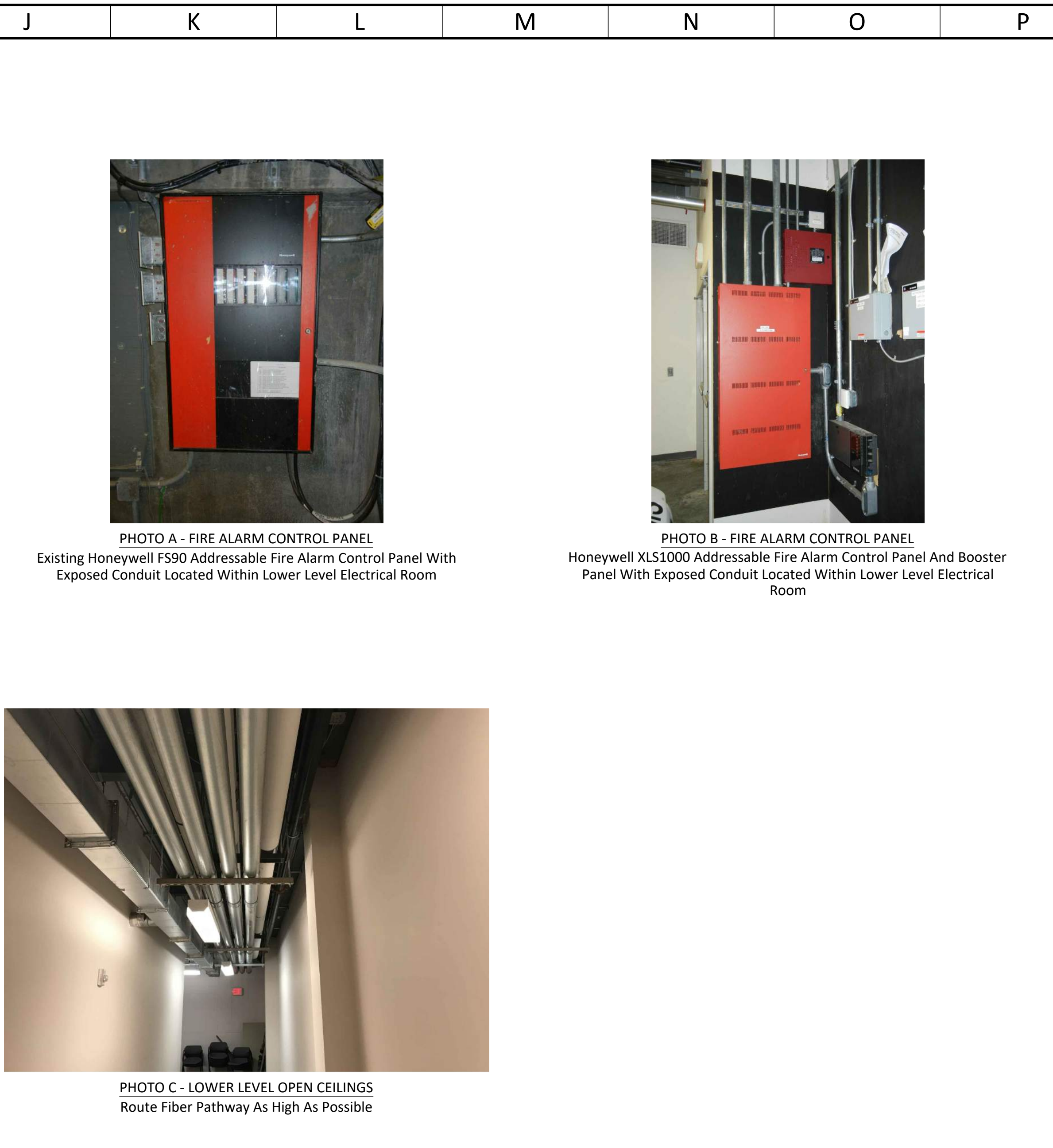
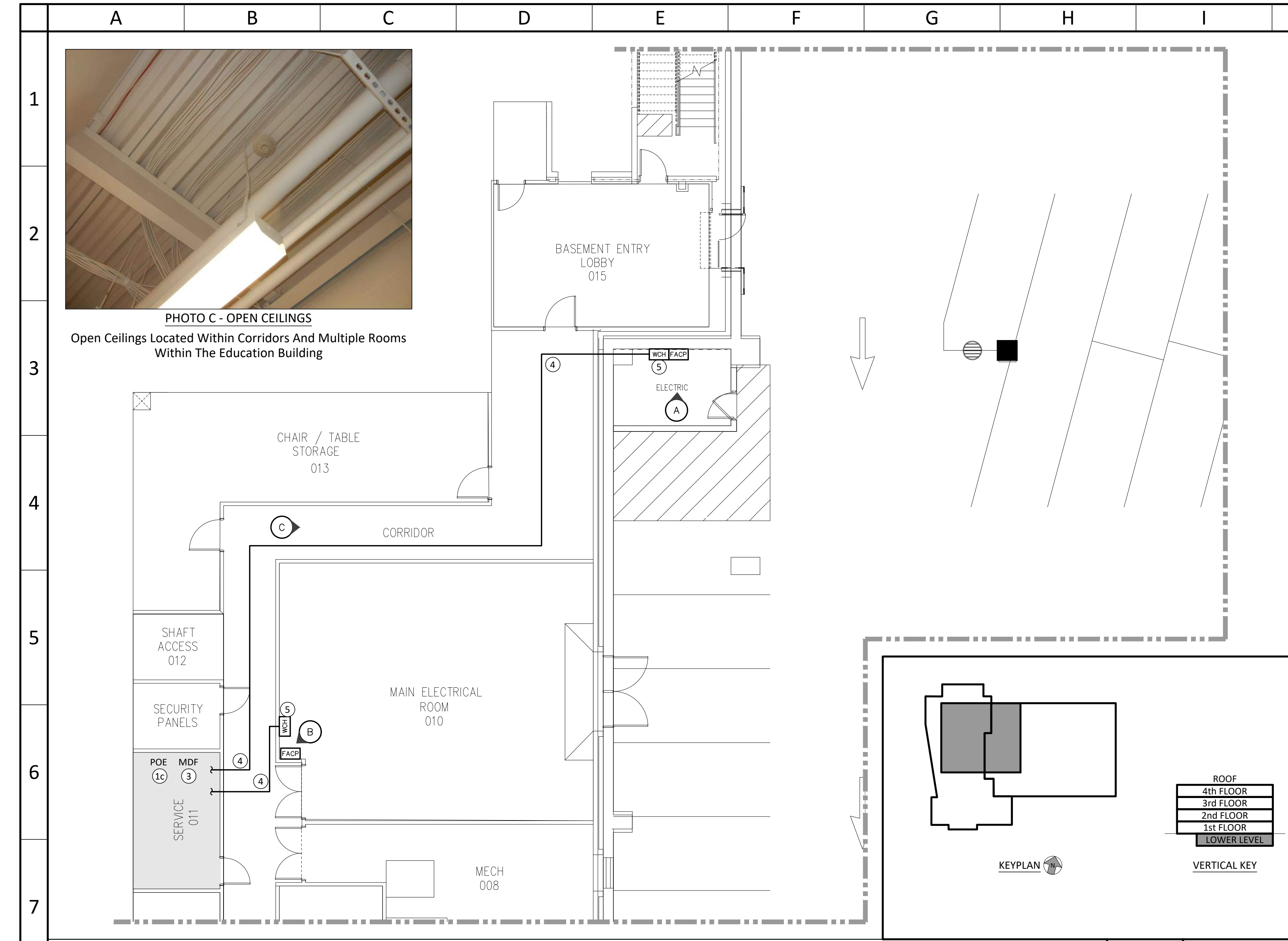
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drawn by AM  
checked by SG  
date 05/03/2020

dwg. no.  
**FA018**

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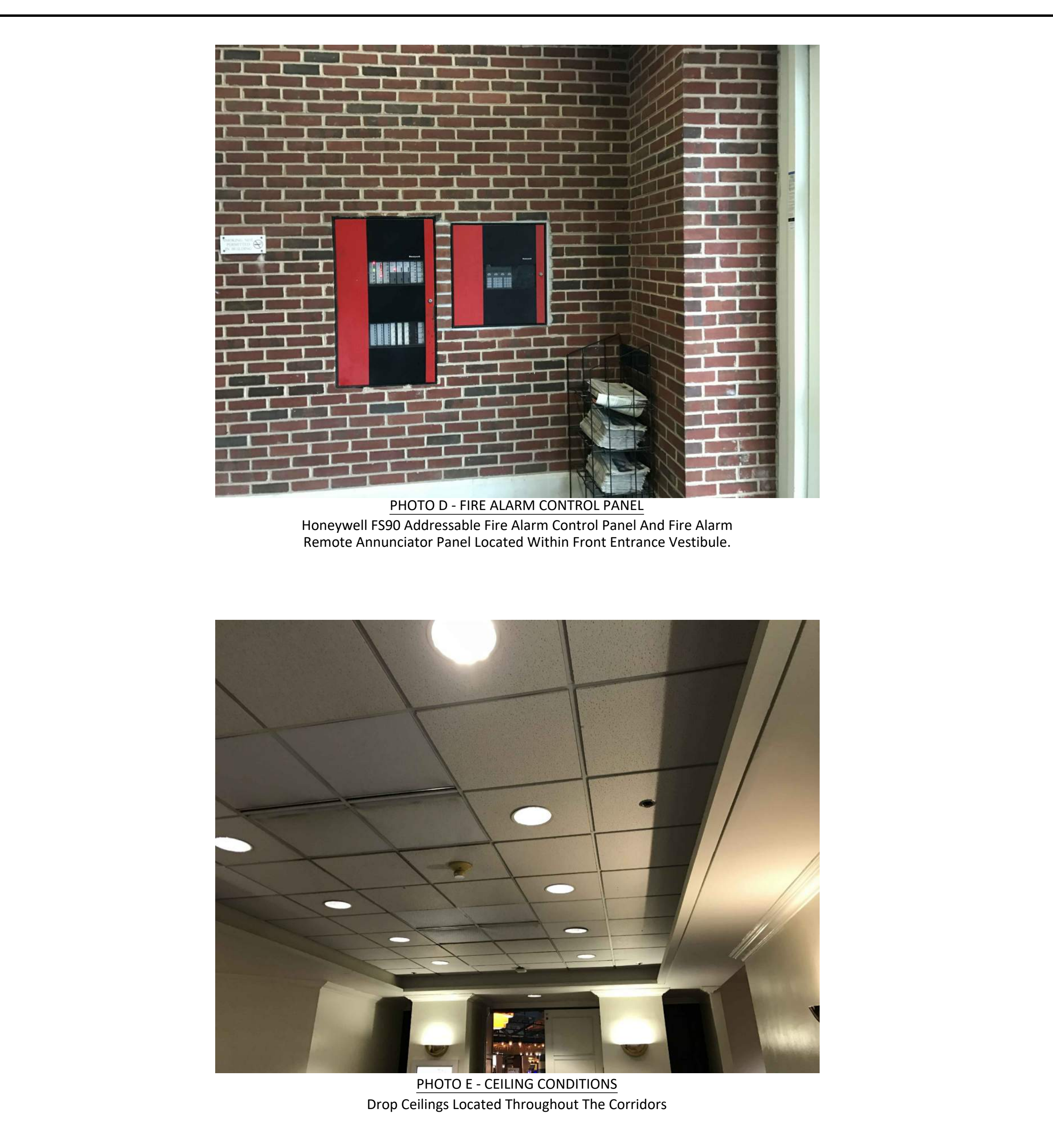
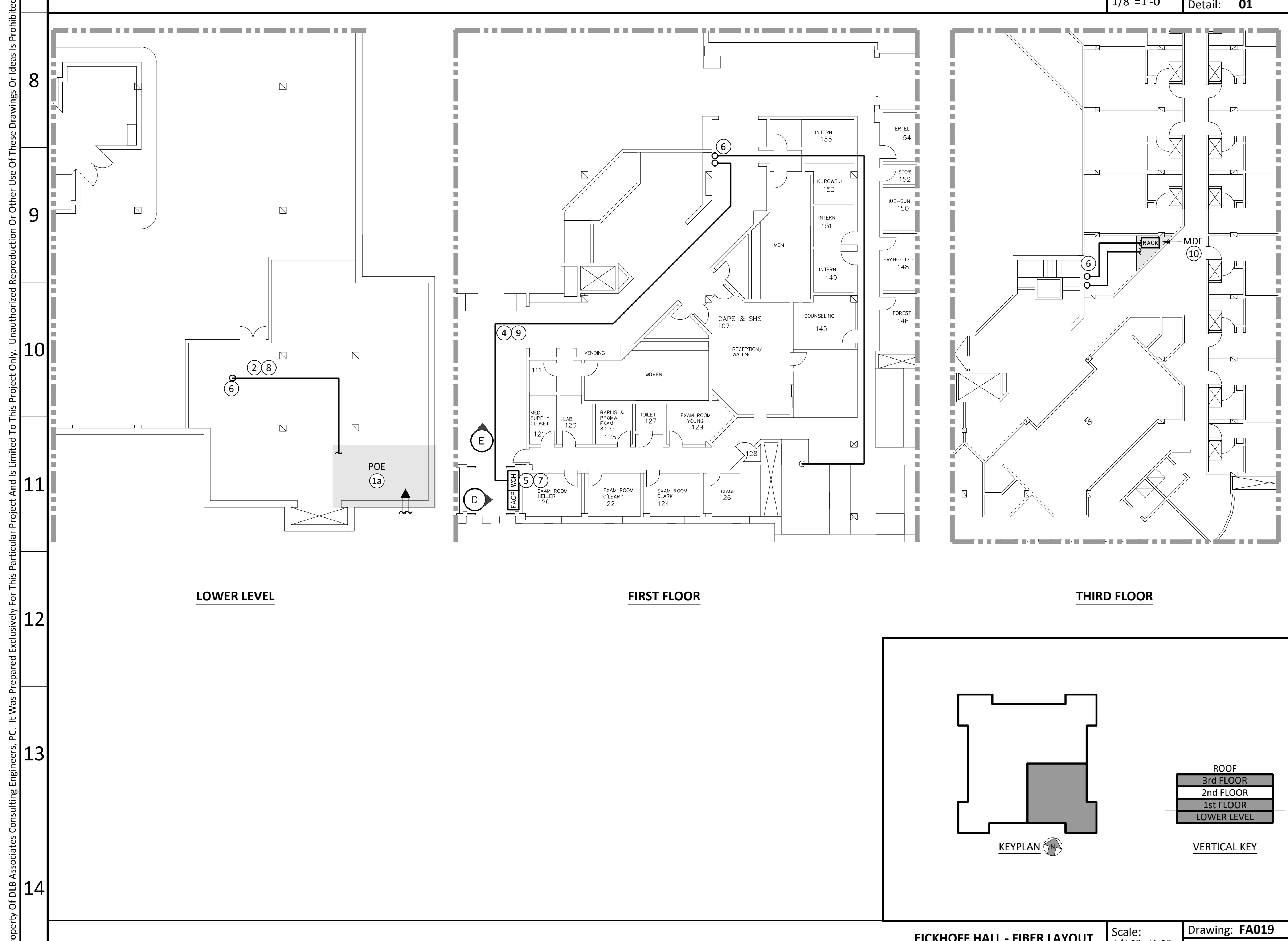
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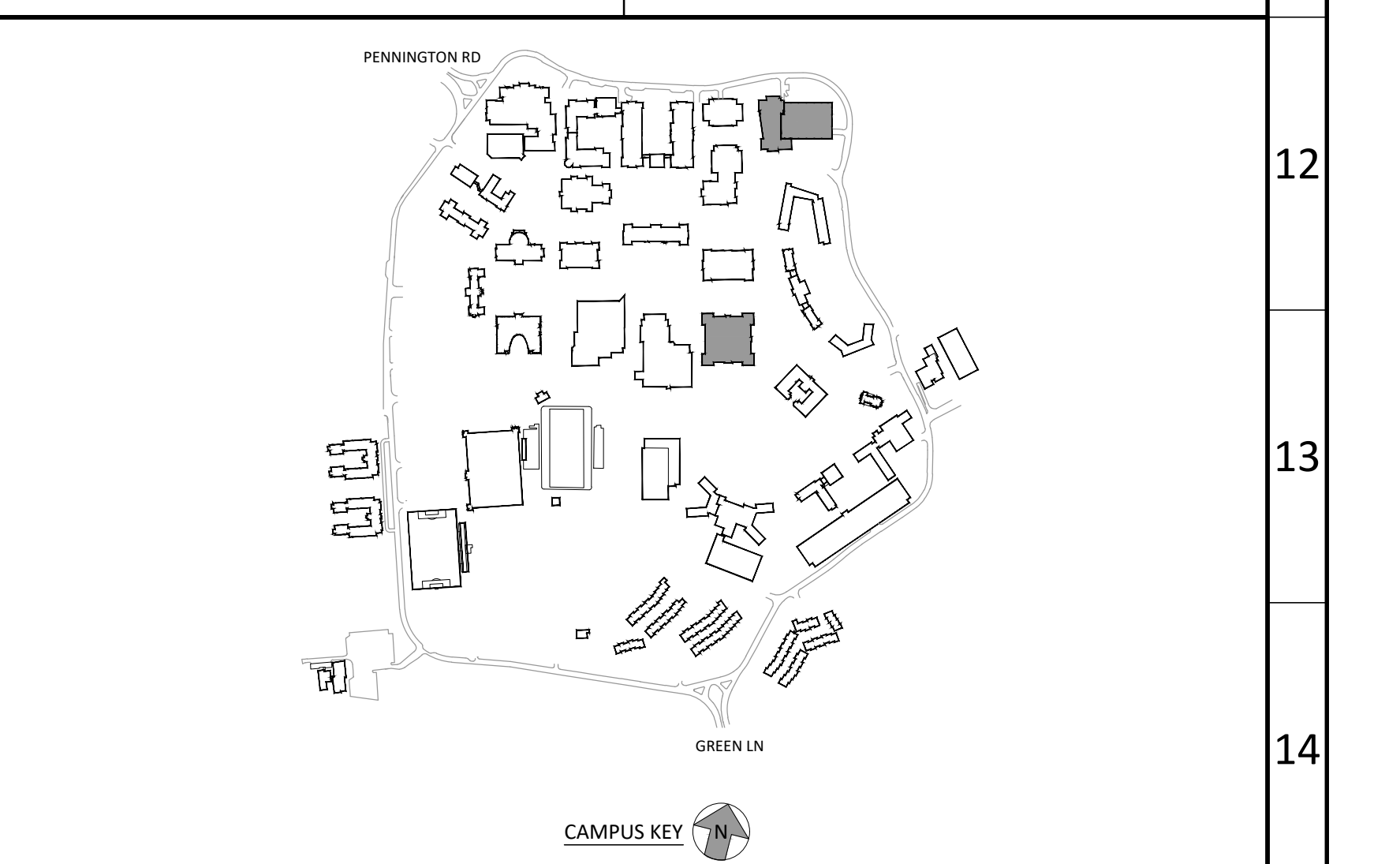
- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- 1a. Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cable Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cable Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Core Drill All Floor Penetrations To Route Fiber From Point Of Entry On Lower Level To Main Distribution Frame (MDF) On Third Floor. Route From MDF To Wall Mounted Connector Housing (WCH) On First Floor. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  7. Mount WCH In Nearby Accessible Location. Coordinate With TCNJ IT Department.
  8. Route Fiber Conduit As Close To The Existing Ceiling As Possible.
  9. Route Fiber Pathway Above Drop Ceiling Where Possible.
  10. Provide Two Post Rack. Terminate Fiber Within New Cable Connector Housing Within New Rack. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.

- GENERAL NOTES**
1. The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  5. All Work And Materials Shall Be New Unless Otherwise Noted.
  6. Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
  7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
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**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



**EICKHOFF HALL - FIBER LAYOUT** Scale: 1/16"=1'-0" Drawing: FA019 Detail: 02

ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724  
Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
EDUCATION BUILDING, GARAGE & EICKHOFF HALL  
FIRE ALARM  
scale AS SHOWN drawn by AM checked by SG date 05/03/2020  
dwg. no. **FA019**

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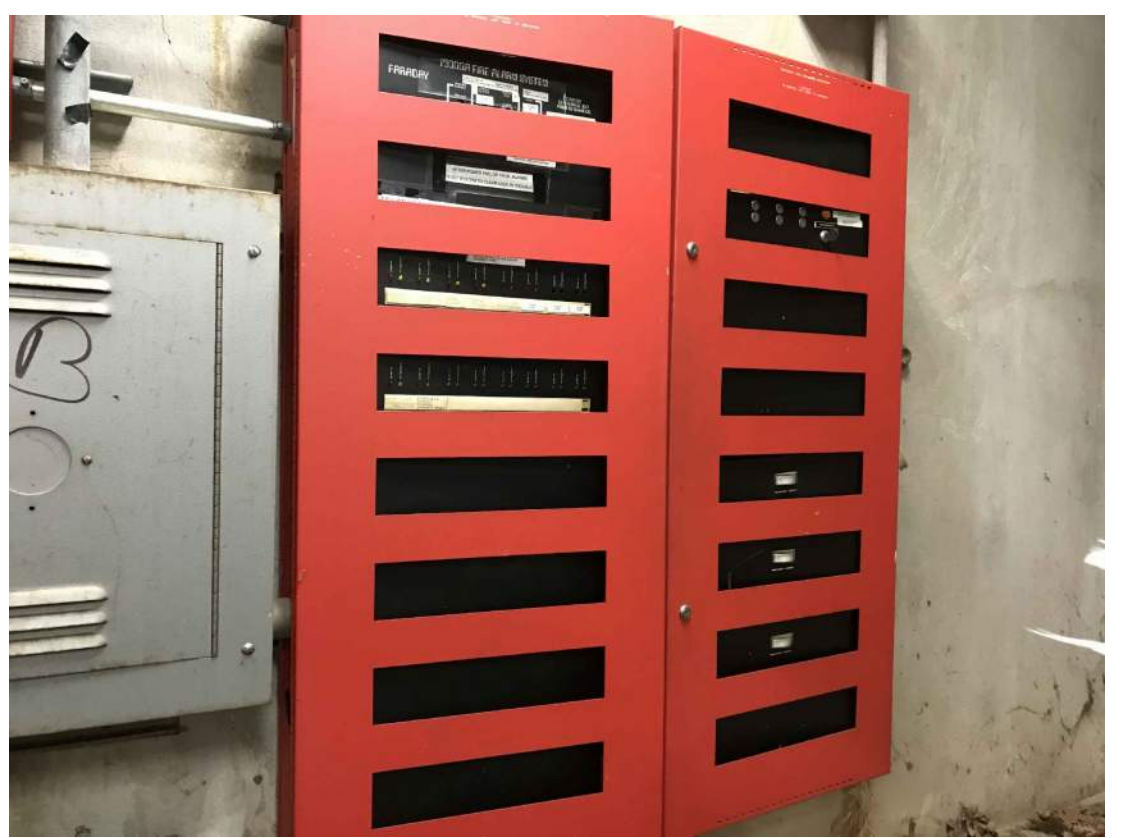
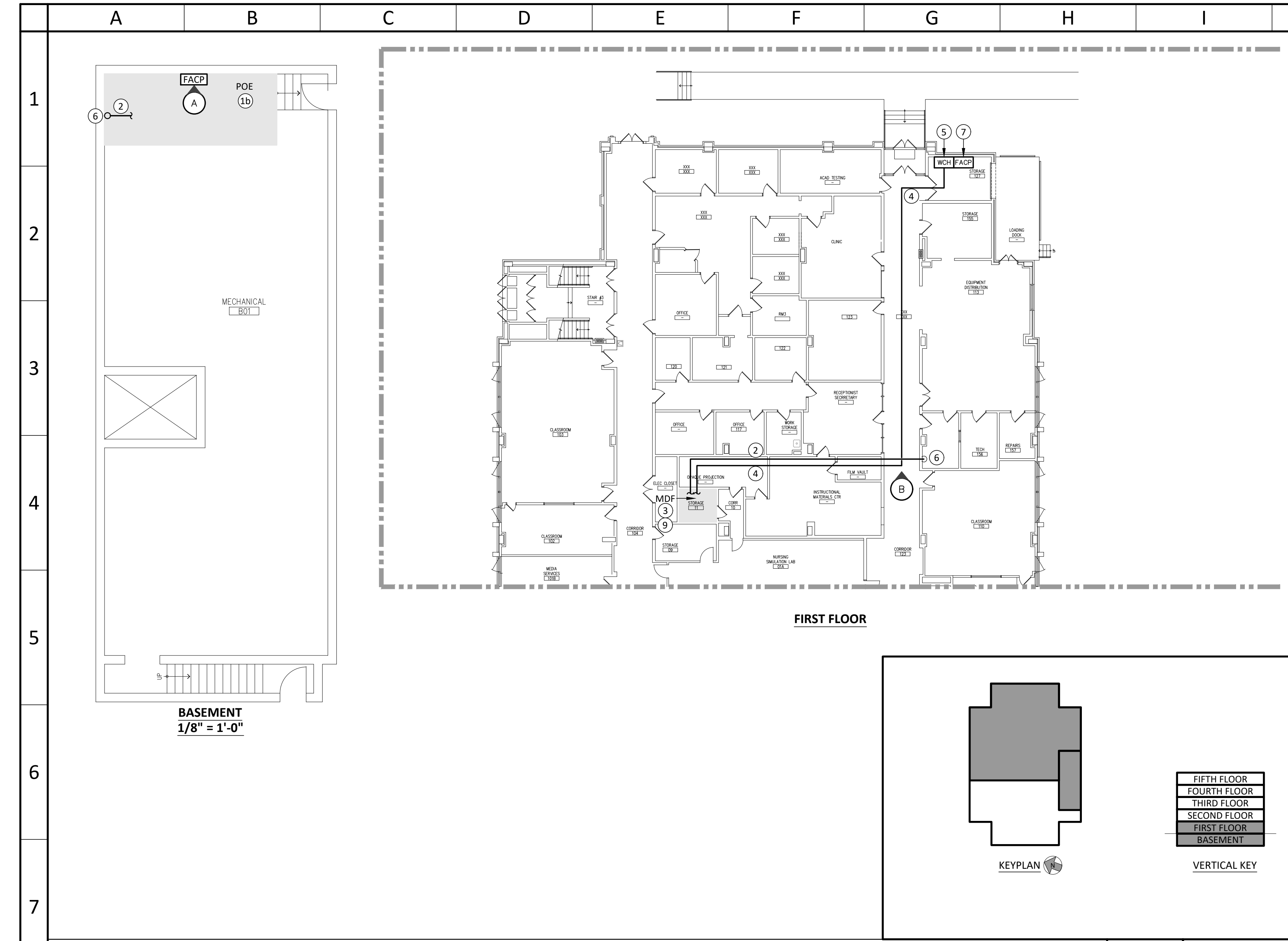


PHOTO A - FIRE ALARM CONTROL PANEL  
Existing Fire Alarm Control Panel With Exposed Conduit Located Within Basement Mechanical Room



PHOTO B - EXISTING CORRIDOR CEILING  
Route Fiber Pathway Above Existing Drop Ceilings Within Corridor

- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  - Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  - Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  - Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  - New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  - Core Drill All Floor Penetrations To Route Fiber From Point Of Entry In Basement To Main Distribution Frame (MDF) On First Floor. Route From MDF To Wall Mounted Connector Housing (WCH) On First Floor. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  - New Location For Fire Alarm Control Panel.
  - Provide Two Post Rack. Terminate Fiber Within New Cable Connector Housing Within New Rack. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  - Provide New Fire Alarm Network Switch And Fiber Patch Cords As Required For New Life Safety Management System Network Architecture. Coordinate With TCNJ IT Department For Connection Of Switch To Fiber Network.
  - New Life Safety Management System Server Location Coordinate With TCNJ IT Department For Connection To Switch And Fiber Network.

- GENERAL NOTES**
- The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  - New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  - All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  - Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  - All Work And Materials Shall Be New Unless Otherwise Noted.
  - Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
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**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Life Safety Management System Server		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		

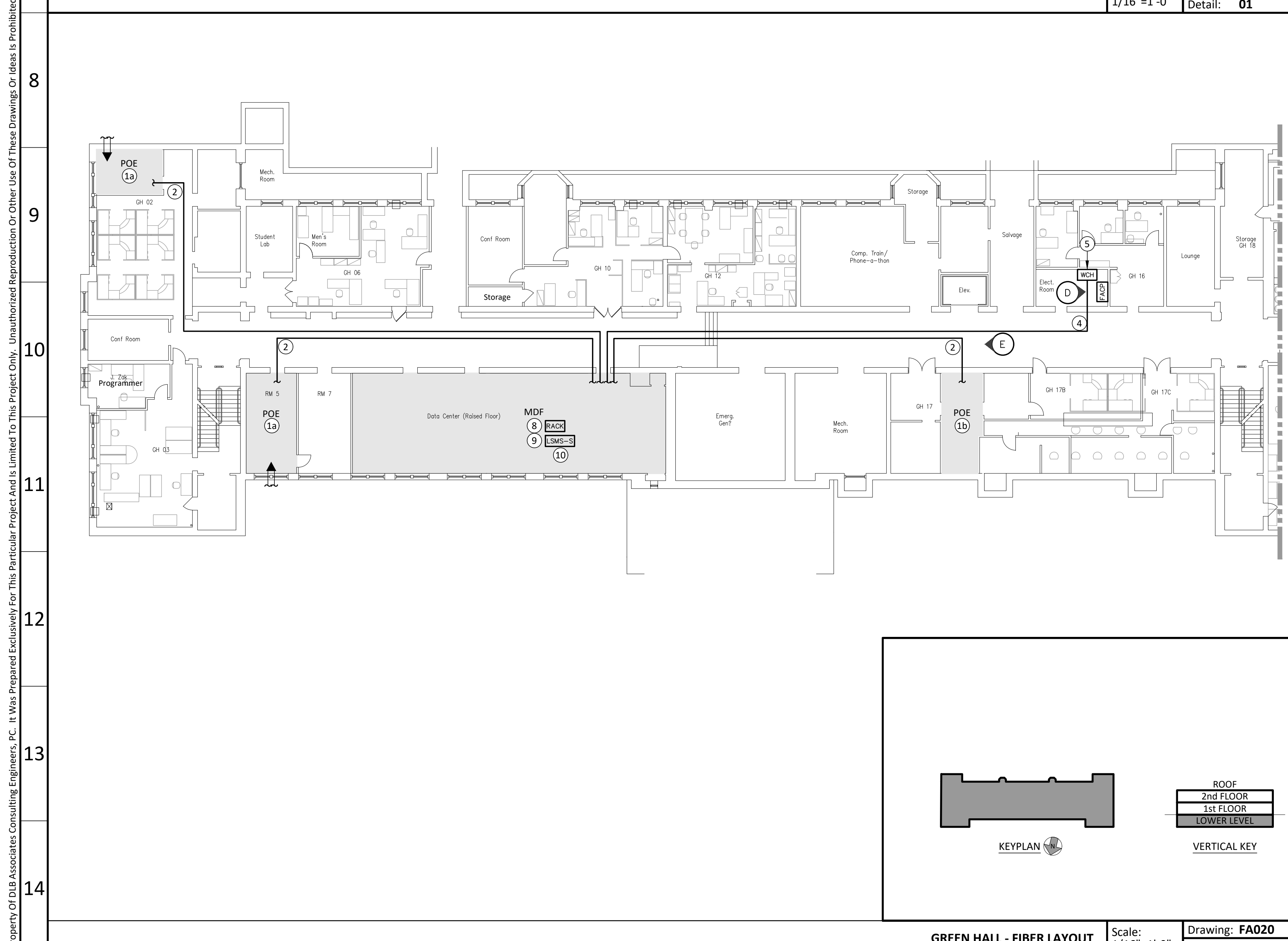


PHOTO D - FIRE ALARM CONTROL PANEL  
Existing Fire Alarm Control Panel With Exposed Conduit Located Within Lower Level Electrical Room

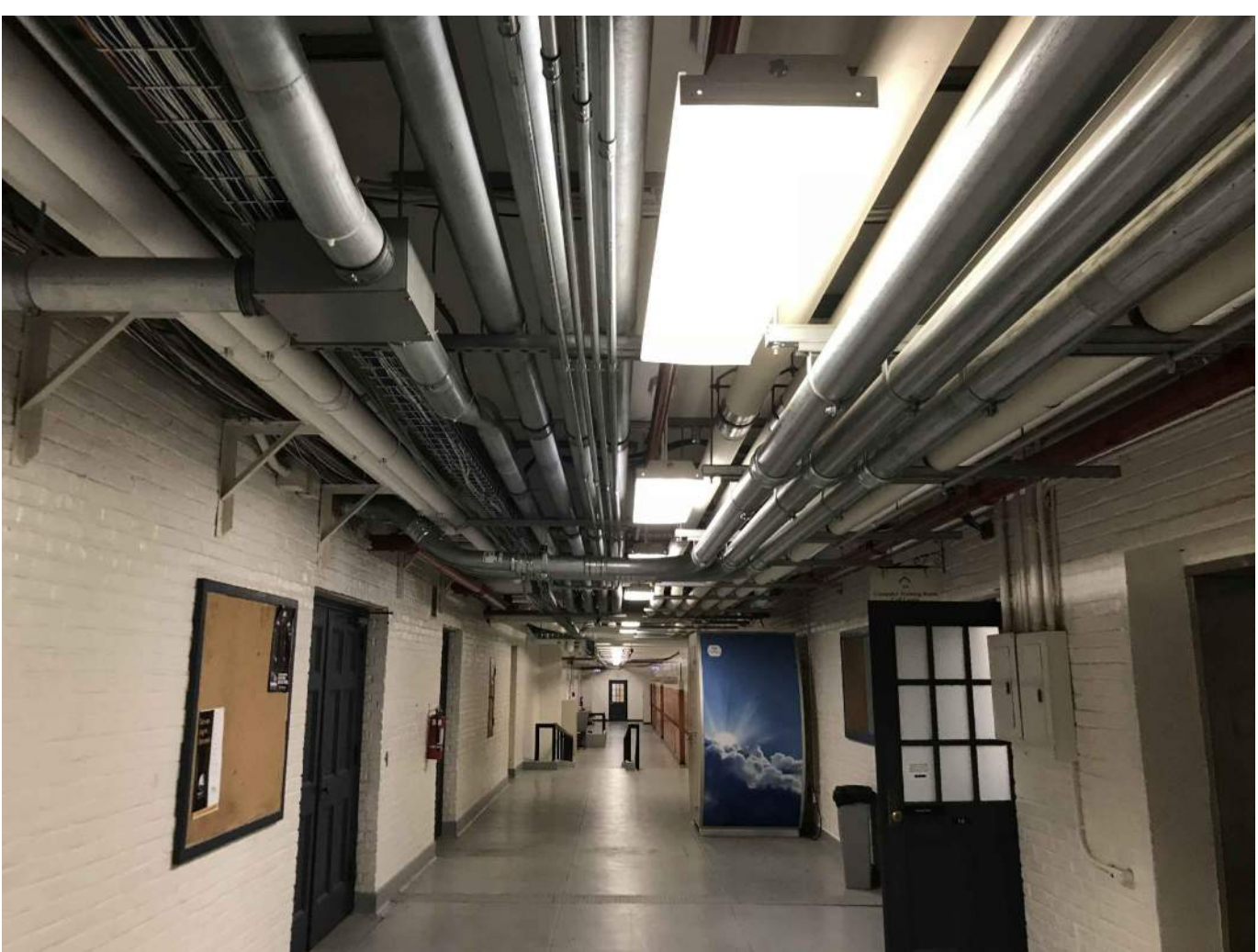
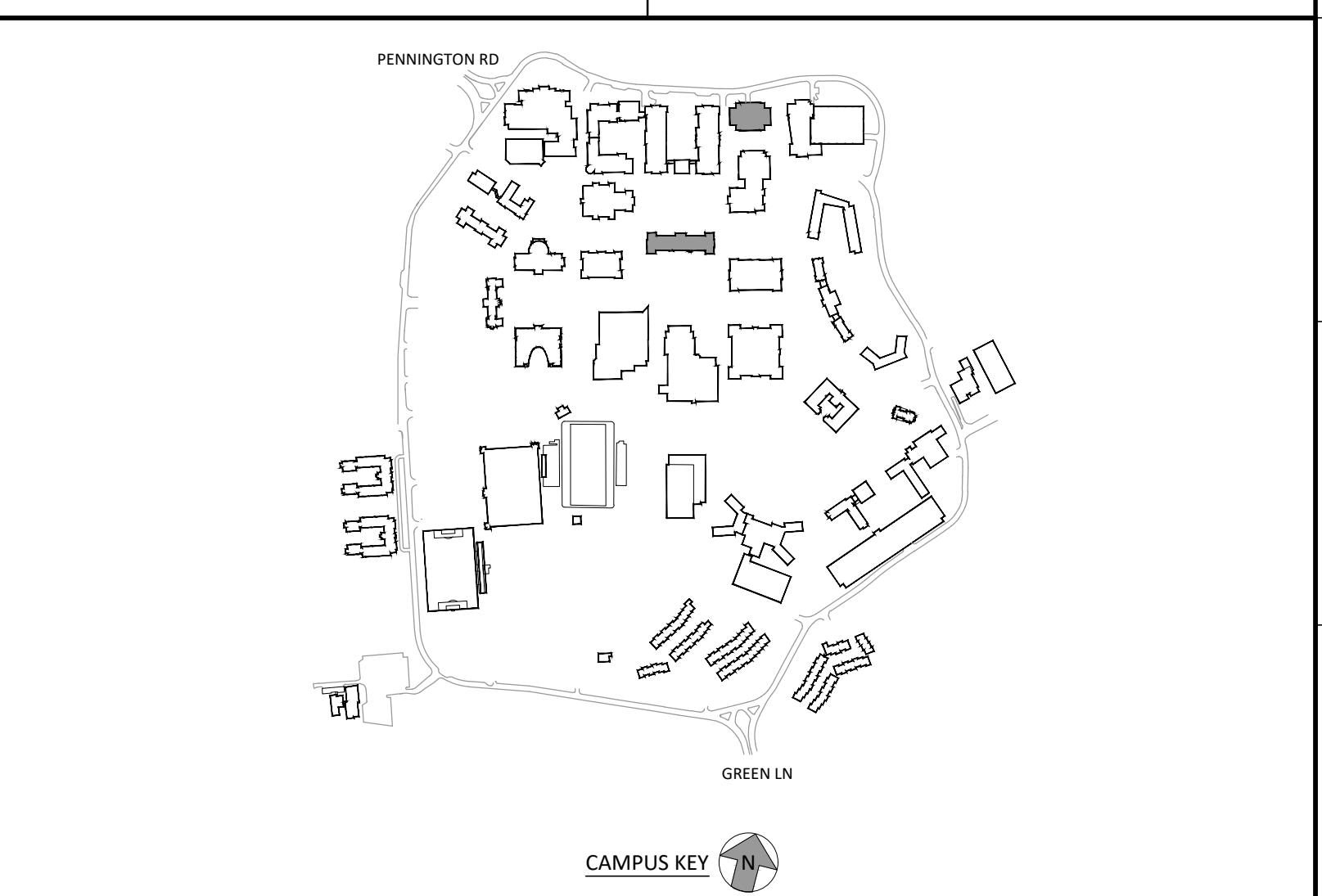


PHOTO E - BASEMENT CEILING  
New Fiber In Conduit To Be Run Along Basement Open Ceiling.



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724  
Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
FORCINA HALL & GREEN HALL  
FIRE ALARM  
scale AS SHOWN  
drawn by AM  
checked by SG  
date 05/03/2020  
dwg. no.  
**FA020**

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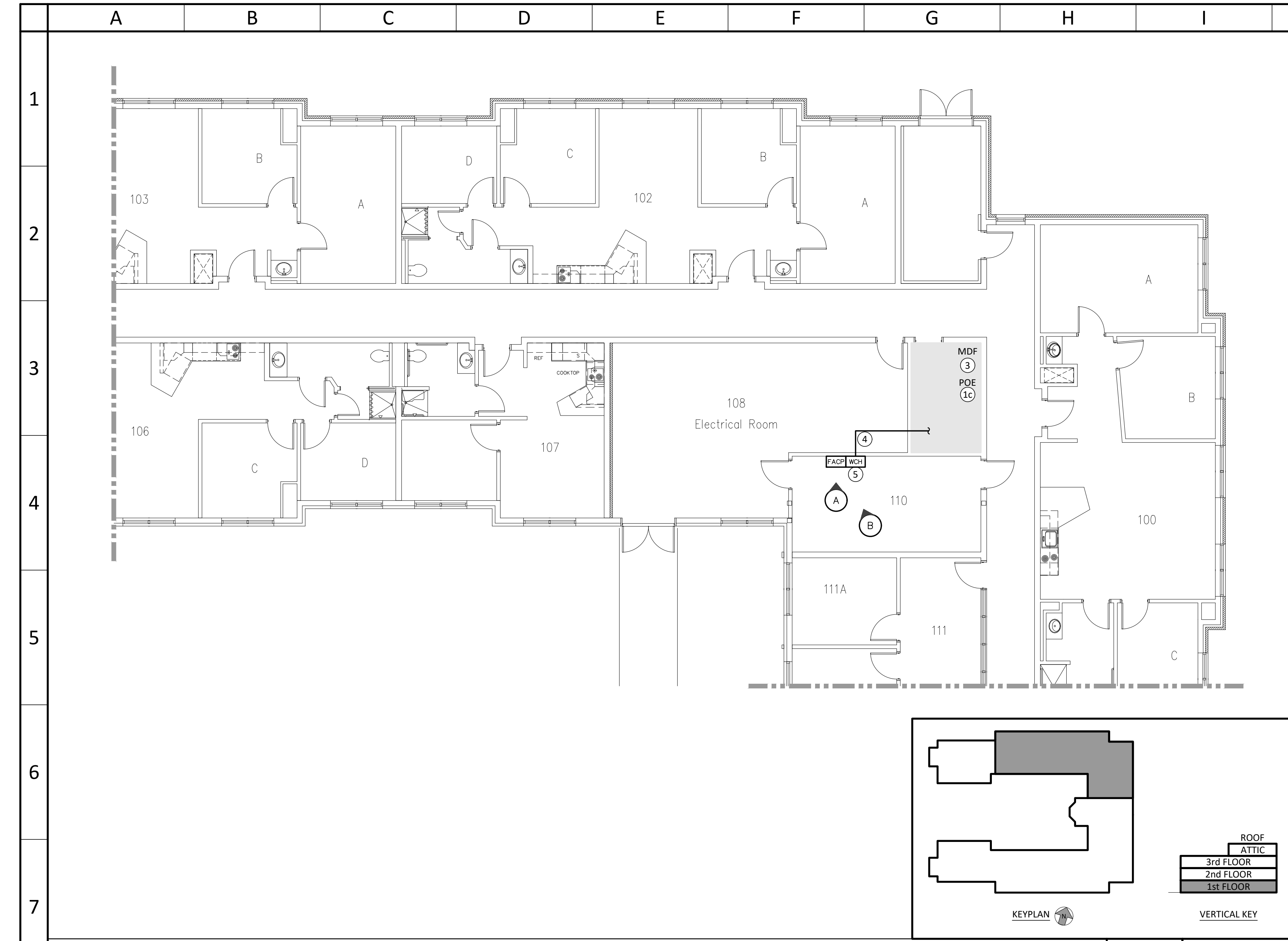


PHOTO A - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel Location



PHOTO B - BASEMENT CEILING  
Open Ceiling In Basement Room 108 And 110

**KEY NOTES (SYMBOLS ①, ②, ETC.)**

KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS

- Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
- Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
- Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
- Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
- Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
- Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
- New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
- Provide Two Post Rack. Terminate Fiber Within New Cable Connector Housing Within New Rack. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.

**GENERAL NOTES**

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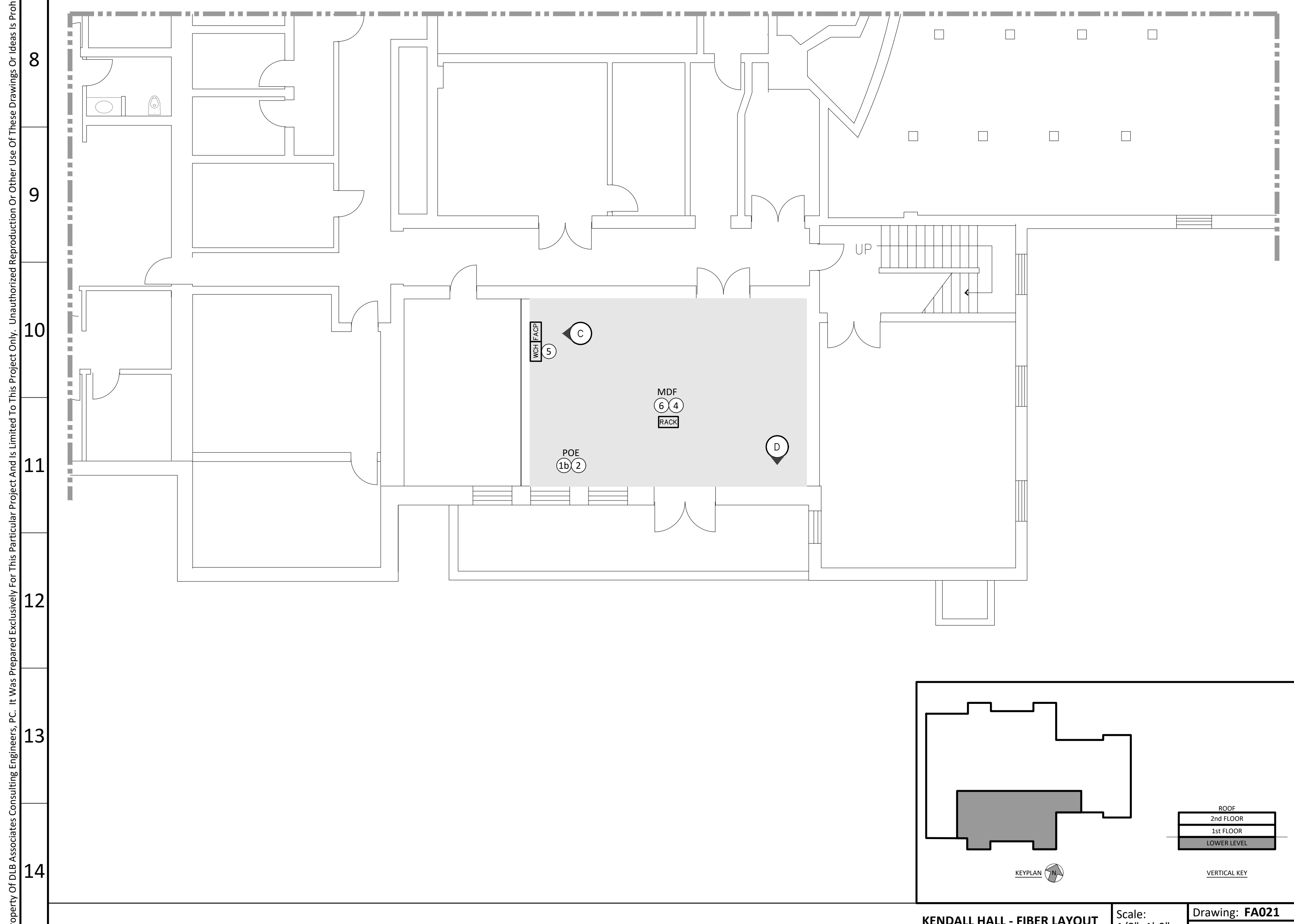


PHOTO C - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel Location

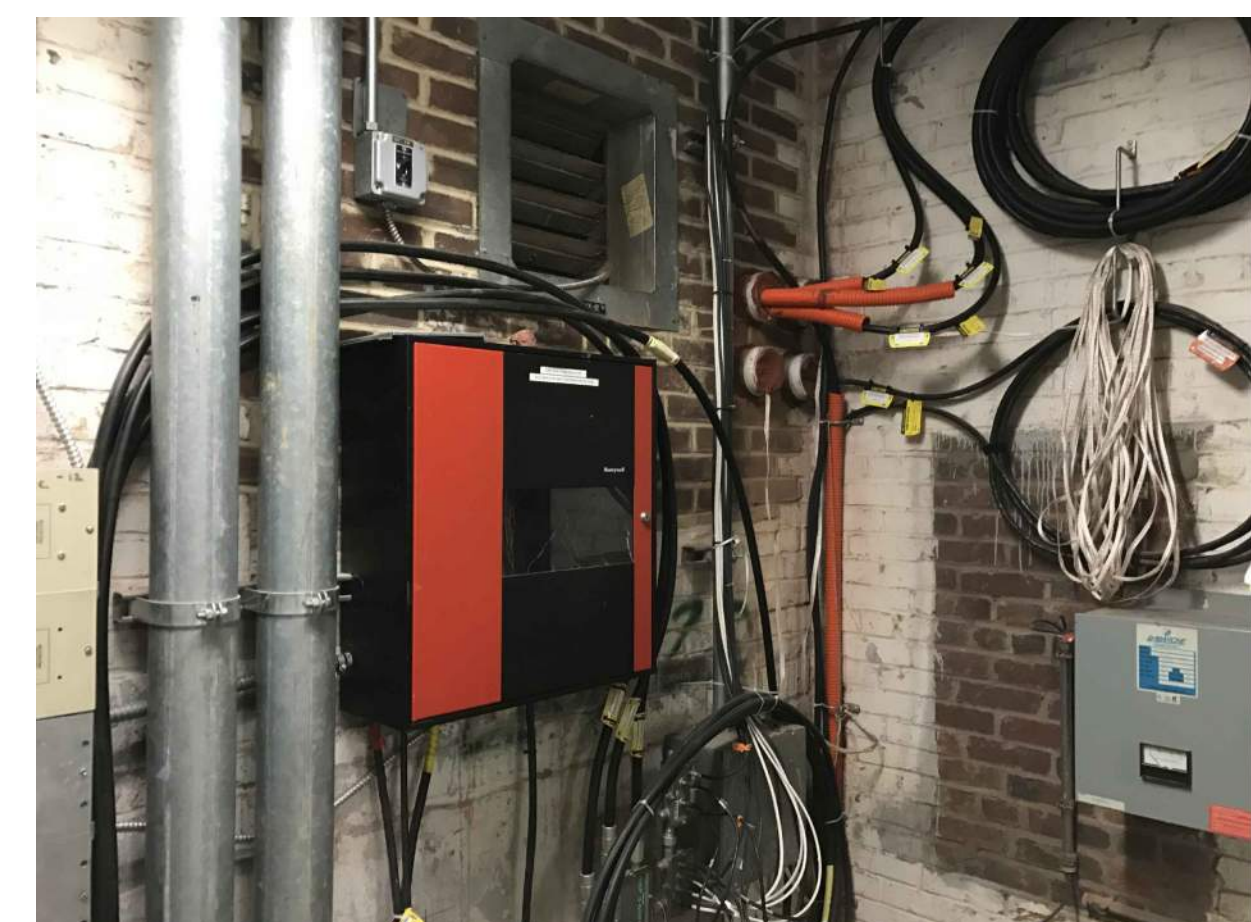
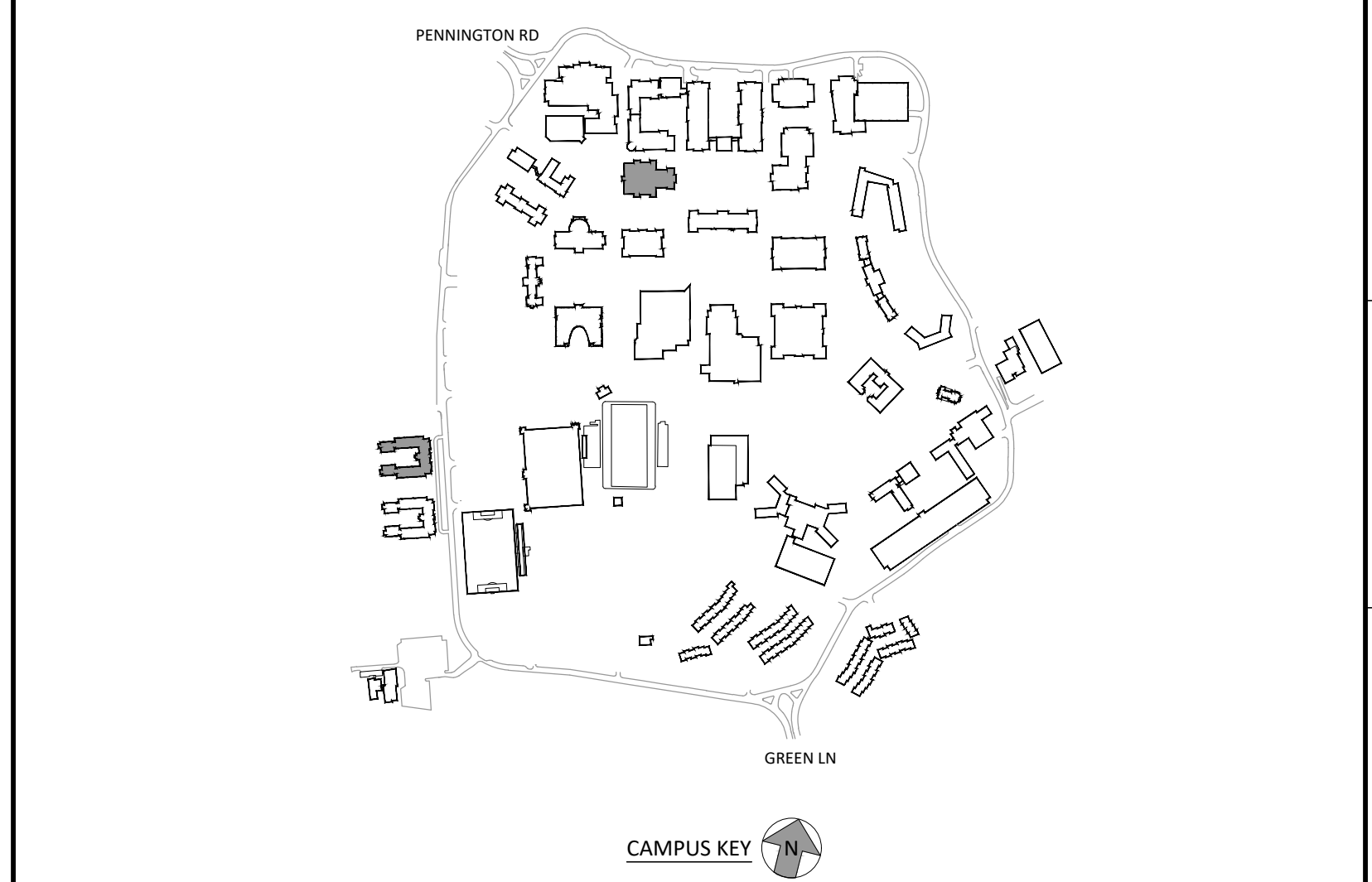


PHOTO D - EXISTING POE  
Existing POE In Basement

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
→	New Fiber Pathway	FACP	Fire Alarm Control Panel
⊙	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
⊙	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
FACP	Fire Alarm Control Panel		
WCH	Wall Mounted Connector Housing		
RACK	IT Rack		
⊙	Photo Identification Tag		
→	Connect To Existing		
■	MDF / POE		



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**dlb associates**  
 CONSULTING ENGINEERS, P.C.  
 265 Industrial Way West, Eatontown, N.J. 07724

Questions For DLB Call: Anthony Laskosky  
 DLB Project ID: 47211 Phone: 732-927-5038

project  
 TCNJ - CAMPUS FIRE ALARM PROJECT  
 PART A - CABLE INFRASTRUCTURE UPGRADES  
 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

title  
 INTERIOR FIBER ROUTING  
 HAUSDOERFFER HALL & KENDALL HALL  
 FIRE ALARM

scale AS SHOWN  
 drawn by AM  
 checked by SG  
 date 05/03/2020

dwg. no.  
**FA021**

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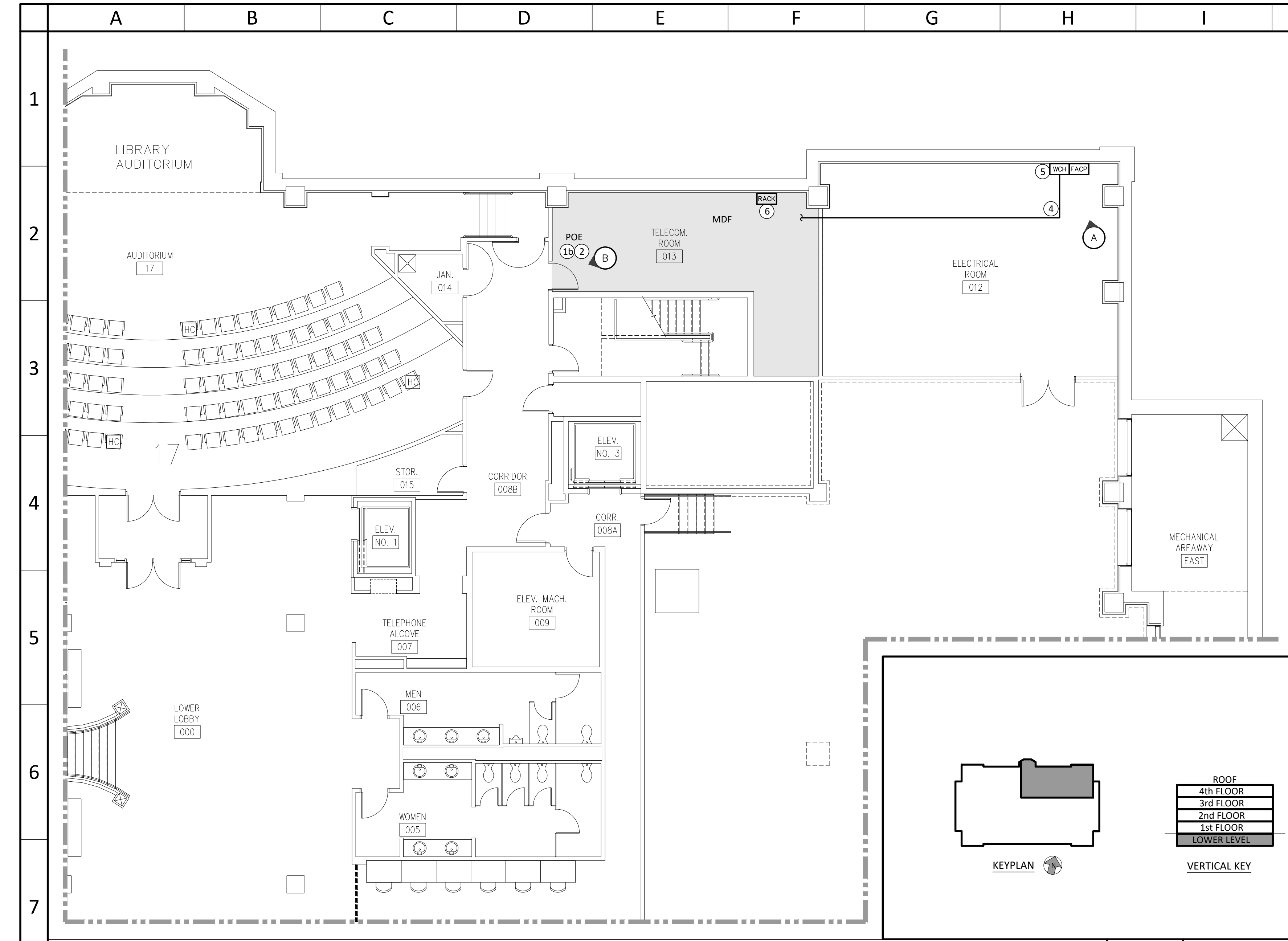


PHOTO A - FIRE ALARM CONTROL PANEL  
 Fire Alarm Control Panel And Booster Panel With Exposed Conduit Located Within Lower Level Electrical Room

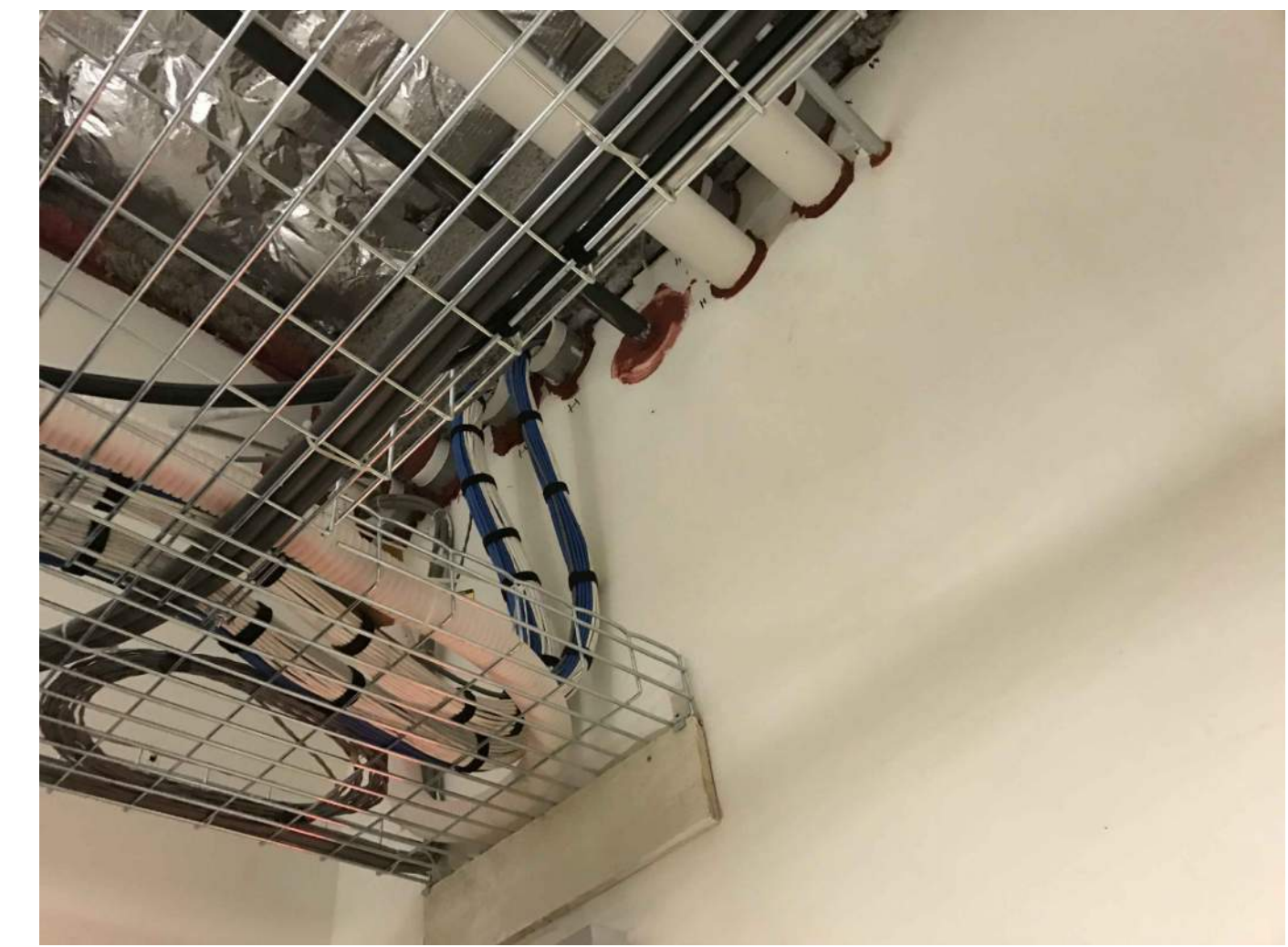


PHOTO B - POINT OF ENTRY  
 Existing Point Of Entry Located Within Telecom Room 013

- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- 1a. Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Provide Two Post Rack. Terminate Fiber Within New Cable Connector Housing Within New Rack. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  7. Pull Box Located on exterior of maintenance building with existing underground empty conduit from Power House. Empty Conduit Shall Be Traced, Reamed And Cleaned. Route From The Pullbox Utilizing Existing Pathway Into The Office Space And Route Above The Ceiling To The MDF.
  8. Provide 12" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.

- GENERAL NOTES**
1. The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  5. All Work And Materials Shall Be New Unless Otherwise Noted.
  6. Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
  7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
  8. A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.

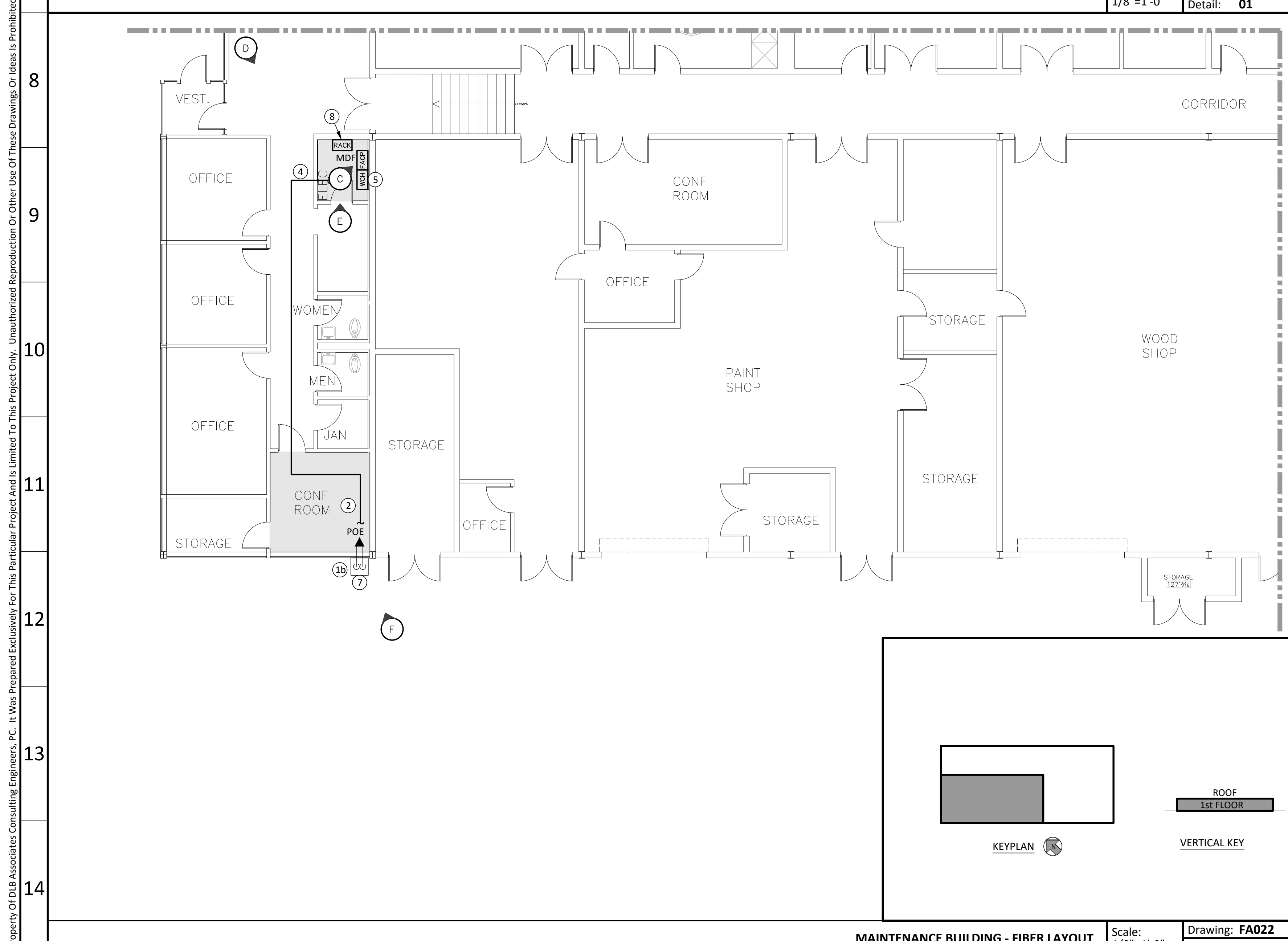


PHOTO C - FIRE ALARM CONTROL PANEL  
 Existing Fire Alarm Control Panel With Exposed Conduit Located Within Electrical Room



PHOTO D - CEILING CONDITION  
 Drop Ceiling Located Throughout The Office Area And Corridor

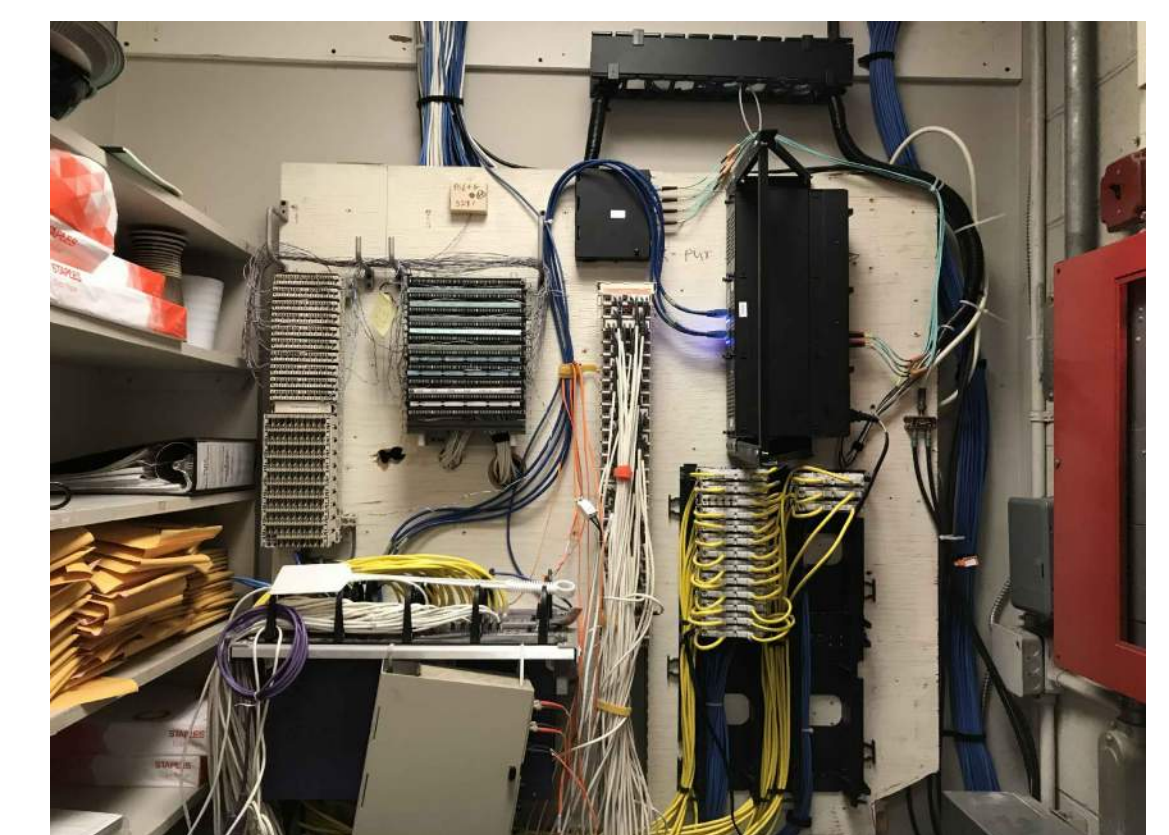


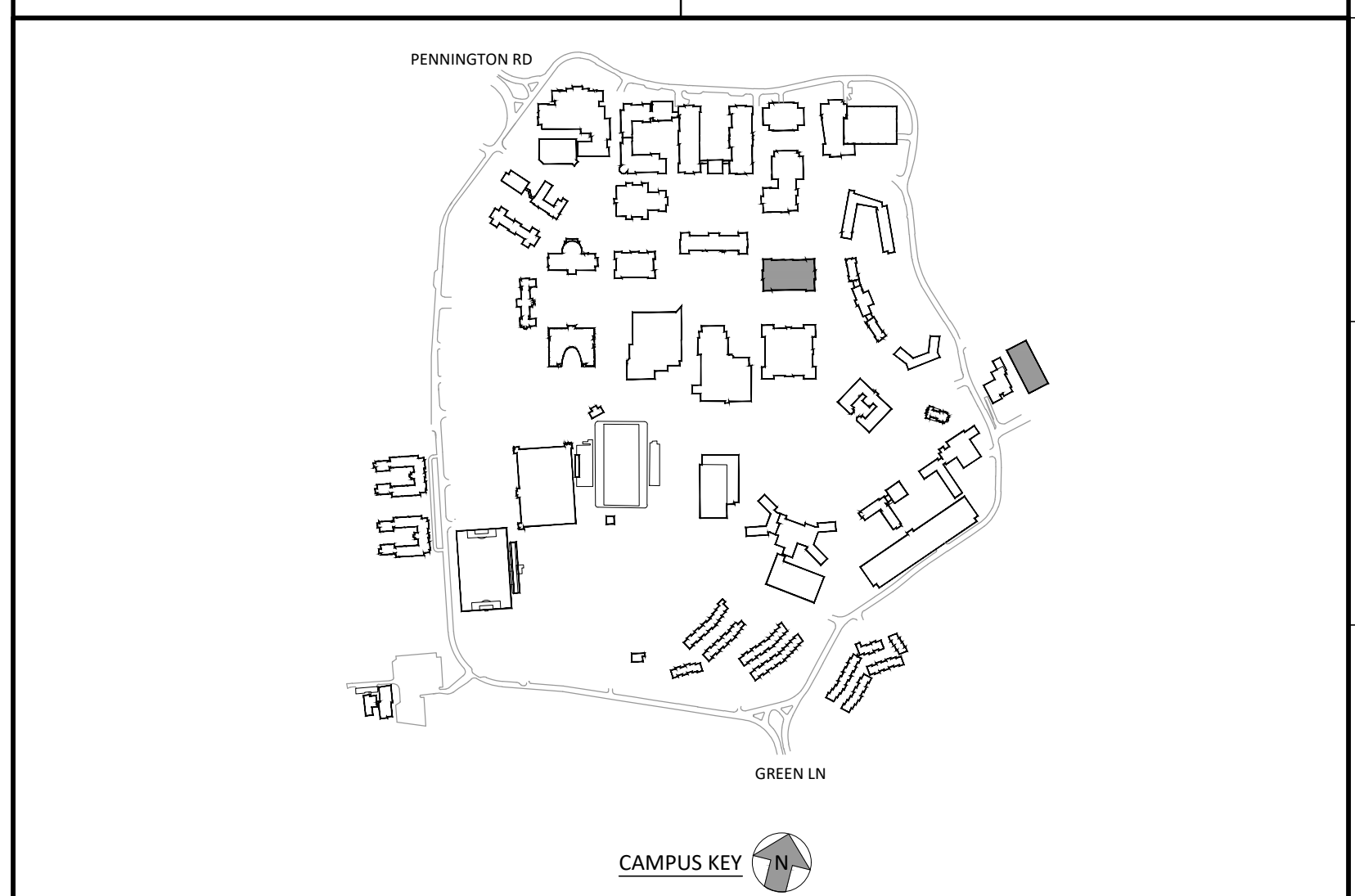
PHOTO E - EXISTING MDF  
 MDF Room Located In First Floor Electric Room.



PHOTO F - EXISTING POINT OF ENTRY  
 Location Of Existing Point Of Entry For Maintenance Building Pull Box Mounted On Building Exterior With Empty Conduit.

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
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**dlb associates**  
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 265 Industrial Way West, Eatontown, N.J. 07724  
 Questions For DLB Call: Anthony Laskosky  
 DLB Project ID: 47211 Phone: 732-927-5038

project  
 TCNJ - CAMPUS FIRE ALARM PROJECT  
 PART A - CABLE INFRASTRUCTURE UPGRADES  
 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

title  
 INTERIOR FIBER ROUTING  
 GITENSTEIN LIBRARY & MAINTENANCE BUILDING  
 FIRE ALARM  
 scale AS SHOWN  
 drawn by AM  
 checked by SG  
 date 05/03/2020  
 dwg. no.  
**FA022**

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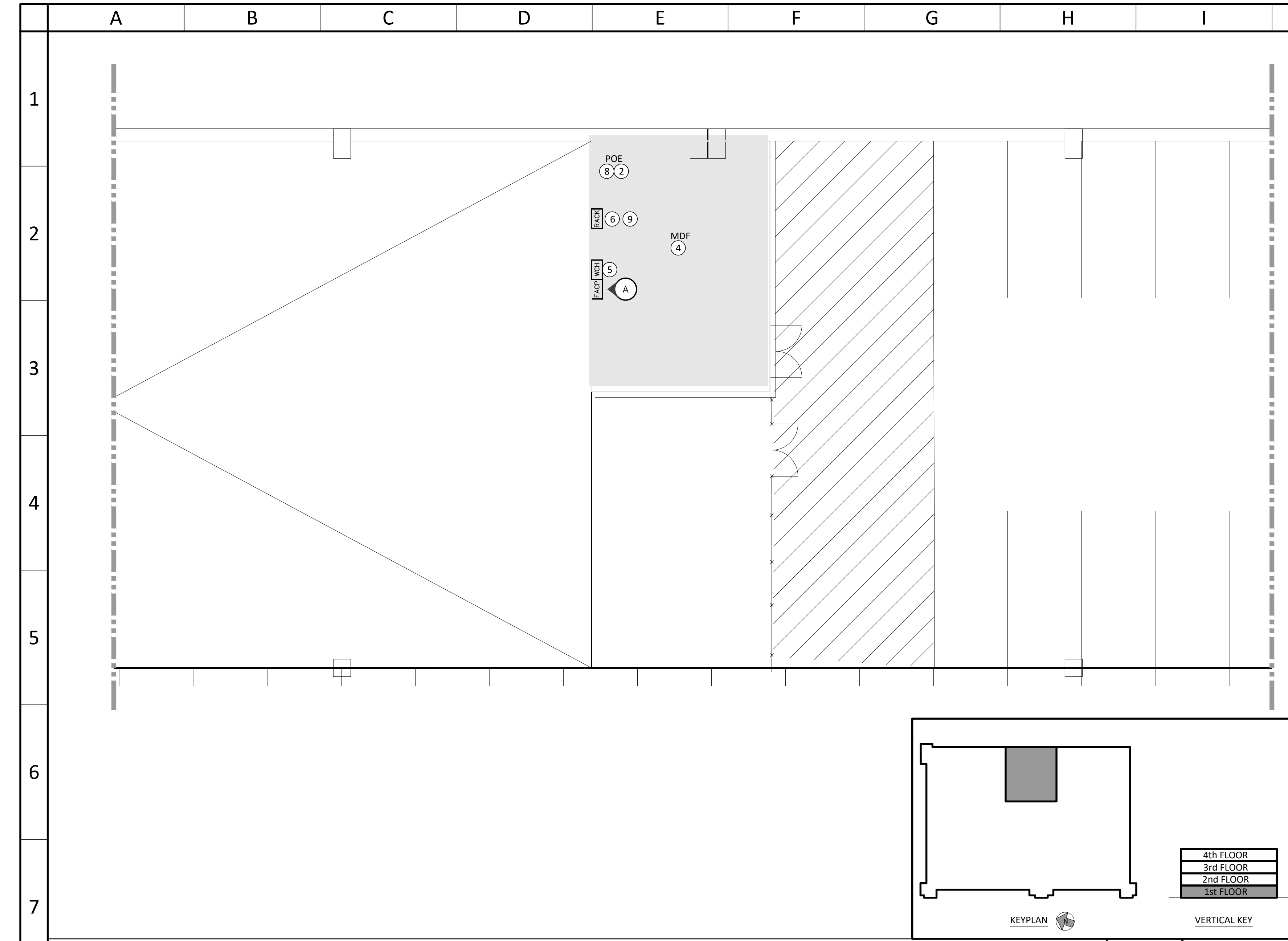


PHOTO A - EXISTING FIRE ALARM PANEL  
 Existing Fire Alarm Control Panel Location

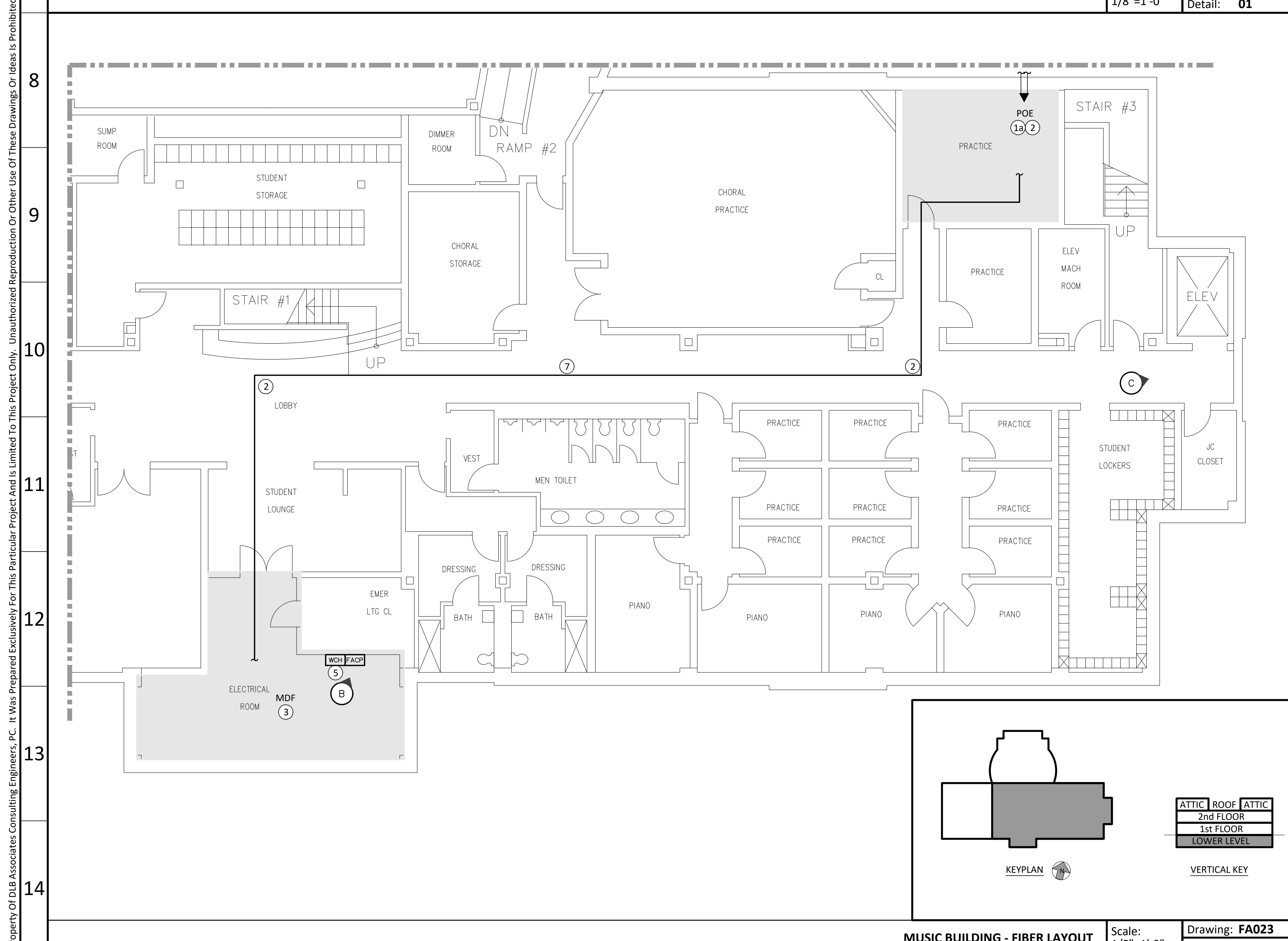


PHOTO B - EXISTING FIRE ALARM PANEL  
 Existing Fire Alarm Control Panel Location



PHOTO C - LOWER LEVEL CEILING  
 Route Fiber Pathway Above Existing Drop Ceiling

**KEY NOTES (SYMBOLS ①, ②, ETC.)**

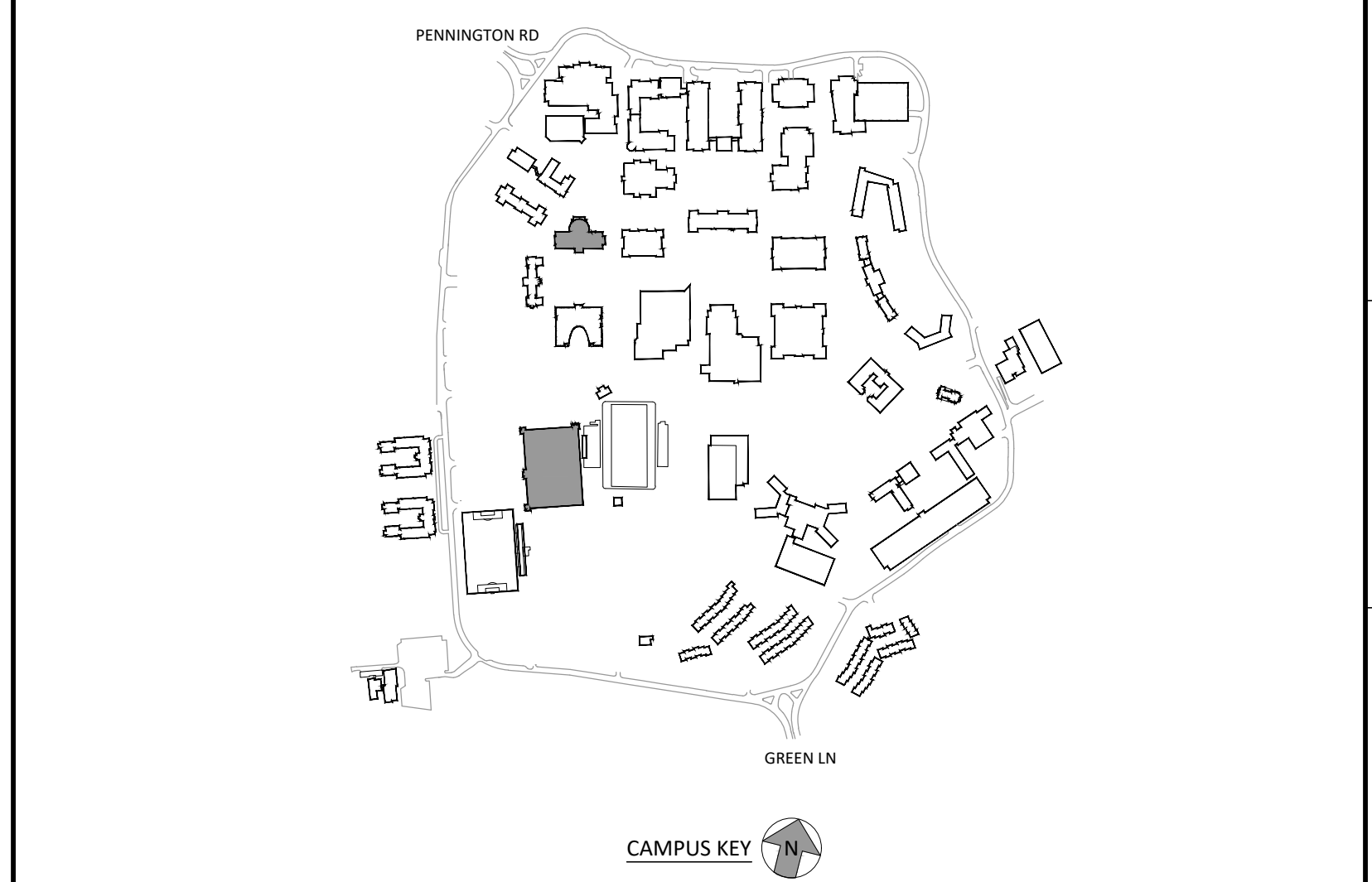
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  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Provide 30" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  7. Route Fiber Pathway Above Drop Ceiling Where Possible.
  8. Coordinate With TCNJ IT Department For Cable Removal. The Intent Is To Remove The Existing Fiber Cable And To Replace With A Higher Capacity Cable.
  9. Contractor Shall Provide A 120V Circuit For Integral Fan And Light Power Within 30" Deep Cabinet. Circuit Shall Be Provided From Nearest Electrical Distribution Panel With Available Space Utilizing 2#12, #12G In 3/4" Conduit With A 20 Amp, 120V Single Phase Circuit Breaker.

**GENERAL NOTES**

1. The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
5. All Work And Materials Shall Be New Unless Otherwise Noted.
6. Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
8. A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



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ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION

**dlb associates**  
 CONSULTING ENGINEERS, P.C.  
 265 Industrial Way West, Eatontown, N.J. 07724  
 Questions For DLB Call: Anthony Laskosky  
 DLB Project ID: 47211 Phone: 732-927-5038

project  
 TCNJ - CAMPUS FIRE ALARM PROJECT  
 PART A - CABLE INFRASTRUCTURE UPGRADES  
 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

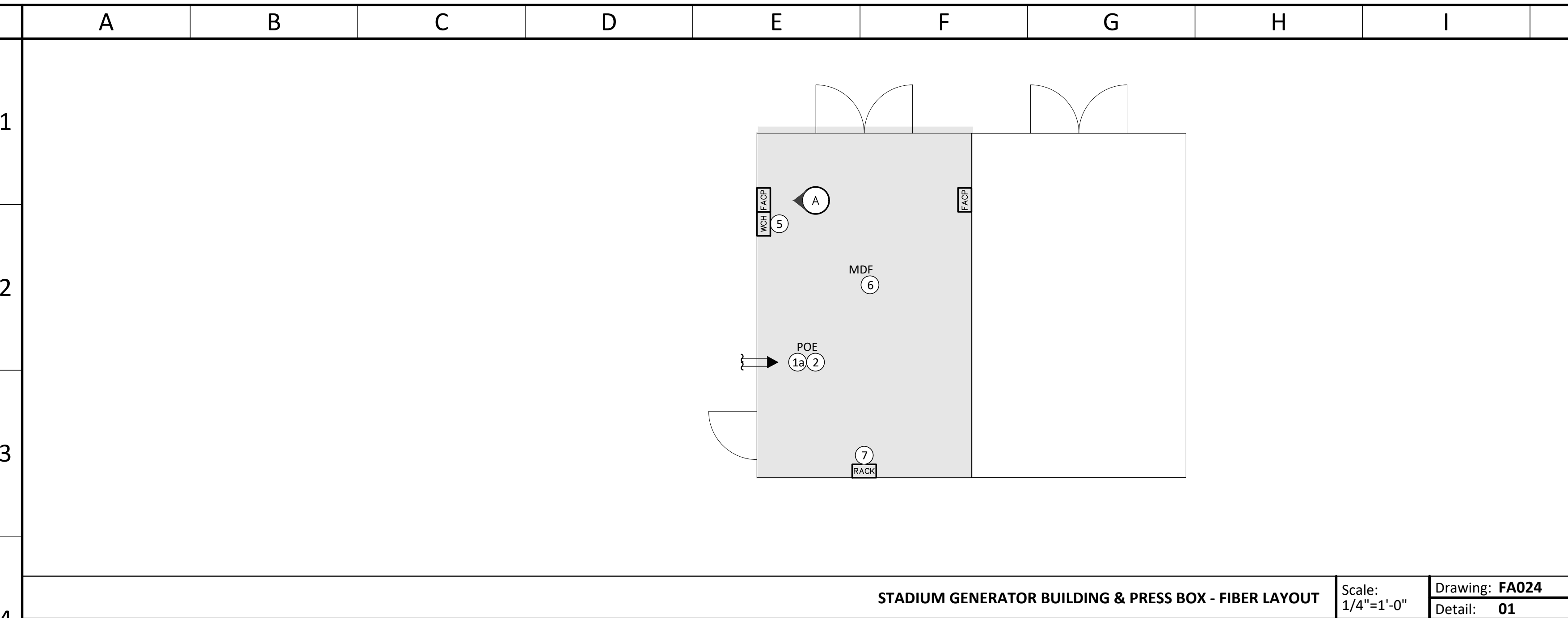
title  
 INTERIOR FIBER ROUTING  
 METZGER GARAGE & MUSIC BUILDING  
 FIRE ALARM

scale AS SHOWN  
 drawn by AM  
 checked by SG  
 date 05/03/2020

dwg. no.  
**FA023**



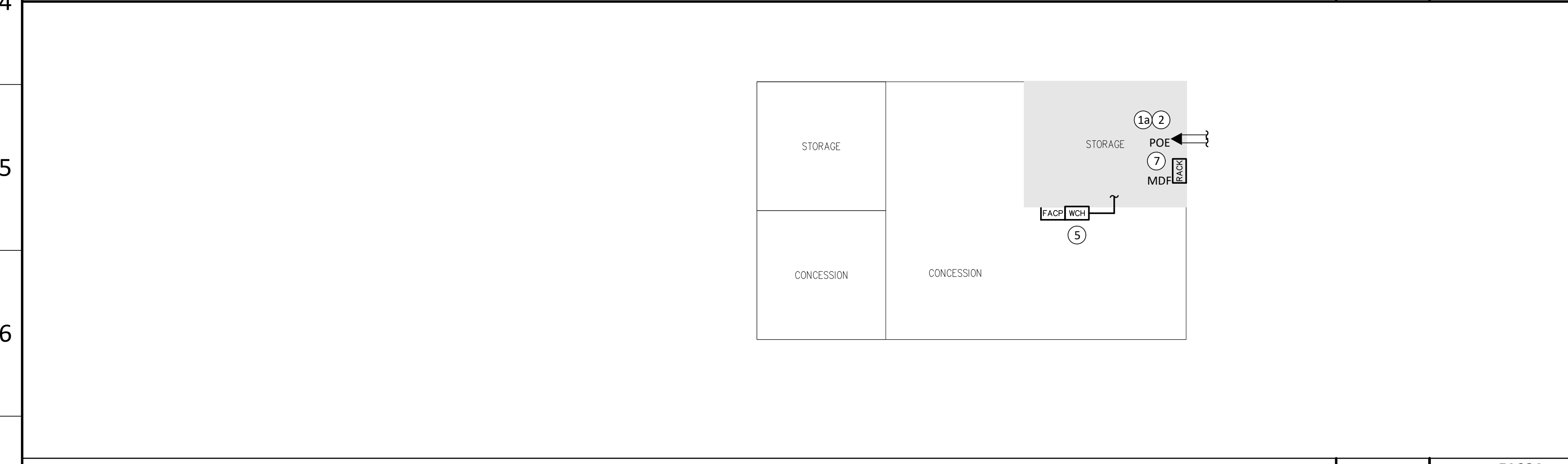
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**STADIUM GENERATOR BUILDING & PRESS BOX - FIBER LAYOUT** Scale: 1/4"=1'-0" Drawing: FA024 Detail: 01



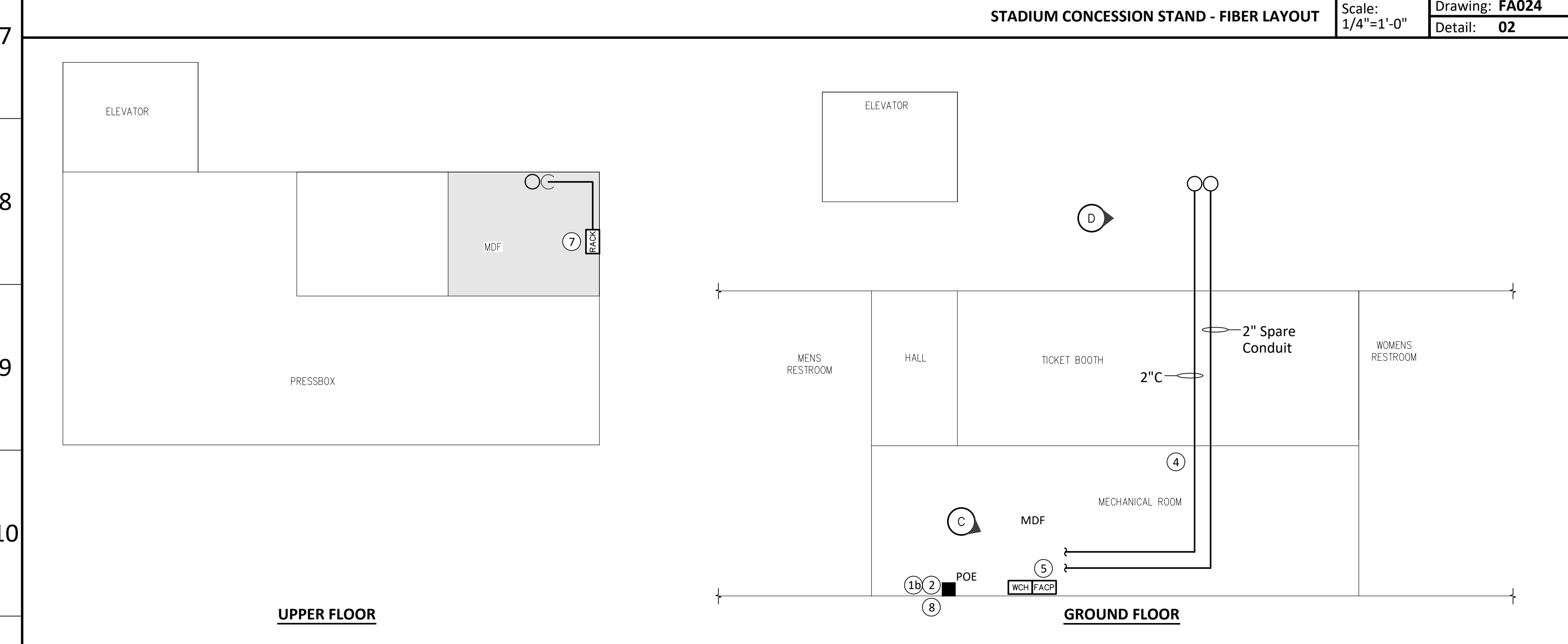
- KEY NOTES (SYMBOLS ①, ②, ETC.)**
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- 1a. Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route (2) 2" Conduits From Soccer Mechanical Room To Soccer Press Box MDF Room Following The Existing Conduit Routing Between The Spaces. One Conduit Shall Contain (2) Fiber Cables And One Conduit Shall Be Spare. This Includes One From The Softball Pressbox To The Soccer MDF Room Sized Per G004 And The Second Cable (12/12 Hybrid) From Soccer MDF Room To Wall Mounted Connector Housing (WCH) For The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. New Conduit And Hybrid 12/12 Fiber Cable From MDF To Stadium Press Box.
  7. Provide 12" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  8. Fiber Route From Admin Splice To Softball Pressbox And From Softball Press Box To Soccer Press Box Are Two Separate Runs.
  9. Provide 30" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  10. Contractor Shall Provide A 120V Circuit For Integral Fan And Light Power Within 30" Deep Cabinet. Circuit Shall Be Provided From Nearest Electrical Distribution Panel With Available Space Utilizing 2#12, #12G In 3/4" Conduit With A 20 Amp, 120V Single Phase Circuit Breaker.



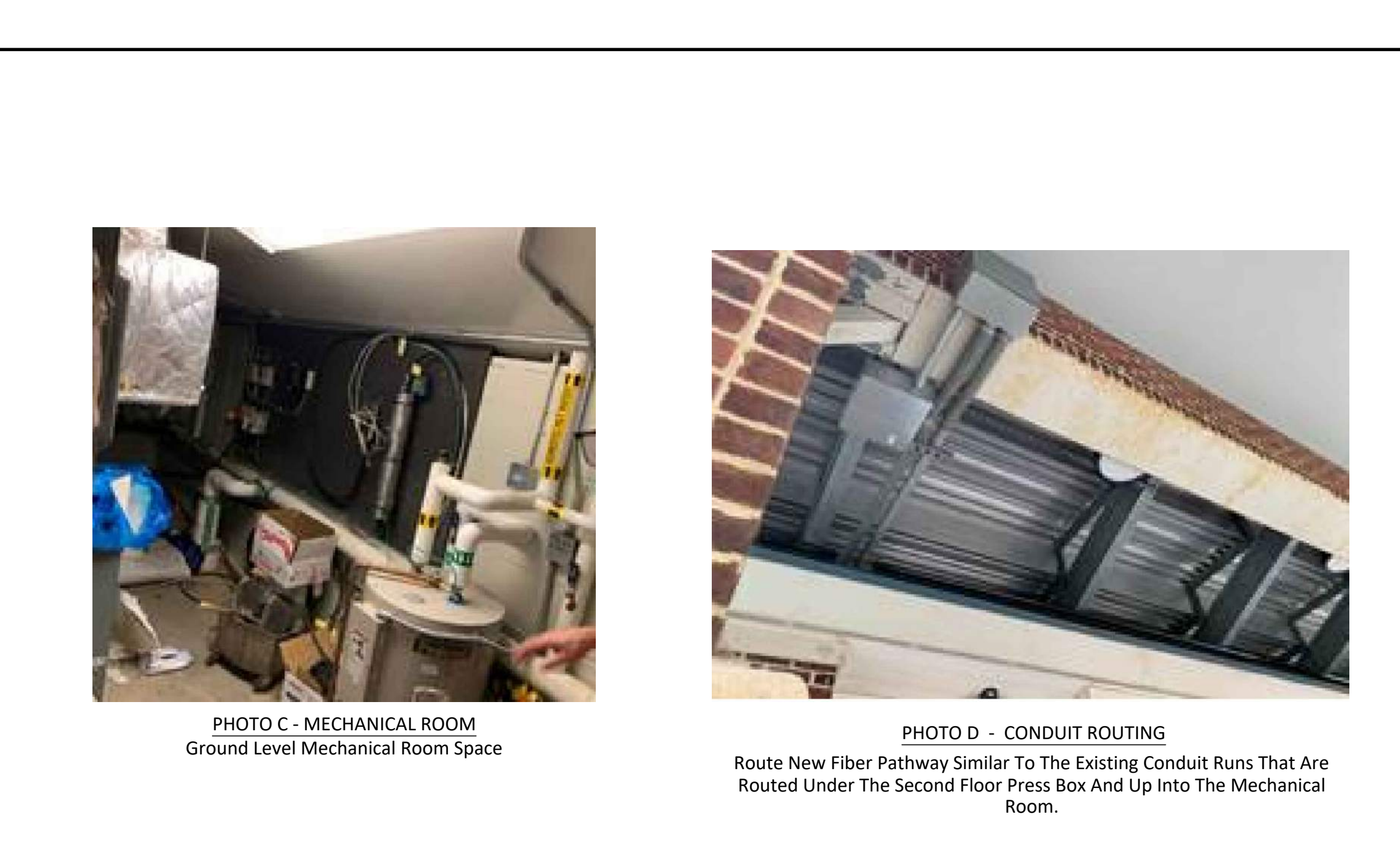
**STADIUM CONCESSION STAND - FIBER LAYOUT** Scale: 1/4"=1'-0" Drawing: FA024 Detail: 02



- GENERAL NOTES**
1. The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  5. All Work And Materials Shall Be New Unless Otherwise Noted.
  6. Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
  7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
  8. A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.

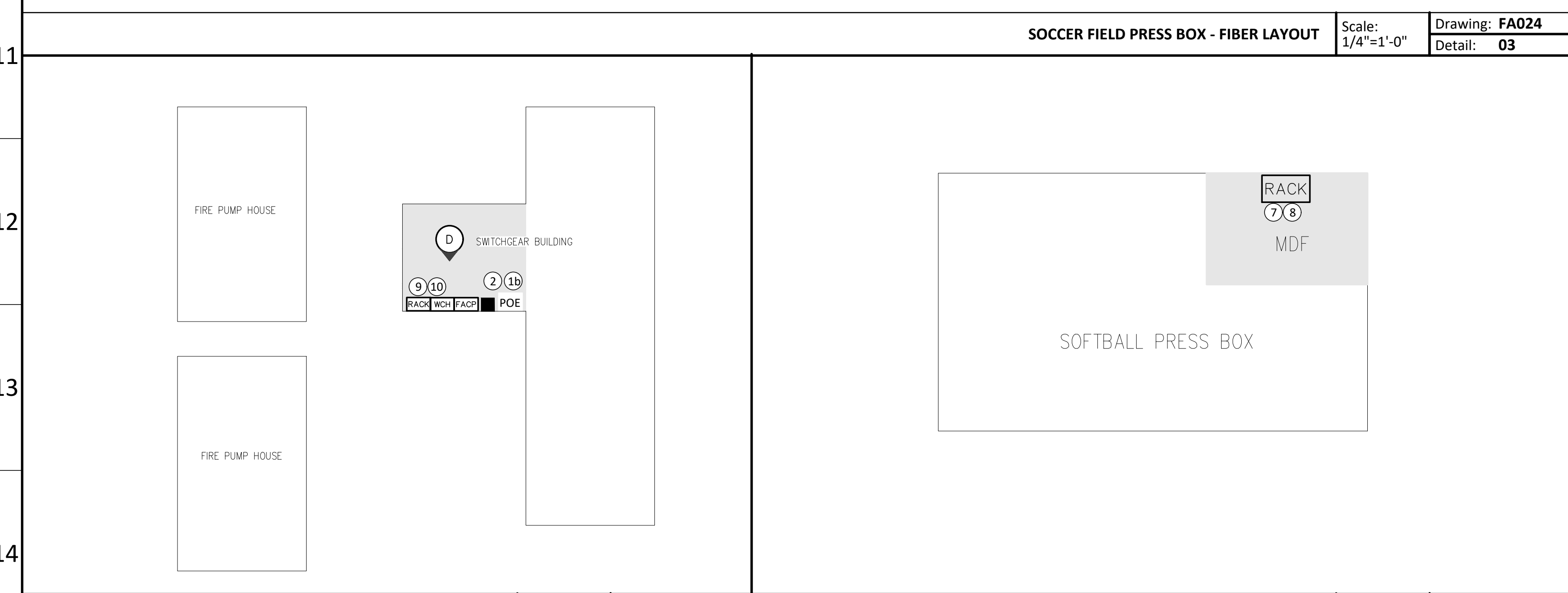


**SOCCER FIELD PRESS BOX - FIBER LAYOUT** Scale: 1/4"=1'-0" Drawing: FA024 Detail: 03



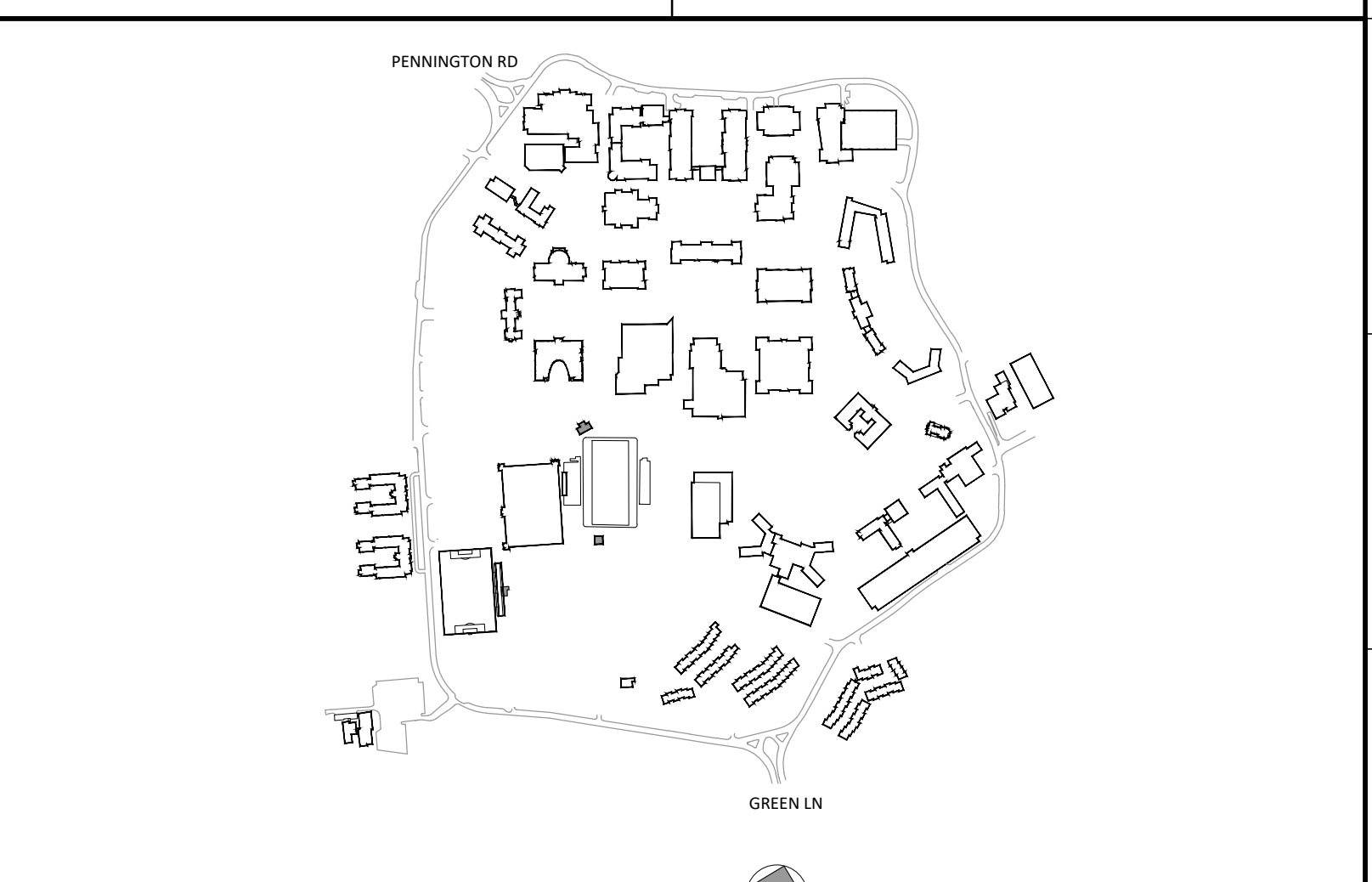
**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		Existing POE
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



**FIRE PUMP HOUSE - FIBER LAYOUT (SWGR HOUSE)** Scale: 1/8"=1'-0" Drawing: FA024 Detail: 04

**SOFTBALL PRESSBOX** Scale: 1/8"=1'-0" Drawing: FA024 Detail: 05



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724

Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

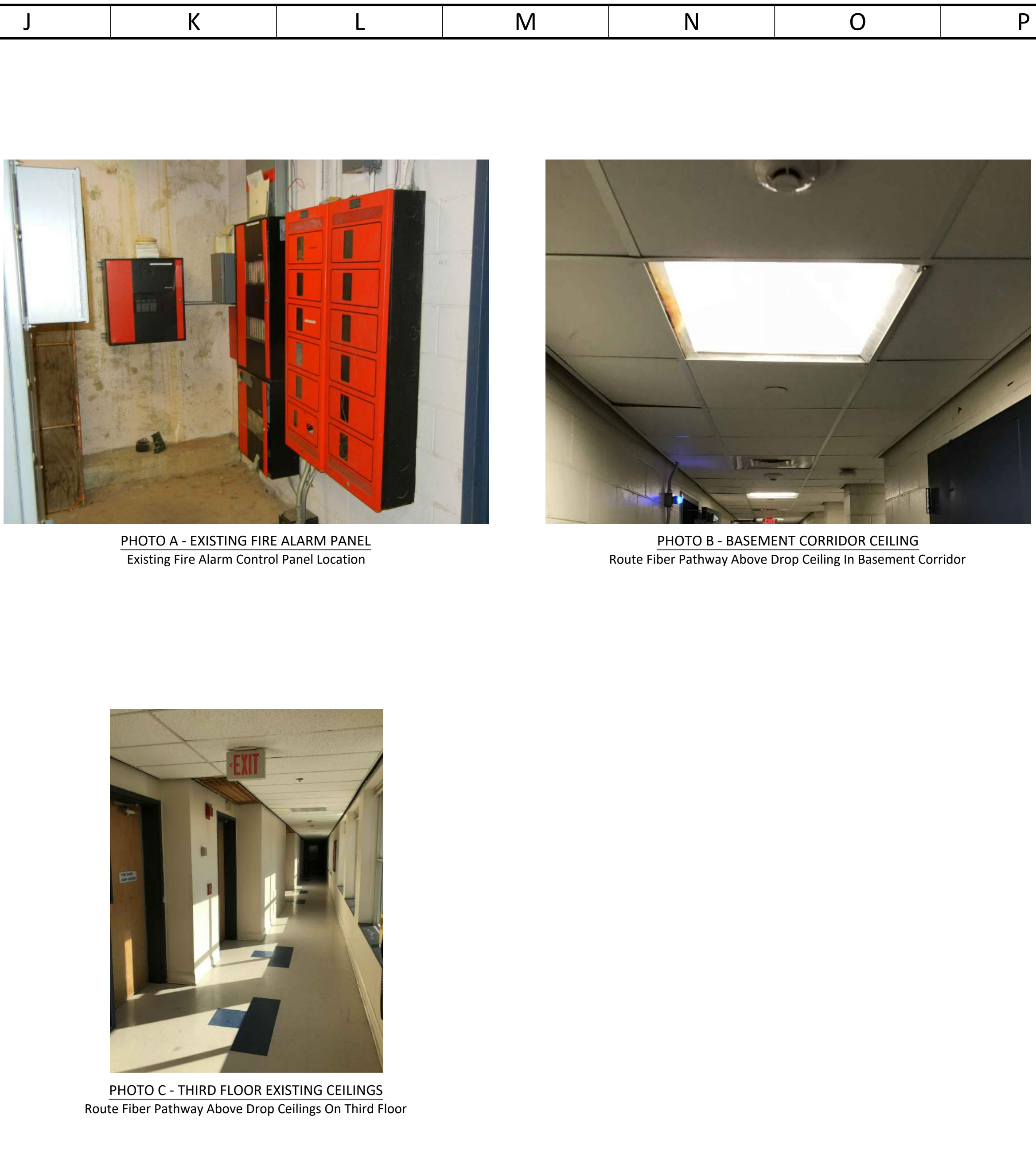
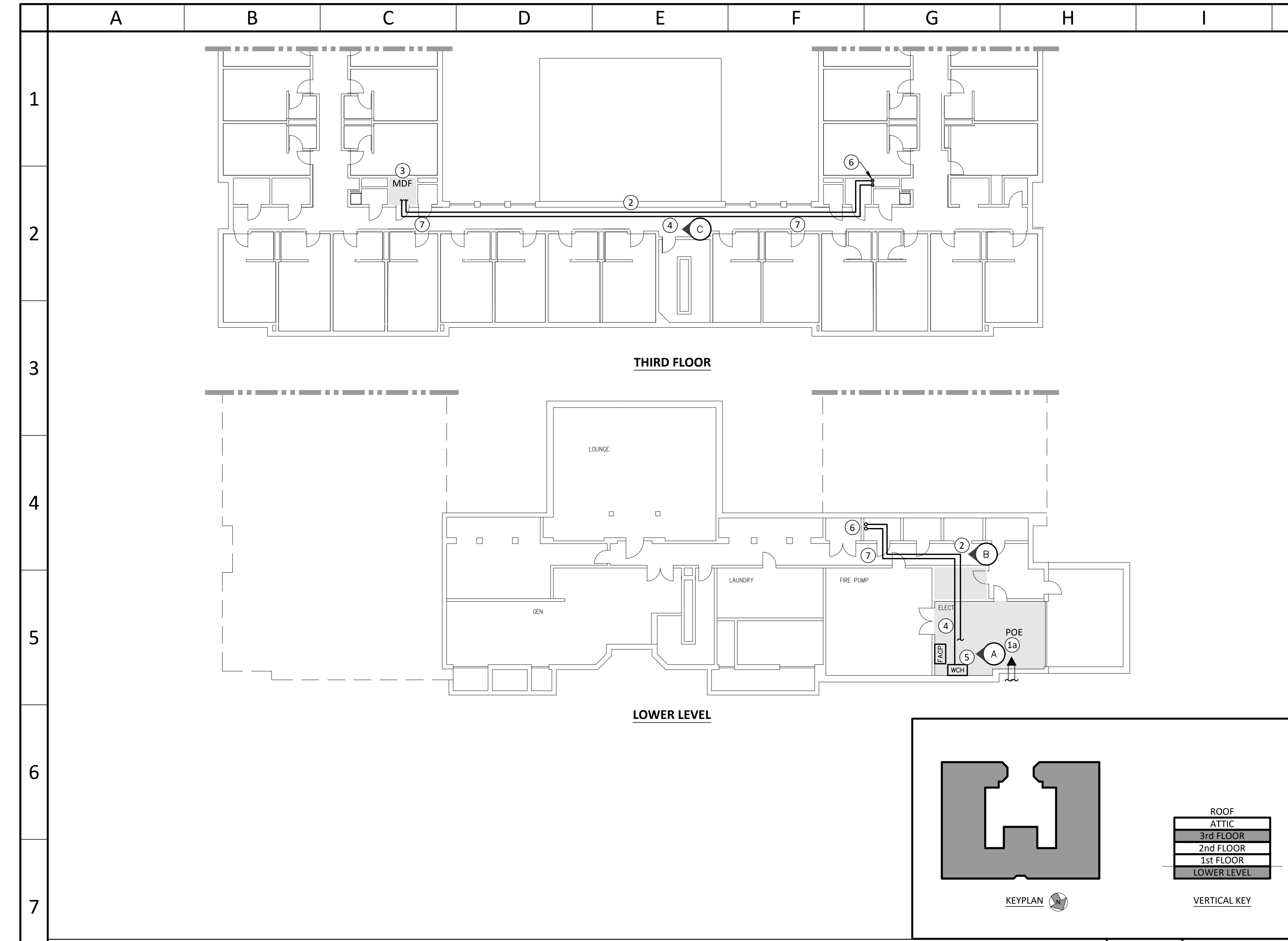
project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
STADIUM & SOCCER FIELD BUILDINGS  
FIRE ALARM

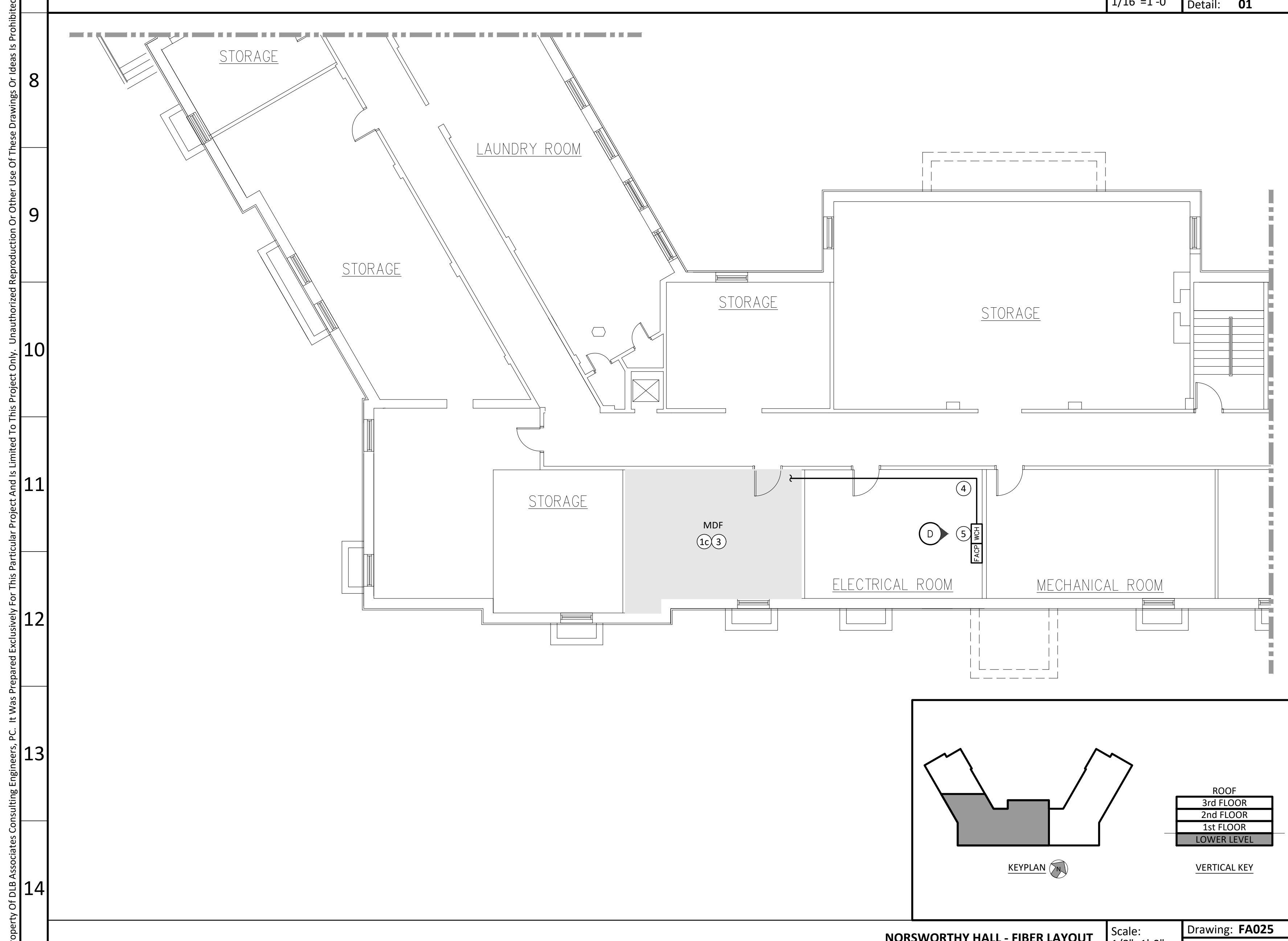
scale AS SHOWN drawn by AM checked by SG date 05/03/2020

dwg. no.  
**FA024**





- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
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  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Core Drill All Floor Penetrations To Route Fiber From Point Of Entry Within Lower Level To Main Distribution Frame (MDF) On Third Floor. Route From MDF To Wall Mounted Connector Housing (WCH) Within Lower Level. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  7. Route Fiber Pathway Above Drop Ceiling Where Possible.
- GENERAL NOTES**
1. The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
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  5. All Work And Materials Shall Be New Unless Otherwise Noted.
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  7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
  8. A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.



**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		

**CAMPUS KEY**

ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
CONSULTING ENGINEERS, P.C.  
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Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
NEW RESIDENCE & NORSWORTHY HALL  
FIRE ALARM

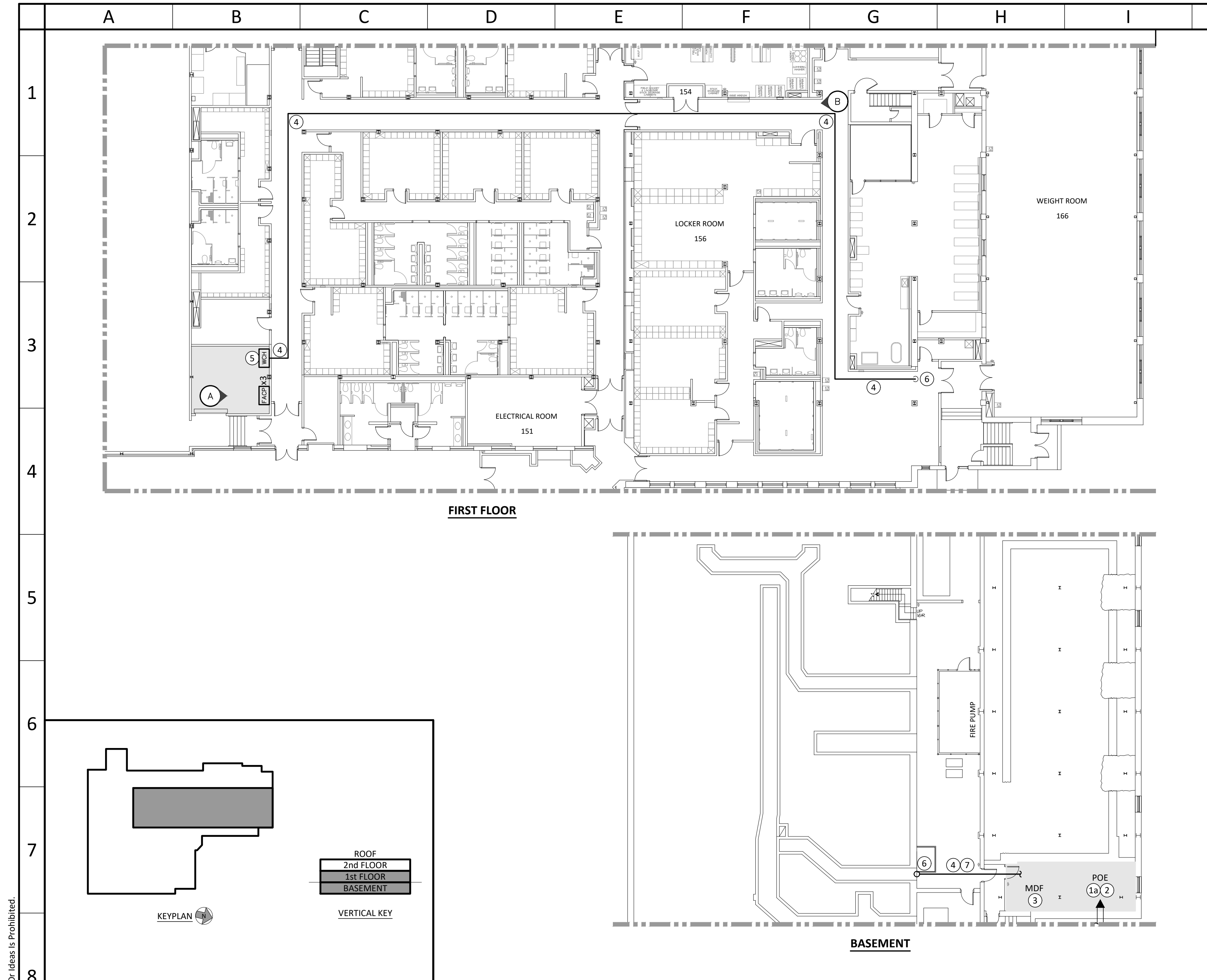
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drawn by AM  
checked by SG  
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dwg. no.  
**FA025**

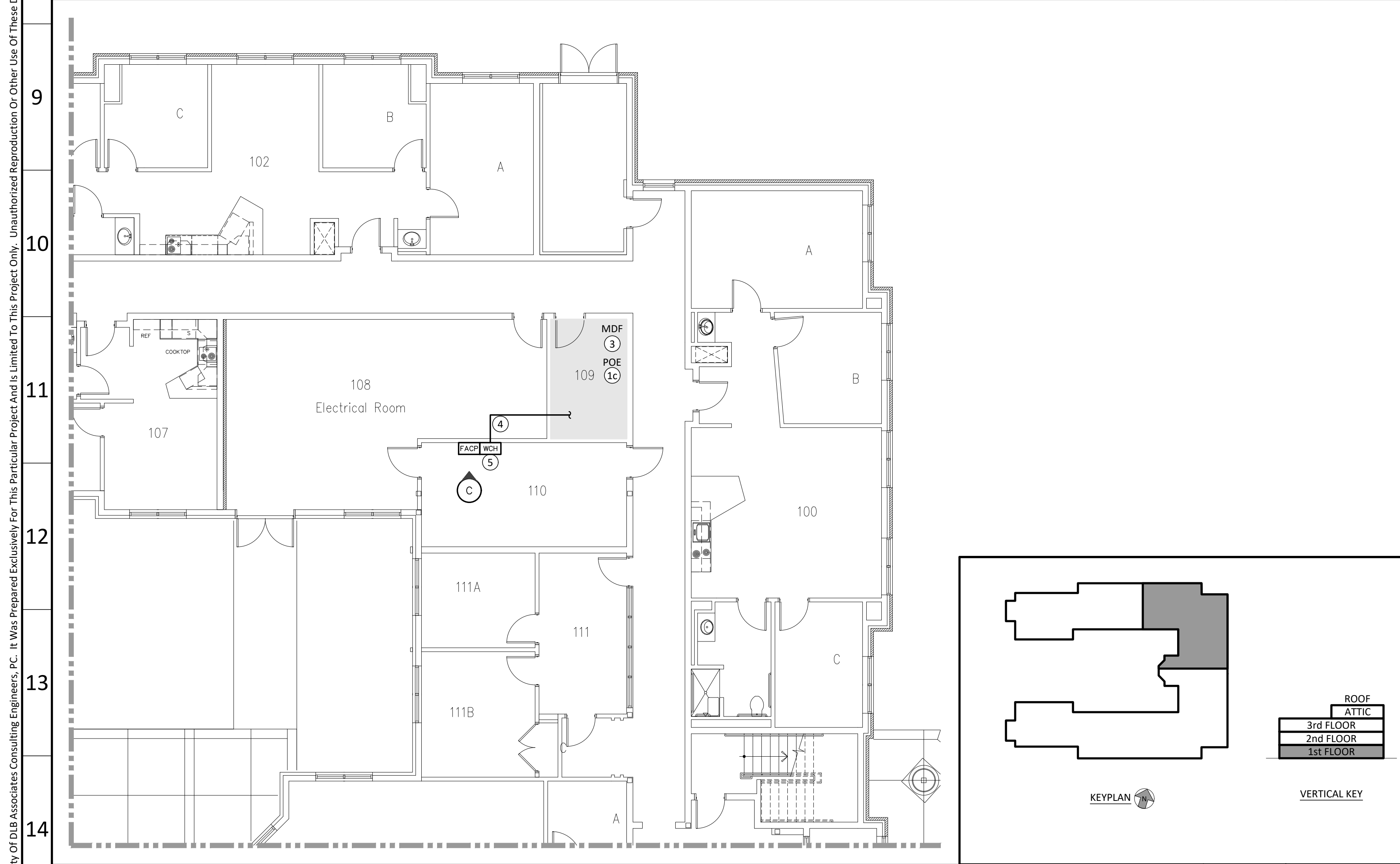
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30x42





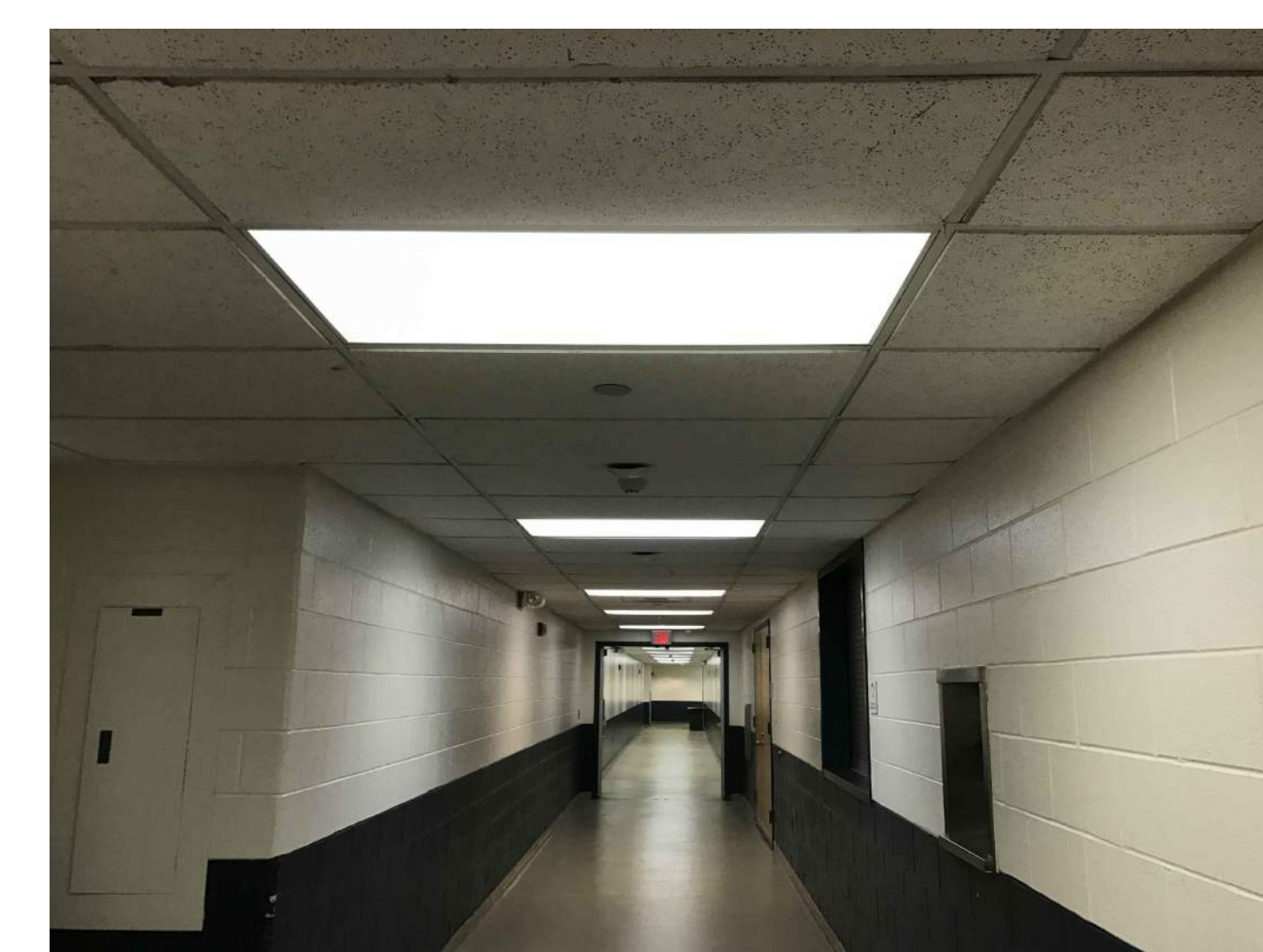
**PACKER HALL - FIBER LAYOUT** Scale: 1/16"=1'-0" Drawing: FA026 Detail: 01



**PHELPS HALL - FIBER LAYOUT** Scale: 1/8"=1'-0" Drawing: FA026 Detail: 02



**PHOTO A - FIRE ALARM CONTROL PANELS**  
Fire Alarm Control Panels And Fire Alarm Remote Annunciator With Exposed Conduit Located Within First Floor Electrical Room



**PHOTO B - EXISTING CEILING CONDITIONS**  
Route Fiber Pathway Above Existing Drop Ceilings Within Corridors



**PHOTO C - FIRE ALARM CONTROL PANEL**  
Fire Alarm Control Panel With Exposed Conduit Located Within First Floor Electrical Room

**KEY NOTES (SYMBOLS ①, ②, ETC.)**

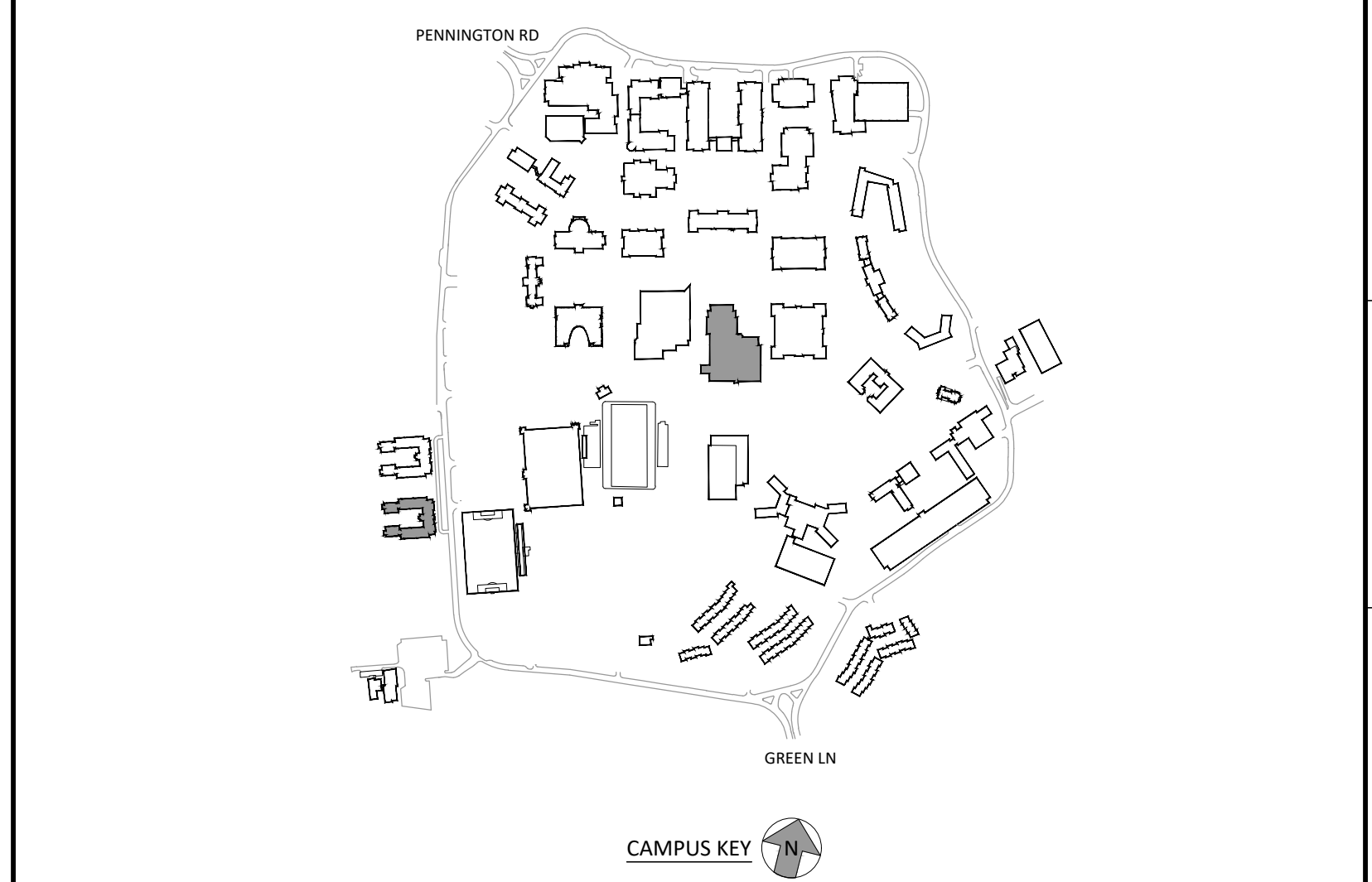
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  3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Core Drill All Floor Penetrations To Route From MDF In Basement To Wall Mounted Connector Housing (WCH) Within First Floor. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  7. Route Fiber Pathway Above Drop Ceiling Where Possible.

**GENERAL NOTES**

1. The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
5. All Work And Materials Shall Be New Unless Otherwise Noted.
6. Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
8. A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



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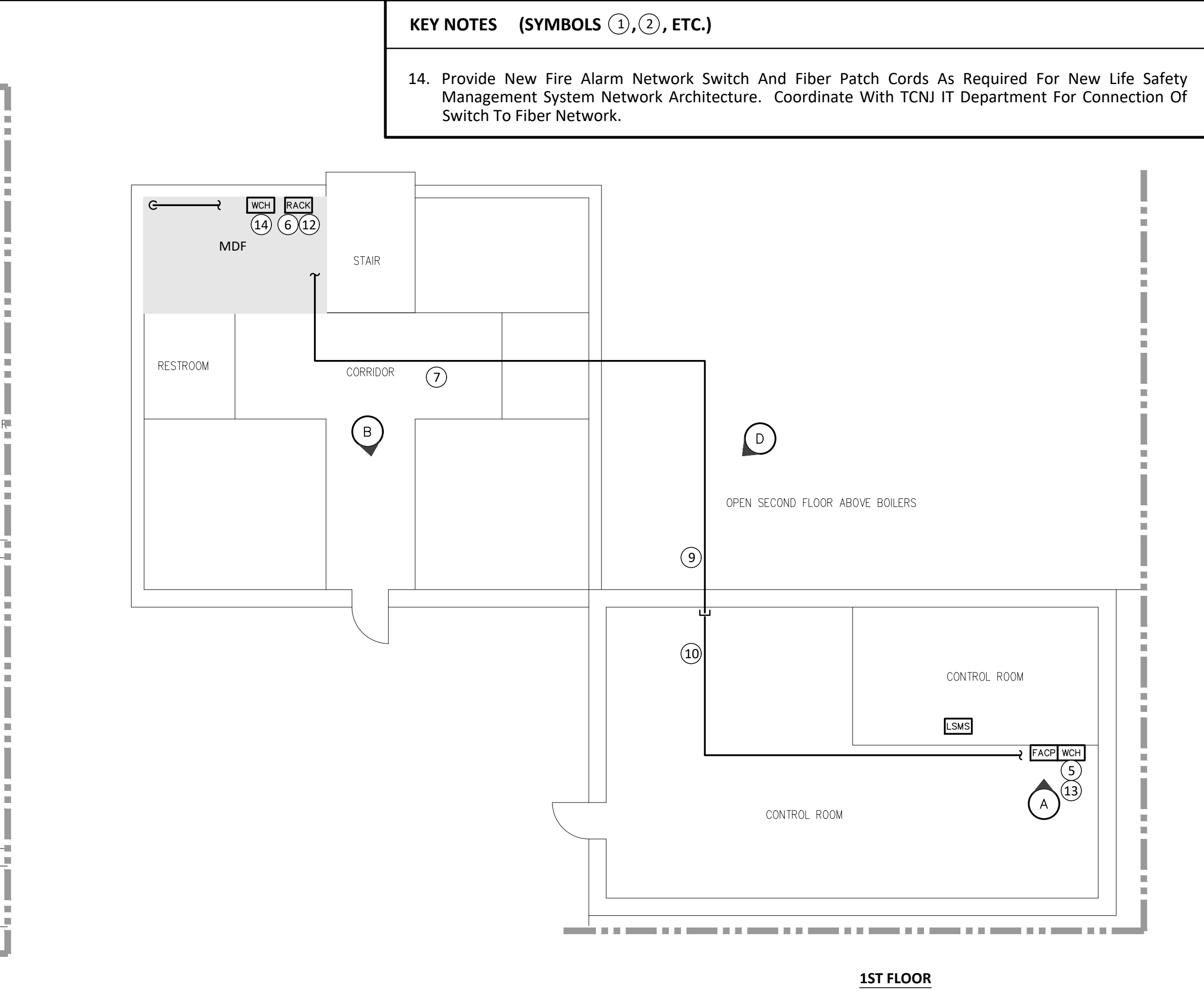
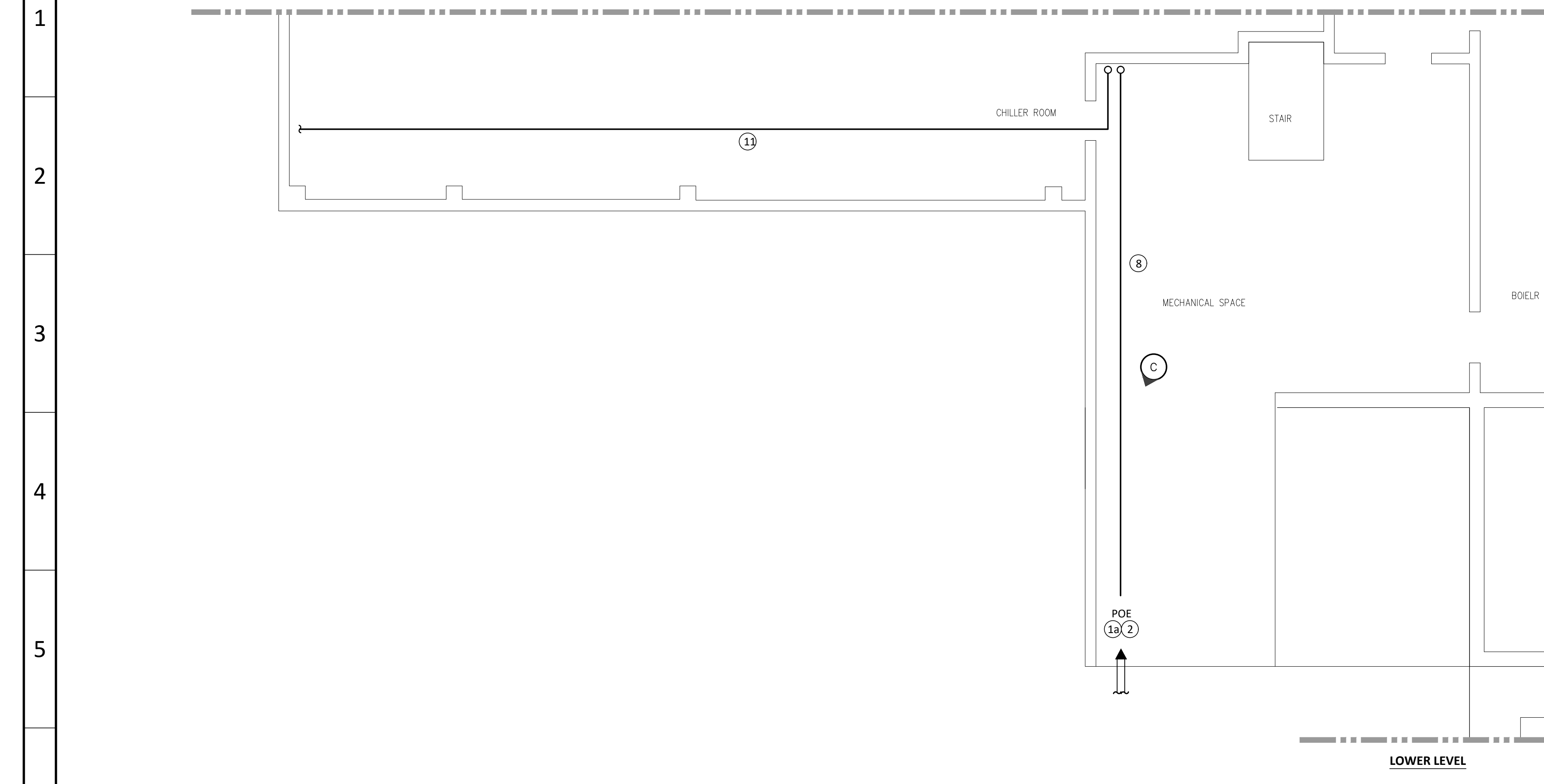
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**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724  
Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
PACKER HALL & PHELPS HALL  
FIRE ALARM  
scale AS SHOWN  
drawn by AM  
checked by SG  
date 05/03/2020  
dwg. no.  
**FA026**





**KEY NOTES (SYMBOLS ①, ②, ETC.)**

14. Provide New Fire Alarm Network Switch And Fiber Patch Cords As Required For New Life Safety Management System Network Architecture. Coordinate With TCNJ IT Department For Connection Of Switch To Fiber Network.

**KEY NOTES (SYMBOLS ①, ②, ETC.)**

KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS

- 1a. Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
- 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
- 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
6. Provide 30" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
7. Route Fiber Pathway Above Drop Ceiling Where Possible.
8. Route 4" Conduit From POE As High As Possible Along Mechanical Basement Ceiling. Core Drill Ceiling And Route Conduit Up Into MDF Room. Contractor To Coordinate Conduit Routing With Existing Field Conditions.
9. Route (1) 4" Conduit From MDF Room Through Boiler Room And Into Ceiling Above Control Room. Conduit Shall Have (3) 1-1/4" ENT. Contractor Shall Coordinate Routing With Existing Field Conditions And Core Penetrations As Required.
10. Route ENT To Wall Mounted Connector Housing (WCH) In Control Room Containing 12/12 Hybrid Fire Alarm Fiber From MDF Room Cabinet Connector Housing. Conduit Shall Be Mounted Tight To Ceiling / As High As Possible.
11. Route With One 4" Conduit With (3) 1-1/4" ENT Containing Fiber Cable From MDF Room Through Chiller Plant To Location Of Existing POE For Connection To Maintenance Building. Follow Routing Of Existing Fiber Pathway.
12. Contractor Shall Provide A 120V Circuit For Integral Fan And Light Power Within 30" Deep Cabinet. Circuit Shall Be Provided From Nearest Electrical Distribution Panel With Available Space Utilizing 2#12, #12G In 3/4" Conduit With A 20 Amp, 120V Single Phase Circuit Breaker.
13. Provide CAT6 From MDF To New WCH At New Front End Workstation Location. New Fire Alarm Front End Workstation Location To Provide Seamless And Scalable Integration Of Entire Campus Fire Alarm System.

**GENERAL NOTES**

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2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing (ENT) Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
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PHOTO A - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel Location On Control Room Wall.



PHOTO B - EXISTING CEILING CONDITIONS  
Route Fiber Pathway Above Drop Ceiling Located Throughout First Floor

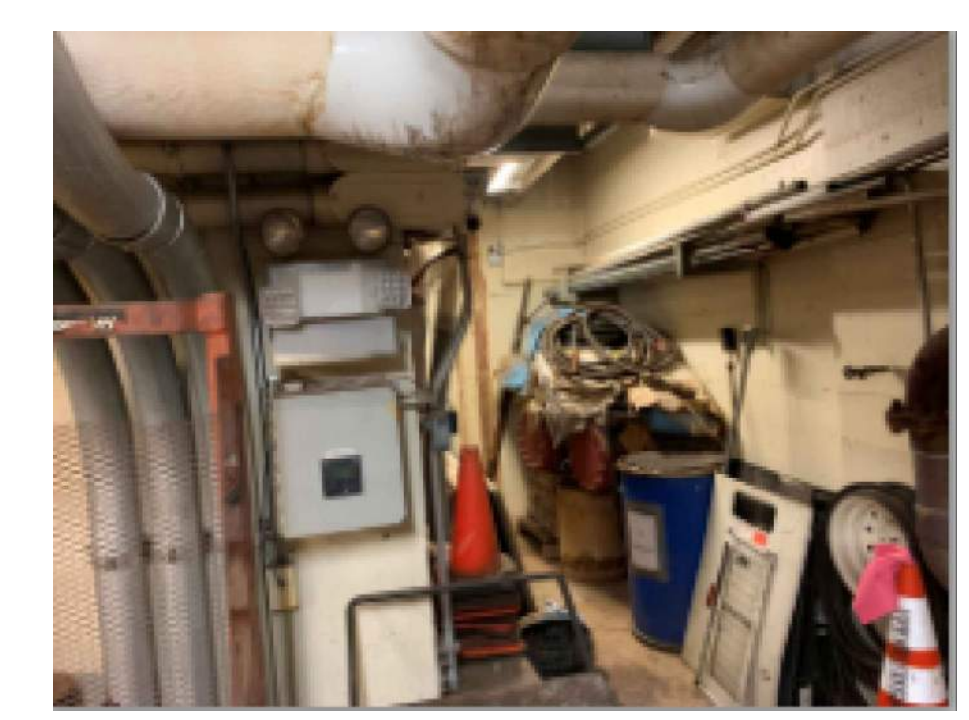
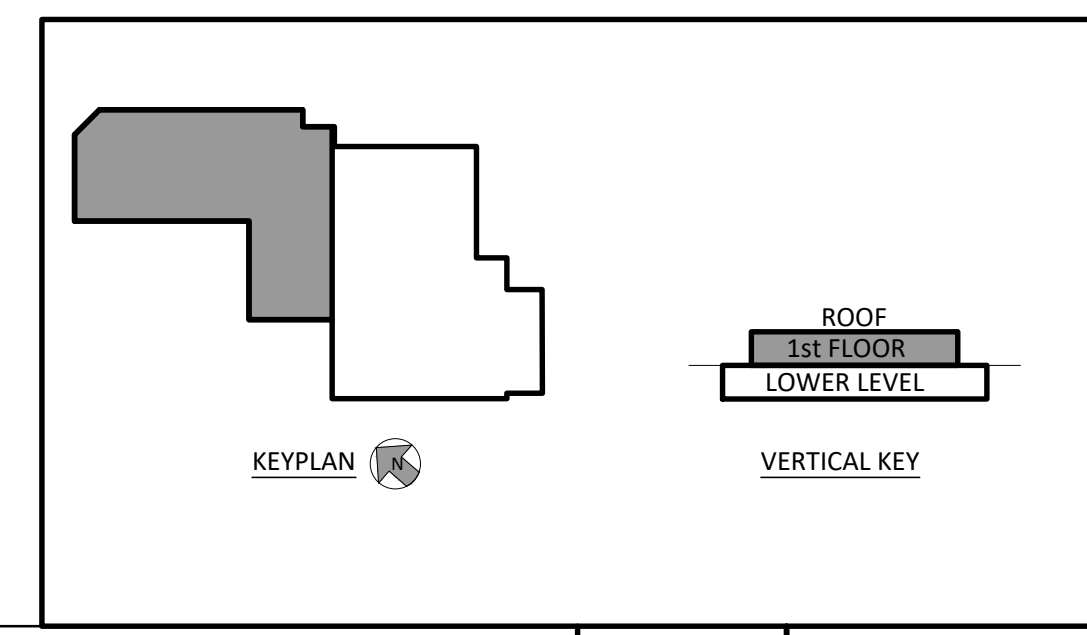


PHOTO C - BASEMENT CEILING AND POE  
Route Fiber Pathway As High As Possible Amongst The Other Mechanical Infrastructure In Basement Area.



PHOTO D - BOILER ROOM VAULTED CEILING  
Route Fiber Pathway Along Wall Entering From Corridor Ceiling And Exiting Above Control Room Ceiling ( Photo Above Shows Existing Conduits Entering Control Room Ceiling Area ). New Fiber Pathway To Be Routed Similar To Existing Routing



POWERHOUSE - FIBER LAYOUT  
Scale: 1/8"=1'-0"  
Drawing: FA027  
Detail: 01

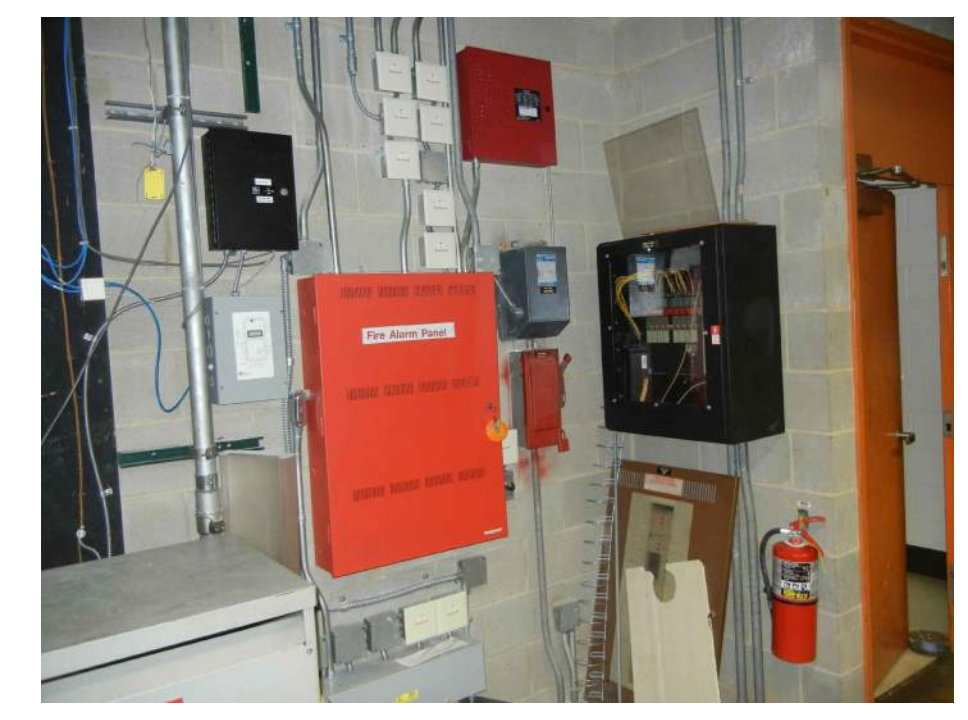
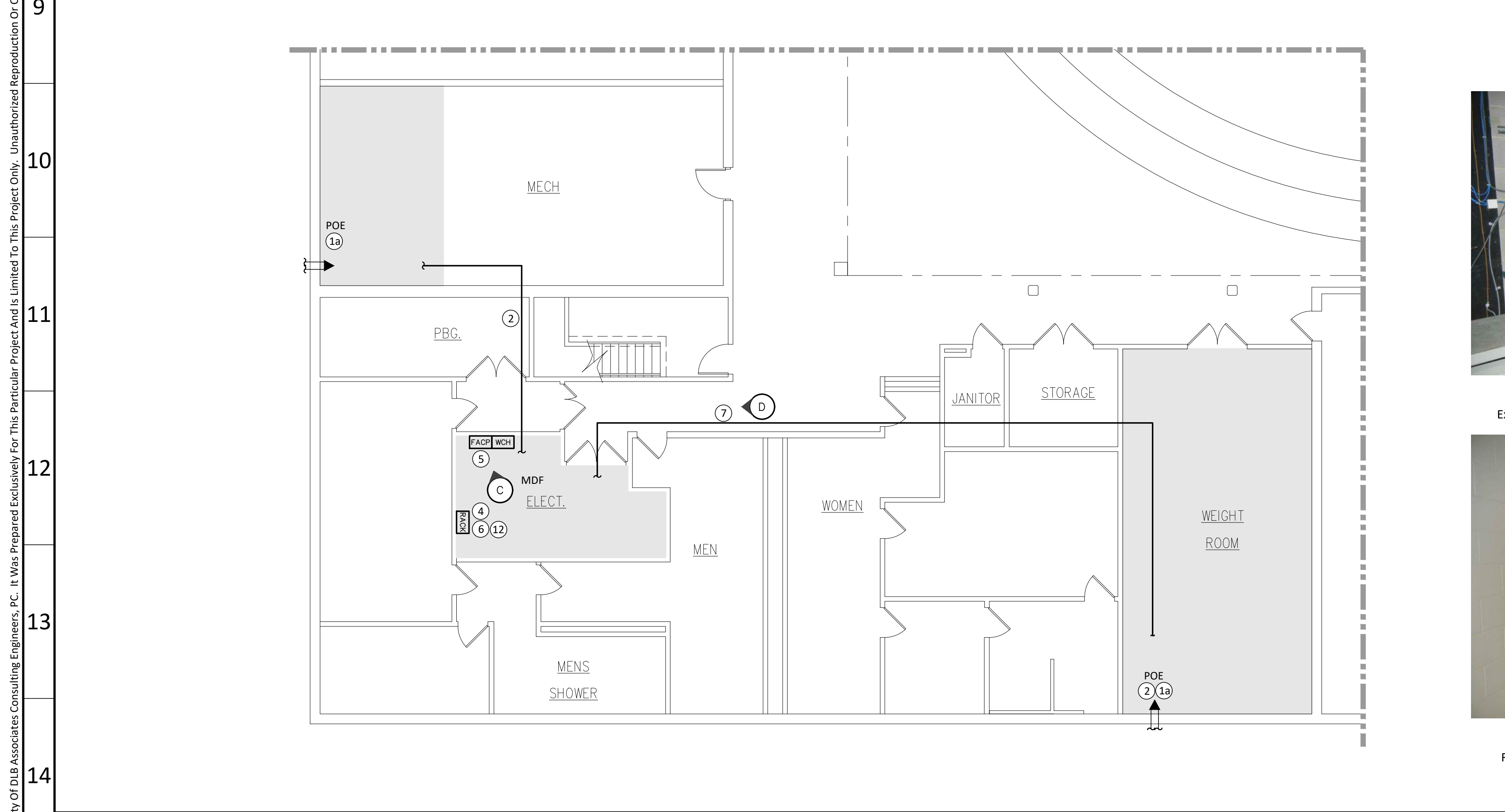
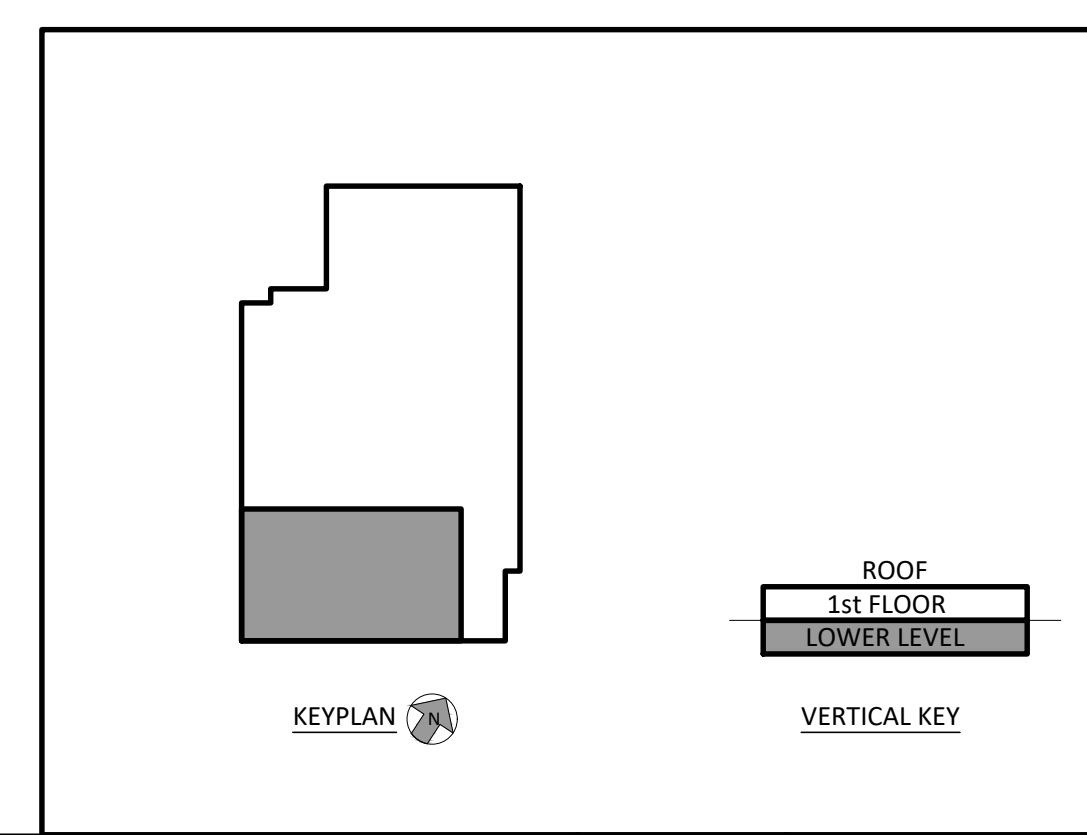


PHOTO C - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel Location In Electrical Room.



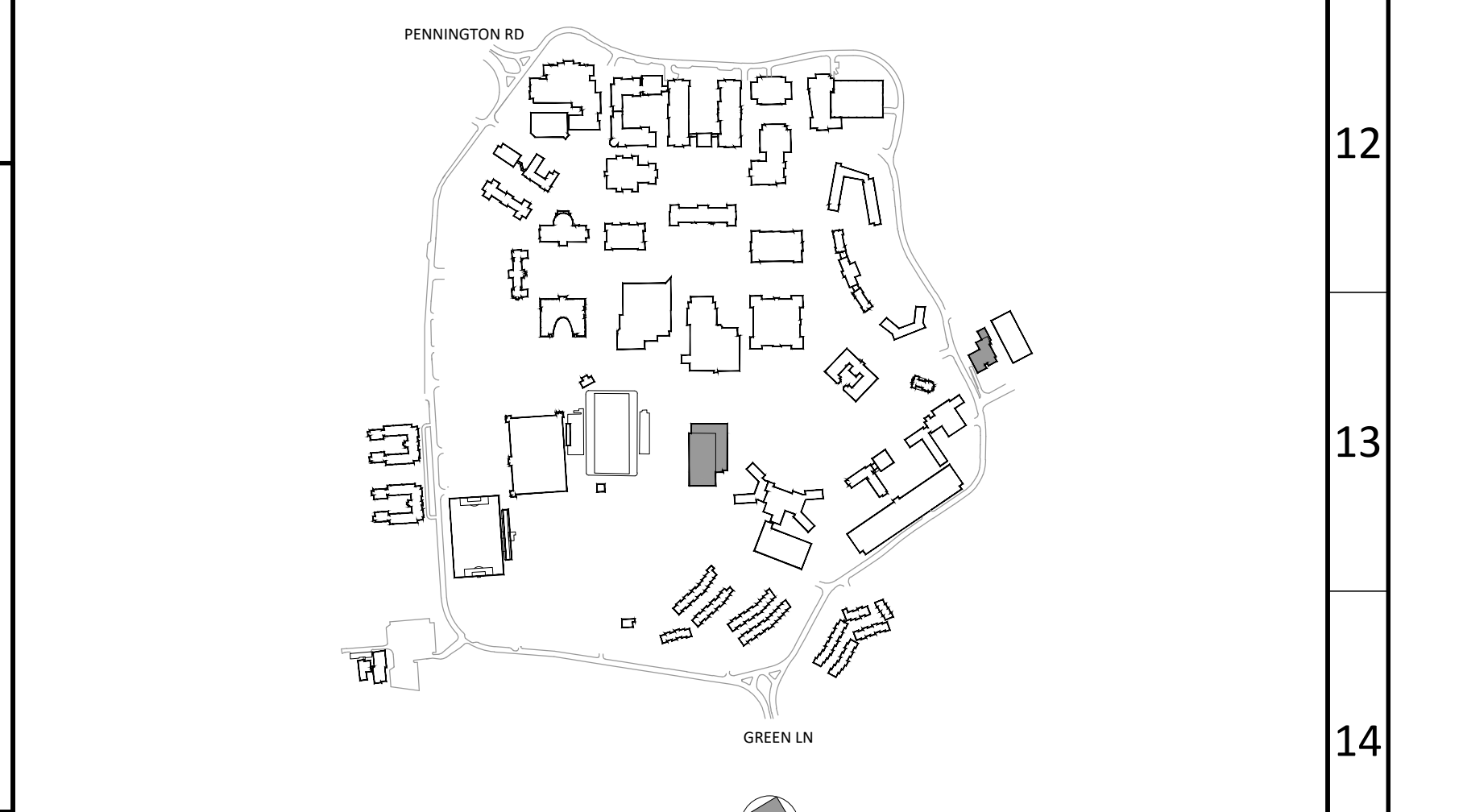
PHOTO D - BASEMENT CEILING  
Route Fiber Pathway Above Existing Basement Drop Ceiling



RECREATION CENTER - FIBER LAYOUT  
Scale: 1/8"=1'-0"  
Drawing: FA027  
Detail: 02

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		Photo Identification Tag
	Wall Mounted Connector Housing		Connect To Existing
	IT Rack		MDF / POE
	Life Safety Management System		



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
CONSULTING ENGINEERS, P.C.  
265 Industrial Way West, Eatontown, N.J. 07724

Questions For DLB Call: Anthony Laskosky  
DLB Project ID: 47211 Phone: 732-927-5038

project  
TCNJ - CAMPUS FIRE ALARM PROJECT  
PART A - CABLE INFRASTRUCTURE UPGRADES  
2000 PENNINGTON ROAD,  
EWING NJ, 08618

title  
INTERIOR FIBER ROUTING  
POWERHOUSE & RECREATION CENTER  
FIRE ALARM

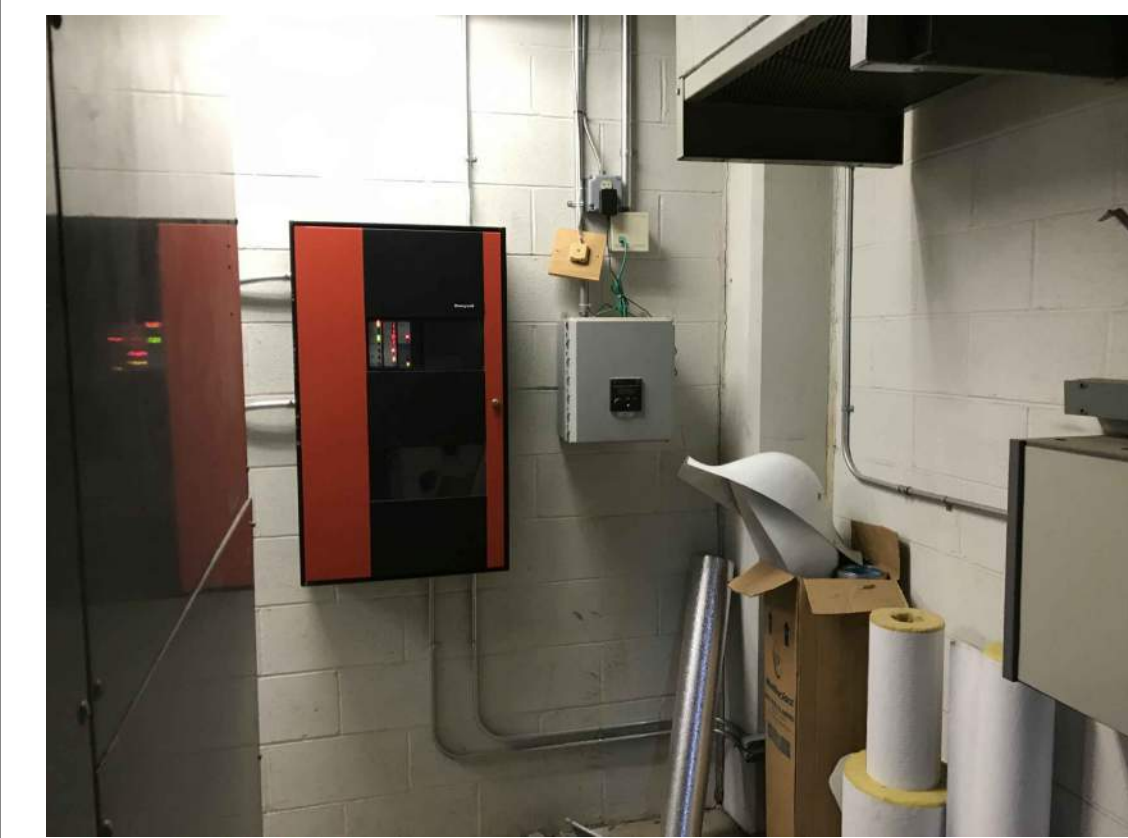
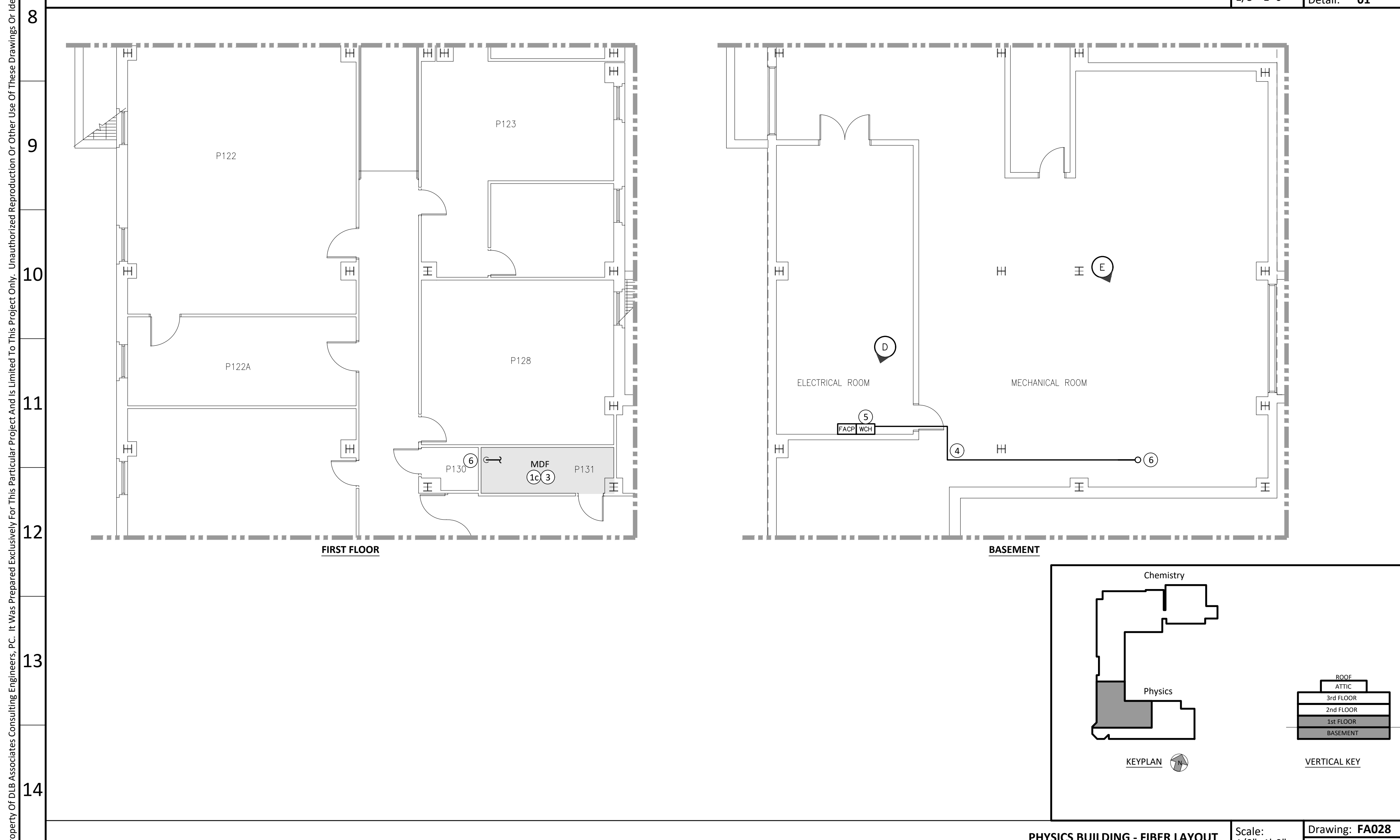
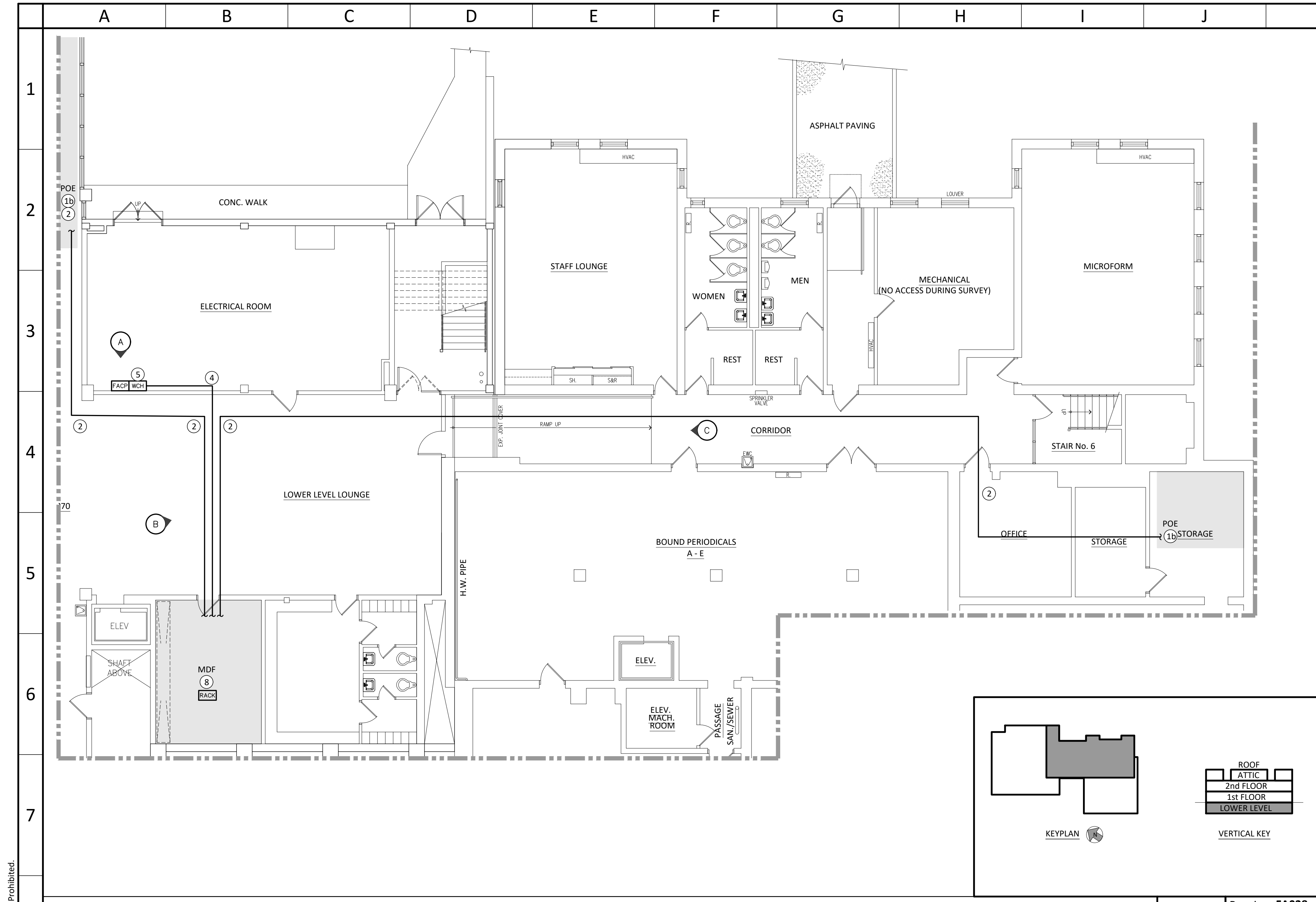
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checked by SG  
date 05/03/2020

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**FA027**

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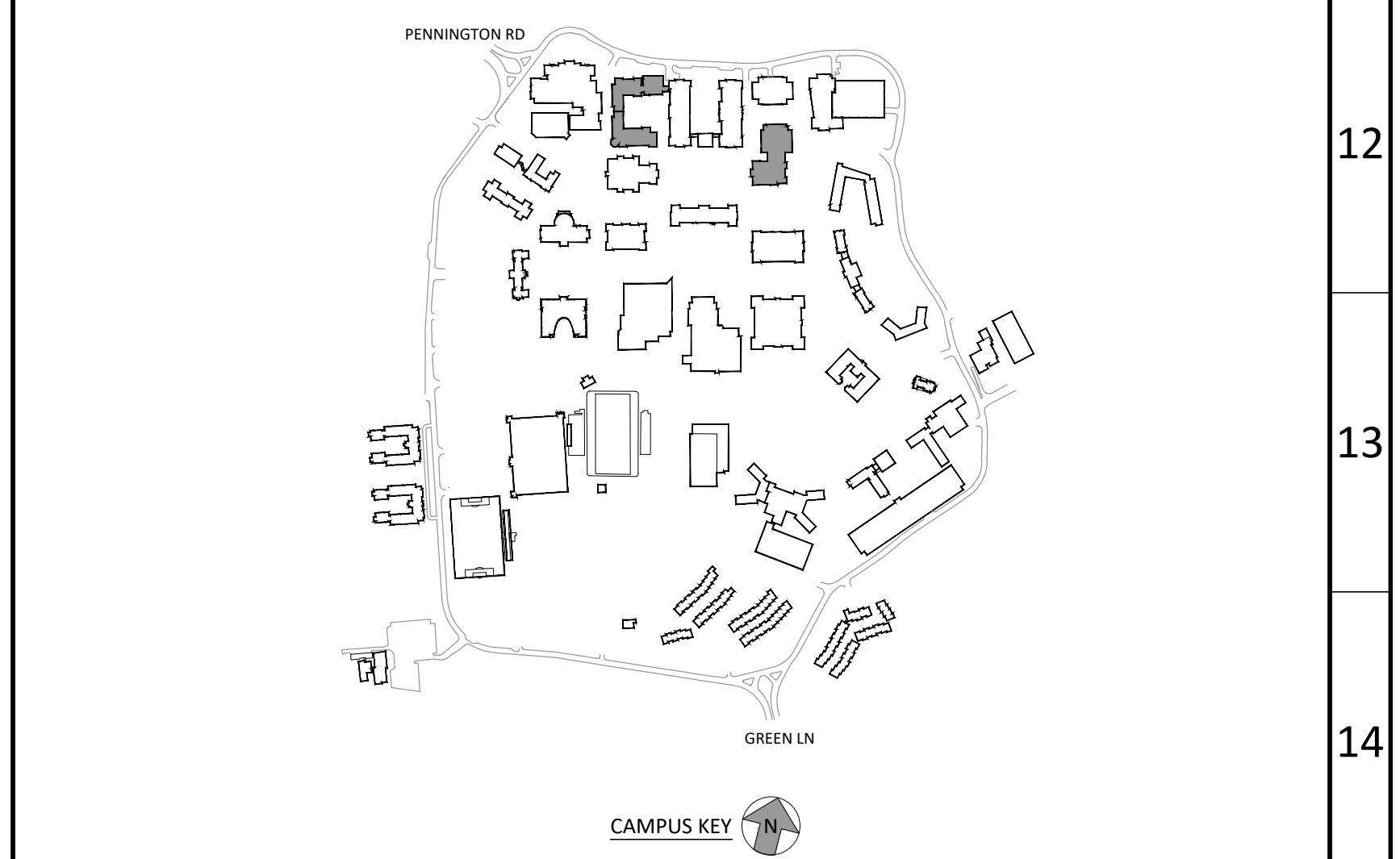




- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  - Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  - Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  - Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  - New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  - Core Drill All Floor Penetrations To Route Fiber From Main Distribution Frame (MDF) On The First Floor To The Wall Mounted Connector Housing (WCH) Within Basement. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  - Route Fiber Pathway Above Drop Ceiling Where Possible.
  - Provide Two Post Rack. Terminate Fiber Within New Cable Connector Housing Within New Rack. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
- GENERAL NOTES**
- The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  - New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
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  - All Work And Materials Shall Be New Unless Otherwise Noted.
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**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



30442

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 265 Industrial Way West, Eatontown, N.J. 07724

Questions For DLB Call: Anthony Laskosky  
 DLB Project ID: 47211 Phone: 732-927-5038

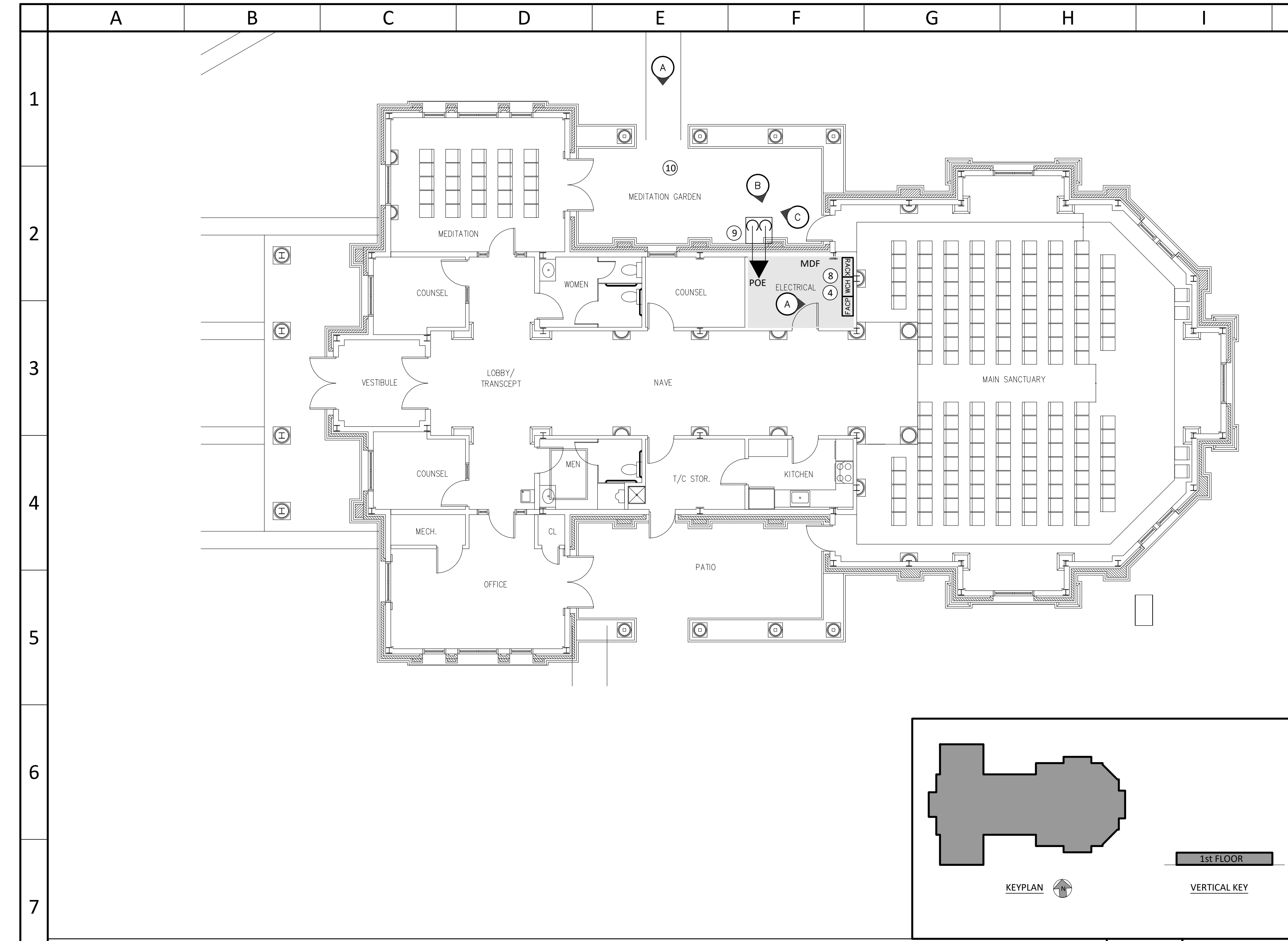
project  
 TCNJ - CAMPUS FIRE ALARM PROJECT  
 PART A - CABLE INFRASTRUCTURE UPGRADES  
 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

title  
 INTERIOR FIBER ROUTING  
 ROSCOE HALL & PHYSICS BUILDING  
 FIRE ALARM

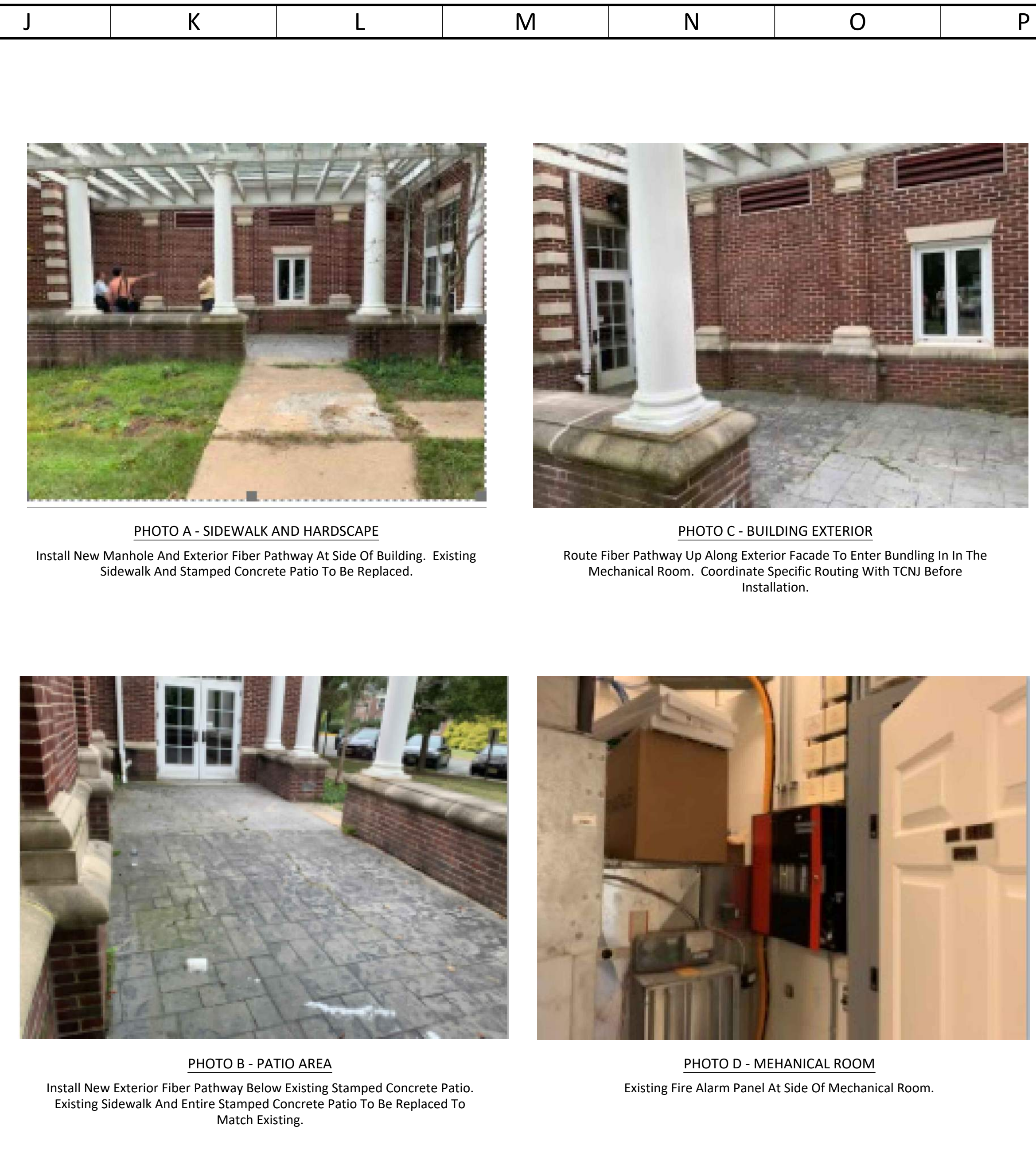
scale AS SHOWN drawn by AM checked by SG date 05/03/2020

dwg. no.  
**FA028**





**SPIRITUAL CENTER - FIBER LAYOUT**  
 Scale: 1/8"=1'-0"  
 Drawing: FA029  
 Detail: 01



**PHOTO A - SIDEWALK AND HARDSCAPE**  
 Install New Manhole And Exterior Fiber Pathway At Side Of Building. Existing Sidewalk And Stamped Concrete Patio To Be Replaced.

**PHOTO B - PATIO AREA**  
 Install New Exterior Fiber Pathway Below Existing Stamped Concrete Patio. Existing Sidewalk And Entire Stamped Concrete Patio To Be Replaced To Match Existing.

**PHOTO C - BUILDING EXTERIOR**  
 Route Fiber Pathway Along Exterior Facade To Enter Bundling In In The Mechanical Room. Coordinate Specific Routing With TCNJ Before Installation.

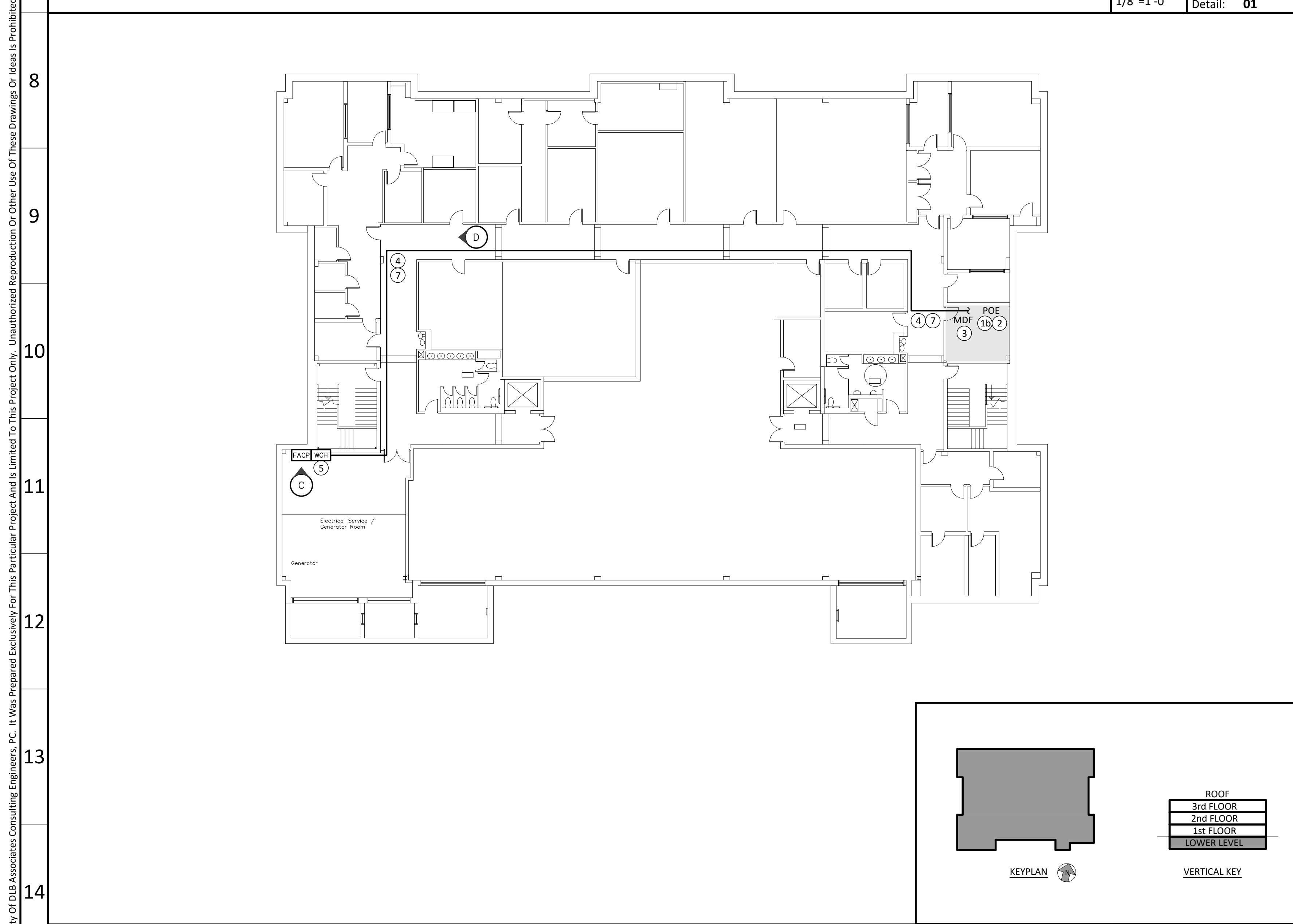
**PHOTO D - MECHANICAL ROOM**  
 Existing Fire Alarm Panel At Side Of Mechanical Room.

- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
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  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Route Fiber Conduit Above Hard Ceiling.
  7. Route Fiber Pathway Above Drop Ceiling Where Possible.
  8. Provide 12" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNJ IT Department. Coordinate Final Location With Existing Field Conditions And TCNJ IT Department.
  9. Route Exterior Fiber From Underground Conduit Up The Side Of The Building To Enclosed Weatherproof 24"W x 30"H x 18"D Pullbox. Route From The Pullbox Up The Exterior Of The Building And Into The Interior Space In The Mechanical Room.
  10. Contractor To Remove And Replace Existing Hardscape To Provide Access For New Conduit. This Shall Include Entire Stamped Hardscape And Damaged Sidewalk Sections

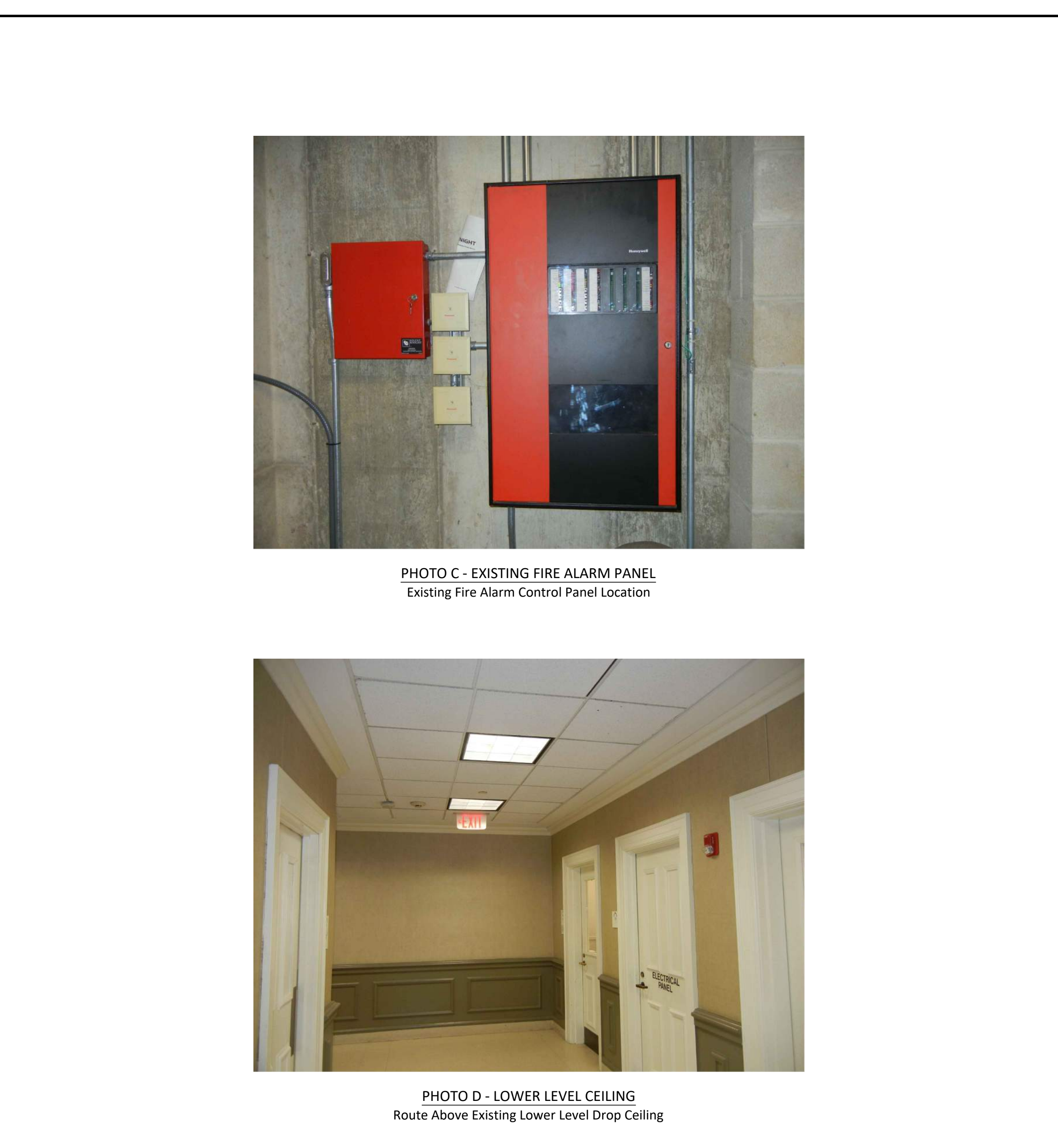
- GENERAL NOTES**
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  3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  5. All Work And Materials Shall Be New Unless Otherwise Noted.
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	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		

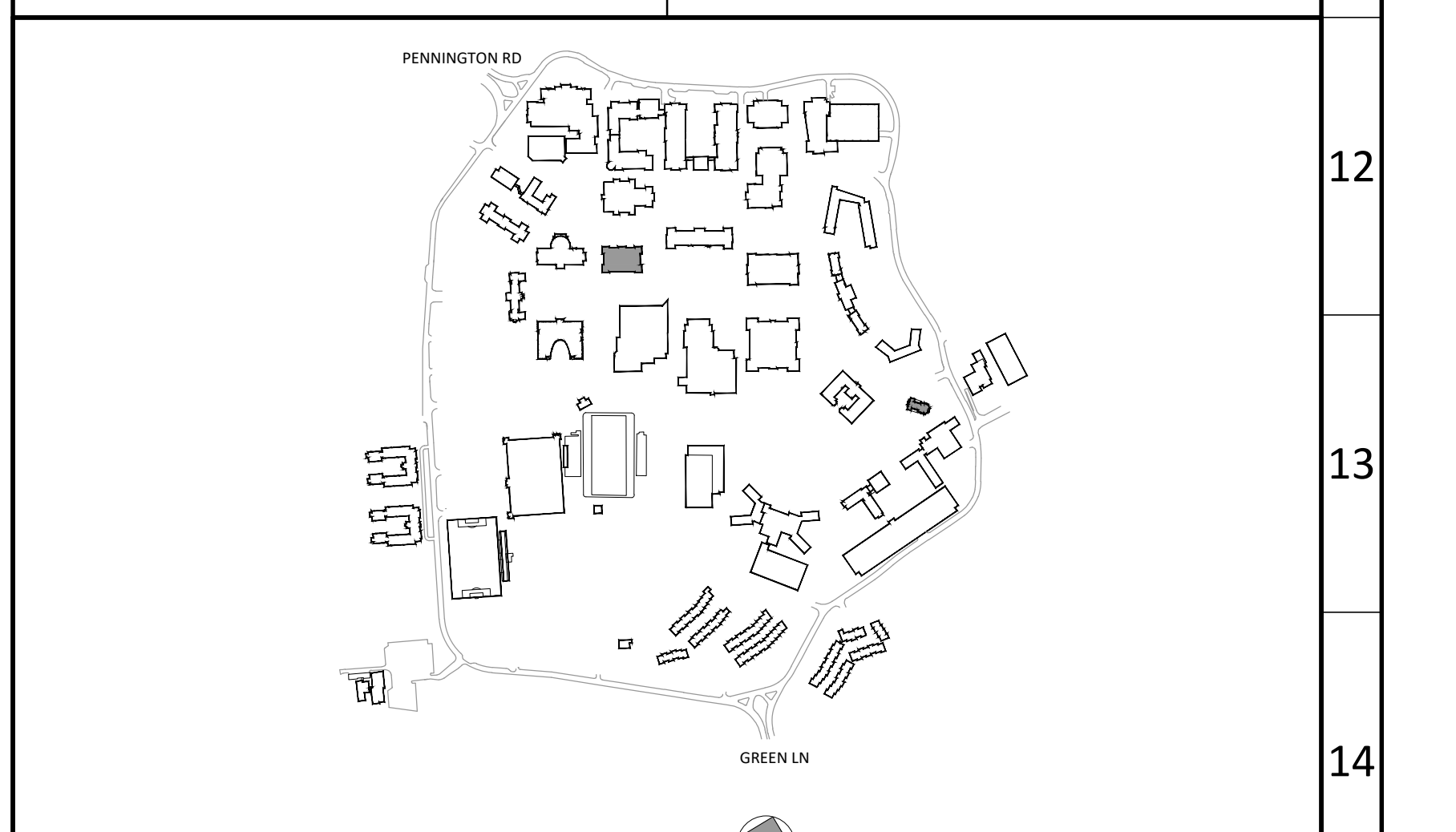


**SOCIAL SCIENCE - FIBER LAYOUT**  
 Scale: 1/16"=1'-0"  
 Drawing: FA029  
 Detail: 02



**PHOTO C - EXISTING FIRE ALARM PANEL**  
 Existing Fire Alarm Control Panel Location

**PHOTO D - LOWER LEVEL CEILING**  
 Route Above Existing Lower Level Drop Ceiling



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
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Questions For DLB Call: Anthony Laskosky  
 DLB Project ID: 47211 Phone: 732-927-5038

project  
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 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

title  
 INTERIOR FIBER ROUTING  
 SPIRITUAL CENTER & SOCIAL SCIENCE  
 FIRE ALARM

scale AS SHOWN  
 drawn by AM  
 checked by SG  
 date 05/03/2020

dwg. no.  
**FA029**

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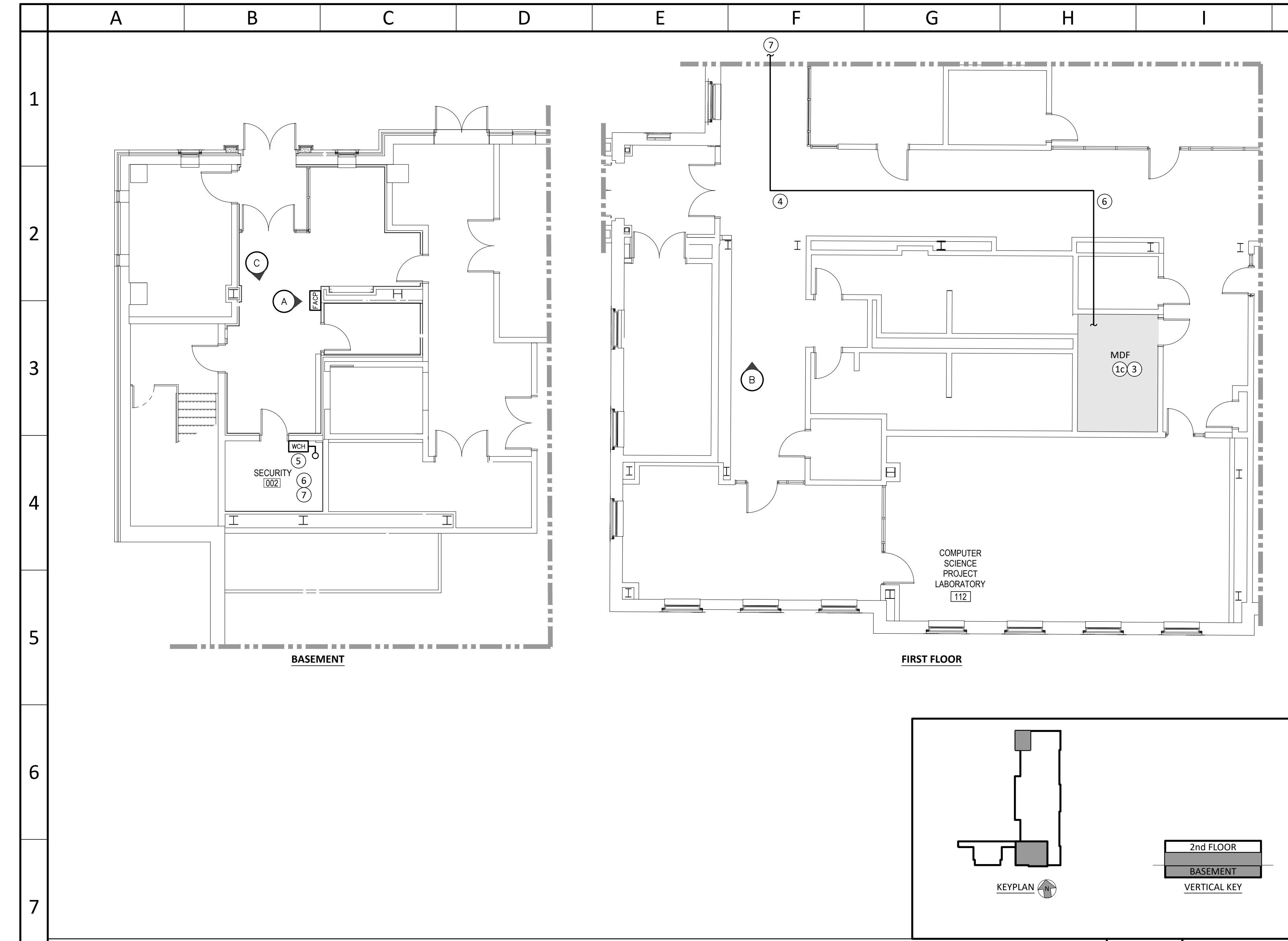


PHOTO A - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel Location



PHOTO B - EXISTING CONDITIONS  
Existing Conditions Within STEM Building Corridors. Route Fiber Pathway As Close To The Top Of Ceiling As Possible.



PHOTO C - EXISTING CONDITIONS  
Fiber Routing Location And Existing Drop Ceiling Conditions

- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 7 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- 1a. Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - 1b. Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - 1c. Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  2. Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  3. Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  4. Route Fiber Pathway AS Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  5. New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  6. Core Drill All Floor Penetrations To Route Fiber From First Floor MDF. To The First Floor IDF Room. Route Down To Existing Rack In Security Room 002. Install Conduit To FACP From Security Room 002. Individual Fiber Jumpers Installed Later By FMS Contractor. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  7. Route Fiber Pathway Above Drop Ceiling Where Possible And Drop Down Into Security Room.
  8. Coordinate With TCNJ IT Department For Cable Removal For This Complex. The Intent Is To Remove The Existing Fiber Cable From Cromwell To Each Townhouse Cluster And To Replace With A Higher Capacity Cable. Two (2) New 36/36 Fiber Cables Are To Enter The Complex Through The POE In Cluster 5 And Run Un-Spliced, One Cable Connecting Cluster 5 And Cluster 7 And The Other Cable Connecting Cluster 3, Cluster 4 And Cluster 6. Each Cable To Be Continuous To The Last POE In The Route With Mid-span Access At Each Cluster POE Along The Way.
  9. Provide Fiber Mid-span Splice Access At Each Cluster With Sufficient Slack ( minimum 30 feet ) In Each Point Of Entry Room. Splice Shall Be 12/12 At Cluster 3, 4, 6 and 7 And 24/24 At Cluster 5 Where The Fire Alarm Control Panel Is Located. Fiber Counts That Do Not Terminate At The Access Location Shall Remain Contiguous; They Shall Not Be Broken And Re-Splice

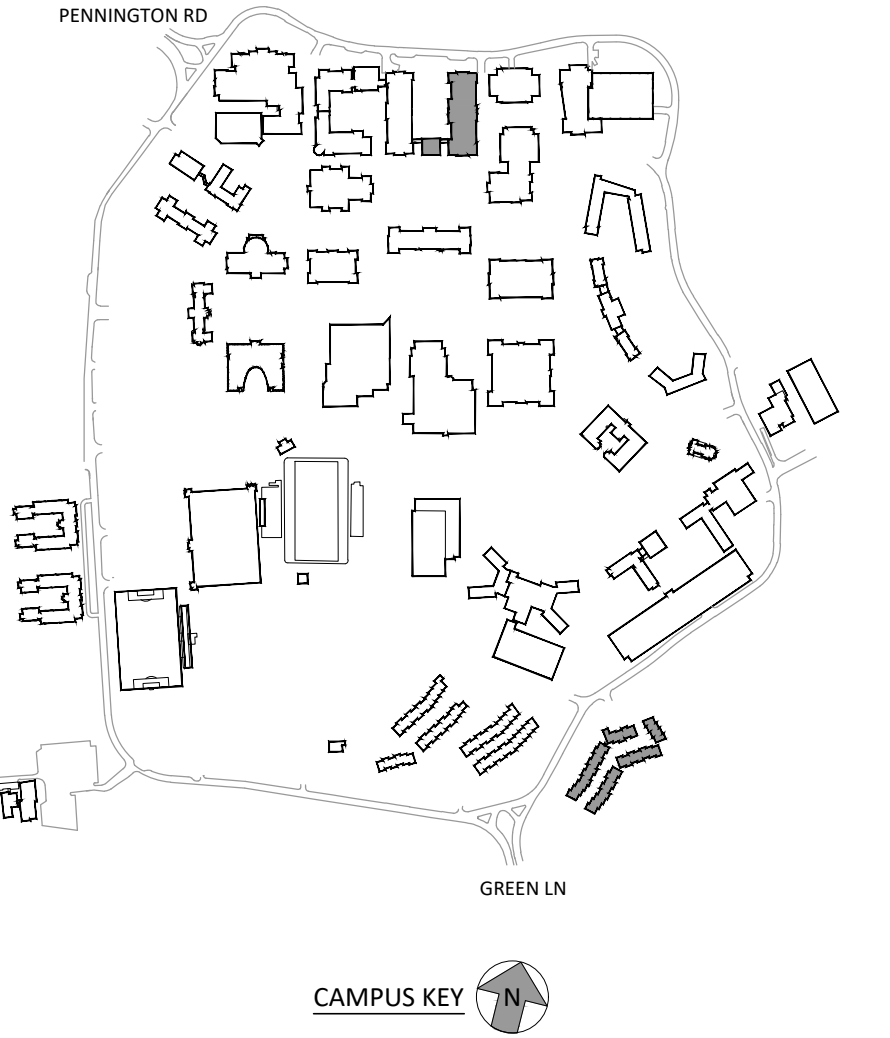
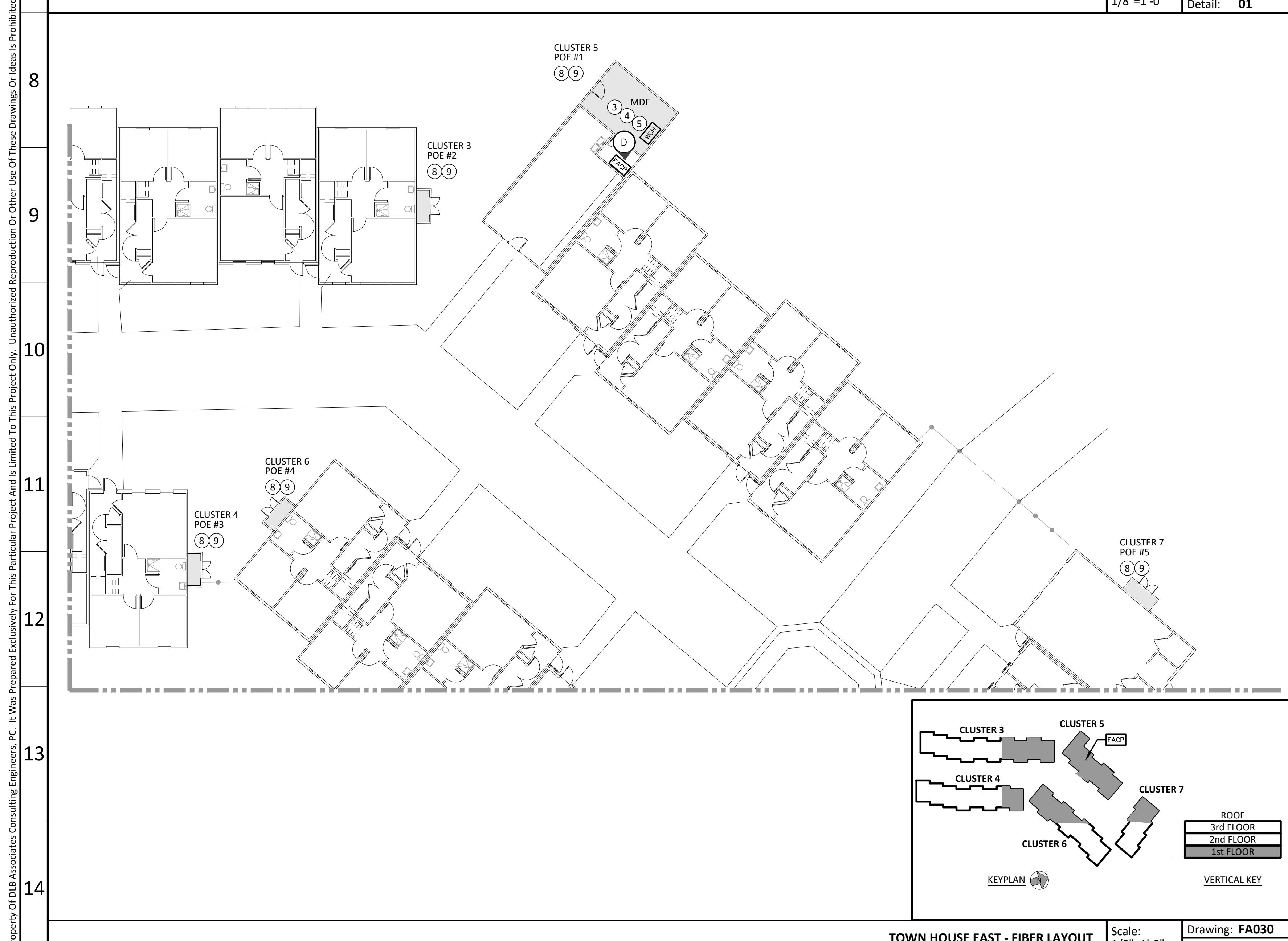
- GENERAL NOTES**
1. The Associated Project Drawings Are Diagrammatic And Are Not Intended To Show The Location Of All Equipment And Devices; Coordinate All Details Of Work As Required To Achieve A Complete Functional Installation (In Conjunction With The Project Specifications).
  2. New 1-1/4" Fiber Conduit To Be Concealed Whenever Possible With Junction Boxes At All Transitions And Elbows. Flexible Non Metallic Tubing Instead Of Conduit Is Acceptable Where Pathway Is Located In Concealed Locations.
  3. All Work Shall Be Done In Accordance With Industry Construction Codes, Standards, And Other Agencies Having Jurisdiction.
  4. Conduit Routing Where Shown Are Diagrammatic. Contractor To Field Verify Routing Fiber With Existing Conditions.
  5. All Work And Materials Shall Be New Unless Otherwise Noted.
  6. Contractor Shall Be Responsible To Sleeve Wall And Floor Penetrations Prior To Running Cable And Conduit For All Cable Runs Noted In Plans.
  7. Contractor To Firestop Wall And Floor Penetrations After Running Cables And Conduit.
  8. A Portion Of This Work Will Be Occurring In The Path Of An Emergency Egress Route. During All Phases Of This Project, A Protected Emergency Egress Route Must Be Maintained Through Each Affected Emergency Egress Route, Allowing Retreat From The Building. Approval From The Department Of Community Affairs Is Required To Close Or Re-direct An Egress Route.

**PARTIAL SYMBOLS & ABBREVIATIONS**

Identifier	Description	Identifier	Description
	New Fiber Pathway	FACP	Fire Alarm Control Panel
	Conduit Pipe Up Through Floor Above Or Through Section Cut Line	POE	Point Of Entry
	Conduit Pipe Drop / Offset Down	MDF	Main Distribution Frame
	Fire Alarm Control Panel		
	Wall Mounted Connector Housing		
	IT Rack		
	Photo Identification Tag		
	Connect To Existing		
	MDF / POE		



PHOTO D - EXISTING FIRE ALARM PANEL  
Existing Fire Alarm Control Panel Location



ITEM	DATE	ISSUE DESCRIPTION	ITEM	DATE	ISSUE DESCRIPTION
1	05/01/2020	ISSUED FOR BID			

**dlb associates**  
 CONSULTING ENGINEERS, P.C.  
 265 Industrial Way West, Eatontown, N.J. 07724  
 Questions For DLB Call: Anthony Laskosky  
 DLB Project ID: 47211 Phone: 732-927-5038

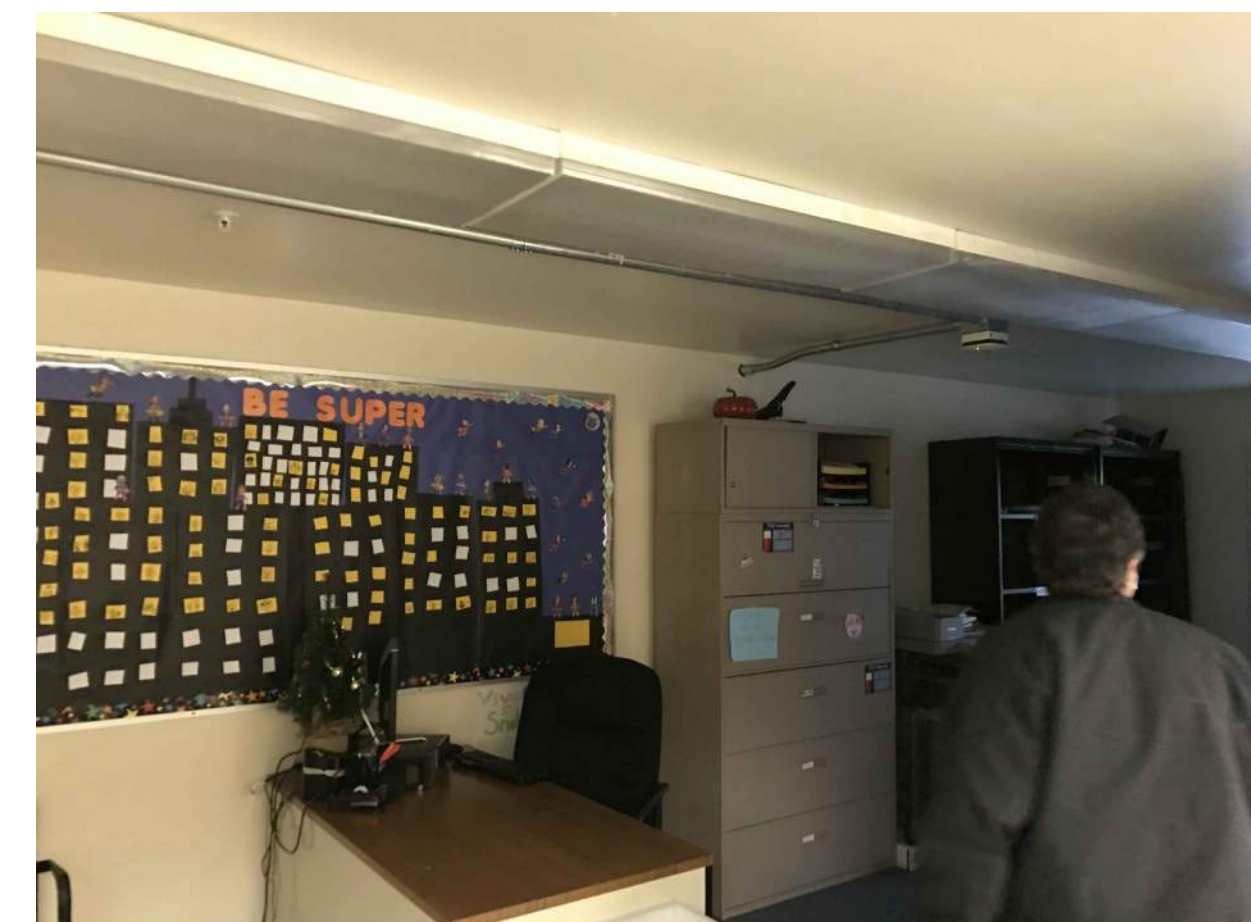
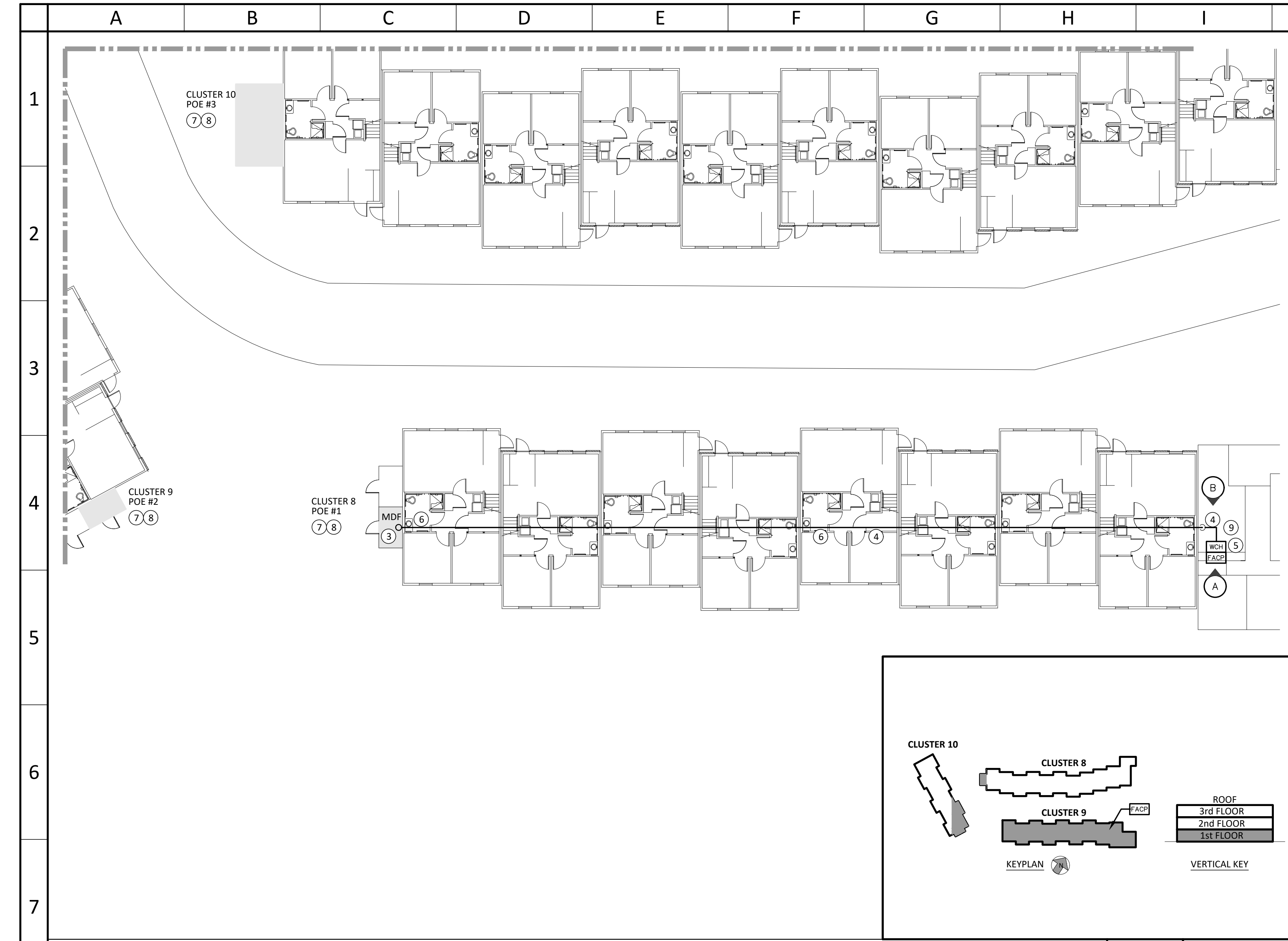
project  
 TCNJ - CAMPUS FIRE ALARM PROJECT  
 PART A - CABLE INFRASTRUCTURE UPGRADES  
 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

title  
 INTERIOR FIBER ROUTING  
 STEM BUILDING & TOWN HOUSE EAST  
 FIRE ALARM  
 scale AS SHOWN  
 drawn by AM  
 checked by SG  
 date 05/03/2020  
 dwg. no.  
**FA030**

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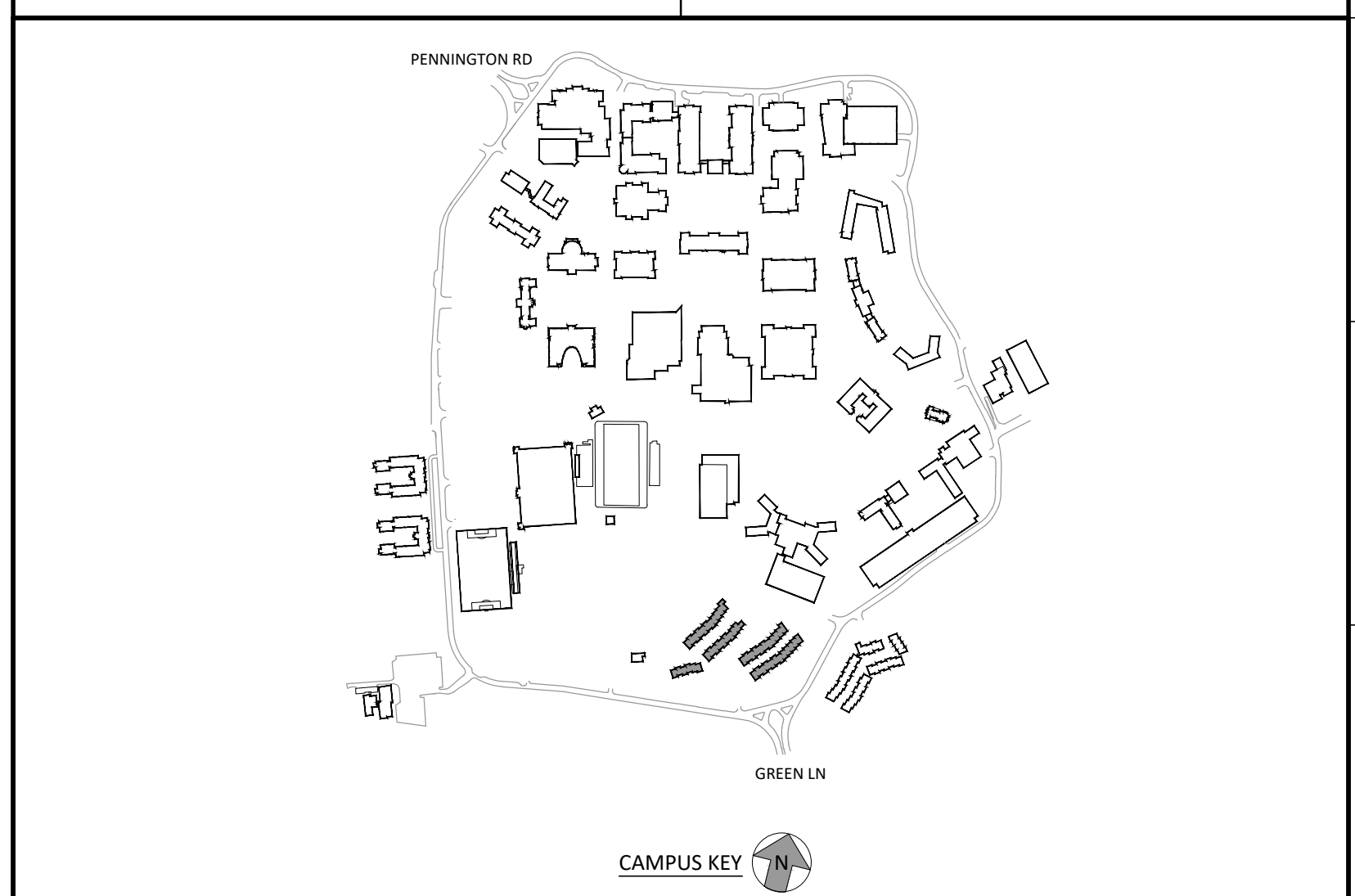
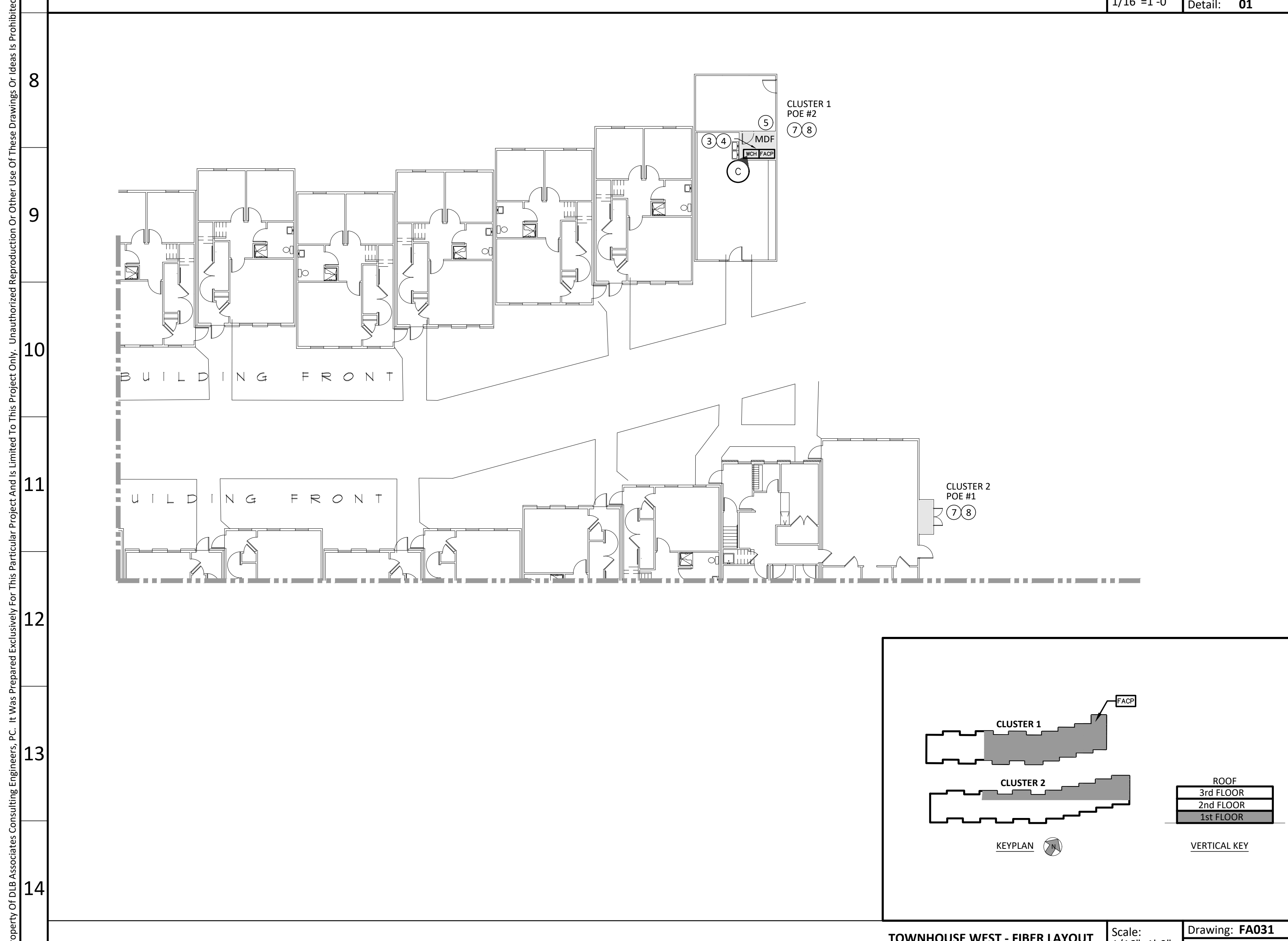


- KEY NOTES (SYMBOLS ①, ②, ETC.)**
- KEYNOTES 1 THRU 5 ARE REPEATED ON ALL INTERIOR FIBER ROUTING DRAWINGS
- Core Drill Foundation Wall For New Conduit Point Of Entry. Wall Penetration Shall Be Sleeved And Sealed As Per G005. Coordinate Final Point Of Entry Location And Conduit Quantity With FA005 - FA008 Sheets And TCNJ IT Department.
  - Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNJ IT Department For Specific Termination Points.
  - Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  - Terminate Fiber Within New Cabinet Connector Housing Located Within Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNJ IT Department.
  - Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  - New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNJ IT.
  - New Fiber To Parallel Existing IT Pathway Up Through Attic And Down To FACP. Firestop All Wall / Ceiling Partitions.
  - Coordinate With TCNJ IT Department For Cable Removal For This Complex. The Intent Is To Remove The Existing Fiber Cable From Cromwell To Each Townhouse Cluster And To Replace With A Higher Capacity Cable. Townhouse South And Townhouse West Shall Each Receive A New 48/48 Fiber Cables Entering Through The POE In Cluster 9 Or Cluster 2. Each Cable To Be Continuous To The Last POE In Each Cluster With Mid-span Access At Each POE Along The Way.
  - Provide Fiber Mid-span Splice Access At Each Cluster With Sufficient Slack ( minimum 30 feet ) In Each Point Of Entry Room. Splice Shall Be 12/12 At Cluster 2, 8 and 10 And 24/24 At Cluster 1 And Cluster 9 Where Each Of The Fire Alarm Control Panel Is Located. Fiber Counts That Do Not Terminate At The Access Location Shall Remain Contiguous; They Shall Not Be Broken And Re-Splice.
  - Conceal New Conduit / ENT Within Finished Walls And Ceilings. Install Cable in ENT Concealed Behind Sheetrock Ceilings In The Office Area. No Conduit Shall Be Routed Exposed In The Office Area. Contractor Shall Restore The Walls And Ceilings Disturbed To Their Original Condition.

- GENERAL NOTES**
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	New Fiber Pathway	FACP	Fire Alarm Control Panel
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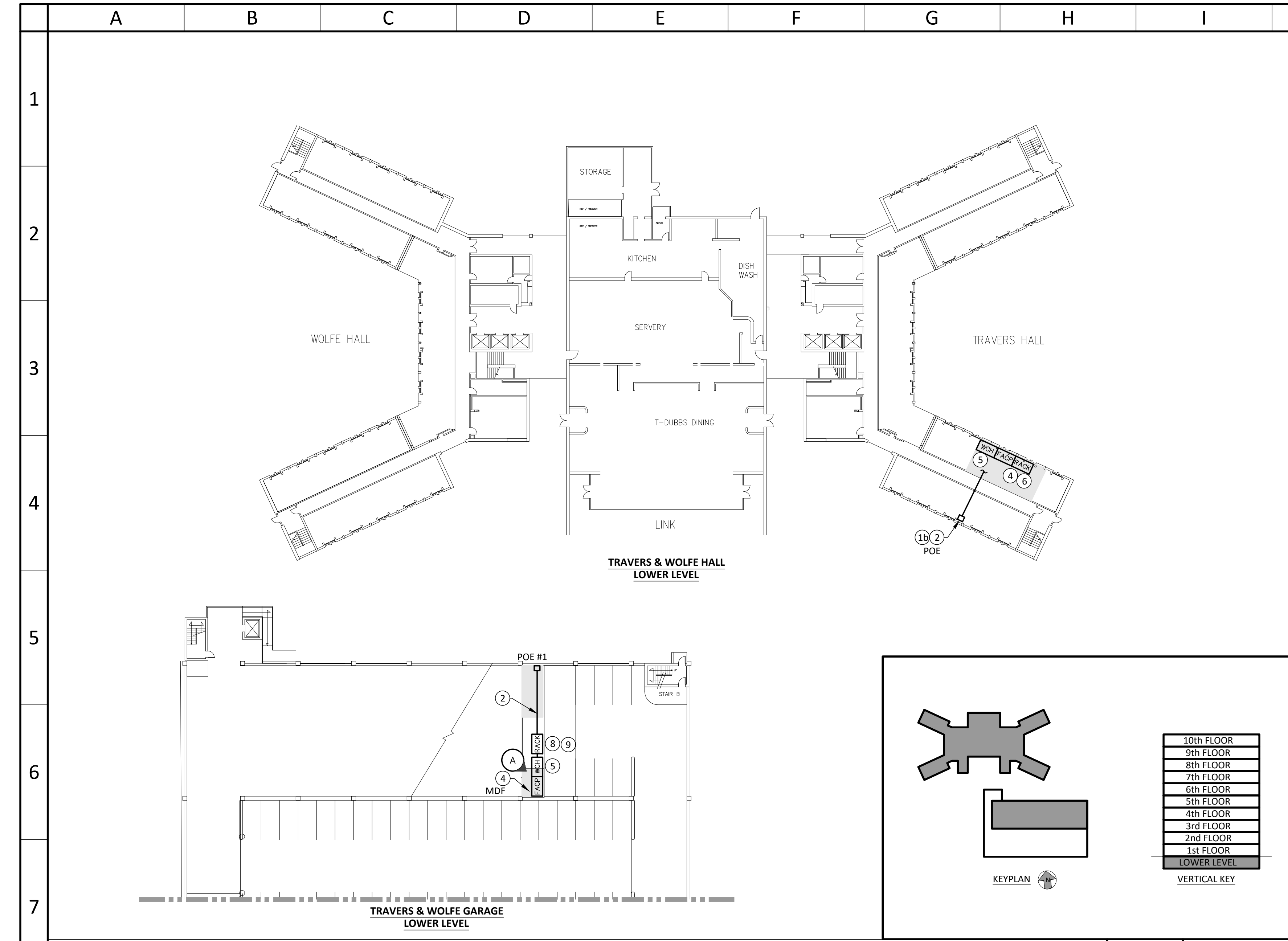
project  
 TCNJ - CAMPUS FIRE ALARM PROJECT  
 PART A - CABLE INFRASTRUCTURE UPGRADES  
 2000 PENNINGTON ROAD,  
 EWING NJ, 08618

title  
 INTERIOR FIBER ROUTING  
 TOWNHOUSE SOUTH & TOWNHOUSE WEST  
 FIRE ALARM  
 scale AS SHOWN  
 drawn by AM  
 checked by SG  
 date 05/03/2020  
 dwg. no.  
**FA031**

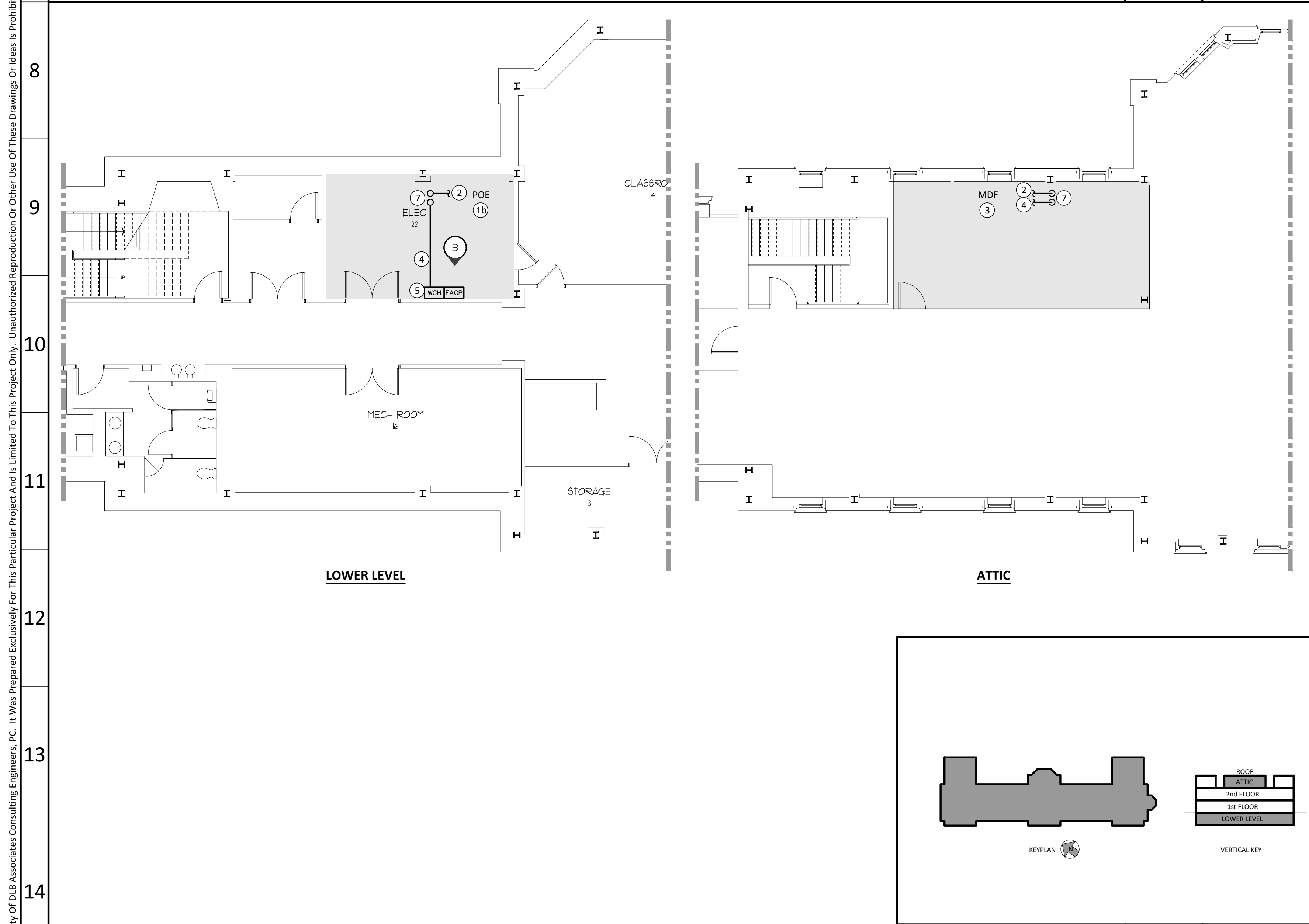
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TRAVERS/WOLFE HALLS & T/W GARAGE - FIBER LAYOUT  
Scale: 1/32"=1'-0"  
Drawing: FA032  
Detail: 01



TRENTON HALL - FIBER LAYOUT  
Scale: 1/8"=1'-0"  
Drawing: FA032  
Detail: 02



PHOTO A - FIRE ALARM CONTROL PANEL  
Existing Fire Alarm Control Panel



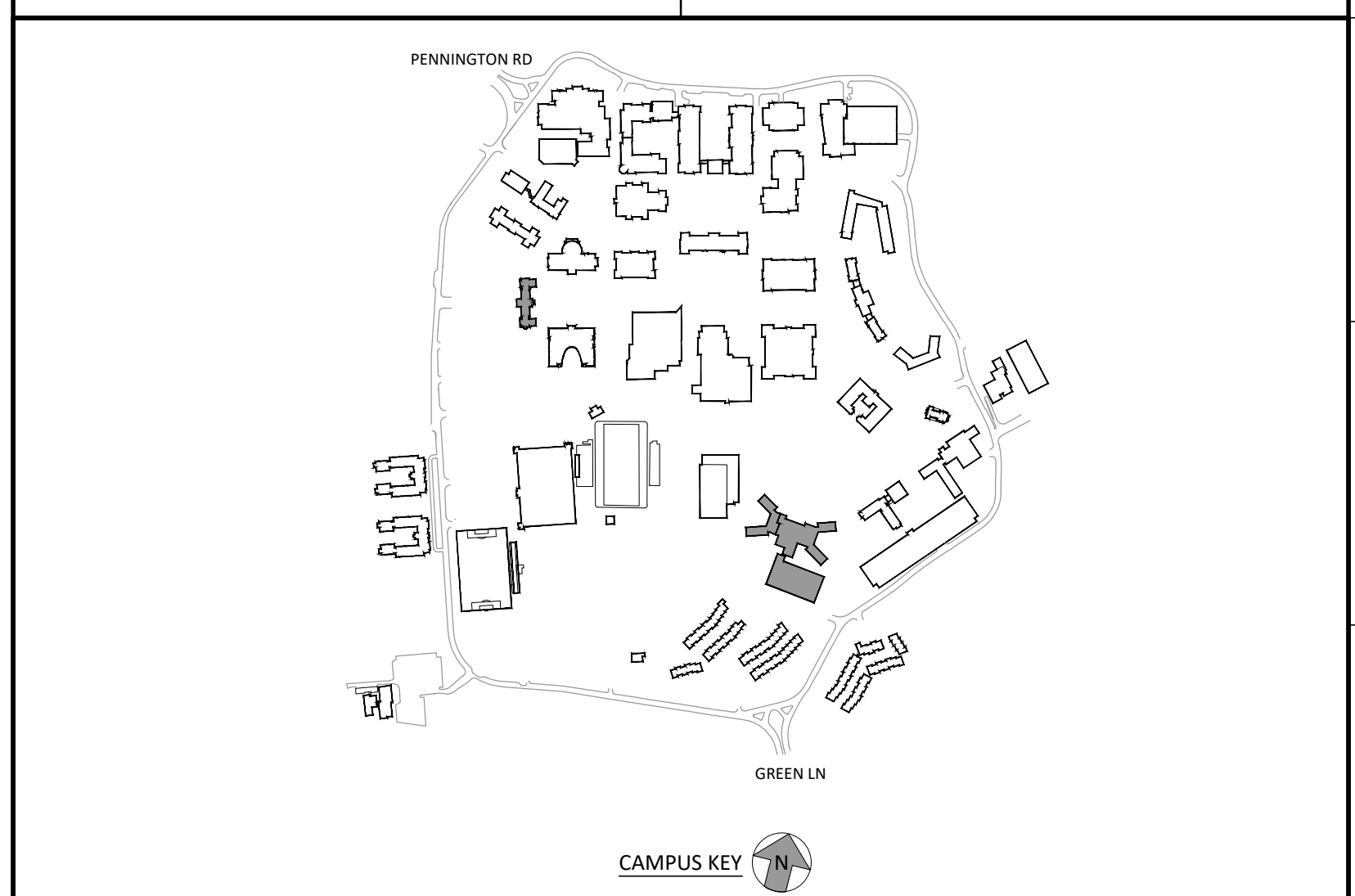
PHOTO B - FIRE ALARM CONTROL PANEL  
Existing Fire Alarm Control Panel

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  - Location Of Existing Empty Conduits. Provide New Fiber And Innerduct.
  - Existing Spare Fiber Capacity Available At MDF. Coordinate With TCNU IT Department For Specific Termination Points.
  - Route Fiber Pathway As Per G003 From Point Of Entry To Main Distribution Frame. Provide Slack Loop And Fiber Labeling As Per Specs.
  - Terminate Fiber Within New Cabinet Connector Housing Located Within Existing Main Distribution Frame Rack. Coordinate Labeling Terminations With TCNU IT Department.
  - Route Fiber Pathway As Per G003 Containing 12/12 Hybrid Fire Alarm Fiber From Main Distribution Frame Cabinet Connector Housing To Wall Mounted Connector Housing (WCH) Located Adjacent To The Fire Alarm Control Panel.
  - New Wall Mounted Connector Housing (WCH) As Per Detail G003 / 06 Located As Close As Possible To The Fire Alarm Control Panel. Coordinate Final Location With TCNU IT.
  - Provide 12" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNU IT Department. Coordinate Final Location With Existing Field Conditions And TCNU IT Department.
  - Core Drill All Floor Penetrations To Route Fiber From Point Of Entry Within Basement To Main Distribution Frame (MDF) Within Attic. Route From MDF In Attic To Wall Mounted Connector Housing Within Basement. All Floor Penetrations To Be Labeled Per Spec And Details On Sheet G005.
  - Provide 30" Deep Wall Mounted Cabinet. Terminate Fiber Within New Cable Connector Housing Within New Wall Mounted Cabinet. Coordinate Labeling Terminations With TCNU IT Department. Coordinate Final Location With Existing Field Conditions And TCNU IT Department.
  - Contractor Shall Provide A 120V Circuit For Integral Fan And Light Power Within 30" Deep Cabinet. Circuit Shall Be Provided From Nearest Electrical Distribution Panel With Available Space Utilizing 2#12, #12G In 3/4" Conduit With A 20 Amp, 120V Single Phase Circuit Breaker.

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title  
INTERIOR FIBER ROUTING  
TRAVERS WOLFE, T/W GARAGE, & TRENTON HALL  
FIRE ALARM  
scale AS SHOWN  
drawn by AM  
checked by SG  
date 05/03/2020  
dwg. no.  
**FA032**  
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