

**SECTION 00 90 01  
BIDDING AND CONTRACT REQUIREMENTS  
ADDENDUM NUMBER (1)**

**Demonica Kemper Associates  
125 N. Halsted Street, Suite 301  
Chicago, IL 60661  
312.496.0000**

To: Prospective Bidders

Issued: October 17, 2018

**Re: ADDENDUM NUMBER (1) TO THE BIDDING DOCUMENTS FOR**

**McHenry County College  
Buildings A & E Renovations – BP2  
Architect's Project Number: 18-001**

This addendum forms a part of the bidding and contract documents and modifies the original bidding documents dated October 2, 2018. Acknowledge receipt of this addendum in the space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

**ADDENDA TO THE SPECIFICATIONS**

003200 – Scope Sheets – Released in its entirety – Sheets 1- 43

**ADDENDA TO THE DRAWINGS**

**ELECTRICAL**

1. ED1.21
  - A. **REVISE** scope of work as shown in enlarged plans 2/ED1.21 and 3/ED1.21.
  - B. **REVISE** keynotes as shown.
2. E1.10
  - A. **REVISE** plan reference tags as shown.
3. E1.21
  - A. **ADD** keynote #8 in enlarged plans 2/E1.21 and 3/E1.21.
  - B. **REVISE** keynotes as shown.
4. E3.21
  - A. **ADD** work scope as shown in enlarged plans 2/E3.21 and 3/E3.21.
  - B. **REVISE** keynotes as shown.

**FIRE PROTECTION**

1. FP1.21
  - A. **REVISE** scope of work detail for Bid Alternate #5. Added view detailing location and scope of work area.
2. FP1.22
  - A. **REVISE** scope of work detail for Bid Alternate #5. Added view detailing location and scope of work area.

**SUPPLEMENTAL BID DOCUMENTS ISSUED**

TEM Environmental, Inc. – Phase 1 Abatement Plan ASB01 – dated 10/3/18 – 1 Page  
MCC A&E Logistics – Proposed Demo Staging area for 2<sup>nd</sup> shift work – 1 Page

**This addendum consists of (2) page(s), excluding attachments.**

**END 009001.**

**Attachments:**

1. 003200 – Scope of Work
2. ED1.21, E1.10, E1.21, E3.21
3. FP1.21, FP1.22
4. ASB01
5. MCC A&E Logistics Plan



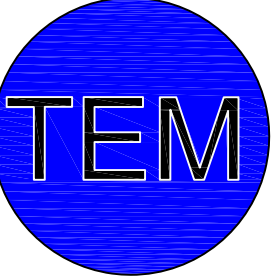
**SCOPE OF WORK**  
ASBESTOS ABATEMENT: Removal and disposal of asbestos containing materials in compliance with all applicable IDPH, IEPA and OSHA rules and regulations.

**WORK SCHEDULE**  
All abatement work shall take place over the winter break December 19th through January 4th. Work hours shall be 6:00am to 10:00pm

- ASBESTOS ABATEMENT SYMBOLS:**
- INDICATES LOCATION OF FIVE (5) CHAMBER WORKER DECONTAMINATION UNIT.
  - INDICATES LOCATION OF ONE CHAMBER WASTE-OUT.
  - INDICATES LOCATION OF NEGATIVE AIR EXHAUST
  - INDICATES LOCATION OF FLOOR TILE AND MASTIC REMOVAL.
  - INDICATES LOCATION OF LAB TABLE TOPS REMOVAL
  - INDICATES LOCATION OF FUME HOOD AND COUNTERTOP REMOVAL
  - INDICATES LOCATION OF CARPET, FLOOR TILE, AND MASTIC REMOVAL.
  - INDICATES WASTE LOAD OUT ROUTING TO PARKING LOT

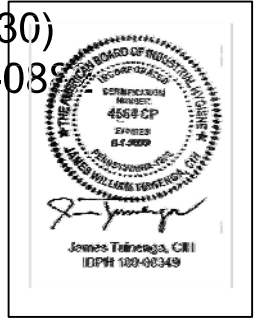
GENERAL NOTES	
COORDINATE WORK WITH ENVIRONMENTAL CONSULTANT, BUILDING OWNER AND GENERAL TRADES PRIOR TO MOBILIZATION.	
CONTRACTOR SHALL PERFORM BACKGROUND CHECKS ON ALL PERSONNAL PRESENT AT THE JOBSITE. SEE PROJECT MANUAL FOR DETAILS ON PROCESS AND REQUIREMENTS.	
CONTRACTOR SHALL SUPPLY ITS OWN ELECTRICIAN FOR ALL CONNECTIONS TO AND DISCONNECTIONS FROM THE BUILDING'S ELECTRIC SYSTEM	
AT ALL STAIRWELLS, SECURE AND CONTROL ACCESS TO THE STAIRWELL AT THE LOWER LEVEL DOOR. ALL SURFACES IN STAIRWELL SHALL EITHER BE PROTECTED ONE LAYER OF 6 MIL PLASTIC SHEETING SECURED IN PLACE WITH DUCT TAPE, OR ISOLATED FROM THE WORK AREA WITH ISOLATION BARRIERS AS DESCRIBED IN SECTION 855.430(a).	
CONTRACTOR SHALL PROTECT CARPETING IN AREAS ADJACENT TO FLOORING REMOVAL, AS NECESSARY, FROM ABATEMENT ACTIVITIES AND/OR IMPACTS BY MASTIC REMOVAL SOLVENTS.	
IF DOORS ARE REMOVED TO FACILITATE REMOVAL OF FLOOR TILE THEY ARE TO BE RE-INSTALLED TO PRE-EXISTING CONDITION.	
OWNER RESPONSIBLE FOR THE REMOVAL OF ALL NECESSARY ROOM CONTENTS AND FURNITURE PRIOR TO MOBILIZATION.	
OWNER SHALL DISCONNECT ALL PLUMBING, ELECTRICAL, AND OTHER CONNECTIONS TO EXISTING LAB TABLE TOPS PRIOR TO MOBILIZATION	
CONTRACTOR TO REMOVE ALL COVEBASE FROM AREAS OF FLOOR TILE REMOVAL. COVEBASE ADHESIVE MAY BE LEFT IN PLACE.	
CONTRACTOR REPOSNSIBLE FOR THE REPAIR OF ANY OVERT AND READILY RECOGNIZABLE PAINT PULLS RESULTING FROM ABATEMENT ACTIVITIES. SEE OWNER FACILITIES DEPARTMENT FOR PAINT COLOR CODES SHOULD RESTORATION OF PAINT DAMAGE BE REQUIRED AT THE COMPLETION OF PROJECT.	
ALL WASTE LOADOUT ACTIVITIES MUST TAKE PLACE BEFORE 7:30AM OR AFTER 5:00PM.	
WASTE OUT THROUGH DOUBLE DOORS AT THE END OF THE HALLWAY	

ABATEMENT KEY NOTES	
1	CONSTRUCT WORK AREA SEPARATION BARRIER AS DESCRIBED IN IDPH SECTION 855.430 (A).
2	CONSTRUCT WORK AREA SEPARATION BARRIERS AS DESCRIBED IN IDPH SECTION 855.430(b). 2L INDICATES BARRIER WITH LOCKABLE DOOR.
3	CONTRACTOR TO SECURE DOORS AND CONTROL ACCESS
4	REMOVE FLOOR TILE AND MASTIC AFTER 5PM ON FIRST DAY OF PROJECT.



ENVIRONMENTAL, INC

443 Duane Street  
Glen Ellyn, IL 60137  
(630) 790-0880  
(630) 790-0388



MCHENRY COUNTY COLLEGE  
BUILDING A- 2018/ 2019 RENOVATIONS

ISSUE/REVISION:

REV.	DATE	DESCRIPTION
	09/12/18	ISSUED FOR BID
1	10/3/18	ISSUED FOR INFORMATION

PROJECT:  
BUILDING A RENOVATIONS 2018 PROJECT

DRAWING TITLE:  
PHASE 1 ABATEMENT PLAN

DESIGNED BY: J. TUINENGA  
DRAWN BY: J. TUINENGA  
CHECKED BY:  
PROJECT NO: 56301  
SCALE:  
SHEET NO.

ASB01

# MCC - A&E Logistics

Proposed Demo staging area for 2nd shift work

## Legend

- McHenry County College
- McHenry County College

All overnight staging must be removed by 7am

Dumpster Staging Area

Dumpster Staging Area

McHenry County College

Google Earth

© 2018 Google

200 ft



# Scope of Work

McHenry County College  
A&E Building Renovation  
Bid Period #2

- Demolition
- Misc Metals
- Folding Partition System
- General Trades
- Acoustic Ceilings
- Flooring
- Paint
- Fire Protection
- Plumbing
- HVAC
- Electrical
- Audio Visual & Security Systems

Pepper Construction Company

**All Trade Specific Scope Sheets issued as Addendum #1 – Dated 10/17/18**

This Section Contains:

A. Universal Scope of Work – All Bid Packages

- i. All bids for all Bid Packages must be inclusive of all requirements outlined in the Universal Scope of Work

B. Scope of Work – Trade Specific Bid Packages

- i. All bids must be inclusive of all requirements outlined in the trade specific Bid Packages outlined below:

- 3. Demolition
- 4. Misc. Metals
- 5. Folding Partition System
- 6. General Trades – Masonry, Architectural Woodwork, Rough Carpentry, Gyp Board Partitions/Ceilings, Div 10 – Furnish & Install the following: Visual Display Boards, Wall and Door Protection, Toilet, Bath and Laundry Accessories, Cubicle Curtain & Track, Fire Extinguishers & Cabinets, Roller Window Shades.
- 7. Acoustic Ceilings
- 8. Flooring - Resilient Floors, Carpet & Ceramic Tile
- 9. Paint & Wallcovering
- 10. Fire Protection
- 11. Plumbing
- 12. HVAC - Including Head walls for Sim Labs – E Building
- 13. Electrical
- 14. Audio Visual & Security Systems

# UNIVERSAL SCOPE OF WORK

For

## ALL BID PACKAGES

All bids for all Bid Packages must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work below:

### Specifications

All Division 00 ..... General

All Division 01 ..... General

1. Contractor understands and will comply with the requirements of Pepper Construction Company's (PCC's) project schedule.
2. The work "Provide" used throughout the scope of work is equivalent to Furnish & Install
3. For work that is required in the existing building that is still occupied, considerations for overtime must be included in this bid to perform the work off-hours. If the work corresponds with planned non-attendance days, then the work may be coordinated with the school. Refer to school schedule and construction schedule for this possibility.
4. Due to the nature of these projects, multiple mobilizations may be required.
5. All overtime required to meet the Project Schedule must be included. Working in existing finished/occupied spaces as required to complete your scope of work shall be figured as off hour work, and premium time shall be included in your proposal.
6. PCC supervision is required for all work performed on-site. Contractor shall cover any additional supervision costs resulting from failure to meet the contract schedule. If contractor elects to perform work, is required to perform work to meet schedule, or indirectly forces another trade to perform work on an overtime basis, contractor shall assume costs for extra PCC supervision.
7. Will agree to sign the AIA Document A132 – Standard Form of Agreement Between Owner and Contractor as provided in Section 005000 in the specifications with no modifications.
8. Within ten (10) days of contract award, contractor must PROVIDE PERFORMANCE AND PAYMENT BONDS to PCC. Refer to specifications for bond requirements.
9. Contractor is encouraged to visit the site prior to submitting bid to verify existing conditions which will affect his work.
10. Clean-up of all debris that is generated by this work is included. All debris must be removed from the building on a daily basis and placed into dumpsters furnished by PCC.
11. Mop up existing hallways as necessary to keep occupied corridors dust free, following deliveries, gondola removals, etc. outside of construction areas.
12. MEPFP contractors to trace, identify as to remain or to be demoed, cut and cap all systems within construction areas. Demolition contractor will drop and haul all systems unless specified in specific scope of works.

13. Demolition contractors shall provide dumpsters for their own work. For all other bid packages, dumpsters are by PCC unless noted otherwise in the bid package scope of work. Dumpster location must be coordinated with PCC so as not to interfere with school activities or cause landscape damage.
14. All bid packages that contain work requiring a wash-out area (i.e. concrete) shall provide and haul off-site their own washout boxes.
15. Protection of existing surfaces is included in each bid package. Existing surfaces shall also be defined as new finishes installed during this project.
16. Provide a fire watch and incorporate the use of fire blankets during cutting and welding operations within existing buildings and finished spaces and be responsible for any damage due to falling spark while working in existing buildings. Also provide smoke eaters in area during work operations during.
17. All street/parking lot cleaning work that is required due to the completion of the work in each bid package is to be included. Contractor is responsible on a daily basis to clean the mud or debris deposited on the adjacent streets as a result of your own construction operations.
18. All truck and equipment traffic will be restricted to the immediate construction area to avoid/minimize any damage to lawn areas. Any landscape restoration required to return to original condition, including watering, is the responsibility of the contractor causing the damage. Sod restoration is required.
19. All hoisting and scaffolding required to complete the work in each bid package is to be included.
20. All materials are to be delivered F.O.B. jobsite to each location as scheduled. Deliveries must be scheduled to coincide with the installation of the work. No long term storage is provided unless approved in advance by PCC.
21. All equipment will be delivered "broken down" as required for access into the building areas required.
22. All layout associated for your own work is to be included in each bid package.
23. In-progress as-built drawings must be maintained on-site during construction.
24. MEPFP Shop Drawings to be prepared using 3D Modelling software.
25. Follow Pepper Quality Coordination Guidelines for all MEP-FP Trades. See section 006000 – Pepper Quality Coordination Guidelines.
26. A Site Specific Safety Plan must be given to PCC for review no later than one month prior to the project start date. No contractors will be permitted to work on site without an approved Site Specific Safety Plan.
27. A one-hour site orientation with the PCC superintendent is mandatory for all tradesmen prior to beginning work.
28. Contractor project managers and foremen including any second tier subcontractors are required to attend preinstallation meetings prior to the start of work as well as coordination meetings with other trades as needed.
29. Contractors will be required to complete trade item checklists as a part of PCC's Job Specific Quality Plan for each project throughout construction.
30. Foremen and project managers are expected to attend weekly on-site meetings.
31. As-Built drawings, operation and maintenance manuals and attic stock are to be submitted within two (2) weeks of the completion of this project.
32. Provide temporary protection from water infiltration when creating penetrations or creating other openings in roof or exterior walls. Maintaining a water-tight opening is the responsibility of the penetrating contractor. All cost associated with water leaks will be the responsibility of the penetrating contractor.

33. Proper procedures for slab removal must be followed. This includes slab x-ray, scoring of existing slab, and jack-hammering for complete removal. Repair related to damage caused to any underground materials are the responsibility of the contractor performing the slab removal.
34. Proper procedures for slab coring must be followed. This include slab x-ray, scanning, black box drill etc. as required to identify existing in slab reinforcing steel, conduit, piping, etc. Adjust core location as necessary to avoid existing systems.
35. Use of elevators must be approved by PCC prior to use. If permission is granted for elevator use, the contractor must provide protection of all surfaces and abide by the capacity rules.
36. Bid pricing shall include all work that is reasonably inferable from the drawings, specification and the individual bid package scopes of work.
37. Provide training to Owner staff for function of all equipment and devices.
38. Coordinate with and provide assistance to testing agency for all testing and inspections related to your work. Including private inspections and testing, municipal inspections and permitting.
39. Provide all submittals as specified in the Project Manual and for all products in your bid package. -Submittal packages must be complete for each item submitted in order to be processed. All submittals are due to PCC so as to meet the Project Schedule. Factor three weeks for submittal review by design team. Any review deadlines should be communicated to Pepper Construction to allow for on-time delivery. Any costs/fees associated with quick shipping to meet the project schedule is the contractor's responsibility.
40. All OSHA and local municipality required barricades, signs and flagmen for your work.
41. Provide and maintain temporary fence and or barricades to isolate this scope of work from pedestrian traffic that is to occur outside the construction area. Remove barricades upon completion.
42. Contractors are responsible to check with local authorities for street load limitations and obtain any permits necessary to complete the work as planned in the bid documents.
43. Furnish, install and remove all temporary shoring required for the completion of your work. Coordination with other trades will be required so as not to impede their work with the shoring location.
44. Indoor air quality requirements must be met and monitored (i.e. no gas-powered vehicles/equipment).
45. Contractor understands the project schedule/sequence and remobilization costs are included in your scope of services.
46. Construction Traffic Route - Construction Traffic should enter and leave the project site from Tartan Drive via Ridgfield Road. Follow all applicable road restrictions/limits. Notify Pepper Construction of any vehicle traffic that will require an alternate route to access the site.
47. Material/Equipment Deliveries that do not fit within elevator will need to be brought into building no later than 7:30am through specified routes. See phasing plan for delivery locations.
48. **Refer to Existing Schutte Mochon Drawings 12, S-2, S-4 & S-6 to coordinate installation of new work. Please note that all hangers are expected to be attached to the existing structural framing at the Roof level and not the gypsum panels. – Note added as part of Addendum #1**

## SCOPE OF WORK

For

### BID PACKAGE 3

# Demolition

All bids for the Demolition Bid Package 3 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

0204119.....Selective Demolition

#### Allowances

In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

\$5,000

#### Alternates

Refer to the Bid Form and Specification 012300 for a listing of all project alternates.

Alternates clearly related to this trade include:

**\*Note W7A, W7B, W7C removal as part of Alternates 1, 2 & 3 will be completed by painting contractor. No work required as part of demolition proposal**

**Alt. # A-5: Eliminate all scope of work shown at the first floor of the stairwells**

#### Scope Items

1. OFF HOURS – Demolition work to be completed off hours estimated 10:00pm to 6:00am. Dumpsters can be staged in parking lot outside of Building A per logistics plan, but will need to be removed no later than 7:00am. Existing Hallways must be cleaned up prior to the end of each shift.
2. Provide site visit to acclimate yourself with the building and conditions.
3. Reference TEM Environmental Inc. plan ASB01 dated 10/3/18 for ACM abatement being completed by others.

4. Include all items as noted on AD#.# sheets for specific demo and salvage notes if not called out below.
5. Note W7A, W7B, W7C demolition as part of Alternates 1, 2 & 3 will be completed by painting contractor. No work required as part of demolition proposal.
6. Layout and cut existing gyp board and metal framing for (2) new openings. Assist Glazing contractor with removal of metal panels.
7. Existing IDF Rack is to remain in A222a Bio Prep. Provide extra care while working around this equipment and wiring.
8. Remove all partitions, demising walls complete including top and bottom track, kickers etc. as shown.
9. Remove all doors/frames/hardware, storefront entrances as shown.
10. Leave cuts smooth/flush where taking walls back to existing partitions to remain.
11. Remove all ceilings, grilles, devices, supports, hangers, etc to existing deck structure. Cut existing fasteners, to avoid damage to decking components. Salvage full ceiling tile, if they are in like new condition and turn over to owner.
12. Remove all casework, countertops, fume hoods, cabinets, equipment, shelving, etc, as shown.
13. Remove all student stations, projectors, display boards, equipment racks, as shown.
14. Remove planetarium dome system complete.
15. Carefully remove all items designated to be reused. Turn over to GC upon completion of work.
16. Remove all in wall electrical, plumbing, piping, systems, etc as noted to be removed by MEPFP contractors.
17. Remove all ductwork, plumbing, electrical, HVAC & fire protection piping as designated on MEPFP Demo drawings. MEPFP contractors will make safe all items to be removed. Only remove items marked as such to remove. Provide caution while working around existing live utilities. Remove all hangers, supports, etc. to existing structure.
18. Cut slab for new HVAC penetrations – Refer to S1.21 for locations/quantity.
19. Remove all light fixtures and properly dispose of lamps/ballasts as necessary.
20. Remove expansion joint cover. Leave existing expansion joint intact and prep edge of slabs for new expansion joint covers.
21. Remove all plumbing fixtures as shown.
22. Remove all floor types as shown, including adhesives. Complete adhesive removal via shotblasting with OSHA approved equipment.
23. Remove painted concrete coating complete as shown. Complete paint/coating removal via shotblasting, with OSHA approved equipment.
24. Remove all resilient wall base as shown/noted.
25. VCT and adhesive removal as noted in attached Abatement drawing will be removed by Abatement contractor.
26. Remove all loose furniture, toilet accessories and miscellaneous accessories at the start of demolition.
27. Remove and store fire extinguisher for re-use in new work. Remove cabinet complete.
28. Remove metal lockers and salvage batter charging stations. Items to be turned over to owner
29. All construction debris and excess material is to be removed by the contractor at the end of each work day.
30. Provide phasing and multiple mobilizations as necessary to complete this scope of work per logistics plan and bid schedule.
31. Provide covered gondolas as necessary to minimize dust transmission through occupied areas.
32. Provide mopping of existing flooring as required during times of hauling to minimize dust transmission through occupied areas.

## SCOPE OF WORK

For

### BID PACKAGE 4

# MISCELLANEOUS METALS

All bids for the Miscellaneous Metals Bid Package 4 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

055000..... Metal Fabrications

#### Allowances

In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

\$5,000

#### Alternates

Refer to the Bid Form and Specification 012300 for a listing of all project alternates.

Alternates clearly related to this trade include:

N/A

#### **Scope Items**

1. Erector must complete the Project Safety Plan for Steel Erection with the Pepper Safety Dept. prior to job start.
2. All ironworkers must receive training in and be knowledgeable of the specific requirements of the Project Safety Dept. prior to beginning work.
3. Provide pig tail for electrician to hook up for Electric Welder
4. Smoke Eaters required for all interior welding.
5. All materials are to be finished with a shop primed finish unless otherwise noted. Spot prime steel as necessary.
6. Provide Operable partition support beams, kickers, angels, fasteners etc per Sheet S1.22 for a total of (4) supports. Provide openings for threaded rod to be installed by partition contractor. Layout and size will be provided.
7. Infill existing floor openings with angle, W8 x 10 and metal deck as detailed on S1.21 as detailed and locations as shown.
8. Provide 14 GA bent plate closure plate – shape to be determined in field base on as-built condition to infill slab on deck per 2 & 5/S1.21

## SCOPE OF WORK

For

### BID PACKAGE 5

# Folding Partition System

All bid for Folding Partition System must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

10 22 39 .....Folding Panel Partitions .....

#### Allowances

In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

\$0

#### Alternates

Refer to the Bid Form and Specification 012300 for a listing of all project alternates.

Alternates clearly related to this trade include:

**N/A**

#### **Scope Items**

1. Provide manually operated folding partitions as shown/specified.
2. **Addendum #2 to clarify partition Finishes**
3. Provide STC Rating of 54
4. Provide attachment to support steel as shown per detail 2/S1.22. Provide layout of threaded rod to metals fabricator for drilling. If layout is not provided in time, this contractor shall drill existing beam as necessary
5. Provide training to Owner for adjustment, operation and maintenance.

## SCOPE OF WORK

For

### BID PACKAGE 6

# GENERAL TRADES

All bids for the General Trades Bid Package 6 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

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The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

06 10 53.....Misc. Rough Carpentry  
06 41 16 .....Plastic-Laminate-Faced Architectural Cabinets  
06 42 16.....Flush Wood Paneling  
07 81 00.....Applied Fireproofing  
07 84 43.....Joint Firestopping  
07 92 00 .....Joint Sealants  
07 95 13.13 ...Interior Expansion Joint Cover Assemblies  
06 11 13 .....Hollow Metal Doors and Frames – BP 1 Specs for installation review  
08 14 16 .....Flush Wood Doors – BP 1 Specs for installation review  
08 71 00 .....Door Hardware – BP 1 Specs for installation review  
09 21 16.23 ..Gypsum Board ShaftWall Assemblies  
09 22 16 .....Non-Structural Metal Framing.  
09 29 00 .....Gypsum Board  
10 11 00 .....Visual Display Units  
10 21 23.....Cubicle Curtains and Tracks  
10 26 00 .....Wall and Door Protection  
10 28 00 .....Toilet, Bath, and Laundry Accessories  
10 44 13 .....Fire Protection Cabinets  
10 44 16 .....Fire Extinguishers  
12.24 13.....Roller Window Shades  
12.36.23.13.....Plastic Laminate Clad Countertops  
12.36 61.16.....Solid Surfacing Countertops

#### Allowances

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In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

Patch Existing Fireproofing - \$30,000

Miscellaneous - \$20,000

Drywall Touch Ups - \$7,500

### Alternates

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Refer to the Bid Form and Specification 012300 for a listing of all project alternates.

Alternates clearly related to this trade include:

**Alt. # A-5: Eliminate all scope of work  
shown at the first floor of the stairwells**

### SCOPE OF WORK

#### **Masonry**

1. Tooth in CMU around new openings as shown – E Building
2. Tooth in and infill CMU at existing openings as shown – E Building
3. Provide shoring as required to allow for demolition of CMU – Note W2A Sheet AD1.21. Removal of CMU by demo contractor.
4. Tooth in CMU around new opening for double door A002F. Install lintel provided by others for 8' opening.
5. Strike all joints smooth.

#### **Architectural Woodwork**

##### **Wood Trim**

1. Provide 4" Pre-finished solid wood white oak base (WD-1 & WD-2) as shown/specified. Stained to match architects sample. Provide adhesive and fasteners as required to attach to specified wall system. No wood backing will be provided at these locations.
2. Provide color matched putty/filler for at all fasteners.

##### **Wood & Ceiling Paneling**

1. Provide Pre-Finished Wood Veneer Wall Panels (WD-1, WD-2 & WD-5) with no exposed fasteners as shown. Match Grain per elevations. Provide ¼" lap joint reveals – Finish to match adjacent wood veneer as noted.
2. Provide Pre-Finished Wood Veneer Ceiling/Soffit Panels as (WD-1 & WD-2) with no exposed fasteners as shown
3. Provide (WD-3 & WD-6) 3/4" x 3/4" white oak stained to match corners as shown.
4. Provide (WD-4) edge banding to match WD-2 on all edges as shown.
5. Provide ¾" Plywood backing attached to metal studs behind all wall and ceiling panels. Provide 1/8" gap lap joint as shown/required.
6. Provide cut outs for all Electrical, Mechanical & Fire Protection penetrations through wood panels.

##### **Casework**

1. Provide Reception/Waiting Room A231 Entrance Desk with Solid Surface Counter and end panels.
2. Provide pre-finished MDF Screen Panels at Entrance Desk with Translucent Panel TP-1
3. Provide break room base and upper cabinets with Plam Counter – room A231D
4. Provide VP Office Closet. Plam to match adjacent furniture – room A231C
5. Provide VP Storage Plam shelving, base and upper cabinets with Plam Counter – Room A231E
6. Provide Millwork Teachers station – Room A220, A222, A224, A226 & A228
7. Provide Plam counter and supports – Room A227

8. Provide Plam counter and supports – Room A206
9. Provide Display Case with 3/8" tempered Glass Shelves – GL-02, stainless steel brackets, concealed standards, locking 3/8" clear tempered display case door and hardware, 1/2" fabric wrapped tack surface panels in corridor A002G
10. Provide Forensic Speech Room base and upper cabinets with Plam counter, Plam display cabinet with removeable panels as shown – Room A205
11. Provide Conf. Storage room base and upper cabinets with PLam counter – Room A211A.
12. Provide Conf. Storage room base and upper cabinets with PLam counter – Room A215A.
13. Provide Work room base and upper cabinets with PLam counter – Room A219C.
14. Provide Plam cabinets – Room A226
15. Provide 18" Deep Solid Surface work counters, full end panels and necessary supports at Corridor A002G, A002F & Conference Rooms A211, A213, A215.
16. Provide Conference Room Feature Wall with 3/8" Glass panels – GL-05 on ¾" x 2" Square stand offs, ½" Painted MDF Panels, Brushed Stainless Steel wrapped around solid wood blocking base, ½" Wood Veneer Panel WD-1 over ½" plywood – no exposed fasteners,, 3" Brushed aluminum lettering.
17. Provide Nursing Reception station with solid surface top and end panels. Room E214A
18. Provide base cabinet and plam top – Room E216
19. Provide 24" Deep Solid Surface work counters and necessary supports at View Rooms 1, 2 & 3 – E Bldg.
20. Provide View Room base and upper cabinets with Plam counter – Room E214F
21. Provide all shims, fillers, scribes, as necessary to complete this installation.
22. Follow details as shown on drawings and specifications for all material & hardware types.
23. Provide cut out in all counter tops for plumbing fixtures
24. Provide grommets in all counter tops as shown/required to coordinate with below counter power/data/AV

#### **ROUGH CARPENTRY**

1. Receive, unload, distribute and install all HM Doors, Frames, Wood Doors & Hardware as specified/shown on Door and Frame Schedule Per A10.01.
2. Receive, unload, distribute and install all Owner Furnished Contractor Installed Accessories in Restrooms & Classrooms.
3. Furnish & Install all in wall wood blocking/metal strapping for installation of wall mounted items including but not limited to, toilet accessories, toilet partitions, railings, marker boards, AV equipment, Lab Equipment, TV's, projection screens, door hold opens, auto operators.
4. Furnish & Install all in wall wood blocking in gyp. framing as shown/noted.
5. Furnish & Install Fire Treated Plywood Backers for Electrical & Mechanical Equipment – Room A223A all walls & Storage Room A223B.
6. Provide a temporary 4 sided solid enclosure (at least 8' high) with a door to enclose existing Voice Data Equipment rack located in room A222A – Bio Prep. Reference TD1.22. Provide Visqueen from 8' up to existing deck to seal off enclosure as required. This rack will remain active until new IDF closet A223A is completed. Remove enclosure once equipment is relocated.

#### **FIREPROOF PATCHING**

25. Provide patching of existing spray fire proofing of structural components as required to maintain specified rating.
26. Complete patching on a T&M Basis against contract allowance.

## **EXPANSION JOINTS**

1. Furnish and install all interior expansion joint assemblies for Walls and Ceilings as shown/specified.
2. Coordinate installation details with specified wall and ceiling types.
3. Provide miscellaneous sealant, fasteners, etc. to complete the required assembly per manufacturer's installation instructions.
4. Furnish and install expansion joint cover assembly for floor for new break through at opening A002F and as shown on A1.22
5. Refer to Sheet A6.02 for expansion joint details.

## **GYPSUM BOARD ASSEMBLIES – WALLS & CEILINGS**

1. Provide layout for all partitions, ceilings, soffits, in wall rough ins, etc. in order to complete this work.
2. Modify existing framing as required to accommodate installation of two new exterior window Type "A". Repair drywall and finish to storefront framing.
3. Provide drywall patching for all demo scars at removed partitions, equipment, ceilings, etc. as shown on demolition drawings.
4. Provide drywall patching for all Electrical Panels, Devices, Equipment removed as part of demo scope as shown on EDxx & TDxx drawings for existing walls to remain.
5. Furnish and install thermal, fire blanket, mineral wool, and sound attenuation insulation above drywall ceiling systems and in walls as indicated.
6. Furnish and install all light gauge metal studs, framing, runners, channels, kickers for all walls, soffits, fascias, ceilings, etc.
7. Provide metal stud box headers over all door and window openings.
8. Furnish and install gyp board shaft wall assemblies including all support framing, gyp board, liner panels, fire safing, caulking in order to provide rated assemblies as shown/specified.
9. Label ALL Rated walls as specified/shown.
10. Include installation of stud against jamb of hollow metal and aluminum frames regardless of sequence of HM frame / metal framing installation.
11. Furnish and install all drywall (all types), including taping and sanding, as specified and indicated.
12. Furnish and install tile backer board where indicated. Tape joints with joint compound provided by ceramic tile contractor.
13. Furnish and install slip joints at top runners as indicated.
14. Furnish and install corner beads, edge beads and control joints as required and specified.
15. Provide Control Joints as indicated in updated Interior Drawings, or at maximum distances as specified/required.
16. Provide acoustic sealant and fire-safe acoustic sealant where indicated. Provide backer rod and sealant at drywall partitions as indicated.
17. Provide all extruded reveals.
18. Tie new gyp partitions/ceilings into existing walls and ceilings. Blend in as necessary for a seamless transition.
19. Remove existing gyp board off of existing studs to extent shown. Provide insulation into cavity of existing wall and re-face with new gyp board to deck above – Note 11/A1.21

20. Extend existing partition as required to accommodate new ceiling elevation. Finish to match partition finish below. Note 18/A2.51
21. Provide finished openings for all monitors, equipment, millwork, fixtures, etc. as shown.
22. Provide all soffits, bulkheads, kickers, bracing as necessary to properly support glass panels, MDF Grilles, and storefront framing as shown/required.
23. Provide framing and bracing for folding panel partitions per 20/A7.21.
24. Provide framing, support, hangers, etc. as necessary to install ceiling system per detail 12/A7.21 for Corridor A002H.
25. Provide angled ceiling assembly with kickers as required at Corridor A002F per 11/A7.22.
26. Provide new gyp ceilings above existing stairwells. Provide scaffolding as necessary to complete this work. Including rental time to allow MEPFP trades to work from scaffolding. Only 1 stairwell can be worked on at a time to allow egress.
27. Coordinate gyp board installation with  $\frac{3}{4}$ " plywood required at all WD wall and ceiling panels. Gyp board must finish to paneling. Provide accessories as required to finish joints.
28. Provide Perforated Gypsum Board as shown.
29. Extend and finish drywall up past all fixtures, ceilings, panels, as necessary/shown.
30. Provide clear anodized aluminum F Reveal and  $\frac{3}{4}$ " x 1" wall angle at WC-3 markerboard sill locations. WC-3 installed by others
31. Provide  $\frac{1}{4}$ " C Channel Aluminum reveal for WC-3 marker board head locations. WC-3 installed by others.
32. Include all metal runners secured to floor slabs as shown.
33. Furnish and install caulk at all joints between drywall/plaster ceilings/soffits/walls and masonry partitions and steel columns.
34. Furnish and install all access doors/panels if indicated on drawings. Refer to Architectural and MEP drawings.
35. Install all access panels supplied by other trades.
36. Coordinate dimensions and locations of recessed fire extinguisher cabinets, electrical panels, etc. in new drywall partitions with applicable trades.
37. Provide steel plate at ribs of metal deck with sealing insulation packed between plate and decking where drywall partitions abut to the underside of metal deck.
38. Furnish and install fire ratings and acoustical requirements where joists, beams, or other duct, pipe, or conduit penetrations pass thru a drywall partition or ceiling. Include all miscellaneous components such as sealants, backer rods, mineral fiber, fire safing, etc. complete.
39. Provide all means necessary for the acoustical walls, such as resilient felts/synthetics, spray applied sealants, mineral fiber, glass fiber material, backer rods, anchor isolators, etc. at heads and bases of walls and acoustical joints at edges of walls, etc.
40. When installing top track to structural framing that is fireproofed, take care in removing only what is necessary to complete your installation. Coordinate all partition details and coordinate with fireproofing requirements of existing structure.
41. Provide spring isolators for suspended gypsum ceilings.
42. Provide metal corner bead where indicated.
43. Provide metal stud box headers over all door and window openings.

## **DIVISION 10 SPECIATIES**

1. This contractor will receive, unload, uncrate, and distribute the materials provided under this contract.
2. Furnish and install all marker boards, lined marker boards, vertical marker boards, sliding marker board assemblies, marker rails, tack strips, etc. Include all accessories, brackets, fasteners as required to coordinate with specified wall types.
3. Furnish and install all Wall and Door protection as specified/shown.
4. Furnish and install all toilet and custodial accessories per plan. Furnish and install all bathroom accessories. Unless indicated by Owner, include, soap dispensers, toilet paper holders, toilet seat covers, napkin disposals, napkin vendors, mirrors, grab bars, waste receptacles, changing tables, shower seats, paper towel dispensers, mop hooks, utility shelves etc. Provide all anchoring as needed for secure fastening of accessories. Any electrical connections required are by the Electrical contractor.
5. Furnish and install all fire extinguisher cabinets and extinguishers as specified/shown. Coordinate quantity and location between Architectural and Fire Protection drawings.
6. Furnish and install cubicle curtain and track. Provide blocking above ACT if required by cubicle curtain manufacturer for installation.

#### **ROLLER WINDOW SHADES**

1. Furnish and install all new roller shades as specified/shown. Roller shades to be provided at exterior windows – RCP Note 2/A2.21. 4 Total.
2. Provide prefinished exposed head box enclosure including front fascia, top and back coves, end caps and removable bottom closure.
3. Provide brackets, anchors, etc as required to complete this installation in the specified partition type.

#### **END OF GENERAL TRADES**

## SCOPE OF WORK

For  
BID PACKAGE 7

# Ceilings

All bids for the Ceilings Bid Package 7 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

09 51 13 .....Acoustical Panel Ceilings. ....  
09 54 60..... Modular Felt Ceiling System.....

### Allowances

In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

Misc. - \$5,000

### Alternates

Refer to the Bid Form and Specification 012300 for a listing of all project alternates. Alternates clearly related to this trade include:

### Scope Items

1. Provide 2 x 2 Acoustical Ceiling Tiles – Type 1 & 2 with 15/16" Grid as specified/shown.
2. Patch existing ACT ceilings at 1<sup>st</sup> Floor Stairwells as shown.
3. Patch existing ACT Ceilings at Library into new Gyp board ceiling. Replace Tee's, mains, and install new wall molding to match exiting as required.
4. Provide wall moldings as required for support of ceiling assembly.
5. Provide modular felt panel ceiling system with insulation installed between ceiling system supports and all necessary support/hanger as required to attach to existing structure. Provide cut outs in system for all MEPFP fixtures/devices/equipment.
6. Provide prefinished perimeter trim molding in sizes as shown at all ACT Transitions Reference Detail 1/A7.21.
7. Provide F Moldings attached to gypsum board. Coordinate installation with partition schedule, and after prime paint.
8. Provide expansion joint cover assembly as specified/shown. Refer to A6.02 for details
9. All Trims, Moldings, Grid Components to be pre-finished in the same color and sheen.
10. Coordinate installation of hangers with Coordinated MEP Systems.
11. Provide hangers attached to structure only. Do not tie off existing hangers.
12. Provide ceiling tile cut outs for all MEPFP components. Coordinate locations and cut out sized with MEPFP

drawings and trade contractors.

13. The delivery of the specified attic stock must be included.

## **SCOPE OF WORK**

For

### **BID PACKAGE 8**

# **CARPET/RESILIENT/CERAMIC TILE FLOORING**

All bids for the Carpet/Resilient/Ceramic Flooring Bid Package 8 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

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The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

- 09 30 13. ....Ceramic Tiling
- 09 65 13 .....Resilient Base and Accessories
- 09 65 16 .....Resilient Sheet Flooring
- 09 65 19 .....Resilient Tile Flooring
- 09 65 66.....Resilient Athletic Flooring
- 09 68 13 .....Tile Carpeting

#### Allowances

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In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

Floor Prep - \$40,000

#### Alternates

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Refer to the Bid Form and Specification 012300 for a listing of all project alternates. Alternates clearly related to this trade include:

### **Scope Items – Ceramic Tile**

1. Furnish and install quartz and porcelain floor tile and base as indicated. Include mortar and grout as specified.
2. Furnish and install all porcelain Trinity wall and floor tile and paver base as indicated. Include mortar and grout as specified.
3. All required wall and floor preparation, including but not limited to, grinding and latexing, filling saw cuts and preparing all new floor slabs and wall for new floor or wall tile. Include floor prep to ensure proper drainage to floor drains (assume concrete slab does not provide pitch). This will be completed on tickets and charged against Floor Prep allowance listed above.
4. Crack suppression membrane must be included over 100% of flooring surface.
5. Moisture mitigation must be included over 100% of flooring surface.
6. Provide bond coat behind tile where indicated.
7. Furnish compound for tile backer board to General Trades contractor to install.
8. Furnish and install all required floor transition strips, reducer strips, edge strips, transition ramps, joint sealants and backer rod as necessary.
9. The delivery of the specified attic stock ceramic must be included.
10. Coordination of all penetrations or embedded items is included.
11. All sealants adjacent to tile shall be included. This includes, but is not limited to, tile edges, wall corners, around penetrations, around cross bracing, adjacent to diffusers, etc.
12. Install Ramboard protection on floor tile upon completion of grouting & final clean.

### **Scope Items – Resilient/Carpet**

1. Furnish and install all Tile Carpeting (CPT-1 through CPT-6) as indicated.
2. Furnish and install all Resilient Sheet (SV-1) Flooring including integral flash cove and heat welded seams. Provide integral cove base at all fixed lab and classroom casework and equipment.
3. Furnish and install detectable warning surfaces (DWT).
4. Furnish and install all Resilient Tile (VCT 1 through VCT-4) flooring as indicated.
5. Furnish and install all RT – Rubber Tile flooring
6. Furnish and install all rubber base. Include rubber base on lab casework
7. Furnish and install all required floor transition strips, reducer strips, terminal strips, nosings and joint sealants.
8. Complete installation of corridor flooring last.
9. Coordination of all penetrations or embedded items is included.
10. Adhesive as recommended by the manufacturer must be included.
11. All floor prep required at flooring transitions to provide a flush installation shall be included in base bid, including but not limited to VT to Porcelain Tile, VT to Carpet, etc.
12. All required floor preparation, including but not limited to, grinding and latexing, filling saw cuts and preparing all new and existing floor slabs for new floor finishing including area which may be sealed.
13. If there are cracks in the subfloor or if there is change in subfloor elevation on either side of a crack or control joint, provide all floor prep as described above.
14. The delivery of the specified attic stock flooring must be included.
15. Provide Masonite floor protection on all finished flooring, minimum 4' wide through hallways and up to

classrooms. Provide ram board floor protection into classrooms and install 1 row at front of classroom against wall.

**Unit Pricing:**

1. Provide Unit Cost/SF for manufacturers approved moisture mitigation system compatible with each flooring type. This can be filled on the Bid Form.
2. Provide Unit Cost/SF for 3/16" self leveler to be installed for VCT/SV flooring.
3. Provide Units Cost/SF for skim coat for CPT.

\*Note – PCC/MCC has the right to direct flooring contractor to complete floor prep on a unit cost basis or a T&M Basis. This contractor will evaluate floor condition upon completion of floor removal and provide a cost proposal for the recommended floor prep.

## SCOPE OF WORK

For

### BID PACKAGE 9

# Painting & Wallcovering

All bids for the Painting & Wallcovering Bid Package 9 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

09 72 00.....Wall Coverings

09 92 23.....Interior Painting

#### Allowances

In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

Misc - \$10,000

#### Alternates

Refer to the Bid Form and Specification 012300 for a listing of all project alternates. Alternates clearly related to this trade include:

**\*Remove wallcovering complete to extents shown – patch and prep existing wall as required for new work. Refer to Demo drawings for location of removals.**

**Alt # A-1 - Remove existing wall covering per demolition key note W7A patch and prep existing walls and new finish work per schedule**

**Alt. # A-2: Remove existing wall covering per demolition key note W7B patch and prep existing walls and new finish work per schedule.**

**Alt. # A-3: Remove existing wall covering per demolition key note W7B patch and prep existing walls and new finish work per schedule.**

### Scope Items

1. Provide all paint types per finish schedule and specifications for new gyp walls and ceilings.
2. Provide high performance epoxy paint systems per finish schedule and specifications.
3. Provide wallcovering WC-1, WC-2, WC-3, WC-4 per finish schedule and specifications.
4. DKA to provide graphics for wallcovering. Provide mock ups for approval as required.
5. Provide paint for all exposed ceilings, MEPFP items as shown/noted.
6. Provide marker/cloth caddy magnetically adhered to wall as shown.
7. Provide Level 5 skim coat behind all wallcovering as required by wall covering manufacturer. General Trades contractor to provide level 4 finish.
8. Provide layout for all paint and wall covering installation per interior elevations.
9. Paint hollow metal doors, frames, access panels, stairs, exposed steel, exposed structural elements, etc. as indicated or affected by construction.
10. Paint interior reveals, blocking, break metal, etc per details noted on A7.12.
11. Paint soffit/wall panels and or recesses as required to allow for millwork and ceiling installations that would otherwise eliminate access to your work.
12. Prep all surfaces as required prior to installation of new finish systems.
13. Provide final filler and sanding at all exposed metal components required to be finished. Metals contractors will weld, grind, spot fill all field welds. Painting contractor to provide final touch up prior to field painting.
14. Provide PT-2 paint for all existing and new hollow metal door frames, transom panels, window frames and mullions, and sidelite/transoms – Note 22 – Finish Plans
15. Re-stain exiting doors to match WD-1 and WD-2. Coordinate with architect for WD stain selection of each door – Note 23 – Finish Plans
16. Paint Existing Window Frames and Mullions PT-2. Paint Both interior and corridor sides. Note 24 – Finish Plans.
17. Paint existing to remain Equipment/Items as noted.
18. New Wood doors will be prefinished by others unless noted otherwise.
19. Painting contractor is responsible for protection of all areas including, but not limited to, floors, ceilings, chalk/marker boards, prefinished materials, etc., which are not to receive paint.
20. Paint electrical conduits, electrical boxes, electrical and mechanical pipe/duct exposed to view. Paint all construction exposed to view above suspended open grid ceiling, if applicable. Refer to interior finish plans and reflected ceiling plans for clarifications.
21. Furnish and install all caulking at all hollow metal and aluminum frames in gypsum board partitions.
22. Prime paint behind all wall coverings and wall panels as required for adhesion.
23. Prime & Paint 1<sup>st</sup> coat all finishes prior to fixed casework/equipment installation.
24. Provide final finish coats after installation of all fixed casework/equipment and flooring.
25. Paint all miscellaneous surfaces called for paint including, but not limited to, steel grating, behind mechanical grilles, on metal angle wall base, exposed misc metals, etc.

**SCOPE OF WORK**  
For  
**BID PACKAGE 10**

**FIRE PROTECTION**

All bids for the Fire Protection Bid Package 10 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

Specifications

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The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

**DIVISION 21 – FIRE SUPPRESSION**

21 05 00 .....	Basic Fire Suppression Requirements.....
21 05 03 .....	Through Penetration Firestopping.....
21 05 05.....	Fire Suppression Demolition for Remodeling.....
21 05 29 .....	Fire Suppression Supports and Anchors.....
21 05 53 .....	Fire Suppression Identification.....
21 13 00 .....	Fire Protection Systems.....

Allowances

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In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

\$7,500

Alternates

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Refer to the Bid Form and Specification 012300 for a listing of all project alternates. Alternates clearly related to this trade include:

**Alt. # A-5: Eliminate all scope of work shown at the  
first floor of the stairwells**

## Scope Items

1. Provide upright heads on existing sprinkler system upon completion of ceiling and ductwork removal. The existing sprinkler system shall remain fully operational during until the new sprinkler system has heads cut into new ceilings/grid and is fully operational.
2. Field Verify the available clearances for ductwork and piping before fabrication. Rises and drops may be necessary because of existing conditions.
3. Remove existing sprinkler piping and provide new as necessary to accommodate new ceiling elevations as shown.
4. Modify existing sprinkler piping and provide new as necessary to provide light hazard coverage as shown.
5. Modify existing sprinkler piping and provide new as necessary to provide ordinary group 1 coverage as shown.
6. All existing fire sprinkler heads shall be removed within the existing fire protection boundary shown – FPD2.21. All fire sprinkler piping shall be modified or removed as necessary to accommodate the new floor plan layout to meet NFPA13.
7. Furnish and install all fire protection sprinkler system work as indicated in the contract documents. All existing fire sprinkler piping shall be modified or removed as necessary to accommodate new floor plan layout to meet NFPA13.
8. Coordinate drain downs with Facilities. Drain system only to make switchovers and connections.
9. All cutting and patching is included as required. This includes concrete floors and exterior walls.
10. Firesafing of all penetrations in fire rated walls, floors and ceilings as required.
11. Acoustical penetration requirements in all acoustical walls as required.
4. Provide pipe sleeves through walls and include all caulking, fire sealants, insulation, etc. for water tight penetrations.
5. This contractor will be responsible to remove, restore, cut, patch, paint, etc. any ceiling/wall/flooring finishes and related work not shown on the architectural drawings as required to perform work.
6. Furnish and install all alarm bells, flow switches, tamper switches, gauges, valves, etc. for a complete system.
7. Provide Sprinkler Coverage in ALL spaces per NFPS 13.
8. All sprinkler heads are to be centered in the ceiling tiles.
9. Flushing, testing, and certification of the new fire protection systems is included.
10. Furnish all access panels for installation as required for installation by Drywall & Acoustical Ceiling contractor.
11. Draining, filling, venting and testing of the existing sprinkler systems as necessary to complete this work.
12. Furnish shop drawings, hydraulic calculations and product data and samples for approval as required
13. Verify existing available flow data with municipality and field conditions. Perform flow tests to determine actual water flow and pressures. Coordinate with authority having jurisdiction and notify PCC/Engineer at least 48-hours prior to test.
14. Submit plans and fees to local Fire Department.
15. Fire Protection Contractor shall provide additional sprinkler heads above and below mechanical/electrical ducts and equipment which exceed 48" in width in accordance with NFPA 13.
16. A sign shall be attached to all control, drain and inspectors test valves.
17. Auxiliary drains shall be provided at the low point of each trapped section of piping and identifying signs shall be attached thereto. These low point drains shall be piped to a mop basin. Coordinate with Owner. Provide concrete splash block at grade.
18. Install all drain valves in accessible areas.
19. All piping furnished and installed shall be installed in a rust-free condition.
20. Provide inspector's test connections as detailed.
21. All signage and identification markers are included.

22. Provide all sprinkler pipe enclosures.
23. Provide any required smooth bore corrosion-resistant outlets.
24. Coordinate location of core holes and openings through decks and structural members with structural engineer and architect.
25. All coring, sleeves, firesafing, caulking, etc. is included.
26. Contractor shall install all auxiliary supporting steel as required for the supporting of their piping, ductwork, conduit, tanks, equipment, etc.
27. Provide all hanger systems including roller systems as detailed in drawings.
28. Lintels required for supporting of piping, ductwork, conduit, etc. shall be installed by this contractor. If not on lintel schedule, this contractor shall furnish and install.
29. Coordinate location of piping with structure and MEP work. Also coordinate with architectural drawings and ceiling construction to provide adequate coverage of all areas of the building with appropriate head types.
30. Provide head guards as indicated.
31. Provide spare head cabinet with spare heads and head wrench.
32. Post hydraulic calculation data in a conspicuous place near the system risers.
33. Provide escutcheons on walls where piping is exposed.
34. Provide all head types, pendants and curtains as indicated.

## SCOPE OF WORK

For

### BID PACKAGE 11

# PLUMBING

All bids for the Plumbing Bid Package 11 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

#### **DIVISION 22 – PLUMBING**

22 05 00 .....	Basic Plumbing Requirements.....
22 05 03 .....	Through Penetration Firestopping .....
22 05 05.....	Plumbing Demolition Remodeling
22 05 29 .....	Plumbing Supports and Anchors .....
22 05 53.....	Plumbing Identification.....
22 07 19 .....	Plumbing Piping Insulation.....
22 10 00 .....	Plumbing Piping.....
22 10 30 .....	Plumbing Specialties.....
22 40 00 .....	Plumbing Fixtures .....

#### Alternates

Refer to the Bid Form and Specification 012300 for a listing of all project alternates.  
Alternates clearly related to this trade include:

N/A

#### Allowances

In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

\$7,500

#### **Scope of Work – Demolition**

1. Trace all existing sanitary, storm, DH&CW piping, systems, etc. & equipment located within construction area and mark them to be demoed or to remain. Marking methods to be confirmed with PCC Foreman & MCC to best identify systems that will need to remain in place and operational.
2. Provide detailed as-builts of existing systems to remain so that new MEPFP coordination can take into account.

3. Notify PCC, MCC & Engineers immediately if systems designated to be removed, will negatively affect/impact existing occupied areas/spaces.
4. Cut, cap and drain all piping as required to be demoed from the construction area in order to make room for new systems. Demo contractor will drop and remove all hangers and piping, once systems are marked ready for removal.
5. Cap existing piping as close to mains to eliminate dead legs.

#### **Scope Items**

1. Plumbing contractor will provide any disconnections needed related to the plumbing systems to allow for complete demolition. Include any temporary re-routing as necessary to maintain function of any downstream activities.
2. Cutting and capping piping in occupied areas shall be completed off hours or during non-occupied times if applicable, and as required to maintain project schedule. Remove and reinstall ceilings each day. Provide temporary protection while working in finished spaces.
3. Furnish and install all domestic water, sanitary waste, storm and vent piping as indicated.
4. Furnish and install all valves, solenoids, and specialty valves as indicated.
5. Provide air gap fittings as indicated.
6. Furnish and install all plumbing fixtures, lav guards, shrouds, and floor/site drains, hand sinks, floor sinks, janitorial sinks, cleanouts/covers, solids interceptors, miscellaneous equipment, etc. as required, scheduled and specified on Sheet P4.01.
7. Furnish and install all electric water coolers.
8. Furnish and install all trim for sinks as indicated.
9. Furnish and install lavatory mixing valves as noted/shown.
10. Sawcut and remove existing flooring on level 1 to allow tie into existing 6" sanitary sewers per P1.11
11. Testing of the new plumbing systems as required. Include verification that all plumbing fixtures affected by the plumbing work are in good working order.
12. Sterilization of plumbing systems and all means necessary to do so, including reporting, shall be included.
13. All new water supply piping shall be pressure tested in a method that does not include or involve the existing active galvanized piping to remain. Contractor shall test new piping system before connections are made to the existing system. Provide valves as required for testing.
14. Furnish and install all access panels as needed to perform your work, either as shown on the drawings or not shown but required.
15. All plumbing work indicated on the architectural plans is included.
16. Coordinate location of core holes and openings through decks and structural members / foundation walls with structural engineer and architect. Coring is included. Scanning concrete for rebar prior to coring is required.
17. Firesafing of all penetrations in fire rated walls, floors and ceilings is included.
18. Furnish and install identification markers as indicated. Markers or strips to be placed on all exposed, covered and uncovered pipes at 50-foot intervals, adjacent to all valves or branches, and at both sides of wall/floor penetrations. Arrows of same color as identification markers shall also be placed on pipes as point away from a marker indicating direction of flow.
19. Contractor is responsible for coordination of all inspections.
20. Provide properly sized air chambers or water hammer arrestors.
21. Install ball valves in each riser or branch takeoff from mains, risers and as indicated on drawings.
22. Provide insulation and vapor jackets on new piping.
23. Exact locations of drains and sinks shall be verified with the Manufactured Casework contractor prior to starting any work.
24. Furnish and install hangers and associated materials.

25. Contractor shall install all auxiliary supporting steel as required for the supporting of their piping, ductwork, conduit, tanks, equipment, etc.
26. Lintels required for supporting of piping, ductwork, conduit, etc. shall be installed by this contractor. If not on lintel schedule, this contractor shall furnish and install.
27. Provide all hanger systems including roller systems as detailed in drawings.
28. Provide dielectric unions at connections between copper and galvanized piping, if any.

## SCOPE OF WORK

For

### BID PACKAGE 12

# HVAC

All bids for the HVAC Bid Package 12 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

#### **DIVISION 23 – HEATING, VENTILATING, AND AIR CONDITIONING**

23 05 00	.....Basic HVAC Requirements.....
23 05 03	.....Through Penetration Firestopping .....
23 05 05	.....HVAC Demolition for Remodeling .....
23 05 29	.....HVAC Supports and Anchors .....
23 05 53	.....HVAC Identification.....
23 05 93	.....Testing, Adjusting and Balancing .....
23 07 13	.....Ductwork Insulation.....
23 07 16	.....HVAC Equipment Insulation .....
23 07 19	.....HVAC Piping Insulation.....
23 09 00	.....Controls.....
23 11 23	.....Natural Gas Piping .....
23 15 00	.....Sim Lab Equipment and Utility Piping .....
23 21 00	.....Hydronic Piping.....
23 31 00	.....Ductwork .....
23 33 00	.....Ductwork Accessories.....
23 34 23	.....Power Ventilators.....
23 36 00	.....Air Terminals Units.....
23 37 00	.....Air Inlets and Outlets.....
23 74 11	.....Packaged Rooftop Air Handling Units .....
23 81 21	.....Computer Room Air Conditioning Units .....
23 82 00	.....Terminal Heat Transfer Units.....

#### Alternates

Refer to the Bid Form and Specification 012300 for a listing of all project alternates.  
Alternates clearly related to this trade include:

#### Allowances

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In the base bid, include the allowance(s) below for additional unforeseen scope of work for each of the following base and alternate bids. Note that the cost of coordination, supervision, overhead, and profit for any such work shall be included in the bidder's cost, as it is not included in the below-listed allowance value. All allowance work will be completed only at the direction of PCC. All allowances not expended will be returned to the Owner 100%.

\$15,000.00

#### **General Scope Items**

2. HVAC Contractor will provide any disconnections needed related to the mechanical and control systems to allow for complete demolition by the Demolition contractor.
3. Provide for all fire safing associated with the HVAC / BAS Scope of Work.
4. Furnish and install sleeves for pipe penetrations in walls. Provide sleeves to Masonry contractor for their installation of sleeves in new masonry walls. Pack remaining void between pipe and sleeve with fiberglass batt, then seal with a silicone compound or other approved sealant. If wall is fire rated, fill void between pipe or insulation and sleeve with fire barrier caulk. Also, provide escutcheon plates on both sides of wall. See Pipe Sleeve details in drawings. If pipe is penetrating the floor pack void between pipe and sleeve with fire safe material and seal both ends with 3M barrier caulk.
5. Any coring required of walls/slabs if necessary will be responsibility of this contractor.
6. This contractor to include all packaged motor starters as required. Loose motor starters not shown on the electrical drawings but required will be included in your scope.
7. Include all rooftop pipe supports as detailed, including roof guard pad, mastic, etc.
8. Furnish and install all access panels as needed to perform your work and not shown and not shown on architectural drawings.
9. Include piping to floor drains of all mechanical equipment and duct stacks as indicated. Provide neutralization basins as indicated.
10. Provide all curbs and portals for your equipment and roof penetrations.
11. Provide and install valve handle extensions as necessary to allow for proper insulation thickness on piping.
12. Provide regulators as indicated.
13. Provide all flow meters as indicated.
14. Furnish and install identification markers as indicated. Markers or strips to be placed on all exposed, covered and uncovered pipes at 50-foot intervals, adjacent to all valves or branches, and at both sides of wall/floor penetrations. Arrows of same color as identification markers shall also be placed on pipes as point away from a marker indicating direction of flow.
15. Provide bird screens in exterior units as required.
16. Contractor shall install all auxiliary supporting steel as required for the supporting of their piping, ductwork, conduit, tanks, equipment, etc.
17. Furnish and install new pipe saddles and shields as indicated in drawings
18. Provide all HVAC Supports and Anchors as necessary to properly support all HVAC Equipment installed under this contract. Include modifications to structure for the installation of pipe hangers.
19. Provide HVAC Isolation as necessary for HVAC Equipment installed under this contract as shown/specified.
20. Provide HVAC Identification as shown/specified.

21. Provide Instrumentation as shown/specified.
22. Provide all curbs and portals for your equipment and roof penetrations
23. Provide temporary protection from water infiltration when creating penetrations or creating other openings in roof. Maintaining a water-tight opening is the responsibility of this contractor.
24. Provide temporary construction filters on equipment and return duct openings in order to protect RTU during construction. Provide 3 months of additional warranty associated with temporary use of mechanical system prior to occupancy. Include all necessary temporary provisions.
25. Coordinate location of core holes and openings through decks and structural members with structural engineer and architect. Coring/cutting of opening is included.
26. Provide TAB for Ventilation and Water Systems. Make necessary adjustments to systems as required to meet specified requirements. Notify Pepper Construction & HVAC contractor immediately of any issues in meeting design criteria.
27. Provide Pre-Tests on existing HVAC equipment that is to remain and be re-used as part of this project for to ensure equipment is in good working order, and to verify capacity/output.
28. Extend the existing FMCS for this project. All controllers and accessories shall interface with existing FMCS.
29. Provide Temperature Control System – Trane Tracer SC (TCS). All controllers and accessories shall interface with existing FMCS.
30. LCS system to communicate with the BAS via gateway. Communication points shall be readable/writeable at the operator workstation.
31. This contractor is responsible to furnish & install all raceway, conduit, wiring, devices, sensors for a complete stand alone system for controls.
32. Provide all actuators, control valves, airflow stations and devices/accessories to operate HVAC, Plumbing & Electrical Systems as shown/specified.
33. Provide control/operation of all HVAC, Plumbing & Electrical Equipment as shown/specified.
34. Mechanical Bidder will review electrical drawings relative to power to their equipment. Any power required above and beyond locations on identified on the electrical drawings are the responsibility of the mechanical bidder.
35. Provide training for TAB contractor and assistance as specified.
36. Provide 24 hours of training after completion of Controls to enable Owners Representative to perform Day to Day operations as outlined in 230900.
37. Provide Testing, Adjusting, and Balancing of Heating, Cooling, Run-Around Loop & Plumbing Systems as specified in section 230593.
38. Provide training for each applicable component/systems. Training must be completed by Project Substantial Completion

#### **Scope of Work – Demolition/Temporary Conditions**

1. Trace all existing ductwork, piping, control systems, equipment located within construction area and mark them to be demoed or to remain. Marking methods to be confirmed with PCC Foreman & MCC to best identify systems that will need to remain in place and operational.
2. Notify PCC, MCC & Engineers immediately if systems designated to be removed, will negatively affect/impact existing occupied areas/spaces.
3. Cut, cap and drain all ductwork, piping, controls, etc. as required to be demoed from the construction area in order to make room for new systems. Demo contractor will drop and remove all hangers, ductwork, equipment, piping, etc. once systems are marked ready for removal.
4. Cap existing piping as close to mains to eliminate dead legs.

5. Provide detailed as-builts of existing systems to remain so that new MEPFP coordination can take into account.
6. Fill ductwork with High Density Solid Foam insulation as required.
7. Remove and dispose of existing RTU's that are scheduled to be replaced.
8. Remove and dispose of all existing HVAC equipment as shown on MD2.31. Cap as noted/shown. For any fume hood exhaust extending through the roof, cut below the roof deck to allow for removal. All ductwork below the roof will be removed by the Demolition contract.
9. Drain down and relocate hot water return line as required to accommodate phasing plan. Store heating water in drums on site for re-use.
10. Provide means of exhausting negative air machines (provided by Pepper) from construction space to outside. Tie into existing exhaust/return air duct into units that will be replaced as part of this project.
11. Provide tempered air to construction space by using existing RTU's. Provide a stand alone state to control the unit. Provide temp filters, maintenance as required to maintain the units until the new units are installed. The goal is to maintain a minimum temp of 60 degrees – heating season, 80 degrees cooling season as to avoid excessive temperature swings throughout the building.

#### **Scope of Work – Ductwork/Equipment**

1. Provide all labor, equipment, handling as required to receive and install owner provided RTU's. Provide all hoisting, flaggers, spotters as necessary to remove the existing RTU's and install the new units.
2. Provide curb adapters for new RTU's to fit existing curbs.
3. Provide Power Ventilators F-EF-1 as shown/specified. Provide curbs& bases. Cut deck as required for penetrations.
4. Roof curbs to be sized for a minimum of 12" above the top surface of the roof membrane.
5. Provide all curbs and portals for your equipment and roof penetrations.
6. Cap existing risers as noted/shown
7. Furnish & Install all ductwork and insulation as specified/scheduled.
8. Connect new ductwork to existing risers service 1<sup>st</sup> floor.
9. Provide Terminal Air Box with Heating Coils and Controls as shown/specified.
10. Provide Fan Powered reheats boxes as shown/specified.
11. Provide Grilles, Registers & diffusers as shown/specified.
12. Provide fire/smoke dampers as shown/specified
13. Provide Duct accessories as shown/specified.
14. Provide duct silencers as shown/specified.
15. Provide destratification fans with controls as shown/specified
16. Provide leak testing of ductwork as specified.
17. Cover all ductwork ends during shipment, and at the end of each day.

#### **Scope of Work – HVAC Piping & Equipment**

1. Relocate 3" Hot Water Return riser during demolition process. Relocate to new wall layout. This line will need to be returned to service within an hour shut down as the heating hot water system needs to remain active to service other areas.
2. Provide Split System Air Conditioning Units CU-1, as shown/specified. Provide prefabricate roof curbs. Coordinate with roof installer and provide cant strips if required.
3. Provide Radiant Ceiling Panels as shown/specified. Coordinate with Reflected Ceiling Plan.
4. Provide all Hydronic Piping, Accessories, equipment as shown/specified.

5. Provide all valves, strainers vents, shut off valves, as shown/specified.
6. Install new valves off existing branch lines if existing branch lines are in good shape to receive new valves.
7. Provide Natural Gas Piping and associated regulators, valves as shown/specified. Connect new RTU's to existing gas piping at roof.
8. Provide Natural Gas piping for combustion equipment. Lab Gas Piping noted below.
9. Provide all curbs and portals for your equipment and roof penetrations.
10. Provide additional water treatment in order to refill system as necessary.
11. Provide Equipment & Piping Insulation as shown/specified.
12. Provide all curbs and portals for your equipment and roof penetrations.
13. Paint new gas piping to match existing where new piping ties into existing mains on roof.

**Scope of Work – Lab Piping**

1. Provide Vacuum, Valves and accessories per Mechanical Piping plans.
2. Provide Vacuum Pump VP-1 and all accessories as specified/shown
3. Provide Compressed Air Equipment, Piping, Valves and accessories per Mechanical Piping Plans.
4. Provide Air Compressor AC-1 and all accessories as specified/shown.
5. Provide Head Wall at Sim Labs as required for outlets/devices shown on MEP & Architectural Drawings.

## SCOPE OF WORK

For  
**BID PACKAGE 13**

# ELECTRICAL WORK

All bids for the Electrical Work Bid Package 13 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

### Specifications

The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

#### **DIVISION 26 – ELECTRICAL**

26 05 00	.....Basic electrical Requirements.....
26 05 03	.....Through Penetration Firestopping.....
26 05 05	.....Electrical Demolition for Remodeling.....
26 05 13	.....Wire and Cable.....
26 05 27	.....Supporting Devices.....
26 05 33	.....Conduit and Boxes.....
26 05 53	.....Electrical Identification.....
26 09 33	.....Lighting Control Systems.....
26 22 00	.....Dry Type Transformers.....
26 24 13	.....Switchboards.....
26 24 16	.....Panelboards.....
26 24 19	.....Motor Control.....
26 27 26	.....Wiring Devices.....
26 28 16	.....Disconnect Switches.....
26 28 21	.....Contactors.....
26 43 00	.....Surge Protection Devices.....
26 51 00	.....Lighting.....

#### **DIVISION 27 – COMMUNICATIONS**

27 01 10	.....Cutover and Training.....
27 05 00	.....Basic Communications Systems Requirements.....
27 05 03	.....Through Penetration Firestopping.....
27 05 05	.....Technology Demolition for Remodeling.....
27 05 26	.....Communications Bonding.....
27 05 28	.....Interior Communication Pathways.....
27 05 53	.....Identification and Administration.....
27 11 00	.....Communication Equipment Rooms.....
27 15 00	.....Horizontal Cabling Requirements.....
27 17 10	.....Testing.....
27 17 20	.....Support and Warranty.....
27 41 00	.....Professional Audio/Video System. – For Information – Installation part of Bid Package 16

#### **DIVISION 28 – ELECTRONIC SAFETY & SECURITY**

28 31 00	.....Fire Alarm and Detection Systems
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#### Alternates

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Refer to the Bid Form and Specification 012300 for a listing of all project alternates.

Alternates clearly related to this trade include:

**Alt. # A-5: Eliminate all scope of work  
shown at the first floor of the stairwells**

#### Allowances

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\$15,000.00

#### **General Scope Items**

1. Electrical contractor will provide any disconnections needed related to the electrical and low voltage systems to allow for complete demolition by the Demolition contractor. Demolition contractor shall have salvage rights to any wiring scheduled for demolition.
2. Prior to demolition of existing equipment, coordinate with the fire alarm, tele/data and A/V contractors to prepare for demolition of the building.
3. Provide hook up of pig tail for welder. Include removal upon completion.
4. Firesafing of all penetrations in fire rated walls, ceilings, and floors is included.
5. Provide for rough in and raceways associated with the AV Scope of Work.
6. Provide for rough in and raceways associated with the Low Voltage / Telecommunication Scope of Work.
7. Provide rough in and raceways associated with the Security System (access control & CCTV) Scope of Work.
8. Provide for all sleeves for Telecomm / AV / Security as indicated, as required.
9. Provide for all connections to MEP Equipment as indicated, as required.
10. Testing of new electrical systems as required.
11. Furnish all access panels for installation by others as required for electrical work.
12. Furnish, install, maintain and remove temporary power including multiple panel locations required so no extension cords exceed 50'. (200 amp - 120/240 volt)
13. Furnish, install, maintain and remove all temporary lighting to maintain the OSHA standard foot candles.
14. All temporary power and light wiring must be hard usage wire as identified in the N.E.C.
15. Include wiring of electric frames / strikes. Coordinate with Carpentry / General Trades and Aluminum & Glass contractors. Secure backbox such that all hold open devices can withstand a pulling force of 80 pounds.
16. Provide and coordinate raceways and requirements for all electrified door hardware and access control systems with Carpentry / General Trades and Aluminum & Glass contractors. Include all labeling and identification markers as indicated.
17. This contractor to include all conduit raceways with pull strings for all low voltage work as required.
18. Provide for all Electrical General Notes as indicated.
19. Electrical Contractor will coordinate final floor power locations with Owner / Furniture Vendor. Detail layout plan to be provided by others.
20. Contractor shall install all auxiliary supporting steel as required for the supporting of their conduit, equipment, etc.
21. Provide all hanger systems including roller systems as detailed in drawings.
22. Furnish and install all conduit, junction boxes, cover plates, receptacles, mud rings, etc. for complete installation.

23. Coordinate location of core holes and openings through decks and structural members with structural engineer and architect. Coring/cutting of openings is included. Locate reinforcement within slabs and decks prior to coring.
24. Provide new portals for your roof penetrations.
25. Provide commissioning of each applicable component/systems as specified.
26. Provide training for each applicable component/systems. Training must be completed by Project Substantial Completion.

#### **Scope of Work – Demolition/Temporary Conditions**

1. Trace all existing electrical & low voltage circuitry/systems & equipment located within construction area and mark them to be demoed or to remain. Marking methods to be confirmed with PCC Foreman & MCC to best identify systems that will need to remain in place and operational.
2. Notify PCC, MCC & Engineers immediately if systems designated to be removed, will negatively affect/impact existing occupied areas/spaces.
3. Cut, disconnect, pull back cable as required to allow for removal by others from the construction area in order to make room for new systems. Disconnect wire and conduit at equipment/panels/MDP, etc. to remain to allow for removal of branch circuitry as shown to be removed. All electrical components to be demoed by others shall be deemed "disconnected" safe. Demo contractor will drop and remove all hangers, piping, equipment, etc. once systems are marked ready for removal.
4. Electrical Contractor to carefully disconnect and remove devices, back boxes, equipment, panels, etc within walls that are to remain. Walls to be patched by General Trades Contractor.
5. Provide detailed as-builts of existing systems to remain so that new MEPFP coordination can take into account.

#### **Scope of Work - Power/Distribution**

1. Maintain existing power/feeders to RTU's to allow for use up until RTU scheduled replacement. Remove existing feeders & panels prior to RTU removal.
2. Provide new 1600AMP Fuses in existing Switchboard MDP-A. Coordination installation off hours or during school closure.
3. Provide Switchboard SB-HVA and associated concrete equipment pad as shown/specified.
4. Provide Panel EMH1 & associated feeders as shown/specified. Tie into existing 100A/3P breaker in Panel DP-EMIT.
5. Provide Distribution Panelboards DP-#, HA-#, RP-#, LA-#, EM-# as shown/specified.
6. Refeed FPB to be relocated by HVAC contractor. Reuse existing circuit. Modify feeder as required.
7. Provide Lighting and appliance branch circuit panel boards – Panel Name: LP-#. Furnish Spare Fuses as required.
8. Re-connect existing branch circuits to new panels as specified/shown.
9. Use existing circuitry for re-use for Power & Lighting were specified/shown. Extend conduit/feeders as required.
10. Remove and Relocate 1 ¼" Conduit and associated wiring per note 1/ED1.22. Coordinate re location with new wall framing.
11. Provide Dry Type Transformers TR-15 & TR-150 and concrete pads as specified/shown.
12. Provide grounding of transformers as specified/shown.
13. Provide Disconnects, Starters & Switches as specified/shown.
14. Provide Lighting Contactors LC-# as shown/specified.
15. Provide Grounding System as shown/specified.
16. Provide raceway, branch circuiting and floor boxes and or devices as shown/specified. Coordinate rough in locations with Architectural Drawings. Coordinate ceiling receptacle locations for projectors with A/V contractor & Architect.

17. Coordinate installation of floor boxes and associated below slab raceway installation with College schedule for affected areas as to not disturb occupants. Work to be completed off hours or during non-occupied times if applicable, and as required to maintain project schedule. Remove and reinstall ceilings each day. Provide temporary protection while working in finished spaces.
18. Provide power Towers and under carpet power track and accessories as specified/shown.
19. Fish existing walls as required to install new raceway/back boxes. No cutting will be provided by other trades to allow for installation of Electrical Components.
20. Provide duplex receptacle in weatherproof enclosure mounted to RTU's as shown.
21. Provide raceway, branch circuiting and Electrical Connections for equipment hook up as shown.
22. Provide raceway, branch circuiting and devices for Clock System
23. Provide 110V hook up/circuit for the following systems, if not shown on drawings: Fire Alarm Panels & BAS Panels.
24. Provide 110V hook up for Telecommunication equipment/racks as shown.
25. Provide Telecommunications bonding per Technology drawings.
26. This contractor is responsible for final connection to all Equipment called out on Mechanical, Plumbing, Equipment, Telecom and Fire Protection drawings.

### **Scope of Work - Lighting**

1. Furnish and install new lighting fixtures and exit signs as required in project documents.
2. Provide switching and sensors as shown/noted.
3. Provide raceway, wire, fittings, back boxes as required for a complete installation.
4. Mount exposed conduit for light fixtures at building A Collaborative Classroom ceiling per note 12/A2.52
5. Remove and reinstall light fixtures in Art Gallery A212X to allow for new ceiling installation.
6. Provide branch circuiting and feeders as specified/shown
7. Connect to existing circuits and lighting controls as shown/noted.
8. Rework existing circuiting to allow for separate switching scheme. Match and extend existing circuit as required.
9. Feed all normal lighting and corridor lighting to panels HA22 & HA21 as shown, unless noted otherwise – A Building.
10. Unless noted otherwise, all exit signs, night lights and switched emergency lighting within this area shall be circuited to existing panel G/XX (277V) – A Building. Route conduit and wiring to existing Panel G/XX. Connect to existing spare circuit breaker.
11. Provide for all lighting control systems and switching as indicated, as required. Provide contactor/relays compatible for tie into BAS System. HVAC Contractor will connect to Relay. Coordinate Relay requirements with HVAC contractor.
12. Coordinate installation of decorative fixtures with Architectural Plans.
13. Provide Attic Stock for Lenses as specified
14. Provide Attic Stock of Ballasts and LED Drivers as specified
15. Support Light Fixtures with a minimum of 2 hangers independent of ceiling grid. Light Fixtures must be supported from existing structural framing and not gypsum roof deck. Refer to existing structural drawings for reference.
16. Support Decorative Pendant Lights in accordance with manufacturers installation instructions, or as outlined in Spec Section 265100. Whichever support system is more stringent.
17. Remove plastic, align luminaires and clean lenses at completion of work.

### **Scope of Work - Fire Alarm**

1. Existing Fire Alarm Control Panel is located in Police Department – Notifier NFS2-3030. Connect to existing head end equipment. Update system as required for new devices/hardware as shown.

2. Remove & Reinstall ceiling tile to install homerun from new Science Center to Police Department. Core/Seal existing walls/soffits as required. Replace any damaged finishes that this trade may cause due to installation. This work to be completed during summer break 2019. Coordinate routing with new fiber run as shown on T0.01. Homerun is to be installed in conduit through existing buildings.
3. Provide heat detectors to maintain coverage throughout construction area upon completion of ceiling demo. Coordinate installation of wiring and devices with other trades. Remove heat detectors and associated cabling upon activation of new devices.
4. This contractor shall ensure that all fire alarm cabling serving existing spaces running through the construction area is maintained at all times. At no point shall any existing fire alarm cabling be taken off line for more than (1) 8 hour shift to perform any new work.
5. Remove and reinstall devices in Art Gallery A212X to allow for new ceiling installation.
6. Provide complete Fire Alarm System as specified/shown. Fire Alarm system shall meet all applicable codes and manufacturers recommendations.
7. Provide permit drawings to Village of Crystal Lake Fire Department and associated permit fee's.
8. Provide notification appliance extender panels as specified/shown or as required.
9. Provide dedicated number of notification appliance circuits as specified/shown or as required.
10. Provide Plenum Wiring above accessible ceilings in new building.
11. This contractor shall coordinate all wire sizes, types and requirements with Fire Alarm Vendor prior to bid.
12. Provide All necessary relays as required.
13. Provide back boxes and conduit stubs/raceways as specified/shown.
14. Provide 120V power connection to any equipment required by FA System not shown on Electrical drawings, from nearest available circuit. Coordinate availability with MCC Facilities.
15. Provide connections to HVAC Equipment as shown/specified.
16. Provide provisions for Door Hold Release tied to FA System.
17. Provide pre-testing and testing as specified/required. Coordinate Final testing with AHJ.
18. Provide training on system upon completion

### **Scope of Work - Low Voltage Raceway**

1. Provide for rough in and raceways associated with the AV Scope of Work.
2. Provide for rough in and raceways associated with the Paging Scope of Work.
3. Provide for rough in, raceways, ladders, sleeves, etc. associated with the Low Voltage / Telecommunication Scope of Work.
4. Provide for rough in and raceways associated with Variable Speed Controllers as shown.
5. Provide rough in and raceways associated with the Security System (access control & CCTV) Scope of Work.
6. Provide conduit stubs and back boxes at all door locations for future rough in as shown – Refer to T5.01 for rough in locations/requirements.
7. Coordinate raceway sizes and locations with Telecom drawings as well as Architectural drawings.

### **Scope of Work – Communication Wiring/Equipment**

1. Demolition of all Voice Data devices, equipment and wiring shall be completed by this contractor.
2. Provide all work as noted by T.C. Matrix of Responsibility as shown on T1.00.
3. Existing MDF room located in Building A.
4. Existing A Building IDF Closet will be relocated as part of this project. Maintain existing IDF Equipment/wiring in place until new IDF Equipment is installed. This will require phasing and careful coordination. Existing A building device wiring will need to be removed and replaced with new cable from new IDF Equipment. This will need to be carefully coordinated to limit down time. Work to be completed off hours or during non-use times if applicable, and as required to maintain project schedule. Remove and reinstall ceilings each day. Provide temporary protection while working in finished spaces. Note 3/TD1.11 and 1/T1.11.
5. Remove & Reinstall ceiling tile to install new 12 Strand Multimode Fiber Optic Cable homerun and 50-pair copper from new IDF room to existing MDF room. Core/Seal existing walls/soffits as required. Replace any damaged finishes that this trade may cause due to installation. This work to be completed during the MCC Summer Break of 2019. See sheet T0.01 for routing.

6. Provide new cable to existing device as noted/shown in existing Level 1 – per T1.11. Remove existing faceplates and provide new faceplates/jacks as required. Refer to scope item 4 noted above for coordination.
7. Provide Equipment Rack SC-ER-1 (2) Each for IT/Comm Room.
8. Provide Fiber Distribution Cabinet SC-FDC-1 installed in SC-ER-1.
9. Provide Wire Management, Modular Patch Panels & Patch Cords as shown/specified.
10. Provide Ladder Rack & Sleeves/Risers for IT/Comm Room
11. Provide Telecommunications Bonding System – SC-GND-1 with all conductors, jumpers bus, etc. as called shown/specified.
12. Provide Cable Tray – SC-LR-1 as in lengths and routings as shown.
13. Provide Cable Tray – SC-CT-1 in lengths and routings as shown.
14. Provide Cat 6 Plenum cabling, Devices, Faceplates, Jacks and Terminations (C# - WAP, C#- Information Outlets & W - Wall Phones) as shown. Provide Plenum wiring. Coordinate Faceplate outlet with schedules per T5.00
15. Terminate category cabling to existing patch panels within existing IT Room E107 – Building E for all V/D wiring.
16. Provide SC-VPP-1 110 Type 100 Pair Mounting Blocks Cat 6 Standard Density Punch Down Kit
17. Provide testing of cabling in accordance with spec section 271710.
18. Provide labeling and identification as specified.

## **SCOPE OF WORK**

For

### **BID PACKAGE 14**

# **AUDIOVISUAL & SECURITY SYSTEMS**

All bids for the Audiovisual & Security Systems Bid Package 14 must be inclusive of, but not necessarily limited to, all requirements outlined in the Universal Scope of Work as well as the trade specific requirements outlined below:

#### Specifications

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The following listed Specification Sections as well as any other related Documents or Specification Sections are included:

#### **DIVISION 27 – COMMUNICATIONS**

27 05 53 .....Identification and Administration  
27 13 00 .....Backbone Cabling Requirements  
27 15 00 .....Horizontal Cabling Requirements  
27 17 10 .....Testing.  
27 17 20 .....Support and Warranty  
27 41 00 .....Professional Audio/Visual System  
27 51 13 .....Paging Systems

#### **DIVISION 28 – ELECTRONIC SAFETY AND SECURITY**

28 05 00 .....Basic Safety and Security Systems  
28 05 03 .....Through Penetration Firestopping  
28 13 00 .....Electronic Access Control  
28 23 00 .....Video Surveillance – Spec Section Replaced – Addendum #1

#### Alternates

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Refer to the Bid Form and Specification 012300 for a listing of all project alternates.  
Alternates clearly related to this trade include:

## **Audio Visual - Scope Items**

1. Demolition of all existing A/V devices and wiring as shown on Technology devices shall be included in this scope of work.
2. Integrator/Dealer: The Contractor must be a factory-authorized and certified integrator/dealer specializing in the selected manufacturers products.
3. The contractor shall have a Certified Technology Specialist with a specialized Installation endorsement (CTS-1) on staff and supervising the project.
4. Control System Dealer – The media control system shall be provided, terminated, installed and programmed by a factory authorized and certified dealer in good standing with the manufacturer.
5. Control System Programmer – The media system shall be programmed by a factory trained and certified programmer.
6. Audio System Programmer: All digital sound processing equipment used on the project shall be set up, programmed and calibrated by a factor-trained and certified technician.
7. Video System Programmer: All video sound processing equipment used on the project shall be set up, programmed and calibrated by a factor-trained and certified technician.
8. Provide for complete AV systems as indicated for each room type/location, as shown/noted. Include all components, racks, devices, as indicated plans and connectivity diagrams.
9. Provide all amplifiers, controllers, digital signal processors, etc, as required to fully support each AV System as indicated, as required.
10. Provide AV Monitors & Mounts in hallways.
11. Provide projectors, projector screens and associated mounts as indicated, as required.
12. Provide AV Cabinets as indicated, as required.
13. Provide wall mount and desk mount touch panels as indicated, as required.
14. Provide desktop and ceiling mount microphones and antenna's as indicated, as required.
15. Provide all equipment designated with AV Prefix identified on Sheet T7.01
16. Provide for all AV schedules as indicated, as required.
17. Provide for all AV cabling as indicated, as required. Include cabling/hook up for Owner Furnished Equipment.
18. Provide for coordination and installation of Owner Furnished Equipment. Contractor will properly log and document equipment received directly from Owner.
19. Provide for all amps, speakers and speaker cabling as indicated, as required.
20. Provide for installation of equipment furnished under this contract.
21. Provide for all supplemental support for equipment furnished under this contract.
22. Provide testing and calibration of all components.
23. Program and Configure all mixers, switches and touch Panels.
24. Provide for all submittal requirements as indicated, as required.
25. Provide for coordination with EC relative to rough in requirements.
26. Provide for all closeout requirements as indicated, as required.
27. Provide for all training as indicated, as required.
28. Provide onsite inspections (2) minor and (2) major during the 1 year warranty period.
29. Furnish Extra Materials per Section 274100 1.6.
30. Provide annual cost for extended service and maintenance warranty after the first year.

## **Access Control – Scope Items**

1. Provide turnkey LAN capable access control system – Basis of Design S2 Extreme/Enterprise including Server and UPS. Provide contractor furnished server, equipment and software as specified in 281300. Owner will provide PC to house Access Control Software.

2. Locate new controller/head end equipment and power supply in IT/COMM Room A223A .
3. Provide Server for Access Control System as specified.
4. Provide licensing required for system operation in bid plus 10% growth. In addition, provide licensing and configuration of system/operation software for (1) work stations.
5. Provide Graphical User Interface system.
6. Provide wiring, devices, and equipment for controlled security doors as shown included, but not limited to card reader, request to exit motion detectors, request to exit button, door position switches. Include wiring and hook up/control of electronic hardware & automatic door hardware (Hardware furnished and installed by others).
7. Provide programming of Access control system as specified.
8. Credentials Provided by Owner.
9. Provide Annual service contract with maintenance of equipment on 6<sup>th</sup> month and 12<sup>th</sup> month of the agreement.
10. Provide a comprehensive, site specific customer planning guide for the system. Include labor for all planning and programming to implement the Owners operational preferences for each device and software.
11. Attend coordination meetings to review all door hardware requirements.
12. Provide Training as outlined in spec section 281300.

### **Video Surveillance – Scope Items**

1. Extension of existing NUOO IP Based System
2. The VMS Contractor shall provide a turnkey solution that includes furnishing, installation, and configuration of a separate IP network, complete with all required network electronics, switches, and other hardware.
3. Provide NVMS video management system capable of supporting camera from a minimum of three readily available camera manufacturers.
4. Licensing – Provide system with software capacity to accommodate a minimum quantity of 20 cameras. Licensing shall only be included for the quantity of camera's shown on the camera schedule. If the manufacturer requires the purchase of a block of licenses, instead of selling a single license, this contractor shall include the appropriate block of licenses that accommodates all device quantities described by the project drawings, plus 10 additional devices for future growth.
5. Provide Workstation Client Software Licensing as specified.
6. Provide software, storage, cameras, hardware, servers, and miscellaneous hardware as specified. PC workstation shall be provided by the Owner.
7. Expansion – Up to 256 Cameras
8. Remove and reinstall existing cameras in corridors outside of construction barricade to maintain coverage until new ceilings/cameras are installed.
9. Provide IP Cameras Cam -1 & Cam-2 with recessed ceiling mounts/brackets as shown/specified.
10. Remove and relocate existing camera's as required
11. Locate controller/head equipment in IT/COMM room.
12. Provide cost for annual service agreement
13. Provide a comprehensive, site specific customer planning guide for the system. Include labor for all planning and programming to implement the Owners operational preferences for each device and software.
14. Contractor shall provide an authorized manufacturer representative to commission the system and ensure the facility wide standards and project setup procedure are adhered to.
15. Provide Training as outlined in spec section 282300

### **Paging Systems – Scope Items**

1. Provide Facility Paging Speaker ceiling mount loudspeakers and all associated wiring back to existing amplifier in MDF rooms as shown/specified. Provide plenum wiring.
2. Provide all system programming, startup, balancing, tuning and adjustments.
3. Provide on site training as specified.



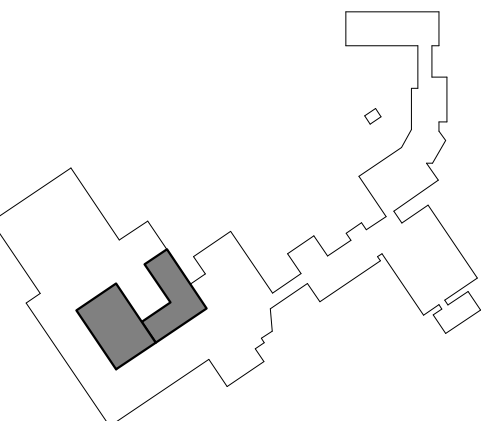
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# MCHENRY COUNTY COLLEGE BUILDING A&E RENOVATIONS

8900 US Hwy 14  
Crystal Lake, IL 60012  
DKA PROJECT NO: 17002217.00

KEY PLAN:



SHEET STATUS: 10/02/2018  
BP2 - ISSUED FOR BID

NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	10/15/2018

SHEET TITLE:  
LEVEL 1 - ELECTRICAL -  
PARTIAL CAMPUS PLAN

SHEET NUMBER:

E1.10

10/13/2018 6:01:33 PM



**LEVEL 1 - ELECTRICAL - PARTIAL CAMPUS PLAN**  
1/16" = 1'-0"

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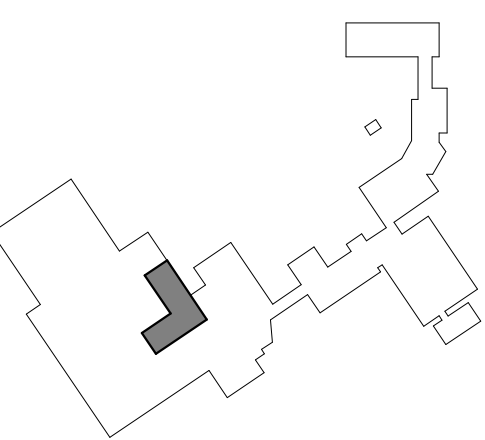


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DKA PROJECT NO: 17002217.00

KEY PLAN:



SHEET STATUS: 10/02/2018  
**BP2 - ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	10/15/2018

SHEET TITLE:  
**LEVEL 2 - LIGHTING -  
BUILDING A - AREA A**

SHEET NUMBER:

**E1.21**

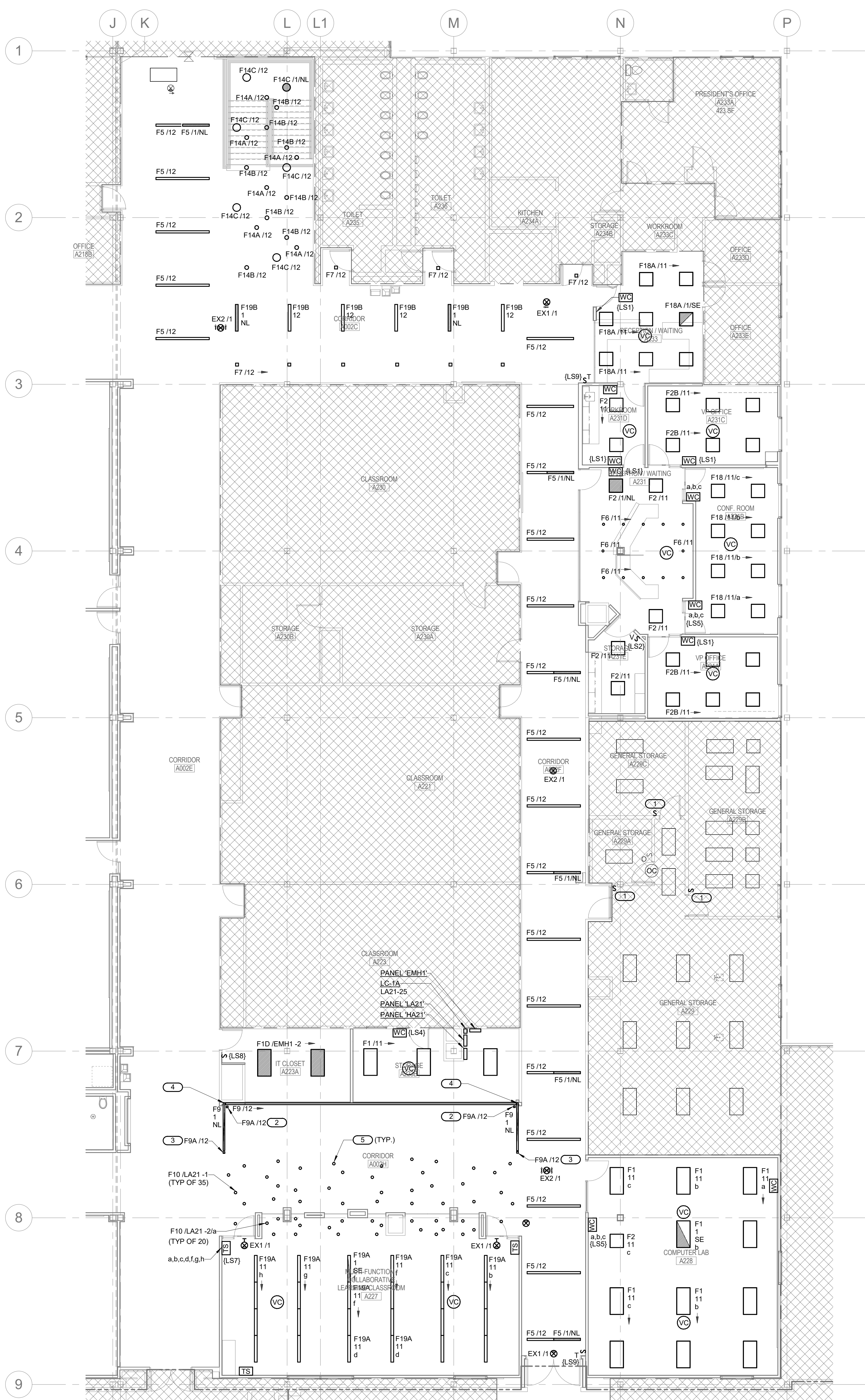
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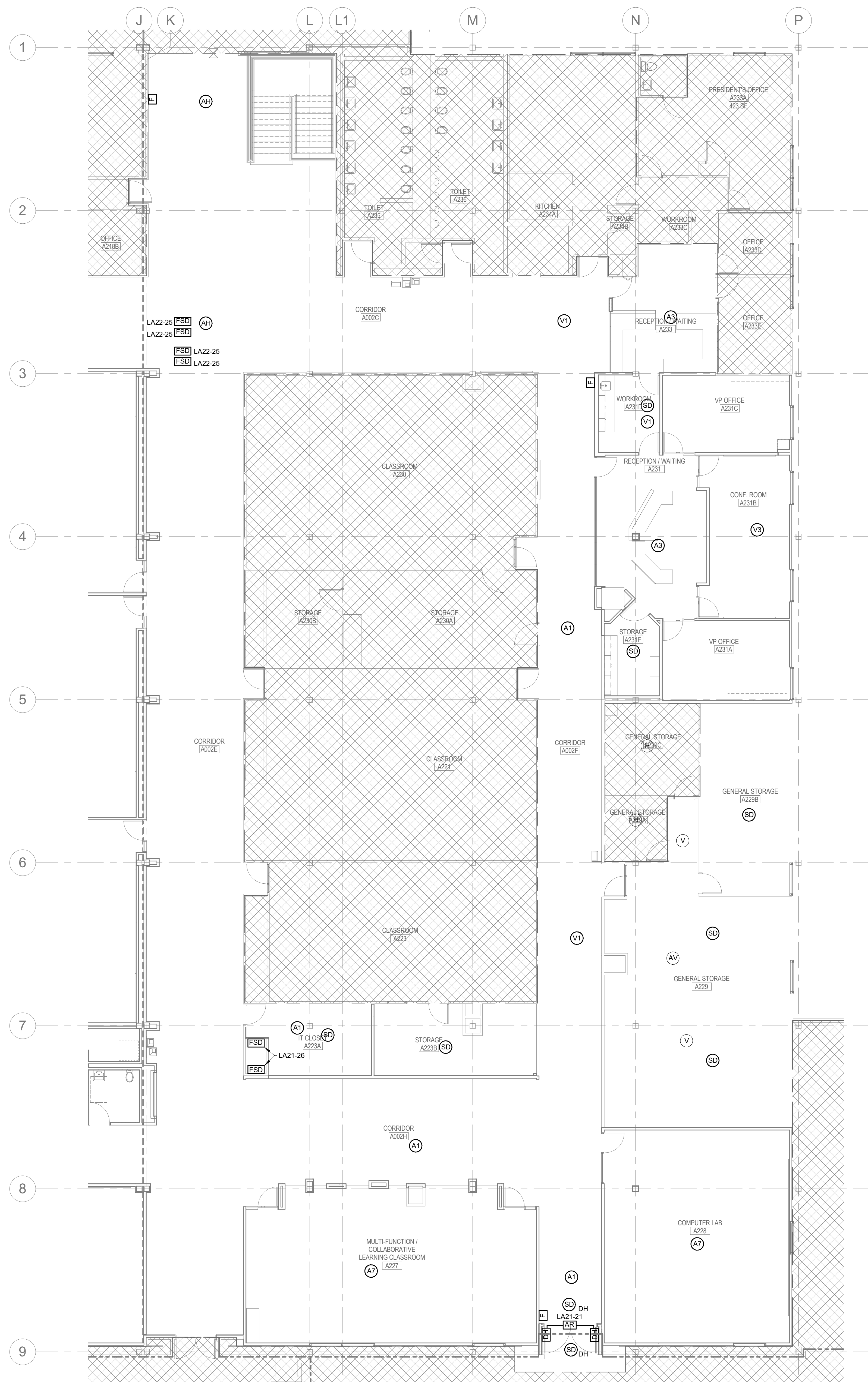
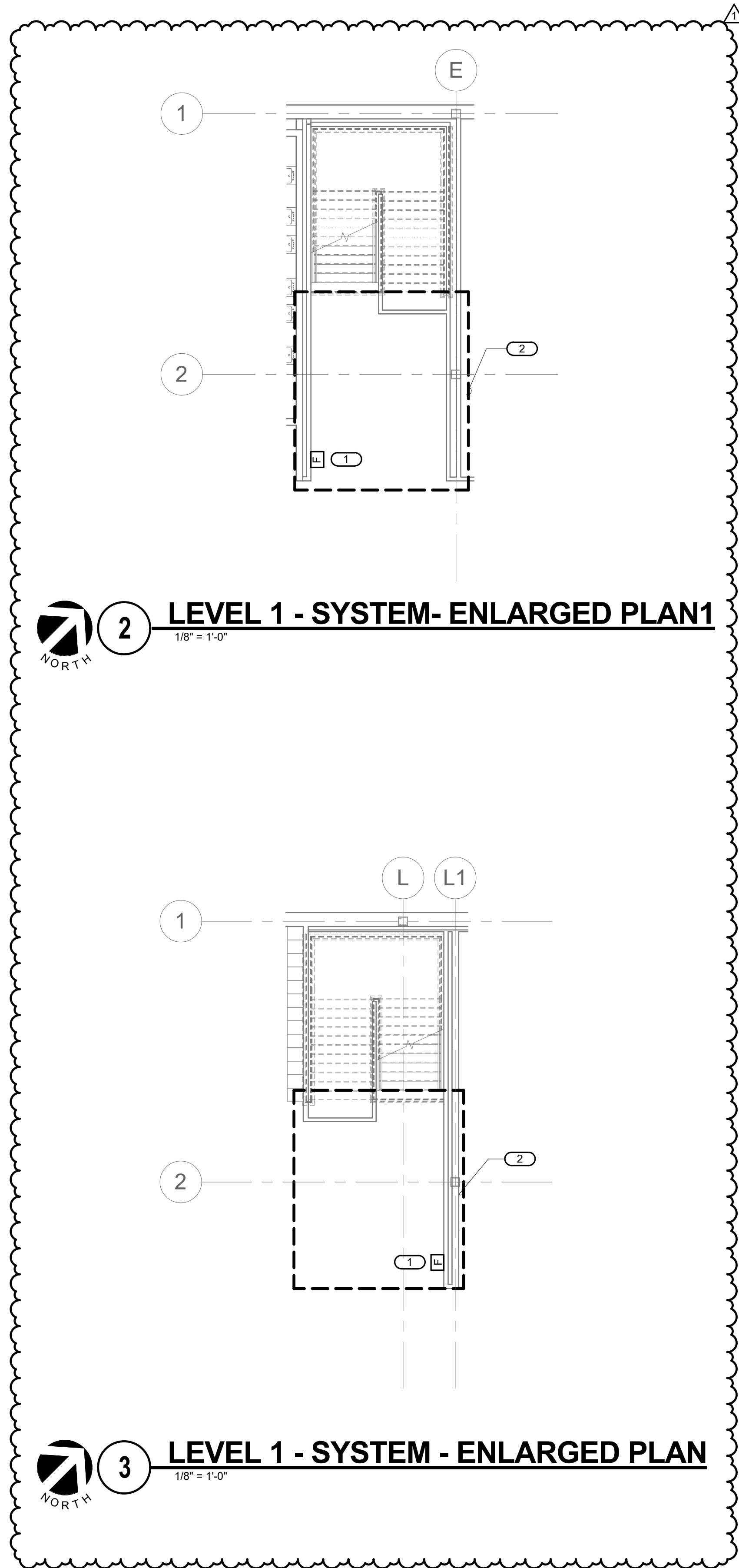
- GENERAL SHEET NOTES:**
- COORDINATE EXACT LOCATION OF WALL AND CEILING MOUNTED DEVICES WITH ARCHITECTURAL DRAWINGS.
  - REFER TO SHEET E1.00 FOR ELECTRICAL GENERAL NOTES, ELECTRICAL INSTALLATION NOTES, ELECTRICAL SYMBOL LIST, AND OTHER MISCELLANEOUS ELECTRICAL INFORMATION.
  - REFER TO E8.00 FOR THE LUMINAIRE SCHEDULE AND LIGHTING SEQUENCE OF OPERATION.
  - REFER TO SHEET E8.01 FOR PANEL SCHEDULES.
  - REFER TO ARCHITECTURAL DRAWINGS FOR LUMINAIRE MOUNTING HEIGHT.

- KEYNOTES: (#)**
- PROVIDE NEW SWITCH. REVISE CIRCUITING AS REQUIRED FOR NEW SWITCHING.
  - MOUNT VERTICAL ON WALL. EXTEND LIGHT FIXTURE FROM UP SOFFIT FACE TO CEILING ABOVE. PROVIDE CORNER PATTERN AS REQUIRED. REFER TO ARCHITECTURAL ELEVATIONS AND RCP FOR ADDITIONAL INFORMATION.
  - MOUNT VERTICAL ON SOFFIT FACE. EXTEND LIGHT FIXTURE FROM UP SOFFIT FACE TO CEILING ABOVE. PROVIDE CUSTOM CORNER PATTERN. REFER TO ARCHITECTURAL ELEVATIONS AND RCP FOR ADDITIONAL INFORMATION.
  - THE CEILING CORNER SHALL BE INSTALLED AS ONE CONTINUOUS PIECE. CORNER ANGLE SHALL BE CUSTOM ANGLE. REFER TO ARCHITECTURAL ELEVATIONS AND RCP FOR ADDITIONAL INFORMATION.
  - LIGHTING FIXTURE TYPE F10 AND CONDUIT SYSTEM ARE PART OF THE ARCHITECTURAL CEILING DETAIL. REFER TO RCP FOR EXACT EXPOSED CONDUIT ROUTING. JUNCTION BOXES SHALL HAVE NO HOLES. CONDUIT SHALL BE 3/4" EMT AND CONDUIT SUPPORTS SHALL BE INSTALLED PER RCP. EC SHALL PROVIDE LIGHTING FIXTURE AND CONDUIT MOCK-UP. COORDINATE MOCK-UP AND INSTALLATION WITH ARCHITECT.
  - INSTALL NEW LIGHTS AS SHOWN. CONNECT NEW LIGHTS TO EXISTING NORMAL 277V CORRIDOR LIGHTING CIRCUIT. MATCH EXISTING CONDUIT AND WIRE SIZE. USE MINIMUM 2#12 & 1#12 GND IN 3/4" C.
  - INSTALL NEW LIGHTS AS SHOWN. CONNECT NEW LIGHTS TO EXISTING EMERGENCY 277V LIGHTING CIRCUIT. MATCH EXISTING CONDUIT AND WIRE SIZE. USE MINIMUM 2#12 & 1#12 GND IN 3/4" C.
  - BASE BID. AS SHOWN. ALTERNATE BID #5: NO WORK.

- BRANCH CIRCUIT NOTES:**
- UNLESS NOTED OTHERWISE, ALL NORMAL LIGHTING WITHIN THIS AREA SHALL BE CIRCUITED TO PANEL 'HA21'.
  - UNLESS NOTED OTHERWISE, ALL EXIT SIGNS, NIGHT LIGHTS AND SWITCHED EMERGENCY LIGHTING WITHIN THIS AREA SHALL BE CIRCUITED TO EXISTING PANEL 'GXX' (277V) ROUTE CONDUIT AND WIRING (2#10 & 1#10 GND IN 3/4" C.) TO EXISTING PANEL 'GXX'. CONNECT TO EXISTING SPARE 20A/1P, 277V CIRCUIT BREAKER. CIRCUIT NUMBER ARE SHOWN FOR IDENTIFICATION PURPOSE ONLY. E.C. TO FIELD VERIFY EXACT EXISTING CIRCUIT NUMBER ON SITE. REFER TO SHEET E2.11 FOR EXISTING PANEL 'GXX' LOCATION.

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- GENERAL SHEET NOTES:**
1. COORDINATE EXACT LOCATION OF WALL AND CEILING MOUNTED DEVICES WITH ARCHITECTURAL DRAWINGS.
  2. REFER TO SHEET E1.00 FOR ELECTRICAL GENERAL NOTES, ELECTRICAL INSTALLATION NOTES, ELECTRICAL SYMBOL LIST, AND OTHER MISCELLANEOUS ELECTRICAL INFORMATION.
  3. REFER TO E7.03 FOR FIRE ALARM MATRIX, FIRE ALARM RISER DIAGRAM AND FIRE SMOKE DAMPER ASSEMBLY DETAIL.
  4. REFER TO SHEET E1.10 FOR EXISTING FIRE ALARM CONTROL PANEL LOCATION.

- KEYNOTES: C #**
1. RELOCATED FIRE ALARM MANUAL PULL STATION, MATCH AND EXTEND EXISTING CONDUIT AND WIRING AS REQUIRED. FLUSH MOUNT DEVICE. CHANNEL WALL AS REQUIRED FOR BACKBOX AND CONDUIT INSTALLATION. PATCH AND REPAIR TO MATCH EXISTING CONDITIONS.
  2. BASE BID: AS SHOWN. ALTERNATE BID #5: NO WORK.

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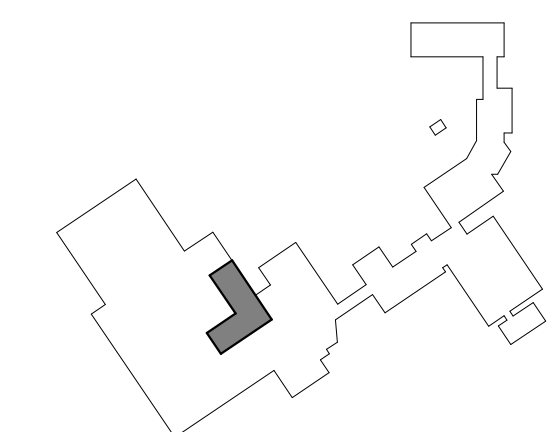


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**BUILDING A&E RENOVATIONS**  
8900 US Hwy 14  
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DKA PROJECT NO: 17002217.00

KEY PLAN:



SHEET STATUS: 10/02/2018  
**BP2 - ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	10/15/2018

SHEET TITLE:  
**LEVEL 2 - SYSTEMS - BUILDING A - AREA A**

SHEET NUMBER:

**E3.21**

10/15/2018 6:34:59 PM



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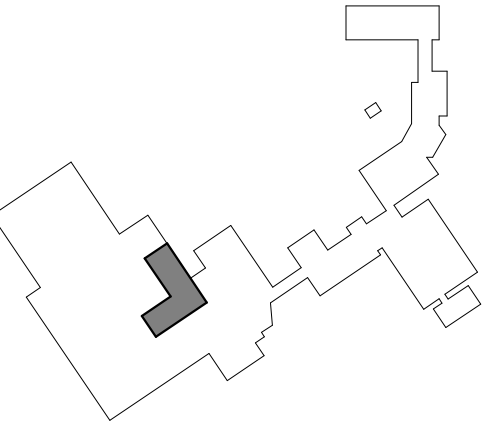
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- GENERAL SHEET NOTES:**
1. REFER TO SHEET E1.00 FOR ELECTRICAL GENERAL NOTES, ELECTRICAL INSTALLATION NOTES, ELECTRICAL SYMBOL LIST, ELECTRICAL DEMOLITION LIST, AND OTHER MISCELLANEOUS ELECTRICAL INFORMATION.
  2. REFER TO SPECIFICATION SECTION 26 05 05 FOR DEMOLITION REQUIREMENTS.
  3. WHERE DEVICES ARE SCHEDULED TO BE REMOVED ON EXISTING WALLS, REMOVE ANY ASSOCIATED SURFACE BOXES AND CONDUIT. RECESSED BOXES SHALL REMAIN. PROVIDE BLANK COVER PLATE FOR ANY EXISTING RECESSED BOXES.
  4. REMOVE EXISTING RECEPTACLE, LIGHTING AND EQUIPMENT CIRCUITS WITHIN THE LIMITS OF DEMOLITION TO LAST ACTIVE DEVICE OR SOURCE PANEL.
  5. REFER TO SHEET E7.01 FOR ONE LINE DIAGRAM DEMOLITION.

- KEYNOTES:**
1. SELECTED BRANCH CIRCUITS TO REMAIN. REFER TO ONE LINE DIAGRAMS AND NEW PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
  2. FPB TO BE RELOCATED. DISCONNECT POWER FEED. EXISTING CIRCUIT TO REMAIN FOR RE-USE. REFER TO SHEET E2.11 FOR NEW LOCATION. COORDINATE WORK AND LOCATION WITH M.C.
  3. BASE BID: AS SHOWN  
ALTERNATE BID # 5: NO WORK.
  4. EXISTING LIGHT FIXTURES TO BE REMOVED. CIRCUIT TO REMAIN FOR RE-USE.
  5. REMOVE AND RELOCATE EXISTING FIRE ALARM PULL STATION.

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KEY PLAN:



SHEET STATUS: 10/02/2018  
**BP2 - ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	10/15/2018

SHEET TITLE:  
**LEVEL 2 - ELECTRICAL  
DEMOLITION - BUILDING A -  
AREA A**

SHEET NUMBER:

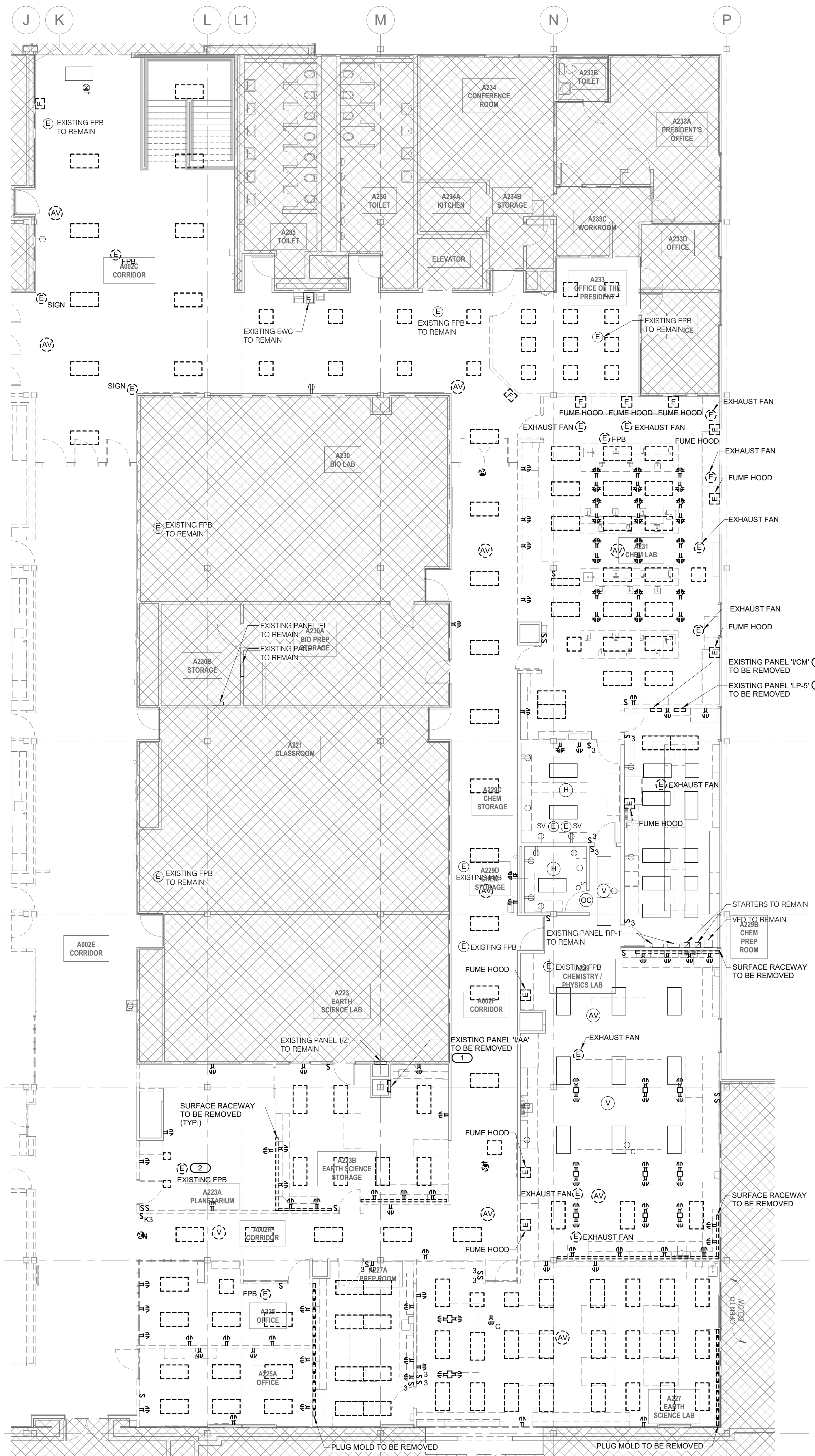
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REFERENCE SCALE IN INCHES  
1" = 1'-0"



**LEVEL 2 - ELECTRICAL - DEMOLITION - BUILDING A - AREA A**

1/8" = 1'-0"

**LEVEL 1 - ELECTRICAL - DEMOLITION  
- ENLARGED PLAN**

1/8" = 1'-0"

**LEVEL 1 - ELECTRICAL - DEMOLITION  
- ENLARGED PLAN**

1/8" = 1'-0"



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- GENERAL SHEET NOTES:**
- COORDINATE EXACT LOCATION OF WALL AND CEILING MOUNTED DEVICES WITH ARCHITECTURAL DRAWINGS
  - PROVIDE NEW SPRINKLER HEADS WITHIN BOUNDARY TO ACCOMMODATE NEW ROOM LAYOUTS. ALL SPRINKLER HEADS WITHIN BOUNDARY SHOWN SHALL BE NEW.
  - SPRINKLER PIPING SHALL BE REUSED. PROVIDED PIPE SIZE CONFORMS TO NFPA REQUIREMENTS. MODIFY PIPING AS REQUIRED TO SERVE NEW SPRINKLER HEADS. SPRINKLER LAYOUT SHALL CONFORM TO NFPA 13.
  - COORDINATE EXISTING NEW PIPING AND SPRINKLER HEADS WITH OTHER TRADES.
  - CONTRACTOR SHALL REFER TO ARCHITECTURAL CEILING PLANS FOR SPRINKLER HEAD LOCATIONS WITHIN HARD CEILINGS. SPRINKLER HEADS WITHIN THESE LOCATIONS ARE TO BE COLORED. COLOR TO BE COORDINATED WITH ARCHITECT.
  - REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND TYPE OF SPRINKLER HEADS WITHIN "HARD" CEILINGS AND LINEAR CEILING SYSTEM.
  - REFER TO 1FP3.01 FOR PIPE SUPPORT DETAIL.
  - REFER TO 2FP3.01 PIPE THROUGH NON-FIRE RATED WALL.
  - REFER TO 3FP3.01 SPRINKLER HEAD MOUNTING DETAIL.

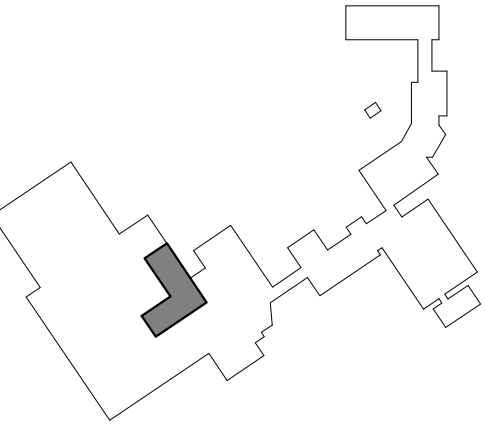
- KEYNOTES:**
- CONTRACTOR SHALL PROVIDE NEW FIRE SPRINKLER PIPING AND MODIFY EXISTING SPRINKLER PIPING AS NECESSARY IN ORDER TO ACCOMMODATE NEW ROOM LAYOUTS.
  - BID ALTERNATE #5. REFER TO ARCHITECTURAL CEILING PLANS FOR ADDITIONAL CEILING SCOPE WITHIN FIRST FLOOR STAIRWELL. CONTRACTOR SHALL PROVIDE NEW FIRE SPRINKLER PIPING AND MODIFY EXISTING SPRINKLER PIPING AS NECESSARY IN ORDER TO ACCOMMODATE NEW CEILING ELEVATIONS ON THE FIRST FLOOR. CONTRACTOR TO REMOVE ALL EXISTING FIRE SPRINKLER HEADS AND REPLACE WITH NEW PER FIRE SPRINKLER USAGE SCHEDULE.



**MCHENRY COUNTY COLLEGE  
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DKA PROJECT NO: 17002217.00

KEY PLAN:



SHEET STATUS: 10/02/2018  
**BP2 - ISSUED FOR BID**

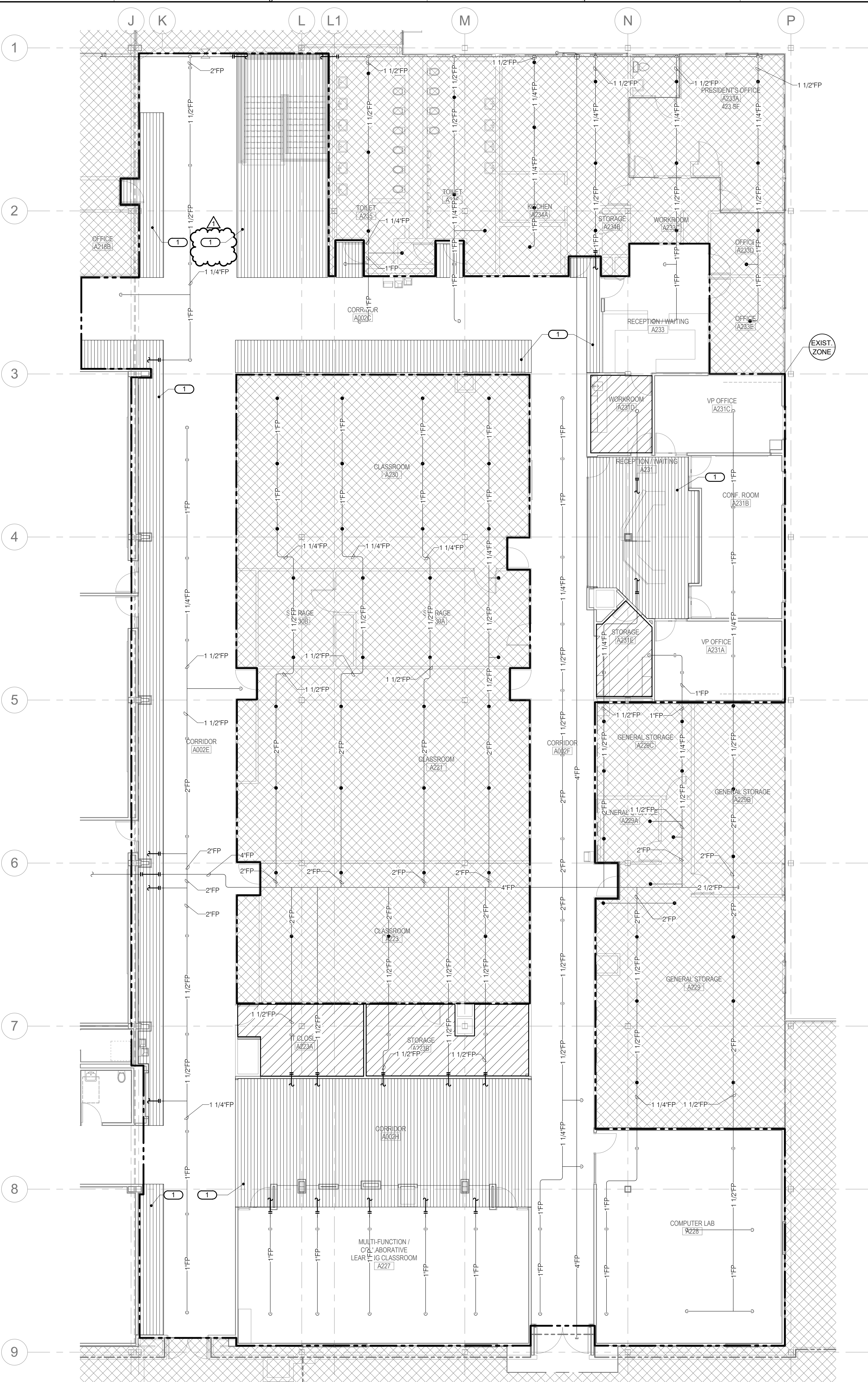
NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	10/15/2018

SHEET TITLE:  
**LEVEL 2 - FIRE  
PROTECTION - BUILDING A -  
AREA A**

SHEET NUMBER:

**FP1.21**

10/15/2018 8:20:33 AM



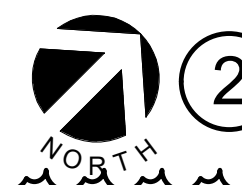


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- GENERAL SHEET NOTES:**
- COORDINATE EXACT LOCATION OF WALL AND CEILING MOUNTED DEVICES WITH ARCHITECTURAL DRAWINGS
  - PROVIDE NEW SPRINKLER HEADS WITHIN BOUNDARY TO ACCOMMODATE NEW ROOM LAYOUTS. ALL SPRINKLER HEADS WITHIN BOUNDARY SHOWN SHALL BE NEW.
  - SPRINKLER PIPING SHALL BE REUSED. PROVIDED PIPE SIZE CONFORMS TO NFPA REQUIREMENTS. MODIFY PIPING AS REQUIRED TO SERVE NEW SPRINKLER HEADS. SPRINKLER LAYOUT SHALL CONFORM TO NFPA 13.
  - COORDINATE EXISTING NEW PIPING AND SPRINKLER HEADS WITH OTHER TRADES.
  - CONTRACTOR SHALL REFER TO ARCHITECTURAL CEILING PLANS FOR SPRINKLER HEAD LOCATIONS WITHIN THESE LOCATIONS ARE TO BE COLORED. COLOR TO BE COORDINATED WITH ARCHITECT.
  - REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND TYPE OF SPRINKLER HEADS WITHIN "HARD" CEILINGS AND LINEAR CEILING SYSTEM.
  - REFER TO 1FP3.01 FOR PIPE SUPPORT DETAIL.
  - REFER TO 2FP3.01 PIPE THROUGH NON-FIRE RATED WALL.
  - REFER TO 3FP3.01 SPRINKLER HEAD MOUNTING DETAIL.

- KEYNOTES: (C #)**
- CONTRACTOR SHALL PROVIDE NEW FIRE SPRINKLER PIPING AND MODIFY EXISTING SPRINKLER PIPING AS NECESSARY IN ORDER TO ACCOMMODATE NEW CEILING ELEVATIONS.
  - BID ALTERNATE #5. REFER TO ARCHITECTURAL CEILING PLANS FOR ADDITIONAL CEILING SCOPE WITHIN FIRST FLOOR STAIRWELL. CONTRACTOR SHALL PROVIDE NEW FIRE SPRINKLER PIPING AND MODIFY EXISTING SPRINKLER PIPING AS NECESSARY IN ORDER TO ACCOMMODATE NEW CEILING ELEVATIONS ON THE FIRST FLOOR. CONTRACTOR TO REMOVE ALL EXISTING FIRE SPRINKLER HEADS AND REPLACE WITH NEW PER FIRE SPRINKLER USAGE SCHEDULE.



2

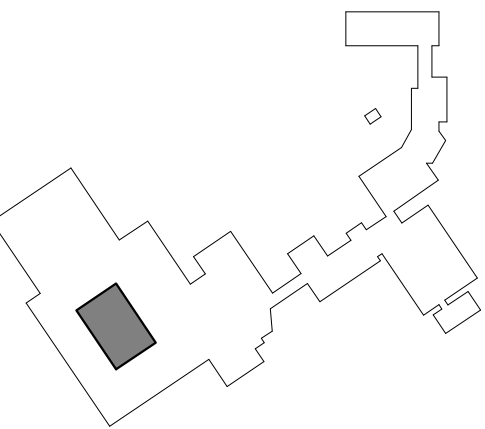
**LEVEL 1 - FIRE PROTECTION - NORTHWEST STAIRWELL PLAN**

1/8" = 1'-0"

**MCHENRY COUNTY COLLEGE  
BUILDING A&E RENOVATIONS**

8900 US Hwy 14  
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DKA PROJECT NO: 17002217.00

KEY PLAN:



SHEET STATUS: 10/02/2018  
**BP2 - ISSUED FOR BID**

NO.	DESCRIPTION:	DATE:
1	ADDENDUM #1	10/15/2018

SHEET TITLE:  
**LEVEL 2 - FIRE PROTECTION - BUILDING A - AREA B**

SHEET NUMBER:

**FP1.22**

10/15/2018 8:20:36 AM



**LEVEL 2 - FIRE PROTECTION - BUILDING A - AREA B**

1/8" = 1'-0"



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