CITY OF VALDEZ

## VALDEZ CITY SCHOOL DISTRICT OFFICES TENANT IMPROVEMENTS @ HHES

1009 W KLUTINA STREET, VALDEZ, ALASKA, 99686

PERMIT DOCUMENTS JULY 28, 2025

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#### **GENERAL PROJECT NOTES**

PROJECT DESCRIPTION: THE PROJECT IS A REMODEL OF SELECT AREAS IN AN EXISTING ELEMENTARY SCHOOL. THE SCHOOL IS A ONE STORY BUILDING WITH AN ACCESSORY MECHANICAL LEVEL. THE EXISTING BUILDING IS SLAB ON GRADE CONSTRUCTION WITH PRECAST CONCRETE WALL PANELS AND METAL STUD PARTITIONS. THE AREA IN SCOPE IS APPROXIMATELY 6,750SF AND THE INTENDED USE IS OFFICE AND STORAGE SPACE.

<u>REFERENCE CODES</u>: ALL WORK SHALL CONFORM TO ALL APPLICABLE BUILDING CODES, STANDARDS, REGULATIONS, AND OTHER

<u>VERIFY CONDITIONS</u>: THE CONTRACTOR SHALL VERIFY ALL PROJECT-RELATED NEW AND/OR EXISTING CONDITIONS, INCLUDING

<u>DRAWING FORMAT</u>: THESE CONSTRUCTION DOCUMENTS HAVE BEEN PRODUCED AT DRAWING SCALES THAT RELATE TO THEIR FULL-SIZE FORMAT 22X34. ANY DEVIATIONS TO THIS FORMAT SIZE WILL PRODUCE DRAWINGS OUTSIDE OF THE SCALE LIMITS INDICATED. DRAWING REPRODUCTIONS AT ANY FORMAT SHOULD NOT BE SCALED FOR DIMENSIONAL ACCURACY. USE GRAPHIC SCALES ACCORDINGLY.

SITE SAFETY: CONTRACTOR IS RESPONSIBLE FOR ALL PROJECT RELATED SAFETY MEASURES ON-SITE, DURING THE PROJECTS ANY SAFETY RELATED CONCERNS BE OBSERVED

<u>ELECTRONIC MEDIA</u>: THE DESIGN DOCUMENTS HAVE BEEN PREPARED UTILIZING ELECTRONIC DRAFTING FORMATS OF AUTOCAD AND/OR REVIT. THE AVAILABILITY OF ELECTRONIC BASE FLOOR PLANS, AND/OR ANY OTHER RELATED DOCUMENT FOR USE BY THE GENERAL CONTRACTOR FOR USE ON THIS SPECIFIC PROJECT IS CONDITIONALLY GRANTED THROUGH PERMISSION OF THE A/E DESIGNER OF RECORD.

**NOTIFICATION OF CHILD OCCUPIED FACILITY:** PORTIONS OF THIS BUILDING ARE CLASSIFIED AS A CHILD OCCUPIED FACILITY IN PERSONNEL PERFORMING WORK IN THESE AREAS MUST COMPLY WITH THE REQUIREMENTS OF 40 CFR 745, INCLUDING TRAINING. WORK PRACTICES AND CLEANING OF THE WORK AREA. REFER TO HAZ-MAT REPORT PROVIDED UNDER SEPARATE COVER BY OWNER, FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING AND DISPOSING OF LEAD MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA

NOTIFICATION OF POTENTIAL HAZARDS: ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINATES, INCLUDING ASBESTOS AND LEAD, ARE ALSO COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO HAZ-MAT REPORT PROVIDED UNDER SEPARATE COVER BY OWNER, FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.

#### **PROJECT TEAM**

#### **ARCHITECTURE & INTERIORS** BETTISWORTH NORTH ARCHITECTS (907) 561-5780 CONTACT: DAVID POPIEL

dpopiel@bettisworthnorth.com

bpekar@rsa-ak.com

**MECHANICAL** RSA ENGINEERING, INC. (907) 276-0521 BRIAN PEKAR

#### **ELECTRICAL**

RSA ENGINEERING, INC. (907) 276-0521 CONTACT: DAVIN BLUBAUGH dblubaugh@rsa-ak.com

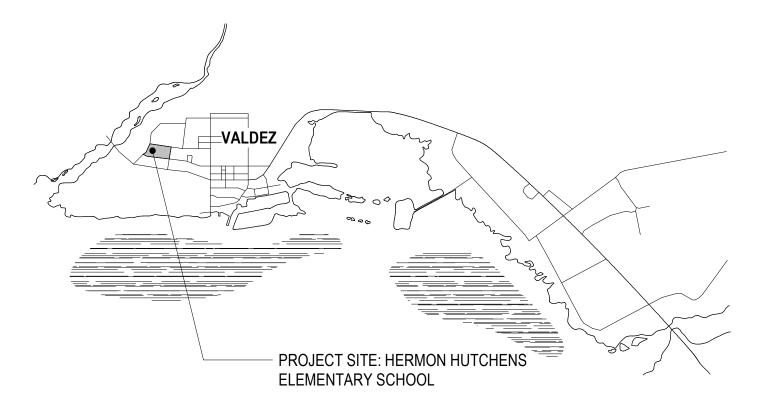
#### **STRUCTURAL**

REID MIDDLETON, INC. (907) 562-3439 ELLEN HAMEL CONTACT: ehamel@reidmiddleton.com

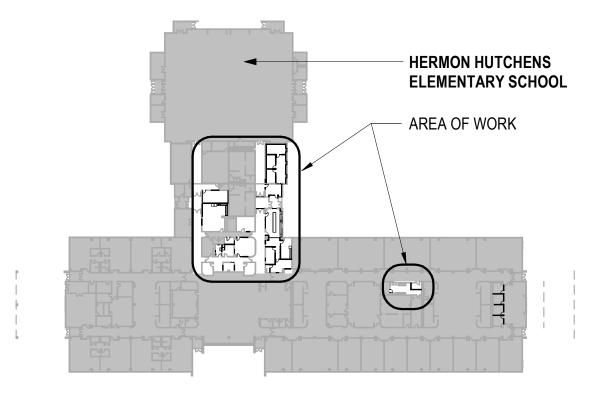
#### **LOCATION MAP**

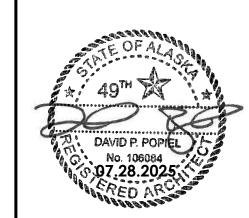


#### **VICINITY MAP**



#### **PROJECT LOCATION**





## TENANT **OFFICES**

EME IMPRO

CONSULTANT:

9F

DISTRIC

PROJECT NO: 24-121 2025-07-28 DRAWN BY: RHR, DPP CHECKED BY: PROJECT TITLE, PROJECT TEAM SHEET INDEX, GENERAL NOTES

BETTISWORTH NORTH ARCHITECTS & PLANNERS

G001

#### PROJECT SUMMARY

#### **PROJECT SUMMARY**

NAME OF PROJECT: VCS OFFICE RELOCATION AT HERMON HUTCHENS ELEMENTARY

CITY OF VALDEZ

ADDRESS: 1009 W. KLUTINA STREET, VALDEZ, AK, 99686 PROPOSED USE: **EDUCATION (NO CHANGE OF USE)** STATE OF ALASKA FIRE MARSHALL

**AUTHORITY HAVING JURISDICTION:** OWNER:

PROJECT DESCRIPTION:

THE PROJECT IS A REMODEL OF SELECT AREAS IN AN EXISTING ELEMENTARY SCHOOL. THE SCHOOL IS A ONE STORY BUILDING WITH AN ACCESSORY MECHANICAL LEVEL. THE EXISTING BUILDING IS SLAB

> AND METAL STUD PARTITIONS. THE AREA IN SCOPE IS APPROXIMATELY 6,750 SF AND THE INTENDED USE IS OFFICE AND STORAGE SPACE THAT SUPPORT THE PRIMARY OCCUPANCY.

ON GRADE CONSTRUCTION WITH PRECAST CONCRETE WALL PANELS

LEGAL DESCRIPTION LT 7, EVERGREEN VISTA, PLAT # 80-12 ARCHITECT'S FILE # 24-121

#### **CODE ANALYSIS**

- INTERNATIONAL BUILDING CODE 2021
- INTERNATIONAL EXISTING BUILDING CODE 2021
- INTERNATIONAL MECHANICAL CODE 2021
- **UNIFORM PLUMBING CODE 2018**
- 2017 NATIONAL ELECTRICAL CODE
- 2020 NFPA 70
- 2021 INTERNATIONAL FIRE CODE

#### **CODE STUDY FROM ORIGINAL DOCUMENTS**

- 1976 UNIFORM BUILDING CODE
- CONSTRUCTION: TYPE III 1 HOUR SPRINKLERED AND TYPE IV NON RATED, SPRINKLERED
- OCCUPANCY: E1 AND A2.1 AT GYM
- FIRE ZONE III
- SINGLE STORY (EXCEPT MECH ROOM AT SECOND LEVEL)
- AREA: 95,200 SF

NOTE: TWO HOUR SEPARATION WALL BETWEEN AREA "E" (TYPE IV NON RATED, FULLY SPRINKLERED) AND AREA "D" (TYPE III, 1 HOUR, FULLY SPRINKLERED) AT GRIDLINE N-241.0

• ALL WORK IN PROJECT OCCURS IN AREA D

#### INTERNATIONAL EXISTING BUILDING CODE ANALYSIS 2021 CODE STUDY

CHAPTER 6: CLASSIFICATION OF WORK

603.1 SCOPE: LEVEL 2 ALTERATION APPLIES TO PROJECT

#### CHAPTER 8: ALTERATIONS - LEVEL 2

- 801.4: COMPLIANCE NEW CONSTRUCTION ELEMENTS SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE.
- 803.4.1.1: GROUP E EXISTING FIRE ALARM SYSTEM TO BE RECONFIGURED AT RENOVATED AREA.

#### INTERNATIONAL BUILDING CODE 2021 ANALYSIS

CHAPTER 3: OCCUPANCY CLASSIFICATION AND USE

- NO PROPOSED CHANGE OF OCCUPANCY CLASSIFICATION
- ORIGINAL OCCUPANCY CLASSIFICATION GROUP E: EDUCATIONAL

#### CHAPTER 5: GENERAL BUILDING HEIGHT AND AREA

NO PROPOSED CHANGE TO BUILDING HEIGHT OR AREA

#### CHAPTER 6: TYPE OF CONSTRUCTION

- NO PROPOSED CHANGE OF CONSTRUCTION TYPE.
- ORIGINAL CONSTRUCTION PERMITTED UNDER 1976 UBC: TYPE III
- NON-COMBUSTIBLE EXTERIOR WALLS, 1-HR RATED STRUCTURAL FRAME, FLOOR AND ROOF ASSEMBLIES
- PROPOSED CONSTRUCTION MAINTAINS ORIGINAL CONSTRUCTION TYPE: PER 2021 IBC: EXISTING CONSTRUCTION IS EQUIVALENT TO TYPE IIIA, REFER TO TABLE 601
- 1. NON-COMBUSTIBLE EXTERIOR WALLS, 1-HR RATED STRUCTURAL FRAME, FLOOR AND ROOF ASSEMBLIES

#### CHAPTER 7: FIRE AND SMOKE PROTECTION FEATURES

 PROJECT IS NON-RATED, NON-LOADING BEARING INTERIOR CONSTRUCTION, NO REQUIRED RATINGS PER TABLE 601

#### **CHAPTER 8: INTERIOR FINISHES**

• PROPOSED INTERIOR FINISHES ARE CLASS A OR CLASS B (REFER TO TABLE 803.13 FOR E-OCCUPANCY)

#### CHAPTER 10: MEANS OF EGRESS

- PROPOSED RENOVATION DOES NOT INCLUDE A CHANGE OF OCCUPANCY, THERE IS NO INCREASE IN OCCUPANT LOAD BEYOND EXISTING EGRESS CAPACITY, AND EXISTING EGRESS WIDTH IS **NOT** BEING
- EGRESS FROM PROJECT WORK AREA COMPLIES WITH CURRENT CODE REQUIREMENTS. REFER TO CODE PLAN FOR OCCUPANT LOAD, COMMON PATH OF TRAVEL, AND EXIT ACCESS DISTANCE FROM RENOVATED AREA

#### CHAPTER 11: ACCESSIBILITY

ALL RENOVATED SPACES COMPLY WITH CURRENT ACCESSIBILITY REQUIREMENTS OF THE IBC AND ADA





TENANT OFFICE DISTRIC EME VALD

IMPRO **CONSULTANT:** 

PROJECT NO: 24-121 2025-07-28 DRAWN BY: DPP, HK, RHR CHECKED BY: DESCRIPTION

**BUILDING CODE ANALYSIS** 

**G101** 

#### STANDARD ARCHITECTURAL ABBREVIATIONS

**EPOXY FLOOR** 

**ELECTRICAL** 

**ENTRY MAT** 

**EQUAL EXISTING** 

**EXISTING** 

**EXPANSION** 

FIRE BLANKET

FLOOR DRAIN

FOUNDATION

FIRE EXTINGUISHER

FACE OF CONCRETE

FACE OF FINISH

FACE OF STUD

FOOT / FEET

FOOTING

**FURRING** 

**GAUGE** 

GALVANIZED

**GLASS TILE** 

HOSE BIB

HEIGHT

HOUR

HAND DRYER

HOLLOW METAL

HARDWARE (IF PROVIDED,

INTEGRALLY COVED BASE

INSULATED HOLLOW METAL

LINEAR METAL CEILING

LUXURY VINYL TILE

IMPACT RESISTANT GYPSUM BOARD

INSIDE DIAMETER

X INDICATES DOOR HARDWARE GROUP #)

HORIZONTAL

HAND RAIL

INSULATION

INTERIOR

LAVATORY

MATERIAL

MAXIMUM

MECHANICAL

**GLULAM BEAM** 

GYPSUM BOARD

GRAB BAR

FACTORY FINISH

FLOOR

FINISH

**EXTERIOR** 

EM

**EXIST** 

FDN

FLR

FIN

FOC

FOF

FOS

FRL

FRP

FRT

FT

FTG

GB

GT

GYP

HB

HD

HGT

HM

HR

ID

INSUL

INT

LAV

LMC

LVT

MATL

MECH

**FURR** 

**EXPANSION JOINT** 

ELEVATION / ELEVATOR

MONOMER MEMBRANE

ETHYLENE PROPYLENE DIENE

FIRE DEPARTMENT CONNECTION

FURNITURE, FIXTURES, & EQUIPMENT

FIBERGLASS REINFORCED LAMINATE FIBERGLASS REINFORCED PLASTIC PANEL

FIRE RETARDANT TREATED

FIRE EXTINGUISHER CABINET

AB	AIR BARRIER	MFR	MANUFACTURER
ACT	ACOUSTIC CEILING TILE	MIN	MINIMUM
ADJ	ADJUSTABLE	MIR	MIRROR
AFF	ABOVE FINISH FLOOR	MISC	MISCELLANEOUS
ALT	ALTERNATE	MB	MARKER BOARD
ALUM	ALUMINUM	MRGYP	MOISTURE-RESISTANT GYPSUM BOARD
	APPROXIMATE	MTD	MOUNTED
ARGYP	ABUSE RESISTANT GYPSUM		
_		MTL	METAL
AWC	ACCESSIBLE WATER CLOSET	MW	MICROWAVE
AWI	ARCHITECTURAL WOODWORK INSTITUTE	NA	NOT APPLICABLE
AWP	ACOUSTICAL WALL PANEL	NFS	NON-FROST SUSCEPTIBLE
BAF	ACOUSTIC BAFFLES	NIC	NOT IN CONTRACT
BCS	BABY CHANGING STATION	OC	ON CENTER
BUR	BUILT UP ROOFING	OFCI	OWNER FURNISHED / CONTRACTOR INSTALLED
BS	BACKSPLASH	OFOI	OWNER FURNISHED / OWNER INSTALLED
CBU	CEMENTITIOUS BACKER UNIT	OH	OVERHEAD
CG	CORNER GUARD	OPP	OPPOSITE
CJ	CONTROL JOINT	OTS	OPEN TO STRUCTURE
CL	CENTERLINE	PL	PLASTIC LAMINATE
CLG	CEILING	PLYWD	PLYWOOD
CMU	CONCRETE MASONRY UNIT	PR	PAIR
COL	COLUMN	PT	PAINT
CONC	CONCRETE	PTB	PORCELAIN TILE BASE
CONT	CONTINUOUS	PTD	PAPER TOWEL DISPENSER
CPT	CARPET	PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE
CR	CARD READER	PVC	POLYVINYL CHLORIDE
CT	CERAMIC TILE	P	PAINT
CUH	CABINET UNIT HEATER	, QT	QUARRY TILE
DBL	DOUBLE	RAD	RADIUS
DEMO	DEMOLISH/DEMOLITION	RB	RESILIENT BASE
DEIVIO	DRINKING FOUNTAIN	REF	REFRIGERATOR
DGF	DECORATIVE GLASS FILM	REQ	REQUIRED
DIA		REV	REVISED / REVISION
	DIAMETER		
DIM	DIMENSION	RF DEFO	RESILIENT FLOORING
DISP	DISPENSER	RFEC	RECESSED FIRE EXTINGUISHER CABINET
DN	DOWN	RM	ROOM
DTL	DETAIL	RNG	RANGE
DW	DISHWASHER	RO	ROUGH OPENING
EA	EACH	RS	ROLLER SHADE
		DET	

RFT

SD

SR

SS

STL

SWI

TB

TP

TRTD

TYP

VIF

VR

VTR

WB

WD

WG

WR

SDT

RESILIENT FLOORING TRANSITION

SALVAGE

SECTION

SHOWER

SIMILAR

SQUARE FEET

SHOWER CURTAIN

SOLID SURFACE

SPECIFICATIONS

SHEET RUBBER

SHOWER SEAT

SUSPENDED

SHEET VINYL

TACK BOARD

TOP OF PLATE

TOP OF SLAB

TOP OF STEEL

TO SUB TOP OF SUBFLOOR

TREATED

TYPICAL

THERMOSTAT

VERIFY IN FIELD

VAPOR RETARDER

VENT THROUGH ROOF

VINYL WALL COVERING

WEATHER BARRIER

WATER CLOSET

WALL COVERING

WASHER / DRYER

WALL GUARD

WALK OFF MAT

WATER PROOF

WAINSCOT

WASTE RECEPTACLE

WOOD PRESERVATIVE TREATED

WOOD

SLOPE WITH INSULATION

SLOPE WITH STRUCTURE

TONGUE AND GROOVE TO BE DETERMINED

TOP OF CONCRETE

TOP OF DECKING

**TOILET PARTITION** 

TOILET PAPER DISPENSER

UNLESS NOTED OTHERWISE

VINYL COMPOSITION TILE

TOILET SEAT COVER DISPENSER

STEEL

STRUCT STRUCTURAL

STAINLESS STEEL

SOLID CORE

SOAP DISPENSER

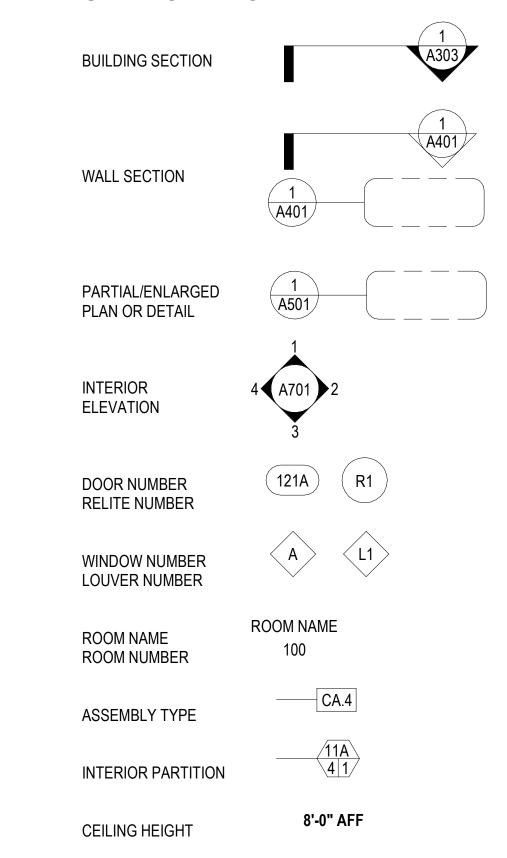
STATIC DISSIPATIVE TILE

SHOWER CURTAIN ROD

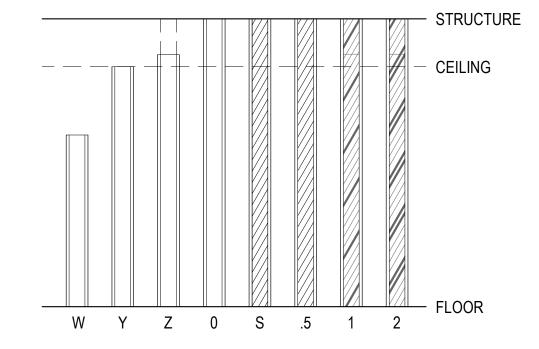
SANITARY NAPKIN DISPENSER

SANITARY NAPKIN RECEPTACLE

#### SYMBOL LEGEND



#### **RATING/PARTITION HEIGHT KEY**



#### FIRE RATING/PARTITION HEIGHTS

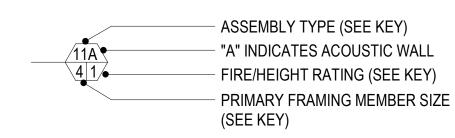
W = NON-RATED, PARTIAL HEIGHT
Y = NON-RATED, CEILING HEIGHT
Z = NON-RATED, ABOVE CEILING HEIGHT
0 = NON-FIRE-RATED
S = SMOKE PARTITION
.5 = 1/2-HR RATED
1 = 1-HR RATED

2 = 2-HR RATED

#### MATERIAL LEGEND

BATT INSULATION	
GYPSUM BOARD	
SOIL	
MASONRY	
RIGID INSULATION	
PLYWOOD	
CONCRETE	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
BLOCKING	
CONTINUOUS BLOCKING	

#### INTERIOR PARTITION KEY



#### **ASSEMBLY TYPE KEY**

<u>TYPE</u>		DESCRIPTION
11 THRU 99 CA, CB, CC FA, FB, FC, RA, RB, RC EA, EB, EC	, ETC. ETC. , ETC.	INTERIOR PARTITIONS CEILINGS FLOORS ROOFS EXTERIOR WALLS
220	4 DV ED	

#### PRIMARY FRAMING KEY

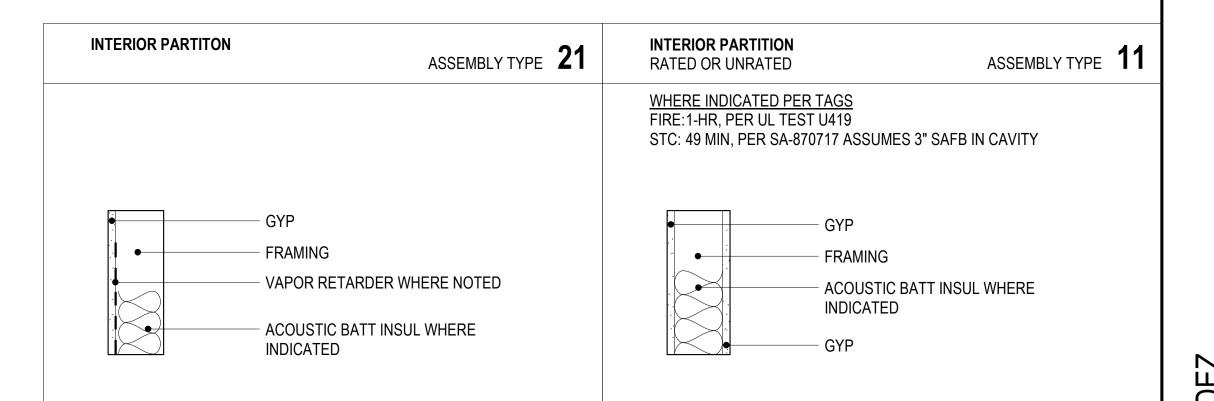
<u>METAL</u>	<u>WOOD</u>	<u>CONC</u>
= 7/8"	1x1	NA
= 2 1/2"	2x2	NA
= 3 5/8"	2x3	NA
= 4"	2x4	4"
= 6"	2x6	6"
= 8"	2x8	8"
= EXISTING	G STUD FR	RAMING
	= 7/8" = 2 1/2" = 3 5/8" = 4" = 6" = 8"	= 7/8" 1x1 = 2 1/2" 2x2 = 3 5/8" 2x3 = 4" 2x4 = 6" 2x6

#### **ACOUSTIC WALL NOTES**

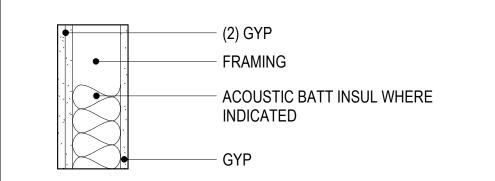
SIMILAR TO ASSEMBLY TYPE WITH THE ADDITION OF FIBERGLASS BATT INSULATION TO FULL WIDTH AND DEPTH OF STUD CAVITY

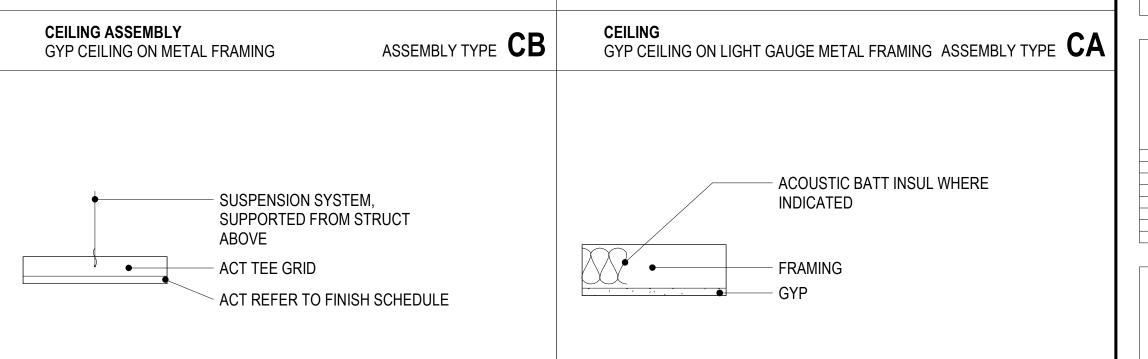
BATT RETAINERS SHALL BE USED WHERE GYPSUM **BOARD IS NOT PRESENT** 

SEE ASSEMBLY NOTES AND SPECIFICATIONS FOR FURTHER INFORMATION ON ACOUSTIC TREATMENT



#### **INTERIOR PARTITION** ASSEMBLY TYPE 12 RATED OR UNRATED WHERE INDICATED PER TAGS FIRE: 1-HR, PER UL TEST U448 STC: 50 MIN, PER SA-800504 ASSUMES 1-1/2" SAFB IN CAVITY





# DAVID P. POPIEI

### TENANT **OFFICES (B)** TRICT ME ALDI DIS **> IMPRO**

CONSULTANT:

PROJECT NO: 24-121 DRAWN BY: CHECKED BY: REVISION DESCRIPTION

2025-07-28 ABBREVIATIONS, SYMBOLS, **ASSEMBLIES** 

A001

**PART 1 GENERAL** 

1.01 DEFINITIONS A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials,

products, assemblies, and equipment. 1. Substitutions for Cause: Proposed due to changed Project circumstances beyond Contractor's

**DIVISION 01 - GENERAL REQUIREMENTS** 

**SECTION 01 25 00** 

SUBSTITUTION PROCEDURES

a. Unavailability

b. Regulatory changes.

2. Substitutions for Convenience: Proposed due to possibility of offering substantial advantage to

a. Substitution requests offering advantages solely to the Contractor will not be considered.

#### PART 2 PRODUCTS - NOT USED PART 3 EXECUTION

#### 3.01 GENERAL REQUIREMENTS

A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:

1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.

2. Agrees to provide the same warranty for the substitution as for the specified product.

Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.

4. Waives claims for additional costs or time extension that may subsequently become apparent. B. Document each request with complete data substantiating compliance of proposed substitution with

Contract Documents. Burden of proof is on proposer. C. Content: Include information necessary for tracking the status of each Substitution Request, and

information necessary to provide an actionable response. 1. No specific form is required. Contractor's Substitution Request documentation must include the

following:

a. Project Information: 1) Official project name and number, and any additional required identifiers established

in Contract Documents 2) Owner's, Architect's, and Contractor's names.

b. Substitution Request Information:

1) Discrete and consecutive Substitution Request number, and descriptive subject/title.

2) Issue date.

3) Reference to particular Contract Document(s) specification section number, title, and

article/paragraph(s). Description of Substitution.

5) Reason why the specified item cannot be provided.

6) Differences between proposed substitution and specified item.

c. Attached Comparative Data: Provide point-by-point, side-by-side comparison addressing essential attributes specified, as appropriate and relevant for the item: d. Impact of Substitution:

D. Limit each request to a single proposed substitution item.

#### 3.02 SUBSTITUTION PROCEDURES DURING CONSTRUCTION

A. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.

B. Submit request for Substitution for Convenience within 14 days of discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule. 1. In addition to meeting general documentation requirements, document how the requested

substitution benefits the Owner through cost savings, time savings, greater energy conservation, or in other specific ways.

2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.

3. Bear the costs engendered by proposed substitution of:

a. Owner's compensation to the Architect for any required redesign, time spent processing and evaluating the request.

C. Substitutions will not be considered under one or more of the following circumstances: 1. When they are indicated or implied on shop drawing or product data submittals, without having

Without a separate written request.

3. When acceptance will require revisions to Contract Documents.

#### 3.03 RESOLUTION

A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.

#### B. Architect will notify Contractor in writing of decision to accept or reject request. 3.04 ACCEPTANCE

A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

3.05 CLOSEOUT ACTIVITIES

#### A. See Section 01 78 00 - Closeout Submittals, for closeout submittals. **END OF SECTION**

#### **SECTION 01 30 00** ADMINISTRATIVE REQUIREMENTS

**PART 1 GENERAL** 

PART 2 PRODUCTS - NOT USED PART 3 EXECUTION

#### 3.01 WEB-BASED PROJECT SOFTWARE SERVICE

A. Web-Based Project Software Service: Provide, administer, and use web-based project software to host and manage project communication and documentation.

Cost: Pay cost of service. Include the cost of the service in the contract sum. Provide user licenses for use by Owner, Architect, Architect's consultants, and other entities

involved in the project.

Comply with the software service's current published licensing agreements. Training: Provide one-hour, web-based training session for users of software service. Further

training is the responsibility of the user. a. Representatives of Owner are scheduled and included in this training.

5. Project Closeout: Architect determines when to terminate the software service for the project

and is responsible for obtaining archive copies of files for Owner.

6. Web-Based Project Software Services: Use one of the following:

a. Submittal Exchange: www.submittalexchange.com.

b. Procore: www.procore.com.

#### c. Approved equal as selected by Owner 3.02 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF or MS Excel) format, as appropriate to the document, and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.

1. Besides submittals for review, information, and closeout, this procedure applies to Requests for Interpretation (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.

Contractor and Architect are required to use this service.

It is Contractor's responsibility to submit documents in allowable format.

Subcontractors, suppliers, and Architect's consultants will be permitted to use the service at no

Users of the service need an email address, internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat. www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com), unless such software

capability is provided by the service provider. 6. Paper document transmittals will not be reviewed; emailed electronic documents will not be

7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.

B. Submittal Service: The selected service is:

C. Training: One, one-hour, web-based training session will be arranged for all participants, with representatives of Architect and Contractor participating; further training is the responsibility of the

D. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

#### 3.03 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the work at maximum bi-monthly intervals.

B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.

C. Attendance Required: Contractor.

Owner.

Architect. Contractor's superintendent.

Major subcontractors.

D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

#### 3.04 CONSTRUCTION PROGRESS SCHEDULE

A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.

B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.

C. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for

1. Include written certification that major contractors have reviewed and accepted proposed

D. Within 10 days after joint review, submit complete schedule.

E. Submit updated schedule with each Application for Payment.

#### 3.05 WEEKLY CONSTRUCTION REPORTS

A. Include only factual information. Do not include personal remarks or opinions regarding operations

B. In addition to transmitting electronically a copy to Owner and Architect, submit \_\_\_\_\_ printed copies at weekly intervals.

1. Submit in format acceptable to Owner.

#### 3.06 REQUESTS FOR INTERPRETATION (RFI) A. Definition: A request seeking one of the following:

1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in

B. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.

Prepare a separate RFI for each specific item.

Prepare using software provided by the Electronic Document Submittal Service. C. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.

Official Project name and number, and any additional required identifiers established in Contract Documents.

Owner's, Architect's, and Contractor's names.

Discrete and consecutive RFI number, and descriptive subject/title.

Issue date, and requested reply date. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.

D. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.

Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.

F. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization

to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.

#### A. Submit to Architect for review a schedule for submittals in tabular format.

Submit at the same time as the preliminary schedule.

Coordinate with Contractor's construction schedule and schedule of values.

#### 3.08 SUBMITTALS FOR REVIEW

3.07 SUBMITTAL SCHEDULE

A. When the following are specified in individual sections, submit them for review: Product data.

Shop drawings. Samples for selection.

Samples for verification. B. Submit to Architect for review for the limited purpose of checking for compliance with information

below and for record documents purposes described in Section 01 78 00 - Closeout Submittals.

given and the design concept expressed in Contract Documents.

C. Samples will be reviewed for aesthetic, color, or finish selection.

D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article

3.09 SUBMITTALS FOR INFORMATION

A. When the following are specified in individual sections, submit them for information:

Design data.

Certificates. Test reports.

Inspection reports. Manufacturer's instructions. Manufacturer's field reports.

Other types indicated. B. Submit for Architect's knowledge as contract administrator or for Owner.

3.10 SUBMITTALS FOR PROJECT CLOSEOUT

A. Submit Correction Punch List for Substantial Completion.

B. Submit Final Correction Punch List for Substantial Completion. C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 78 00 - Closeout Submittals:

1. Project record documents.

Operation and maintenance data.

Warranties.

Bonds. 5. Other types as indicated.

D. Submit for Owner's benefit during and after project completion.

#### 3.11 NUMBER OF COPIES OF SUBMITTALS

A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.

B. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.

1. After review, produce duplicates.

Retained samples will not be returned to Contractor unless specifically so stated.

#### 3.12 SUBMITTAL PROCEDURES

A. General Requirements:

Use a separate transmittal for each item. 2. Submit separate packages of submittals for review and submittals for information, when included in the same specification section.

3. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix. 4. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number;

and specification section number and article/paragraph, as appropriate on each copy. 5. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information

is in accordance with the requirements of the work and Contract Documents. 6. Identify variations from Contract Documents and product or system limitations that may be

detrimental to successful performance of the completed work. 7. Provide space for Contractor and Architect review stamps.

8. When revised for resubmission, identify all changes made since previous submission. 9. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct

portion(s) of the work, and have received prior approval for their use.

B. Product Data Procedures: Submit only information required by individual specification sections.

Collect required information into a single submittal.

3. Do not submit (Material) Safety Data Sheets for materials or products.

Transmit related items together as single package.

C. Shop Drawing Procedures: Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract

Documents and coordinating related work. Generic, non-project-specific information submitted as shop drawings do not meet the

requirements for shop drawings. D. Samples Procedures:

3.13 SUBMITTAL REVIEW

Identify each item to allow review for applicability in relation to shop drawings showing installation locations.

A. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate B. Submittals for Information: Architect will acknowledge receipt and review. See below for actions to

be taken. C. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.

1. Authorizing purchasing, fabrication, delivery, and installation: a. "Approved", or language with same legal meaning.

1) At Contractor's option, submit corrected item, with review notations acknowledged and

D. Architect's and consultants' actions on items submitted for review:

c. "Approved as Noted, Resubmit for Record", or language with same legal meaning. 2. Not Authorizing fabrication, delivery, and installation: E. Architect's and consultants' actions on items submitted for information:

 Items for which no action was taken: a. "Received" - to notify the Contractor that the submittal has been received for record only. Items for which action was taken:

b. "Approved as Noted, Resubmission not required", or language with same legal meaning.

a. "Reviewed" - no further action is required from Contractor. **END OF SECTION** 

**SECTION 01 40 00** 

B. Contractor's Professional Design Services: Design of some aspect or portion of the project by party

A. Provide such engineering design services as may be necessary to plan and safely conduct certain

#### **QUALITY REQUIREMENTS**

#### **PART 1 GENERAL** 1.01 DEFINITIONS

A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for

other than the design professional of record. Provide these services as part of the Contract for 1.02 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES

construction operations, pertaining to, but not limited to the following: Temporary sheeting, shoring, or supports.

Temporary scaffolding. 3. Temporary bracing.

Documents, or for Owner's information.

1.03 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES A. Base design on performance and/or design criteria indicated in individual specification sections.

B. Scope of Contractor's Professional Design Services: Provide for the following items of work: 1.04 SUBMITTALS

A. Designer's Qualification Statement: Submit for Architect's knowledge as contract administrator, or for Owner's information. Include information for each individual professional responsible for producing, or supervising

production of, design-related professional services provided by Contractor. a. Full name. b. Professional licensure information. c. Statement addressing extent and depth of experience specifically relevant to design of

items assigned to Contractor. B. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract

C. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to D. Certificates: When specified in individual specification sections, submit certification by the

manufacturer and Contractor or installation/application subcontractor to Architect, in quantities

Manufacturer's Instructions: When specified in individual specification sections, submit printed

instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the

Owner's information. Indicate special procedures, perimeter conditions requiring special attention,

specified for Product Data. 1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

#### and special environmental criteria required for application or installation. 1.05 QUALITY ASSURANCE

A. Testing Agency Qualifications:

Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.

B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is

C. Contractor's Quality Control (CQC) Plan:

1. Prior to start of work, submit a comprehensive plan describing how contract deliverables will be produced. Tailor CQC plan to specific requirements of the project. Include the following

#### 1.06 REFERENCES AND STANDARDS

A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

where a specific date is established by applicable code.

B. Comply with reference standard of date of issue current on date of Contract Documents, except

C. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.

D. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

#### 3.01 CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

F. Verify that field measurements are as indicated on shop drawings or as instructed by the

B. Comply with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.

D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship

E. Have work performed by persons qualified to produce required and specified quality.

G. Secure products in place with positive anchorage devices designed and sized to withstand stresses,

**SECTION 01 50 00** 

vibration, physical distortion, and disfigurement.

3.02 DEFECT ASSESSMENT A. Replace Work or portions of the Work not complying with specified requirements.

**END OF SECTION** 

TEMPORARY FACILITIES AND CONTROLS PART 1 GENERAL

A. Owner will provide the following:

B. Existing facilities may be used.

1.02 TELECOMMUNICATIONS SERVICES

1.01 TEMPORARY UTILITIES - SEE SECTION 01 51 00

1. Electrical power and metering, consisting of connection to existing facilities. 2. Water supply, consisting of connection to existing facilities.

A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.

1.04 FENCING

1.03 BARRIERS A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

A. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with

1.05 EXTERIOR ENCLOSURES

1.06 SECURITY

A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

1.07 VEHICULAR ACCESS AND PARKING A. Coordinate access and haul routes with governing authorities and Owner.

A. Provide project identification sign of design and construction indicated on drawings.

1.08 WASTE REMOVAL A. Provide waste removal facilities and services as required to maintain the site in clean and orderly

B. Provide and maintain access to fire hydrants, free of obstructions.

sturdy furniture, drawing rack, and drawing display table.

B. Provide containers with lids. Remove trash from site periodically. 1.09 PROJECT IDENTIFICATION

B. Erect on site at location indicated. 1.10 FIELD OFFICES

A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with

B. Provide space for Project meetings, with table and chairs to accommodate 6 persons. PART 2 PRODUCTS - NOT USED

permitted by Contract Documents.

**END OF SECTION** 

**SECTION 01 60 00** 

PRODUCT REQUIREMENTS

PART 1 GENERAL 1.01 SUBMITTALS

PART 3 EXECUTION - NOT USED

A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances. C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral

PART 2 PRODUCTS 2.01 EXISTING PRODUCTS A. Do not use materials and equipment removed from existing premises unless specifically required or

parts and attachment devices. Coordinate sample submittals for interfacing work.

DAVID P. POPIEL No. 106084

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PROJECT NO: DRAWN BY: CHECKED BY: REVISION DESCRIPTION

CONSULTANT:

24-121 2025-07-28

SHEET SPECIFICATIONS

- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.

- A. Provide new products unless specifically required or permitted by Contract Documents. 2.03 PRODUCT OPTIONS
- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

#### PART 3 EXECUTION

#### 3.01 SUBSTITUTION LIMITATIONS

A. See Section 01 25 00 - Substitution Procedures.

#### **END OF SECTION**

#### **SECTION 01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS**

A. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:

#### **PART 1 GENERAL**

- 1.01 SUBMITTALS
  - Structural integrity of any element of Project. Integrity of weather exposed or moisture resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.

#### 1.02 QUALIFICATIONS

- A. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.
- 1.03 PROJECT CONDITIONS Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent
- accumulation of dust, fumes, vapors, or gases. B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent
- C. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations

#### PART 2 PRODUCTS

#### 2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where
- necessary, referring to existing work as a standard.

#### PART 3 EXECUTION

#### 3.01 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated. E. Make neat transitions between different surfaces, maintaining texture and appearance.

#### 3.02 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
- Complete the work.
- Fit products together to integrate with other work. Provide openings for penetration of mechanical, electrical, and other services
- Match work that has been cut to adjacent work.
- Repair areas adjacent to cuts to required condition.
- Repair new work damaged by subsequent work.
- Remove samples of installed work for testing when requested.
- Remove and replace defective and non-complying work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original
- D. Patching:
- 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
- 3.03 PROGRESS CLEANING
- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

#### 3.04 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.
- 3.05 FINAL CLEANING
- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.

#### 3.06 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
- B. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- C. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
- D. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- E. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

#### **END OF SECTION**

#### **SECTION 01 78 00** CLOSEOUT SUBMITTALS

#### **PART 1 GENERAL** 1.01 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for
- B. Operation and Maintenance Data:
- C. Warranties and Bonds: For equipment or component parts of equipment put into service during construction with

#### Owner's permission, submit documents within 10 days after acceptance. PART 2 PRODUCTS - NOT USED

#### PART 3 EXECUTION

- 3.01 PROJECT RECORD DOCUMENTS A. Maintain on site one set of the following record documents; record actual revisions to the Work:

  - Change Orders and other modifications to the Contract.

#### 3.02 OPERATION AND MAINTENANCE DATA

- A. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- B. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance

#### 3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

A. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.

#### 3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- B. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

#### 3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.

#### 3.06 WARRANTIES AND BONDS

A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.

#### **END OF SECTION**

#### **DIVISION 02 - EXISTING CONDITIONS**

#### **SECTION 02 41 00 DEMOLITION**

#### PART 1 GENERAL

#### 1.01 SUBMITTALS

- A. Site Plan: Indicate:
- B. Demolition Plan: Submit demolition plan as required by OSHA and local AHJs.
- C. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

#### PART 3 EXECUTION

#### 2.01 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public. Obtain required permits.
- Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures. Provide, erect, and maintain temporary barriers and security devices.
- B. Hazardous Materials:
  - Hazardous Materials: Comply with 29 CFR 1926 and state and local regulations. Refer to hazardous materials report provided by Owner.

#### 2.02 EXISTING UTILITIES

- A. Coordinate work with utility companies. Notify utilities before starting work, comply with their requirements, and obtain required permits.
- B. Protect existing utilities to remain from damage.

#### 2.03 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Existing construction and utilities indicated on drawings are based on casual field observation and existing record documents only.
- B. Maintain weatherproof exterior building enclosure, except for interruptions required for replacement or modifications; prevent water and humidity damage.
- C. Remove existing work as indicated and required to accomplish new work.
- D. Services including, but not limited to, HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications: Remove existing systems and equipment as indicated.
- E. Protect existing work to remain. 2.04 DEBRIS AND WASTE REMOVAL

#### A. Remove debris, junk, and trash from site.

**END OF SECTION** 

#### DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES **SECTION 06 10 53 MISCELLANEOUS ROUGH CARPENTRY**

#### PART 1 GENERAL PART 2 PRODUCTS

#### 2.01 GENERAL REQUIREMENTS

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
- If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements. Grading Agency: Grading agency whose rules are approved by the Board of Review, American

Lumber Standard Committee (www.alsc.org) and who provides grading service for the species

#### and grade specified; provide lumber stamped with grade mark unless otherwise indicated. 2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Sizes: Nominal sizes as indicated on drawings, S4S.
- B. Moisture Content: S-dry or MC19.
- C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
  - Lumber: S4S, No.2 or Standard Grade.
- Boards: Standard or No.3.

#### 2.03 CONSTRUCTION PANELS

A. Communications and Electrical Room Mounting Boards: PS 1, A-D plywood, or medium density fiberboard; 3/4 inch thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.

#### 2.04 ACCESSORIES

- A. Fasteners and Anchors: 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere

#### PART 3 EXECUTION

#### 3.01 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- 3.02 INSTALLATION OF CONSTRUCTION PANELS

#### **END OF SECTION**

#### **SECTION 06 20 00** FINISH CARPENTRY

#### 1.01 SUBMITTALS

**PART 1 GENERAL** 

- A. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and
- B. Samples: Submit two samples of wood trim 24 inch long.

#### 1.02 QUALITY ASSURANCE

#### PART 2 PRODUCTS 2.01 FINISH CARPENTRY ITEMS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS), unless noted
- B. Surface Burning Characteristics: Provide materials having fire and smoke properties as required by applicable code.

#### 2.02 LUMBER MATERIALS

- A. Softwood Lumber: Select Structural Douglas Fir-Larch, No. 2 or better, or SPF, kiln-dried species, Quarter-sawn sawn, maximum moisture content of 6 percent; with vertical grain, of quality suitable
- Hardwood Lumber: Maple, Birch, or Oak, clean, kiln-dried, free of defects, for exposed work; other hardwoods acceptable for concealed components species, Quarter-sawn sawn, maximum moisture content of 6 percent; with vertical grain, of quality suitable for transparent finish.

#### 2.03 SHEET MATERIALS

- A. Softwood Plywood, Not Exposed to View: Any face species, veneer core; PS 1 Grade A-B, glue type as recommended for application.
- B. Hardwood Plywood: Face species as indicated, plain sawn, book matched, veneer core; HPVA HP-1 Front Face Grade AA, Back Face Grade 1, glue type as recommended for application.

A. Plastic Laminate: Types as specified in Section 06 41 00 - Architectural Wood Casework.

#### 2.04 PLASTIC LAMINATE MATERIALS

- 2.05 ACCESSORIES
- A. Adhesive: Type recommended by AWI/AWMAC to suit application. B. Plastic Edge Trim: Extruded flat shaped; smooth finish; of width to match component thickness; color
- 1. Design intent is for laminate panel edges to be finished with edge band as manufactured by scheduled plastic laminate manufacturer for truest match to scheduled laminate pattern and
- C. Aluminum Edge Trim: Extruded flat shape; smooth surface finish; self locking serrated tongue; of width to match component thickness; clear anodized finish.
- D. Primer: Alkyd primer sealer. E. Wood Filler: Solvent base, tinted to match surface finish color
- 2.06 HARDWARE

#### A. Hardware: Comply with BHMA A156.9.

2.07 WOOD TREATMENT A. Factory-Treated Lumber: Comply with requirements of AWPA U1 - Use Category System for pressure impregnated wood treatments determined by use categories, expected service conditions, and specific applications.

#### 2.08 FABRICATION

A. Shop assemble work for delivery to site, permitting passage through building openings. B. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit

corners and joints hairline; secure with concealed fasteners. Slightly bevel arises.

- C. Apply laminate backing sheet to reverse face of plastic laminate finished surfaces. 2.09 SHOP FINISHING
- A. Sand work smooth and set exposed nails and screws. B. Apply wood filler in exposed nail and screw indentations.

#### C. Finish work in accordance with AWI/AWMAC/WI (AWS), Section 5 - Finishing for grade specified and as follows:

indicated.

#### **PART 3 EXECUTION**

- 3.01 INSTALLATION A. Install custom fabrications in accordance with AWI/AWMAC/WI (AWS) requirements for grade
- B. Set and secure materials and components in place, plumb and level. C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.

#### **END OF SECTION**

#### **SECTION 06 41 00**

ARCHITECTURAL WOOD CASEWORK

#### **PART 1 GENERAL**

#### 1.01 SUBMITTALS

- A. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and
- Samples: Submit actual samples of architectural cabinet construction, minimum 12 inches square, illustrating proposed cabinet and shelf unit substrate and finish.
- C. Third-party certified Health Product Declaration and/or Environmental Product Declaration and/or Declare® Label(s) for each product indicated, if available.

#### 1.02 QUALITY ASSURANCE PART 2 PRODUCTS

#### 2.01 CABINETS

- Aesthetic Performance Grade: Custom Grade, in accordance with ANSI/AWI Standards, unless
- B. Structural Performance Grade: Duty Level 3, in accordance with ANSI/AWI Standards, unless noted
- C. Plastic Laminate Faced Cabinets: Custom grade.
- Finish Exposed Exterior Surfaces: Decorative laminate 2. Finish - Exposed Interior Surfaces: Decorative laminate.

- Finish Semi-Exposed Surfaces: Decorative laminate
- Finish Concealed Surfaces: Manufacturer's option.
- Door and Drawer Front Edge Profiles: Square edge with thick applied band.
- Door and Drawer Front Retention Profiles: Fixed panel.
- Casework Construction Type: Type A Frameless.
- Interface Style for Cabinet and Door: Style 1 Overlay; flush overlay. Grained Face Layout for Cabinet and Door Fronts: Flush panel.
- vertically within each cabinet unit.
- 10. Cabinet Design Series: As indicated on drawings.

a. Custom Grade: Doors, drawer fronts and false fronts wood grain to run and match

11. Drawer Construction Technique: As recommended by fabricator and meeting the duty rating

#### specified.

#### 2.02 WOOD-BASED COMPONENTS

A. Wood fabricated from old growth timber is not permitted.

#### 2.03 LAMINATE MATERIALS

- A. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.
- B. Provide specific types as indicated.
- 1. Horizontal Surfaces: HGS, 0.048 inch nominal thickness, colors as indicated, finish as
- 2. Cabinet Liner: CLS, 0.020 inch nominal thickness, through color, color as selected, textured low aloss finish. Laminate Backer: BKL, 0.020 inch nominal thickness, undecorated; for application to concealed
- backside of panels faced with high pressure decorative laminate. 4. Phenolic Cabinet Construction: CSL or CCSL, thickness as indicated, black or through-color

#### core as indicated, colors as indicated, finish as indicated.

2.04 COUNTERTOPS A. Countertops: See Section 12 36 00.

#### 2.05 ACCESSORIES

- A. Adhesive: Type recommended by fabricator to suit application.
- B. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; chrome-plated
- finish in concealed locations and stainless steel or chrome-plated finish in exposed locations.
- C. Grommets: Standard plastic grommets for cut-outs, in color to match adjacent surface.

#### 1. Wall Bumpers: Clear, plastc, self-adhesive bumper, approximately 1/2" x 1/2" x 3/16", applied to adjacent perpendicular wall where, when cabinet door is opened, specifed pull makes contact

#### with wall fnish. Provide one bumper per door pull where wall contact occurs.

- 2.06 HARDWARE
- A. Cabinet Hardware: Comply with BHMA A156.9 for hardware types and grades indicated below: B. Adjustable Shelf Supports: Standard side-mounted system using multiple holes for pin supports and
- coordinated self rests, polished chrome finish, for nominal 1 inch spacing adjustments. C. Drawer and Door Pulls, Typical: "U" shaped wire pull, steel with chrome finish, 4 inch centers.

D. Cabinet Locks, Typical: Keyed cylinder, two keys per lock, master keyed, steel with satin finish.

- E. Cabinet Catches:
- F. Drawer Slides:
- Type: Full extension with overtravel. Static Load Capacity: Heavy duty grade unless noted otherwise.
- G. Soft-Close, Door and Drawer Adjustable Dampers: H. Hinges: European style concealed self-closing type, steel with satin finish.

Mounting: Side or bottom mounted.

- 2.07 FABRICATION A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage
- through building openings. B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one

C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting.

manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel

Provide matching trim for scribing and site cutting. D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with

#### Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.

Cap exposed plastic laminate finish edges with plastic trim. PART 3 EXECUTION

3.01 INSTALLATION

- A. Install work in accordance with ANSI/AWI requirements for grade indicated. B. Coordinate the work with plumbing rough-in, electrical rough-in, and installation of associated and
- C. Sequence installation to ensure utility connections are achieved in an orderly and expeditious

B. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.

3.02 INSTALLATION A. Install work in accordance with ANSI/AWI requirements for grade indicated.

#### **END OF SECTION**

C. Use concealed joint fasteners to align and secure adjoining cabinet units.

PART 1 GENERAL 1.01 SUBMITTALS

List of backing materials approved for use with the specific product.

Backing material recommended by sealant manufacturer.

**DIVISION 07 - THERMAL AND MOISTURE PROTECTION** 

**SECTION 07 92 00** 

**JOINT SEALANTS** 

- A. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and
- Substrates that product is known to satisfactorily adhere to and with which it is compatible. Substrates the product should not be used on. B. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product

to be used, including physical characteristics, installation instructions, and recommended tools.

C. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards

#### 1.02 WARRANTY

PART 2 PRODUCTS

that fail to achieve a watertight seal, exhibit loss of adhesion or cohesion, or do not cure. Complete

forms in Owner's name and register with manufacturer.

showing standard colors available for selection.

A. Scope:

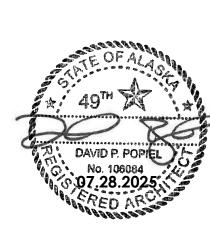
2.01 JOINT SEALANT APPLICATIONS

2.02 JOINT SEALANTS - GENERAL

#### A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements. B. Manufacturer Warranty: Provide 2-year manufacturer warranty for installed sealants and accessories

#### 1. Exterior Joints:

Interior Joints:



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CONSULTANT:

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PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY: REVISION DESCRIPTION DATE

SHEET SPECIFICATIONS

BETTISWORTH NORTH ARCHITECTS & PLANNERS®

- A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than
- B. Colors: As indicated on drawings.

#### 2.03 ACCESSORIES

A. Sealant Backing Materials, General: Materials placed in joint before applying sealants; assists sealant performance and service life by developing optimum sealant profile and preventing threesided adhesion; type and size recommended by sealant manufacturer for compatibility with sealant. substrate, and application.

#### **PART 3 EXECUTION**

#### 3.01 INSTALLATION

- A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Provide joint sealant installations complying with ASTM C1193.
- C. Install bond breaker backing tape where backer rod cannot be used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

#### **END OF SECTION**

#### **DIVISION 08 - OPENINGS SECTION 08 11 13 HOLLOW METAL DOORS AND FRAMES**

#### **PART 1 GENERAL**

- 1.01 SUBMITTALS
- A. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes.
- B. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.

#### 1.02 DELIVERY, STORAGE, AND HANDLING

A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified

#### PART 2 PRODUCTS

#### 2.01 PERFORMANCE REQUIREMENTS

- A. Requirements for Hollow Metal Doors and Frames:
- Steel Sheet: Comply with one or more of the following requirements; galvannealed steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.
- 2. Accessibility: Comply with ICC A117.1 and ADA Standards.
- Door Edge Profile: Beveled, both sides.
- Typical Door Face Sheets: Flush.
- Glazed Lights: Non-removable stops on non-secure side; sizes and configurations as indicated on drawings. Style: Manufacturer's standard.
- 6. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and ANSI/SDI A250.8 (SDI-100) in accordance with
- Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

#### 2.02 HOLLOW METAL DOORS

- A. Door Finish: Factory primed and field finished.
- B. Interior Doors, Non-Fire-Rated:
  - Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
  - Level 3 Extra Heavy-duty. b. Physical Performance Level A 1 000 000 cycles; in accordance with ANSI/SDI A250.4.
  - c. Model 1 Full Flush.
  - d. Door Face Metal Thickness: 16 gauge, 0.053 inch, minimum.
  - 2. Door Core Material: Manufacturers standard core material/construction and in compliance with

  - 3. Door Thickness: 1-3/4 inches, nominal.
- 2.03 HOLLOW METAL FRAMES
- A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
- B. Frame Finish: Factory primed and field finished.
- C. Interior Door Frames, Non-Fire Rated: Full profile/continuously welded type.
- 1. Frame Metal Thickness: 16 gauge, 0.053 inch, minimum.
- D. Frames for Wood Doors: Comply with frame requirements in accordance with corresponding door.
- E. Borrowed Lites Glazing Frames: Construction and face dimensions to match door frames, and as
- indicated on drawings. F. Frames Wider than 48 inches: Reinforce with steel channel fitted tightly into frame head, flush with

#### 2.04 FINISHES

A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

#### 2.05 ACCESSORIES

- A. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.
- B. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

#### **PART 3 EXECUTION**

- 3.01 INSTALLATION A. Install doors and frames in accordance with manufacturer's instructions and related requirements of
- specified door and frame standards or custom guidelines indicated. B. Coordinate frame anchor placement with wall construction.

#### **END OF SECTION**

#### **SECTION 08 14 16 FLUSH WOOD DOORS**

#### **PART 1 GENERAL**

#### 1.01 SUBMITTALS

- A. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.
- Third-party certified Health Product Declaration and/or Environmental Product Declaration and/or Declare® Label(s) for each product indicated, if available.
- C. Shop Drawings: Show doors and frames, elevations, sizes, types, swings, undercuts, beveling, blocking for hardware, factory machining, factory finishing, cutouts for glazing and other details.
- D. Samples: Submit two samples of door veneer, 12 by 12 inches in size illustrating wood grain, stain color, and sheen.

#### 1.02 QUALITY ASSURANCE

#### 1.03 WARRANTY

A. Manufacturer Warranty: Provide manufacturer's warranty on interior doors for the life of the installation. Complete forms in Owner's name and register with manufacturer.

Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.

#### PART 2 PRODUCTS

#### **2.01 DOORS**

- A. Doors: See drawings for locations and additional requirements.
  - Quality Standard: Premium Grade, Extra Heavy Duty performance, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Interior Doors: 1-3/4 inches thick unless otherwise indicated; flush construction Provide solid core doors at each location.

#### 2.02 DOOR AND PANEL CORES

A. Non-Rated Solid Core and 20 Minute Rated Doors: Type particleboard core (PC), plies and faces as indicated.

2.03 DOOR FACINGS A. Veneer Facing for Transparent Finish: \_\_\_\_\_, HPVA Grade A, plain sliced (flat cut), with book match between leaves of veneer, balance match of spliced veneer leaves assembled on door or panel face.

#### Vertical Edges: Same species as face veneer. 2.04 DOOR CONSTRUCTION

- A. Fabricate doors in accordance with door quality standard specified.
- B. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.
- C. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.

#### 2.05 FINISHES - WOOD VENEER DOORS

- A. Finish work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), Section 5 -Finishing for grade specified and as follows:
- 1. Transparent: a. System - 11, Polyurethane, Catalyzed.
- b. Sheen: Satin.

#### 2.06 ACCESSORIES

- A. Glazing Stops: Wood, of same species as door facing, mitered corners; prepared for countersink style tamper proof screws
- B. Door Hardware: See Section 08 71 00.

#### PART 3 EXECUTION

#### 3.01 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions and specified quality standard.
- B. Coordinate installation of doors with installation of frames and hardware.

#### **END OF SECTION**

#### **SECTION 08 31 00** ACCESS DOORS AND PANELS

#### PART 1 GENERAL

#### 1.01 SUBMITTALS

- A. Product Data: Provide sizes, types, finishes, hardware, scheduled locations, and details of adjoining
- B. Shop Drawings: Indicate exact position of each access door and/or panel unit.

#### PART 2 PRODUCTS 2.01 ACCESS DOORS AND PANELS ASSEMBLIES

- A. Wall-Mounted Units:
  - Location: As indicated on drawings. Coordinate with Mechanical.
- 2. Size: Refer to drawings B. Ceiling-Mounted Units:

#### Location: As indicated on drawings. Coordinate with Mechanical.

- Size: Refer to drawings 2.02 WALL- AND CEILING-MOUNTED ACCESS UNITS A. Wall- and Ceiling-Mounted Units: Factory-fabricated door and frame, fully assembled units with
  - corner joints welded, filled and ground flush; square and without rack or warp; coordinate requirements with type of installation assembly being used for each unit. Material: Steel.
  - Door Style: Single thickness with rolled or turned in edges. Frames: 16-gauge, 0.0598-inch minimum thickness.
  - Single Steel Sheet Door Panels: 16-gauge, 0,0625-inch minimum thickness. Steel Finish: Primed.
  - Primed and Factory Finish: Polyester powder coat; color white.
  - a. Hinges for Non-Fire-Rated Units: Concealed, constant force closure spring type.

#### PART 3 EXECUTION

#### 3.01 INSTALLATION

A. Install units in accordance with manufacturer's instructions.

b. Latch/Lock: Tamperproof tool-operated cam latch.

B. Install frames plumb and level in openings, and secure units rigidly in place.

#### **END OF SECTION**

#### **SECTION 08 53 13 VINYL WINDOWS**

#### PART 1 GENERAL

#### 1.01 SUBMITTALS

- A. Product Data: Provide component dimensions, anchors, fasteners, glass, and internal drainage.
- B. Shop Drawings: Indicate opening dimensions, framed opening tolerances, affected related work, and
- C. Grade Substantiation: Prior to submitting shop drawings or starting fabrication, submit one of the following showing compliance with specified grade: Evidence of AAMA Certification.
- Evidence of CSA Certification. Test report(s) by independent testing agency itemizing compliance and acceptable to authorities

having jurisdiction.

Evidence of WDMA Certification.

#### D. Specimen warranty.

- 1.02 WARRANTY A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. Manufactuer Warranty: Provide 20 year manufacturer warranty covering laminated foil finish, including degradation or failure due to chemical contact. Complete forms in Owner's name and register with manufacturer.

#### PART 2 PRODUCTS

#### 2.01 DESCRIPTION

- A. Vinyl Windows: Factory-fabricated frame and sash members of extruded, hollow, ultravioletresistant, glass-fiber reinforced polyvinyl chloride (PVC) with integral color; with factory-installed glazing, hardware, related flashings, anchorage and attachment devices.
  - Configuration: As indicated on drawings. a. Product Type: FW - Fixed window in accordance with AAMA/WDMA/CSA 101/I.S.2/A440. Interior Color: As selected by Architect from manufacturer's full line of colors.
  - Exterior Color: As selected by Architect from manufacturer's full line of colors. System Internal Drainage: Drain to exterior side by means of weep drainage network any water entering joints, condensation within glazing channel, or other migrating moisture within system.

Glazing Stops, Trim, Flashings, and Accessory Pieces: Formed of rigid PVC, fitting tightly into

#### 2.02 PERFORMANCE REQUIREMENTS

A. Grade: AAMA/WDMA/CSA 101/I.S.2/A440 requirements for specific window type: 1. Performance Class (PC): CW.

#### 2.03 COMPONENTS

- A. Glazing: Insulated double pane, annealed glass, clear, low-E coated, manufacturer's standard fill, with thermoplastic warm-edge spacer, with glass thicknesses as recommended by manufacturer for specified wind conditions.
- B. Frame Depth: Manufacturer's standard.

#### **PART 3 EXECUTION**

#### 3.01 INSTALLATION

- A. Install window unit assemblies in accordance with manufacturers instructions and applicable building
- B. Attach window frame and shims to perimeter opening to accommodate construction tolerances and other irregularities as necessary.
- C. Align window plumb and level, free of warp or twist, and maintain dimensional tolerances and alignment with adjacent work.

#### **END OF SECTION**

#### **SECTION 08 80 00** GLAZING

#### **PART 1 GENERAL** 1.01 SUBMITTALS

- A. Product Data on Glazing Unit Glazing Types: Provide structural, physical and environmental
- characteristics, size limitations, special handling and installation requirements. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available
- C. Third-party certified Health Product Declaration and/or Environmental Product Declaration and/or Declare® Label(s) for each product indicated, if available.
- D. Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated on Drawings.
- 1. Schedule is to identify compliance with Safety Glazing Provisions identified in interior and exterior glazing paragraphs. Coordinate with submittals for glazed Aluminum Storefronts and Hollow Metal Doors and Frames.

#### 1.02 QUALITY ASSURANCE A. Perform Work in accordance with GANA (GM), GANA (SM), GANA (LGRM), and IGMA TM-3000 for

glazing installation methods. Maintain one copy on site. 1.03 WARRANTY

#### A. Insulating Glass Units: Provide a ten (10) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including providing products to replace failed units.

#### PART 2 PRODUCTS 2.01 MANUFACTURERS

- 2.02 GLASS MATERIALS
- A. Float Glass: Provide float glass based glazing unless otherwise indicated. Kind HS - Heat-Strengthened Type: Complies with ASTM C1048.

Kind FT - Fully Tempered Type: Complies with ASTM C1048.

- 3. Fully Tempered Safety Glass: Complies with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations.
- Applications: a. Glazed lites in doors, except fire doors.
- b. Glazed sidelights to doors, except in fire-rated walls and partitions. Other locations required by applicable federal, state, and local codes and regulations.
- Other locations indicated on drawings.
- 2. Glass Type: Fully tempered safety glass as specified. 3. Tint: Clear.

A. Monolithic Safety Glazing: Non-fire-rated.

#### 4. Thickness: 1/4 inch, nominal.

2.03 GLAZING UNITS

- 2.04 ACCESSORIES Setting Blocks: Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch by width of glazing rabbet space minus
  - 1/16 inch by height to suit glazing method and pane weight and area. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Continuous
  - by one half the height of the glazing stop by thickness to suit application, self adhesive on one face. C. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound with integral resilient spacer rod applicable to application indicated; 5 to 30 cured Shore A durometer

#### hardness; coiled on release paper; black color. **PART 3 EXECUTION**

#### **DIVISION 09 - FINISHES SECTION 09 05 61**

#### PART 1 GENERAL 1.01 SUBMITTALS

A. Floor Covering and Adhesive Manufacturers' Product Literature: For each specific combination of substrate, floor covering, and adhesive to be used; showing:

**END OF SECTION** 

COMMON WORK RESULTS FOR FLOORING PREPARATION

- B. Adhesive Bond and Compatibility Test Report.

#### PART 2 PRODUCTS

- 2.01 MATERIALS A. Patching Compound: Floor covering manufacturer's recommended product, suitable for conditions, and compatible with adhesive and floor covering. In the absence of any recommendation from
  - flooring manufacturer, provide a product with the following characteristics: 1. Cementitious moisture-, mildew-, and alkali-resistant compound, compatible with floor, floor covering, and floor covering adhesive, and capable of being feathered to nothing at edges.

2. Compressive Strength: 3000 psi, minimum, after 28 days, when tested in accordance with

ASTM C109/C109M or ASTM C472, whichever is appropriate. Alternate Flooring Adhesive: Floor covering manufacturer's recommended product, suitable for the moisture and pH conditions present; low-VOC. In the absence of any recommendation from flooring manufacturer, provide a product recommended by adhesive manufacturer as suitable for substrate

#### and floor covering and for conditions present. PART 3 EXECUTION

#### 3.01 CONCRETE SLAB PREPARATION

A. Perform following operations in the order indicated:

b. Removal of existing floor covering.

- 1. Existing concrete slabs (on-grade and elevated) with existing floor coverings: a. Visual observation of existing floor covering, for adhesion, water damage, alkaline deposits.
- 2. Existing concrete slabs with coatings or penetrating sealers/hardeners/dustproofers: a. Do not attempt to remove coating or penetrating material. b. Do not abrade surface.

and other defects.

Preliminary cleaning. 4. Specified remediation, if required.

- Patching, smoothing, and leveling, as required.
- Other preparation specified.
- Adhesive bond and compatibility test.
- 8. Protection.
- B. Remediations: 1. Active Water Leaks or Continuing Moisture Migration to Surface of Slab: Correct this condition before doing any other remediation; re-test after correction.
- 2. Excessive Moisture Emission or Relative Humidity: If an adhesive that is resistant to the level of moisture present is available and acceptable to flooring manufacturer, use that adhesive for installation of the flooring; if not, apply remedial floor coating or remedial sheet membrane over entire suspect floor area.
- 3. Excessive Alkalinity (pH): If remedial floor coating is necessary to address excessive moisture, no additional remediation is required; if not, if an adhesive that is resistant to the level present is available and acceptable to the flooring manufacturer, use that adhesive for installation of the flooring; otherwise, apply a skim coat of specified patching compound over entire suspect floor

#### 3.02 ADHESIVE BOND AND COMPATIBILITY TESTING

A. Comply with requirements and recommendations of floor covering manufacturer.

#### 3.03 APPLICATION OF REMEDIAL FLOOR COATING

#### A. Comply with requirements and recommendations of coating manufacturer.

#### **END OF SECTION**

#### **SECTION 09 21 16 GYPSUM BOARD ASSEMBLIES**

#### PART 1 GENERAL 1.01 SUBMITTALS

- A. Shop Drawings: Indicate special details associated with fireproofing and acoustic seals.
- B. Product Data: Provide data on gypsum board, glass mat faced gypsum board, accessories, and joint finishing system.
- C. Product Data: Provide manufacturer's data on partition head to structure connectors, showing
- compliance with requirements D. Third-party certified Health Product Declaration and/or Environmental Product Declaration and/or

#### Declare® Label(s) for each product indicated, if available. **PART 2 PRODUCTS**

- 2.01 GYPSUM BOARD ASSEMBLIES
- A. Provide completed assemblies complying with ASTM C840 and GA-216. B. Interior PartitionsIndicated as Sound-Rated: Provide completed assemblies with the following characteristics
- tests conducted in accordance with ASTM E90. C. Fire-Resistance-Rated Assemblies: Provide completed assemblies in accordance with the citations

1. Acoustic Attenuation: STC as indicated calculated in accordance with ASTM E413, based on

#### 1. UL Assembly Numbers: Provide construction equivalent to that listed for the particular assembly in the current UL (FRD).

Thickness:

- 2.02 BOARD MATERIALS A. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to
  - minimize joints in place; ends square cut. 1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
  - Glass mat faced gypsum panels, as defined in ASTM C1658/C1658M, suitable for paint finish, of the same core type and thickness may be substituted for paper-faced board. 3. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
  - 4. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
  - a. Vertical Surfaces: 5/8 inch. b. Ceilings: 5/8 inch.
  - Multi-Layer Assemblies: Thicknesses as indicated on drawings. B. Backing Board For Wet Areas: One of the following products:
  - 1. Application: Surfaces behind tile in wet areas including shower ceilings. a. Provide Cement-Based Board behind tile at shower and tub surrounds. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.

3. ANSI Cement-Based Board: Non-gypsum-based; aggregated Portland cement panels with

- plass fiber mesh embedded in front and back surfaces complying with ANSI A118.9 or ASTM 4. Glass Mat Faced Board: Coated glass mat water-resistant gypsum backing panel as defined in
- C. Ceiling Board: Special sag resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
- Application: Ceilings, unless otherwise indicated.
- 2. Thickness: 5/8 inch. 3. Edges: Tapered.

2. Architectural Reveal Beads:

Reveal Depth: 1/4 inch.

Reveal Width: 1/4 inch.

- 2.03 GYPSUM BOARD ACCESSORIES
- A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness as indicated in Drawings. B. Beads, Joint Accessories, and Other Trim: ASTM C1047, rolled zinc, unless noted otherwise.

Corner Beads: Low profile, for 90 degree outside corners.

- Shapes: As indicated on drawings. 3. Wall Mounted Deflection Beads: Flexible gasket and bead with 1-1/8 inch flange. Expansion Joints:
- C. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for 1. Fiberglass Tape: 2 inch wide, coated glass fiber tape for joints and cornersat glass mat faced

2. Paper Tape: 2 inch wide, creased paper tape for joints and corners, except as otherwise

D. High Build Drywall Surfacer: Vinyl acrylic latex-based coating for spray application, designed to take

Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit

indicated. 3. Joint Compound: Drying type, vinyl-based, ready-mixed.

gypsum board and cementitious backer board.

4. Joint Compound: Setting type, field-mixed.

the place of skim coating and separate paint primer in achieving Level 5 finish. E. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws, corrosion-resistant.

#### application; to rigidly secure materials in place.

#### PART 3 EXECUTION 3.01 ACOUSTIC ACCESSORIES INSTALLATION

especially in highly visible locations.

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

#### B. Fire-Resistance-Rated Construction: Install gypsum board in strict compliance with requirements of

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints,

C. Exposed Gypsum Board in Interior Wet Areas: Seal joints, cut edges, and holes with water-resistant

DAVID P. POPIEL No. 106084

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REVISION DESCRIPTION

BETTISWORTH NORTH ARCHITECTS & PLANNERS

M CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY:

SHEET SPECIFICATIONS

- D. Cementitious Backing Board: Install over steel framing members and plywood substrate where indicated, in accordance with ANSI A108.11 and manufacturer's instructions.
- E. Installation on Metal Framing: Use screws for attachment of gypsum board.

#### 3.03 JOINT TREATMENT

- A. Glass Mat Faced Gypsum Board and Exterior Glass Mat Faced Sheathing: Use fiberglass joint tape, embed and finish with setting type joint compound.
- Paper Faced Gypsum Board: Use paper joint tape, embed with drying type joint compound and finish with drying type joint compound.
- C. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
- Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
- Level 3: Walls to receive textured wall finish. Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.
- 4. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction, plenum spaces.
- 5. Level 0: Temporary partitions.

#### **END OF SECTION**

#### **SECTION 09 51 00 ACOUSTICAL CEILINGS**

#### **PART 1 GENERAL**

- 1.01 SUBMITTALS
- A. Shop Drawings: Indicate grid layout and related dimensioning, junctions with other ceiling finishes, and mechanical and electrical items installed in the ceiling.
- B. Product Data: Provide data on suspension system components and acoustical units.
- C. Samples: Submit two samples 6 by 6 inch in size illustrating material and finish of acoustical units.

#### 1.02 QUALITY ASSURANCE 1.03 FIELD CONDITIONS

A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

#### PART 2 PRODUCTS

#### 2.01 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Ceiling systems designed to withstand the effects of earthquake motions

determined according to ASCE 7 for Seismic Design Category E and complying with the following:

- 1. Local authorities having jurisdiction. 2.02 ACOUSTICAL UNITS
- A. Acoustical Units General: ASTM E1264, Class A.
- 1. VOC Content: Certified as Low Emission by one of the following: a. Product listing in UL (GGG).
- B. Acoustical Panels: Painted mineral fiber, with the following characteristics:
- 1. Classification: ASTM E1264 Type III.
- a. Form: 2, water felted.
- b. Pattern: "C" perforated, small holes; "E" lightly textured. 2. Size: 24 by 48 inches unless otherwise indicated.
- Thickness: 5/8 inch.
- Light Reflectance: minimium 85 percent, determined in accordance with ASTM E1264.
- NRC Range: 0.50 to 0.70, determined in accordance with ASTM E1264.
- Ceiling Attenuation Class (CAC): minimum 30, determined in accordance with ASTM E1264 Panel Edge: Square.
- Color: As indicated on drawings.
- Suspension System: Exposed grid.

#### 2.03 SUSPENSION SYSTEM(S)

A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with perimeter moldings, hold down clips, stabilizer bars, clips, and splices as required.

#### 2.04 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.
- B. Hanger Wire: 12 gauge, 0.08 inch galvanized steel wire.
- C. Hold-Down Clips: Manufacturer's standard clips to suit application.
- D. Seismic Clips: Manufacturer's standard clips for seismic conditions and to suit application.
- E. Perimeter Moldings: Same metal and finish as grid.
- Size: As required for installation conditions and specified Seismic Design Category. F. Metal Edge Trim for Suspension Systems: Steel or extruded aluminum; provide attachment clips, splice plates, and preformed corner pieces for complete trim system.

#### 1. Trim Height: 6 inch. PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Install after major above-ceiling work is complete.
- B. Coordinate the location of hangers with other work.

#### 3.02 INSTALLATION - SUSPENSION SYSTEM

A. Install suspension system in accordance with ASTM E580/E580M and manufacturer's instructions

#### and as supplemented in this section.

#### 3.03 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.

#### **END OF SECTION**

#### **SECTION 09 65 00 RESILIENT FLOORING**

#### **PART 1 GENERAL**

1.01 SUBMITTALS

- A. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- B. Shop Drawings: Indicate seaming plans and floor patterns.
- C. Verification Samples: Submit two samples, \_\_\_ by \_\_\_ inch in size illustrating color and pattern for each resilient flooring product specified.

#### PART 2 PRODUCTS 2.01 SHEET FLOORING

- A. Rubber Sheet Flooring Refer to drawings; finish schedule: 100 percent rubber composition, color and pattern through total thickness.
- 1. Minimum Requirements: Comply with ASTM F1859, Type 1, without backing.
- Thickness: 0.125 inch minimum. Color: As indicated on drawings.

#### 2.02 RESILIENT BASE

- A. Resilient Base Refer to drawings; finish schedule: ASTM F1861, Type TS, rubber, vulcanized thermoset; style as scheduled.
- 1. Height: 4 inches.
- 2. Thickness: 0.125 inch. 3. Finish: Satin.
- 4. Color: As indicated on drawings.
- **PART 3 EXECUTION**
- 3.01 INSTALLATION GENERAL

- A. Starting installation constitutes acceptance of subfloor conditions
- B. Install in accordance with manufacturer's written instructions.

#### 3.02 INSTALLATION - SHEET FLOORING

- A. Lay flooring with joints and seams parallel to longer room dimensions, to produce minimum number of seams. Lay out seams to avoid widths less than 1/3 of roll width; match patterns at seams. 3.03 INSTALLATION - RESILIENT BASE
- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.

#### **END OF SECTION**

#### **SECTION 09 68 13 TILE CARPETING**

#### PART 1 GENERAL

#### 1.01 SUBMITTALS

- A. Product Data: Provide data on specified products, describing physical and performance
- B. Shop Drawings: Indicate layout of joints.
- characteristics; sizes, patterns, colors available, and method of installation.
- C. Samples: Submit two carpet tiles illustrating color and pattern design for each carpet color selected. D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions
- E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
- See Section 01 60 00 Product Requirements, for additional provisions. Extra Carpet Tiles: Quantity equal to 5 percent of total installed of each color and pattern

#### PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. Tile Carpeting: Tufted, manufactured in one color dye lot. Refer to drawings; finish schedule
- PART 3 EXECUTION

#### 3.01 INSTALLATION

- A. Blend carpet from different cartons to ensure minimal variation in color match.
- B. Cut carpet tile clean. Fit carpet tight to intersection with vertical surfaces without gaps. C. Lay carpet tile in square pattern, with pile direction parallel to next unit, set parallel to building lines. **END OF SECTION**

#### **SECTION 09 84 30** SOUND-ABSORBING WALL AND CEILING UNITS

#### PART 1 GENERAL

- 1.01 SUBMITTALS
  - A. Product Data: Manufacturer's printed data sheets for products specified.
  - B. Shop Drawings: Fabrication and installation details, panel layout, fabric orientation, and wood grain orientation.
  - C. Verification Samples: Fabricated samples of each type of panel specified; 12 by 12 inch, showing construction, edge details, and fabric covering.

#### PART 2 PRODUCTS

#### 2.01 FABRIC-COVERED SOUND-ABSORBING UNITS

- A. General:
- Prefinished, factory assembled fabric-covered panels.
- Surface Burning Characteristics: Flame spread index of 25 or less and smoke developed index of 450 or less, when tested in accordance with ASTM E84.
- B. Fabric-Covered Acoustical Panels for Walls and Ceilings: Refer to finish schedule.
- 1. Panel Core: Manufacturer's standard rigid or semi-rigid fiberglass core.

#### 2.02 FABRICATION

PART 3 EXECUTION

3.01 INSTALLATION

**PART 1 GENERAL** 

1.02 SUBMITTALS

PART 2 PRODUCTS

2.01 MANUFACTURERS

exceptions.

1.01 SECTION INCLUDES

- A. Fabric Wrapped, General: Fabricate panels to sizes and configurations as indicated, with fabric facing installed without sagging, wrinkles, blisters, or visible seams.
- 1. For panels suspended from ceiling, provide fabric covering both sides, with seams only at panel

B. Do Not Paint or Finish the Following Items:

parts of equipment.

"alkyd enamel").

Glass.

2.03 ACCESSORIES A. Ceiling-Suspended Accessories: Manufacturer's standard accessories at locations as indicated on

A. Install acoustical units in locations as indicated, following manufacturer's installation instructions.

**END OF SECTION** 

**SECTION 09 91 23** 

INTERIOR PAINTING

A. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise

A. Product Data: Provide complete list of products to be used, with the following information for each:

B. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of

C. Samples: Submit two paper chip samples, 12x12 inch in size illustrating range of colors and textures

A. Provide paints and finishes used in any individual system from the same manufacturer; no

Items factory-finished unless otherwise indicated; materials and products having factory-applied

Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating

Manufacturer's name, product name and/or catalog number, and general product category (e.g.,

Cross-reference to specified paint system products to be used in project; include description of

B. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and

manufacturer's instructions and as supplemented in this section.

D. Suspend ceiling baffles at locations and heights as indicated.

primers are not considered factory finished.

Items indicated to receive other finishes.

Items indicated to remain unfinished.

Floors, unless specifically indicated.

7. Concealed pipes, ducts, and conduits.

MPI product number (e.g., MPI #47).

colors available for each finishing product specified.

available for each surface finishing product scheduled.

Where sheen is specified, submit samples in only that sheen.

C. Install mounting accessories and supports in accordance with shop drawings.

- each acoustical unit, sized appropriately for weight of acoustical unit.
  - C. Samples: Submit samples illustrating component design, configurations, joinery, color and finish. Submit two sections of corner guards, 24 inches long.

A. Product Data: Indicate physical dimensions, features, wall mounting brackets with mounted

- Submit two samples of protective wall covering, 6 by 6 inches square.
- D. Maintenance Materials: Furnish the following for Owner's use in maintenance of project: 1. Extra Stock Materials: One package(s) of minimum 96 inches long unit of each kind of covers
- 2. Extra Stock Materials: 32 square feet of each kind of protective wall covering.

#### 1.02 WARRANTY

2.02 PAINT SYSTEMS - INTERIOR

**PART 3 EXECUTION** 

3.01 EXAMINATION

3.02 PREPARATION

3.03 APPLICATION

**PART 1 GENERAL** 

1.01 SUBMITTALS

PART 2 PRODUCTS

2.02 PANEL SIGNAGE

2.03 ACCESSORIES

PART 3 EXECUTION

3.01 INSTALLATION

PART 1 GENERAL

1.01 SUBMITTALS

B. Shop Drawings:

2.01 REGULATORY REQUIREMENTS

restrictive requirements.

B. Install with horizontal edges level.

diagrams for protective wall coverings.

applied.

concrete, wood, and shop primed steel.

Two top coats and one coat primer.

Two top coats and one coat primer.

Gypsum Wallboard: 12 percent.

for the substrate under the project conditions.

Architectural Painting Specification Manual".

including metals and wood:

A. Paint I-OP - Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board,

B. Paint I-OP-MD-DT - Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants,

A. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result

A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI

B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is

**END OF SECTION** 

**DIVISION 10 - SPECIALTIES** 

**SECTION 10 14 23** 

**PANEL SIGNAGE** 

foreground and background colors, locations, and overall dimensions of each sign.

C. Verification Samples: Submit samples showing colors, materials, and finishes specified.

A. Panel Signage: Refer to drawings for signage plan, schedule, and types.

A. Tape Adhesive: Double-sided tape, permanent adhesive.

A. Install in accordance with manufacturer's instructions.

A. Accessibility Requirements: Comply with ADA Standards and ICC A117.1 and applicable building

**END OF SECTION** 

**SECTION 10 26 00** 

WALL AND DOOR PROTECTION

B. Shop Drawings: Include plans, elevation, sections, and attachment details. Show design and spacing

of supports for protective corridor handrails, required to withstand structural loads. Provide seaming

codes, unless otherwise indicated; in the event of conflicting requirements, comply with the most

Product Data: Manufacturer's product literature for each type of panel sign, indicating styles, font,

1. Include dimensions, locations, elevations, materials, text and graphic layout, attachment details,

unless moisture content of surfaces is below the following maximums:

Masonry, Concrete, and Concrete Masonry Units: 12 percent.

A. Clean surfaces thoroughly and correct defects prior to application.

3. Interior Wood: 15 percent, measured in accordance with ASTM D4442.

- A. See Section 01 78 00 Closeout Submittals for additional warranty requirements.
- Manufacturer Warranty: Provide 5-year manufacturer warranty for metal crash rails. Complete forms in Owner's name and register with manufacturer.
- 1. Failures include, but are not limited to, the following:

measurements, anchorage details, and rough-in measurements.

a. Structural failures or internal connection failures. b. Deterioration of materials beyond that expected of normal use, as intended by

#### PART 2 PRODUCTS 2.01 PERFORMANCE CRITERIA

- A. Impact Strength: Unless otherwise noted, provide protection products and assemblies that have been successfully tested for compliance with applicable provisions of ASTM D256 and/or ASTM
- B. Chemical and Stain Resistance: Unless otherwise noted, provide protection products and assemblies with chemical and stain resistance complying with applicable provisions of ASTM D543.
- Fungal Resistance: Unless otherwise noted, provide protection products and assemblies which pass ASTM G21 testing.

#### 2.02 PRODUCT TYPES

- A. Corner Guards Refer to finish schedule.
- 1. Preformed end caps.
- B. Protective Wall Covering (HIP): Refer to finish schedule.

A. Fabricate components with tight joints, corners and seams

- 1. Color: As indicated on drawings.
- C. Adhesives and Primers: As recommended by manufacturer.
- D. Mounting Brackets and Attachment Hardware: Appropriate to component and substrate. 2.03 FABRICATION

#### B. Pre-drill holes for attachment. C. Form end trim closure by capping and finishing smooth.

#### **PART 3 EXECUTION** 3.01 INSTALLATION

A. Install components in accordance with manufacturer's instructions, level and plumb, secured rigidly in position to supporting construction

#### **END OF SECTION**

#### **SECTION 10 28 00 TOILET. BATH. AND LAUNDRY ACCESSORIES**

#### PART 1 GENERAL

#### 1.01 SUBMITTALS

A. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.

#### PART 2 PRODUCTS

2.01 MANUFACTURERS A. Refer to drawings for manufacturers and products.

#### 2.02 MATERIALS

A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.

#### PART 3 EXECUTION

#### 3.01 INSTALLATION

- A. Install accessories in accordance with manufacturers' instructions in locations indicated on drawings
- B. Install plumb and level, securely and rigidly anchored to substrate.
- C. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.

#### **END OF SECTION**

#### **SECTION 10 44 00** FIRE PROTECTION SPECIALTIES

#### PART 1 GENERAL

#### 1.01 SUBMITTALS

- A. Product Data: Provide extinguisher operational features, extinguisher ratings and classifications,
- color and finish, anchorage details, and installation instructions. B. Shop Drawings: Indicate locations of cabinets, locations of individual fire extinquishers, and

#### accessories required for complete installation. PART 2 PRODUCTS

#### 2.01 FIRE EXTINGUISHERS

- A. Fire Extinguishers General: Comply with product requirements of NFPA 10 and applicable codes, whichever is more stringent
- 1. Provide extinguishers labeled by UL (DIR) or FM (AG) for purpose specified and as indicated. B. Multipurpose Dry Chemical Type Fire Extinguishers: Carbon steel tank, with pressure gauge. 1. Class: A:B:C type.
- 3. Temperature range: Minus 40 degrees F to 120 degrees F. C. Dry Chemical Type Fire Extinguishers: Stainless steel tank, with pressure gauge.

2. Size: 5 pound.

Class: K type. 2. Size: 1.6 gallons.

#### 3. Temperature range: Minus 20 degrees F to 120 degrees F. 2.02 FIRE EXTINGUISHER CABINETS

- A. Cabinet Configuration: Semi-recessed type.
- B. Door: 0.036 inch metal thickness, reinforced for flatness and rigidity with roller type catch. Hinge doors for 180 degree opening with continuous piano hinge.
- C. Door Glazing: Acrylic plastic, clear, 1/8 inch thick, flat shape and set in resilient channel glazing
- D. Cabinet Mounting Hardware: Appropriate to cabinet, with pre-drilled holes for placement of anchors. E. Finish of Cabinet Exterior Trim and Door: No.4 - Brushed stainless steel.

#### A. Extinguisher Brackets: Formed steel, chrome-plated. PART 3 EXECUTION

2.03 ACCESSORIES

#### 3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions. B. Install cabinets plumb and level in wall openings, 48 inches from finished floor to top of cabinet.
- C. Secure rigidly in place.
  - D. Place extinguishers in cabinets and on wall brackets.

#### **END OF SECTION DIVISION 12 - FURNISHINGS**

**SECTION 12 24 00** 

**WINDOW SHADES** 

#### PART 1 GENERAL

- 1.01 SUBMITTALS A. Product Data: Provide manufacturer's standard catalog pages and data sheets, including materials,
  - B. Shop Drawings: Include shade schedule indicating size, location and keys to details, head, jamb and sill details, mounting dimension requirements for each product and condition, and operation direction

finishes, fabrication details, dimensions, profiles, mounting requirements, and accessories.

C. Selection Samples: Include fabric samples in full range of available colors and patterns.

#### D. Verification Samples: Minimum size 6 inches square, representing actual materials, color and

#### **PART 2 PRODUCTS** 2.01 ROLLER SHADES

- A. General: Provide shade system components that are easy to remove or adjust without removal of
- 2. Provide shade system that operates smoothly when shades are raised or lowered.

#### B. Roller Shades: Refer to drawings for shade locations, manfucaturers, and products. PART 3 EXECUTION

#### 3.01 INSTALLATION A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting

#### B. Adjust level, projection, and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

**END OF SECTION** 

**COUNTERTOPS** 

#### **SECTION 12 36 00**

#### **PART 1 GENERAL**

- 1.01 SUBMITTALS A. Product Data: Manufacturer's data sheets on each product to be used, including:
  - Preparation instructions and recommendations
  - Storage and handling requirements and recommendations.
- Specimen warranty. B. Third-party certified Health Product Declaration and/or Environmental Product Declaration and/or Declare® Label(s) for each product indicated, if available.
- C. Shop Drawings: Complete details of materials and installation; combine with shop drawings of cabinets and casework specified in other sections.

## DAVID P. POPIEL No. 106084

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PROJECT NO: DRAWN BY: CHECKED BY: REVISION DESCRIPTION

BETTISWORTH NORTH ARCHITECTS & PLANNERS

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CONSULTANT:

24-121 2025-07-28

SHEET SPECIFICATIONS

- D. Verification Samples: For each finish product specified, minimum size 6 inches square, representing
- E. Sustainable Design Submittal: Documentation for sustainably harvested wood-based components.

#### PART 2 PRODUCTS

#### 2.01 BASIS OF DESIGN

A. Basis of Design Product: Subject to compliance with the requirements, provide product indicated in Interior Finish Schedule or approved substitution. Product manufacturer's designations indicate the basis for quality and aesthetic selection (pattern, color, and overall compatibility with interior finish

#### 2.02 COUNTERTOPS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS), unless noted
- B. Quality Standard: SEFA 3 for laboratory worksurfaces.
- C. Plastic Laminate Countertops: High-pressure decorative laminate (HPDL) sheet bonded to substrate. 1. Laminate Sheet: NEMA LD 3, Grade HGS, 0.048 inch nominal thickness.
  - a. Surface Burning Characteristics: Flame spread index of 25, maximum; smoke developed
  - index of 450, maximum; when tested in accordance with ASTM E84. b. NSF approved for food contact.
  - c. Wear Resistance: In addition to specified grade, comply with NEMA LD 3 High Wear Grade requirements for wear resistance.
  - d. Finish: As indicated on drawings.
  - e. Surface Color and Pattern: As indicated on drawings.
- 2. Exposed Edge Treatment: Molded vinyl edge, minimum 3mm thick, flat with square edges, sized
- to completely cover edge of panel. a. Color: As selected by Architect from manufacturer's full range of standard and premium
  - options and coordinated patterns and colors. 1) Design intent is for edges to be finished with edge band as manufactured by
  - scheduled plastic laminate manufacturer for truest match to scheduled laminate
- 3. Back and End Splashes: Same material, same construction.
- D. Solid Surfacing Countertops: Solid surfacing sheet or plastic resin casting over continuous substrate.
- 1. Flat Sheet Thickness: 1/2 inch, minimum.
- 2. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
- a. Surface Burning Characteristics: Flame spread index of 25, maximum; smoke developed index of 450, maximum; when tested in accordance with ASTM E84.
- b. NSF approved for food contact.
- c. Sinks and Bowls: Integral castings; minimum 3/4 inch wall thickness; comply with IAPMO
- d. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
- e. Color and Pattern: As indicated on drawings.
- 3. Other Components Thickness: 1/2 inch, minimum.
- 4. Exposed Edge Treatment: Built up to minimum 1-1/4 inch thick; square edge.
- 5. Back and End Splashes: Same sheet material, square top; minimum 4 inches high unless noted otherwise.
- 6. Skirts: As indicated on drawings.

#### 2.03 MATERIALS

- A. Plywood for Supporting Substrate: PS 1 Exterior Grade, A-C veneer grade, minimum 5-ply; minimum 3/4 inch thick; join lengths using metal splines.
- B. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials
- being joined.

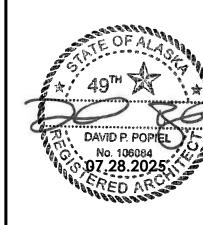
#### 2.04 FABRICATION

- A. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
- B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
- C. Solid Surfacing: Fabricate tops up to 144 inches long in one piece; join pieces with adhesive sealant in accordance with manufacturer's recommendations and instructions.
- 1. Integral sinks: Shop-mount securely to countertop with adhesives, using flush configuration, as per manufacturer's instructions.
- D. Wall-Mounted Counters: Provide skirts, aprons, brackets, and braces as indicated on drawings.

#### PART 3 EXECUTION 3.01 INSTALLATION

- A. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim
- Attach plastic laminate countertops using screws with minimum penetration into substrate board of
- C. Seal joint between back/end splashes and vertical surfaces.

**END OF SECTION** 

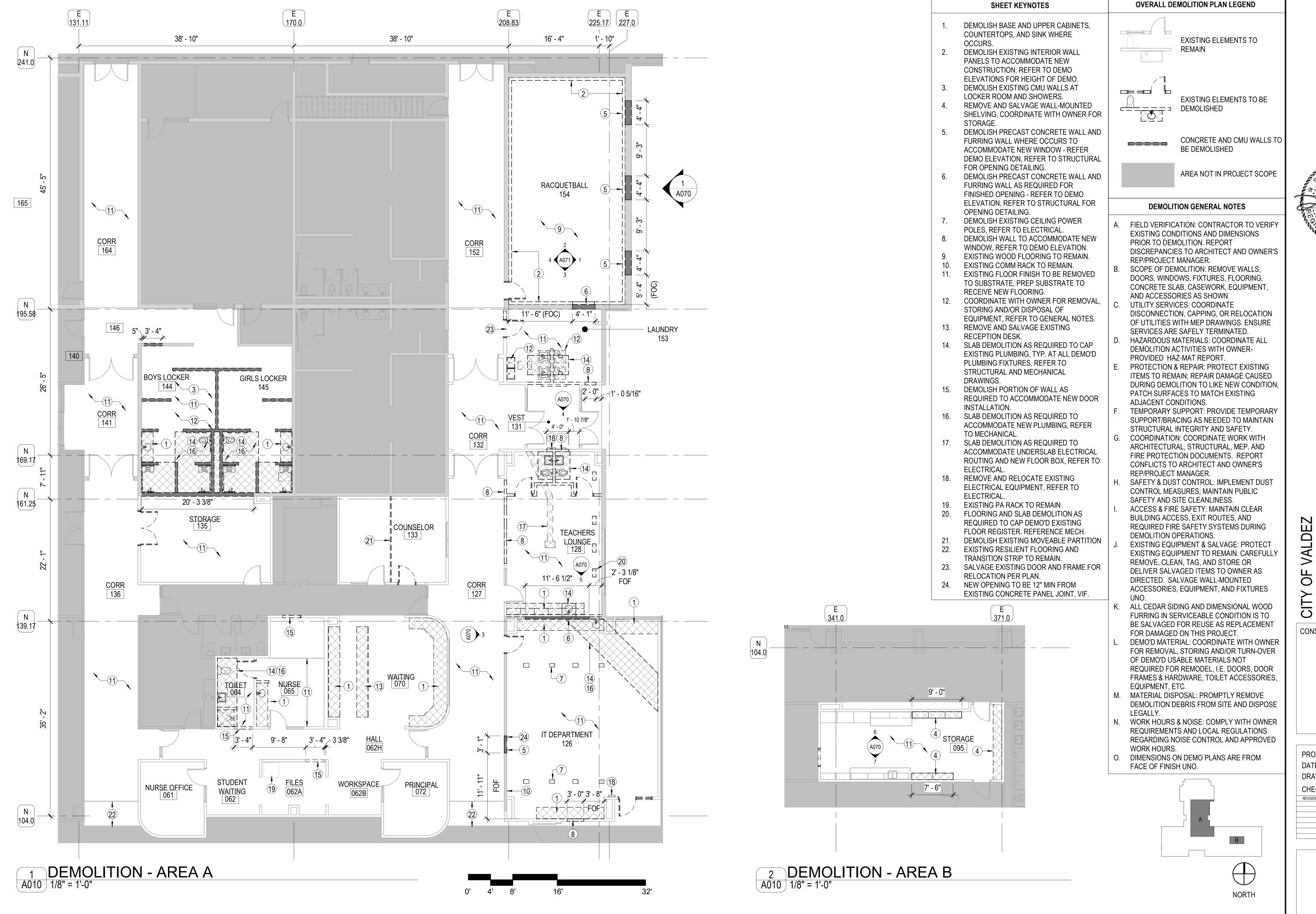


**TENANT** OFFICE **S DISTRICT** VALDEZ

IMPROVEME CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY:

SHEET SPECIFICATIONS



INCH (1") EXACTLY, THIS DRAWING AFFECTING ALL LABELED SCALES

IMENSION DOES NOT MEASURE HAS BEEN ENLARGED OR REDL



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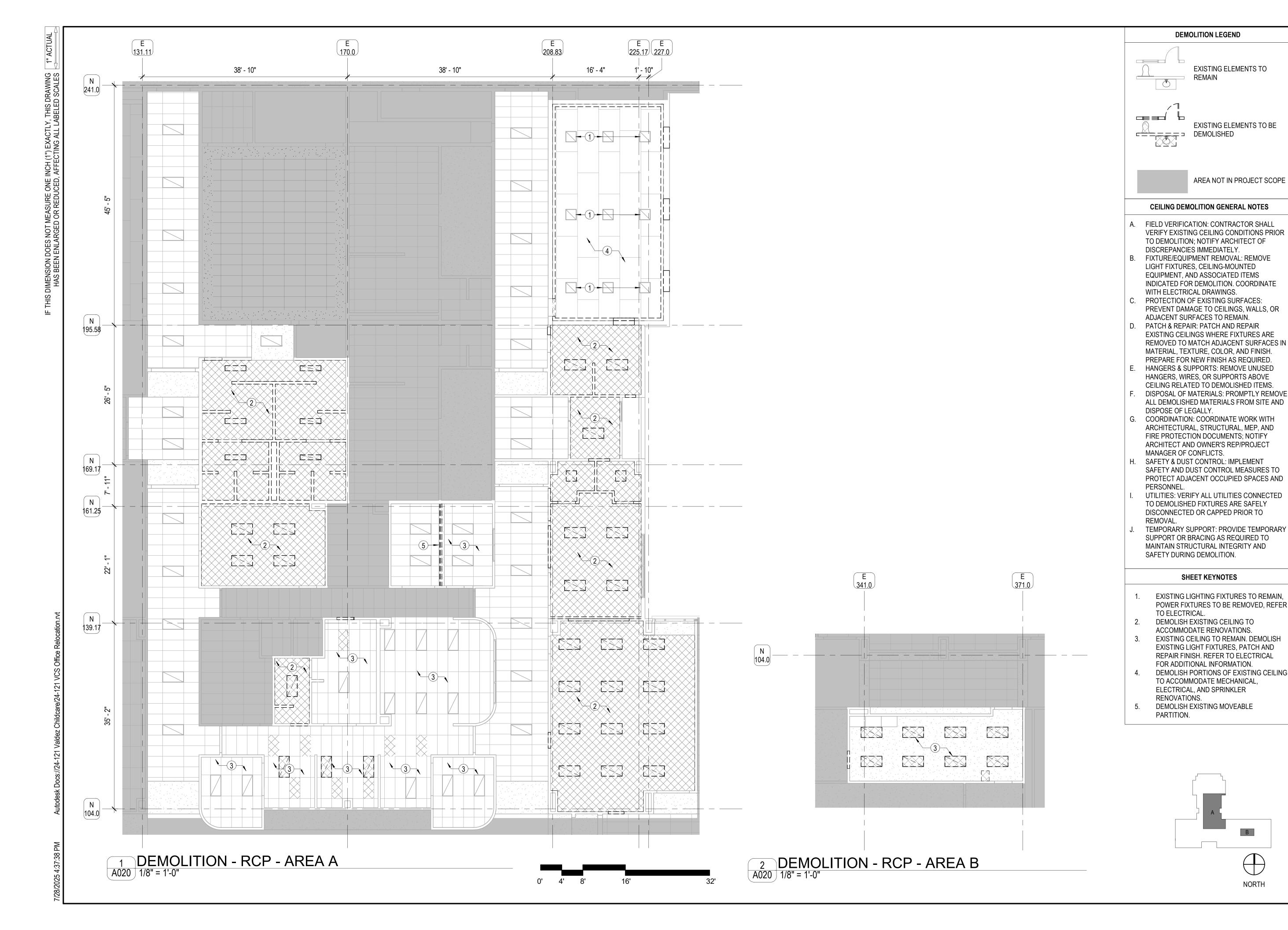
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**CONSULTANT:** 

PROJECT NO: 24-121 2025-07-28 DRAWN BY: RHR, PLG CHECKED BY: DESCRIPTION **DEMOLITION PLAN** 

**A010** 





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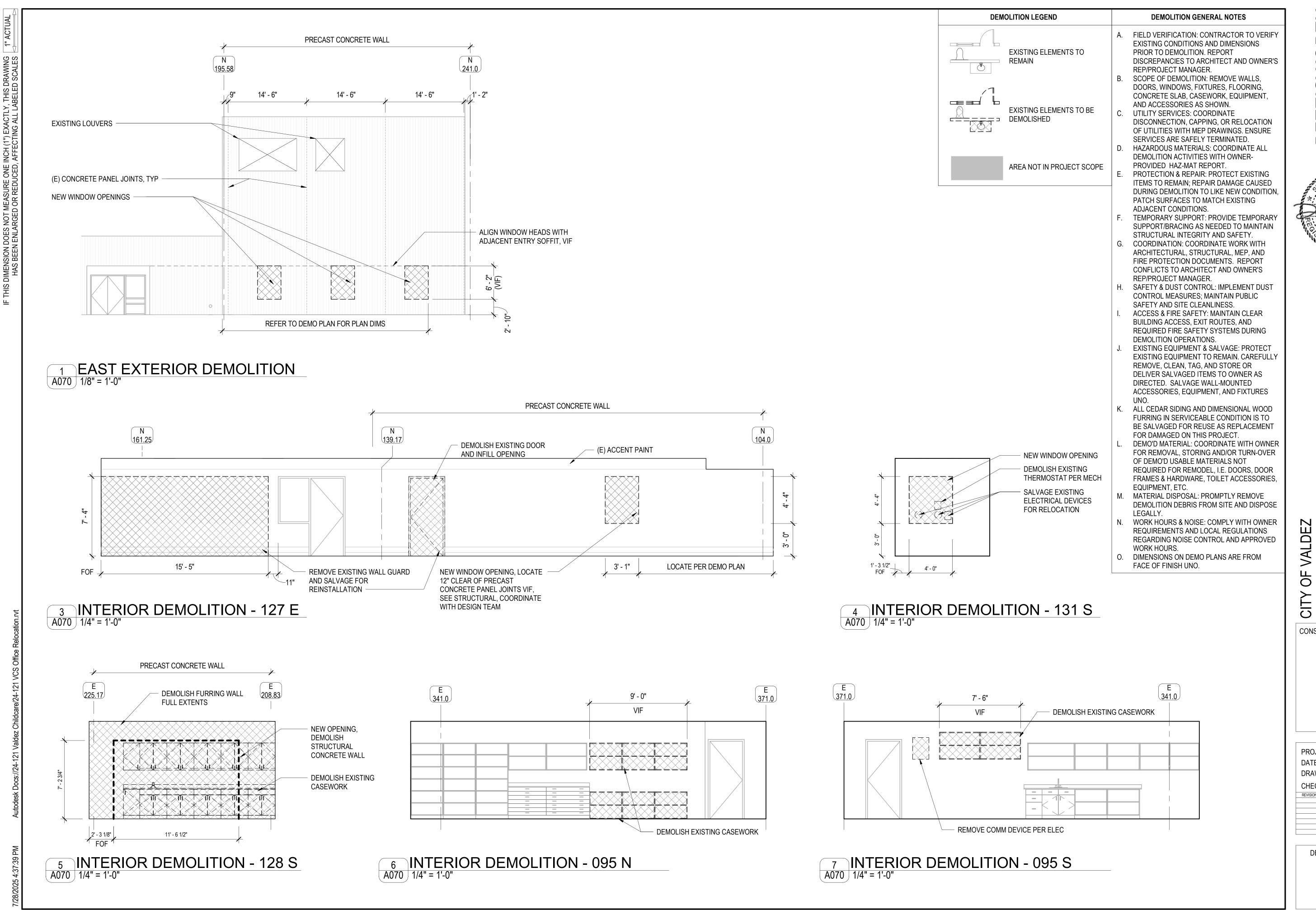
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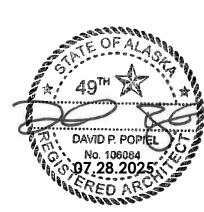
PROJECT NO: 24-121 2025-07-28 RHR, PLG DRAWN BY: CHECKED BY: REVISION DESCRIPTION DATE DEMOLITION REFLECTED CEILING PLAN

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CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: RHR, PLG CHECKED BY: REVISION DESCRIPTION

DEMOLITION ELEVATIONS

**A070** 

DEMOLISH EXISTING

INTERIOR WALL

**NEW WINDOW** 

TO 1/A070 FOR

**DIMENSIONS** 

OPENINGS, REFER

A071 1/8" = 1'-0"

PANEL -

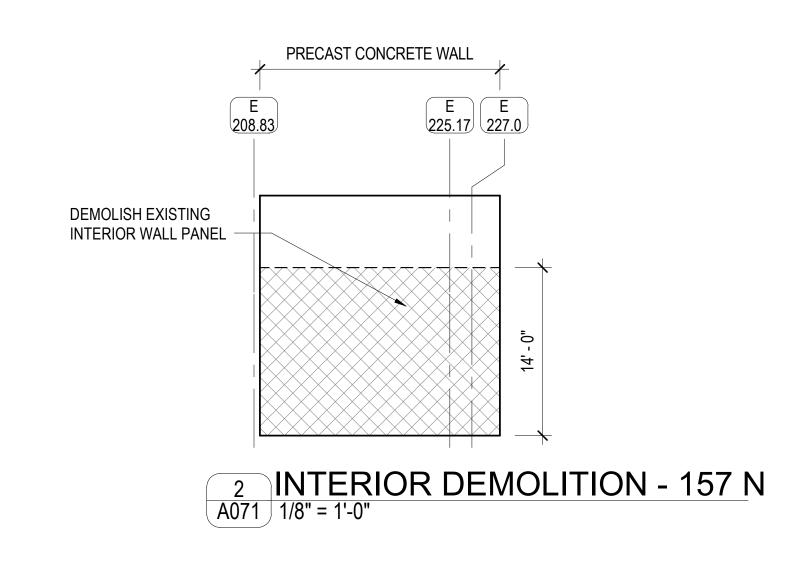
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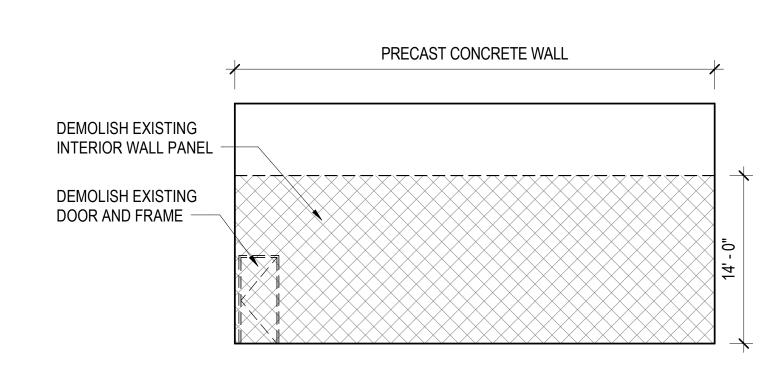
PRECAST CONCRETE WALL

INTERIOR DEMOLITION - 157 E

208.83

PRECAST CONCRETE WALL





4 INTERIOR DEMOLITION - 157 W A071 1/8" = 1'-0"

A. FIELD VERIFICATION: CONTRACTOR TO VERIFY EXISTING CONDITIONS AND DIMENSIONS EXISTING ELEMENTS TO PRIOR TO DEMOLITION. REPORT REMAIN DISCREPANCIES TO ARCHITECT AND OWNER'S REP/PROJECT MANAGER. B. SCOPE OF DEMOLITION: REMOVE WALLS, DOORS, WINDOWS, FIXTURES, FLOORING, CONCRETE SLAB, CASEWORK, EQUIPMENT, AND ACCESSORIES AS SHOWN. EXISTING ELEMENTS TO BE

**DEMOLITION LEGEND** 

DEMOLISHED

AREA NOT IN PROJECT SCOPE

C. UTILITY SERVICES: COORDINATE DISCONNECTION, CAPPING, OR RELOCATION OF UTILITIES WITH MEP DRAWINGS. ENSURE SERVICES ARE SAFELY TERMINATED. HAZARDOUS MATERIALS: COORDINATE ALL

**DEMOLITION GENERAL NOTES** 

DEMOLITION ACTIVITIES WITH OWNER-PROVIDED HAZ-MAT REPORT. PROTECTION & REPAIR: PROTECT EXISTING ITEMS TO REMAIN; REPAIR DAMAGE CAUSED

DURING DEMOLITION TO LIKE NEW CONDITION, PATCH SURFACES TO MATCH EXISTING ADJACENT CONDITIONS. TEMPORARY SUPPORT: PROVIDE TEMPORARY SUPPORT/BRACING AS NEEDED TO MAINTAIN

STRUCTURAL INTEGRITY AND SAFETY. G. COORDINATION: COORDINATE WORK WITH ARCHITECTURAL, STRUCTURAL, MEP, AND FIRE PROTECTION DOCUMENTS. REPORT CONFLICTS TO ARCHITECT AND OWNER'S REP/PROJECT MANAGER.

SAFETY & DUST CONTROL: IMPLEMENT DUST CONTROL MEASURES; MAINTAIN PUBLIC SAFETY AND SITE CLEANLINESS. ACCESS & FIRE SAFETY: MAINTAIN CLEAR BUILDING ACCESS, EXIT ROUTES, AND REQUIRED FIRE SAFETY SYSTEMS DURING DEMOLITION OPERATIONS. **EXISTING EQUIPMENT & SALVAGE: PROTECT** 

EXISTING EQUIPMENT TO REMAIN. CAREFULLY REMOVE, CLEAN, TAG, AND STORE OR DELIVER SALVAGED ITEMS TO OWNER AS DIRECTED. SALVAGE WALL-MOUNTED ACCESSORIES, EQUIPMENT, AND FIXTURES

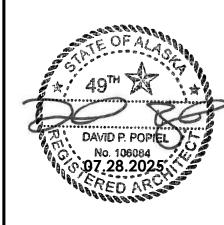
K. ALL CEDAR SIDING AND DIMENSIONAL WOOD FURRING IN SERVICEABLE CONDITION IS TO BE SALVAGED FOR REUSE AS REPLACEMENT FOR DAMAGED ON THIS PROJECT.

DEMO'D MATERIAL: COORDINATE WITH OWNER FOR REMOVAL, STORING AND/OR TURN-OVER OF DEMO'D USABLE MATERIALS NOT REQUIRED FOR REMODEL, I.E. DOORS, DOOR FRAMES & HARDWARE, TOILET ACCESSORIES, EQUIPMENT, ETC.

M. MATERIAL DISPOSAL: PROMPTLY REMOVE DEMOLITION DEBRIS FROM SITE AND DISPOSE LEGALLY.

N. WORK HOURS & NOISE: COMPLY WITH OWNER REQUIREMENTS AND LOCAL REGULATIONS REGARDING NOISE CONTROL AND APPROVED WORK HOURS.

O. DIMENSIONS ON DEMO PLANS ARE FROM FACE OF FINISH UNO.



## TENANT CES HHE FFICE( O VCS DISTRIC ASK

VALDEZ

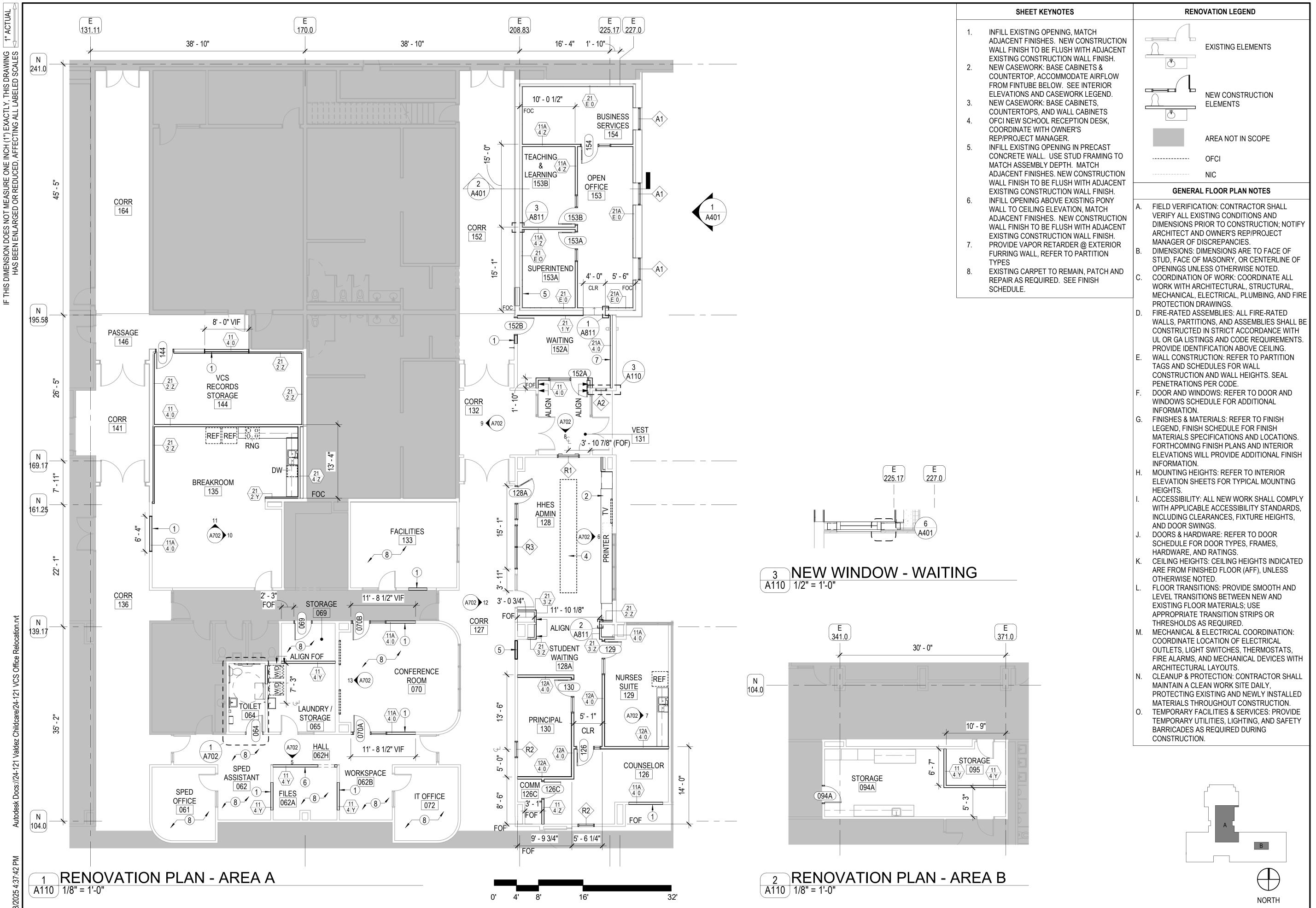
OF

CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: RHR, PLG CHECKED BY:

DEMOLITION ELEVATIONS

A071





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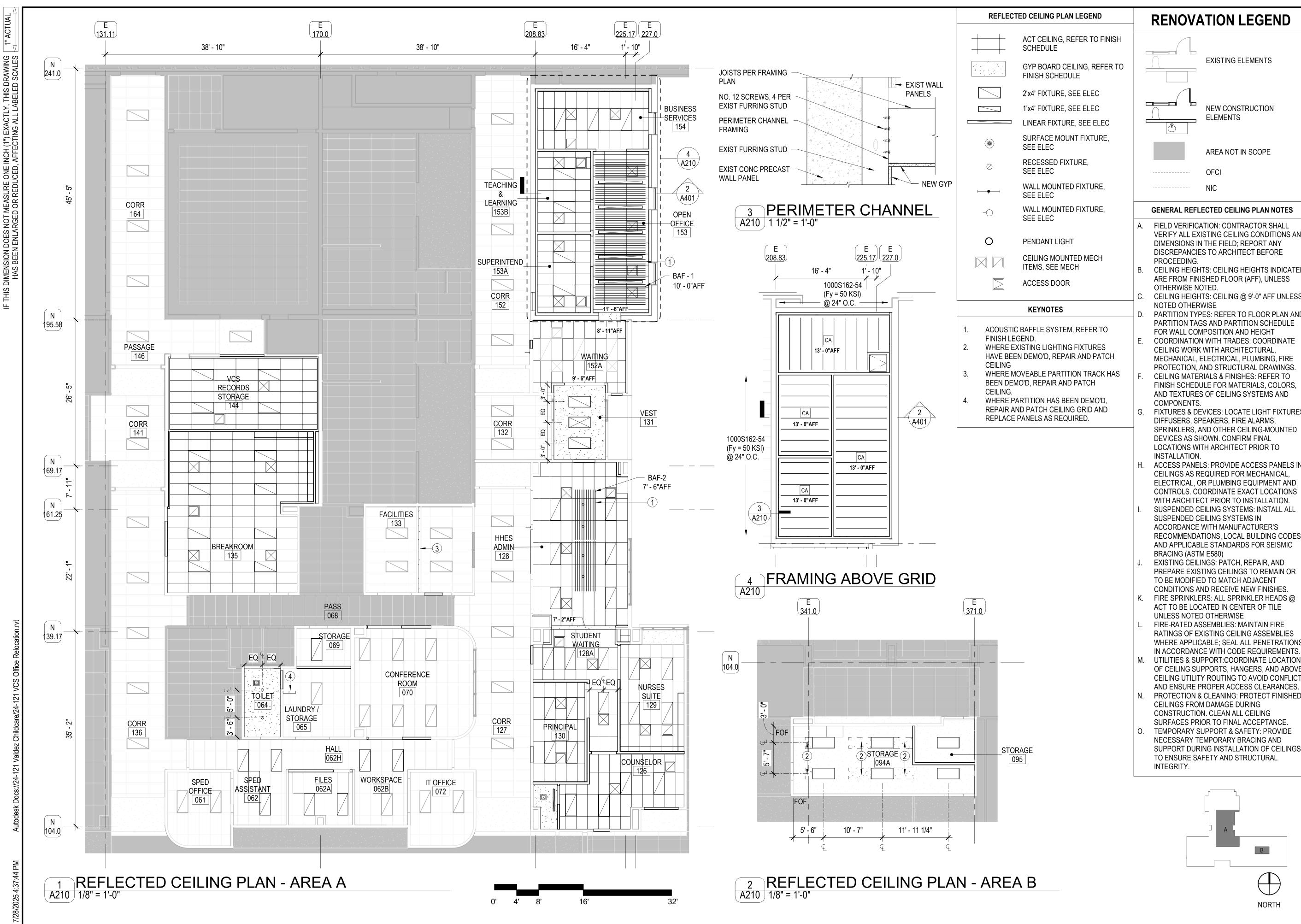
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OF

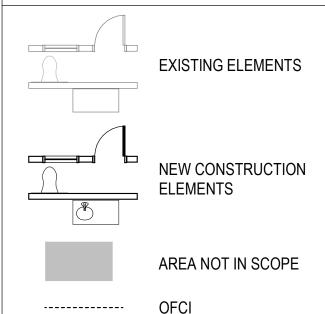
CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY: DESCRIPTION RENOVATION FLOOR PLAN

A110

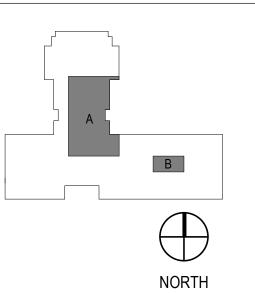


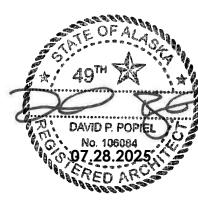
#### **RENOVATION LEGEND**



#### **GENERAL REFLECTED CEILING PLAN NOTES**

- FIELD VERIFICATION: CONTRACTOR SHALL VERIFY ALL EXISTING CEILING CONDITIONS AND DIMENSIONS IN THE FIELD; REPORT ANY DISCREPANCIES TO ARCHITECT BEFORE PROCEEDING.
- CEILING HEIGHTS: CEILING HEIGHTS INDICATED ARE FROM FINISHED FLOOR (AFF), UNLESS
- OTHERWISE NOTED. CEILING HEIGHTS: CEILING @ 9'-0" AFF UNLESS
- NOTED OTHERWISE PARTITION TYPES: REFER TO FLOOR PLAN AND PARTITION TAGS AND PARTITION SCHEDULE
- FOR WALL COMPOSITION AND HEIGHT COORDINATION WITH TRADES: COORDINATE CEILING WORK WITH ARCHITECTURAL MECHANICAL, ELECTRICAL, PLUMBING, FIRE
- PROTECTION, AND STRUCTURAL DRAWINGS. CEILING MATERIALS & FINISHES: REFER TO FINISH SCHEDULE FOR MATERIALS, COLORS, AND TEXTURES OF CEILING SYSTEMS AND COMPONENTS.
- FIXTURES & DEVICES: LOCATE LIGHT FIXTURES DIFFUSERS, SPEAKERS, FIRE ALARMS, SPRINKLERS, AND OTHER CEILING-MOUNTED DEVICES AS SHOWN. CONFIRM FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
- ACCESS PANELS: PROVIDE ACCESS PANELS IN CEILINGS AS REQUIRED FOR MECHANICAL, ELECTRICAL, OR PLUMBING EQUIPMENT AND CONTROLS. COORDINATE EXACT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. SUSPENDED CEILING SYSTEMS: INSTALL ALL
- SUSPENDED CEILING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, LOCAL BUILDING CODES AND APPLICABLE STANDARDS FOR SEISMIC BRACING (ASTM E580)
- EXISTING CEILINGS: PATCH, REPAIR, AND PREPARE EXISTING CEILINGS TO REMAIN OR TO BE MODIFIED TO MATCH ADJACENT CONDITIONS AND RECEIVE NEW FINISHES
- FIRE SPRINKLERS: ALL SPRINKLER HEADS @ ACT TO BE LOCATED IN CENTER OF TILE UNLESS NOTED OTHERWISE
- FIRE-RATED ASSEMBLIES: MAINTAIN FIRE RATINGS OF EXISTING CEILING ASSEMBLIES WHERE APPLICABLE; SEAL ALL PENETRATIONS IN ACCORDANCE WITH CODE REQUIREMENTS. M. UTILITIES & SUPPORT: COORDINATE LOCATION
- CEILING UTILITY ROUTING TO AVOID CONFLICTS AND ENSURE PROPER ACCESS CLEARANCES. PROTECTION & CLEANING: PROTECT FINISHED CEILINGS FROM DAMAGE DURING CONSTRUCTION. CLEAN ALL CEILING
- SURFACES PRIOR TO FINAL ACCEPTANCE. TEMPORARY SUPPORT & SAFETY: PROVIDE NECESSARY TEMPORARY BRACING AND SUPPORT DURING INSTALLATION OF CEILINGS TO ENSURE SAFETY AND STRUCTURAL INTEGRITY.





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CONSULTANT:

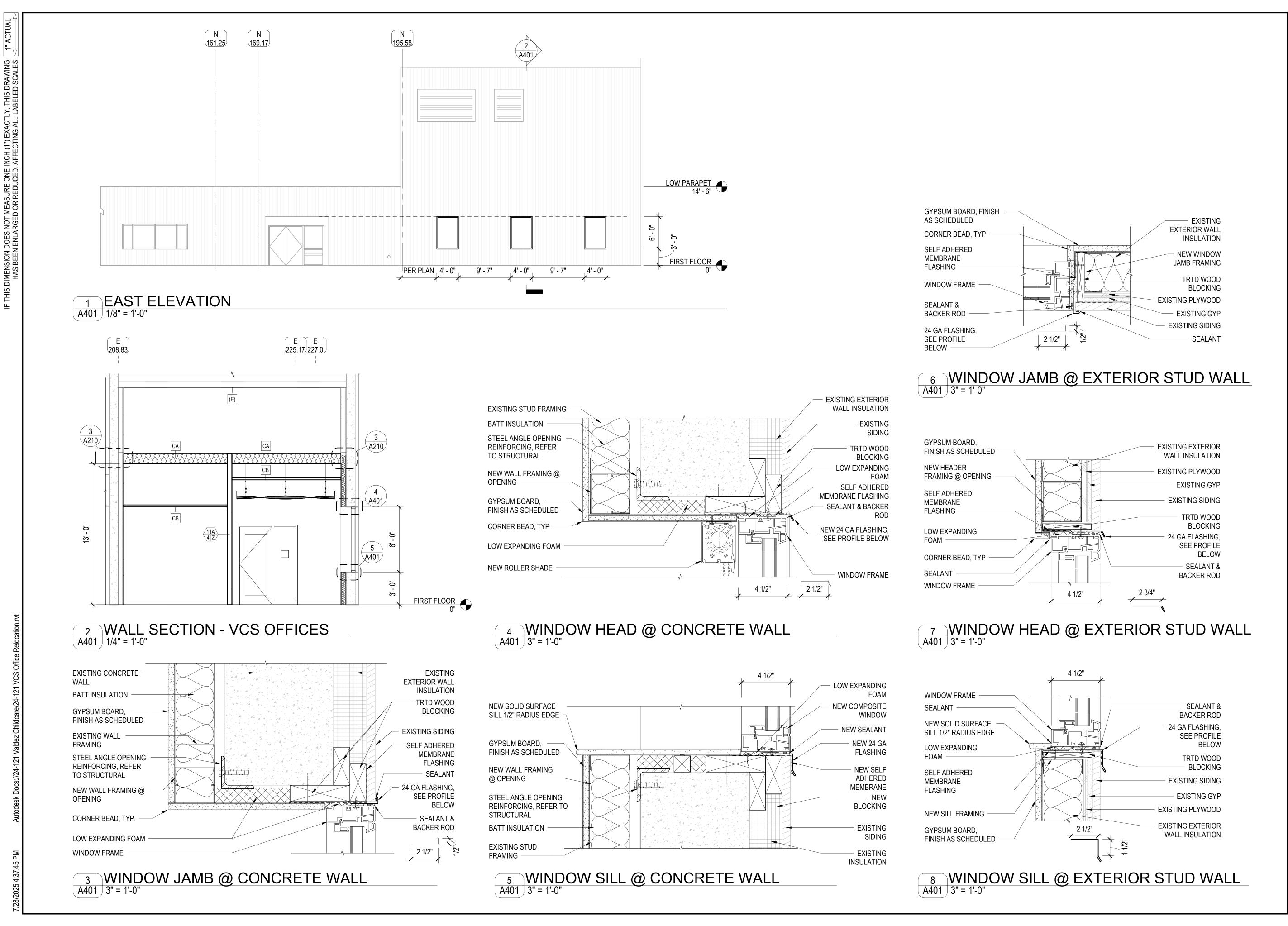
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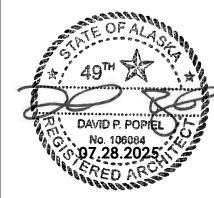
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OF

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY: DESCRIPTION RENOVATION REFLECTED CEILING PLAN

**A210** 





## **TENANT** OFFICES -TS @ HHE NTS VCS DISTRICT (IMPROVEMENT VALDEZ

**ALASK** 

VALDEZ,

CONSULTANT:

OF

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY: REVISION DESCRIPTION

EXTERIOR ELEVATION, WALL SECTIONS, AND DETAILS

A401

THIS DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES

SWITCHES LIGHTING CONTROL/

**OCCUPANCY SENSOR** 

**UP TO 4 DEVICES** 

THERMOSTAT

DOOR RELEASE

REQUEST

TO EXIT

BUTTON

DOOR HOLD

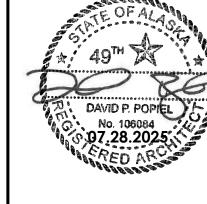
PLATE

READER

#### **GENERAL MOUNTING HEIGHTS NOTES**

- ALL DEVICES WILL BE MOUNTED AS NOTED, OR AS PER APPLICABLE BUILDING CODE, UNLESS OTHERWISE DIMENSIONED.
- NOTIFY ARCHITECT IN ADVANCE OF INSTALLATION, IF MOUNTING HEIGHTS ON **ELEVATIONS OR IF FIELD CONDITIONS** PRESENT CONFLICTS WITH THE REQUIRED MOUNTING HEIGHTS.
- THE DETAIL SHOWN MAY NOT MATCH SPECIFIED OR SCHEDULED HARDWARE AND/ OR DEVICES
- THE DIMENSIONS CALLED OUT SHALL BE TO THE CENTERLINE OF THE DEVICE FACE PLATE AS SHOWN, UNO.
- VERTICAL DIMENSIONS SHOWN ON INTERIOR ELEVATIONS INDICATE A **DEVIATION FROM TYPICAL MOUNTING** HEIGHTS SHOWN HERE.
- COORDINATE GROUPING OF OUTLETS AND SWITCHES PRIOR TO ROUGH-IN WHERE MOUNTING HEIGHTS ARE THE SAME FOR (2) OR MORE DEVICES IN THE SAME LOCATION.
- IF MULTIPLE DEVICES WITH DIFFERENT MOUNTING HEIGHTS ARE LOCATED WITHIN CLOSE PROXIMITY, STACK DEVICES SO THAT CENTERLINES ALIGN.
- DEVICES LOCATED PER THESE DOCUMENTS TAKE PRECEDENCE OVER FRAMING AND STUD SPACING. FRAMING SHALL BE MODIFIED TO ACCOMMODATE THE PRECISE LOCATION. CONTRACTOR TO COORDINATE THE APPROPRIATE
- CONTRACTOR TO COORDINATE DEVICES LOCATED IN FINISH PANELS (EXAMPLE: SECONDARY INSTALLATIONS SUCH AS FABRIC PANELS, WOOD PANELING.)
- NOTIFY THE ARCHITECT SHOULD ANY INDICATED MOUNTING DETAILS BE IN CONFLICT WITH MANUFACTURER REQUIREMENTS.
- ELECTRICAL RECEPTACLES, COMMUNICATION OUTLETS ARE SHOWN ON THE ARCHITECTURAL ELEVATIONS FOR LOCATIONS AND COORDINATION WITH OTHER WORK. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS BETWEEN ARCHITECTURAL MOUNTING HEIGHTS AND ELECTRICAL. PLUMBING OR MECHANICAL DRAWINGS.

**INDICATES ADA/ANSI 117.1** COMPLIANCE WHERE TWO DEVICES AND HEIGHT ARE SHOWN.



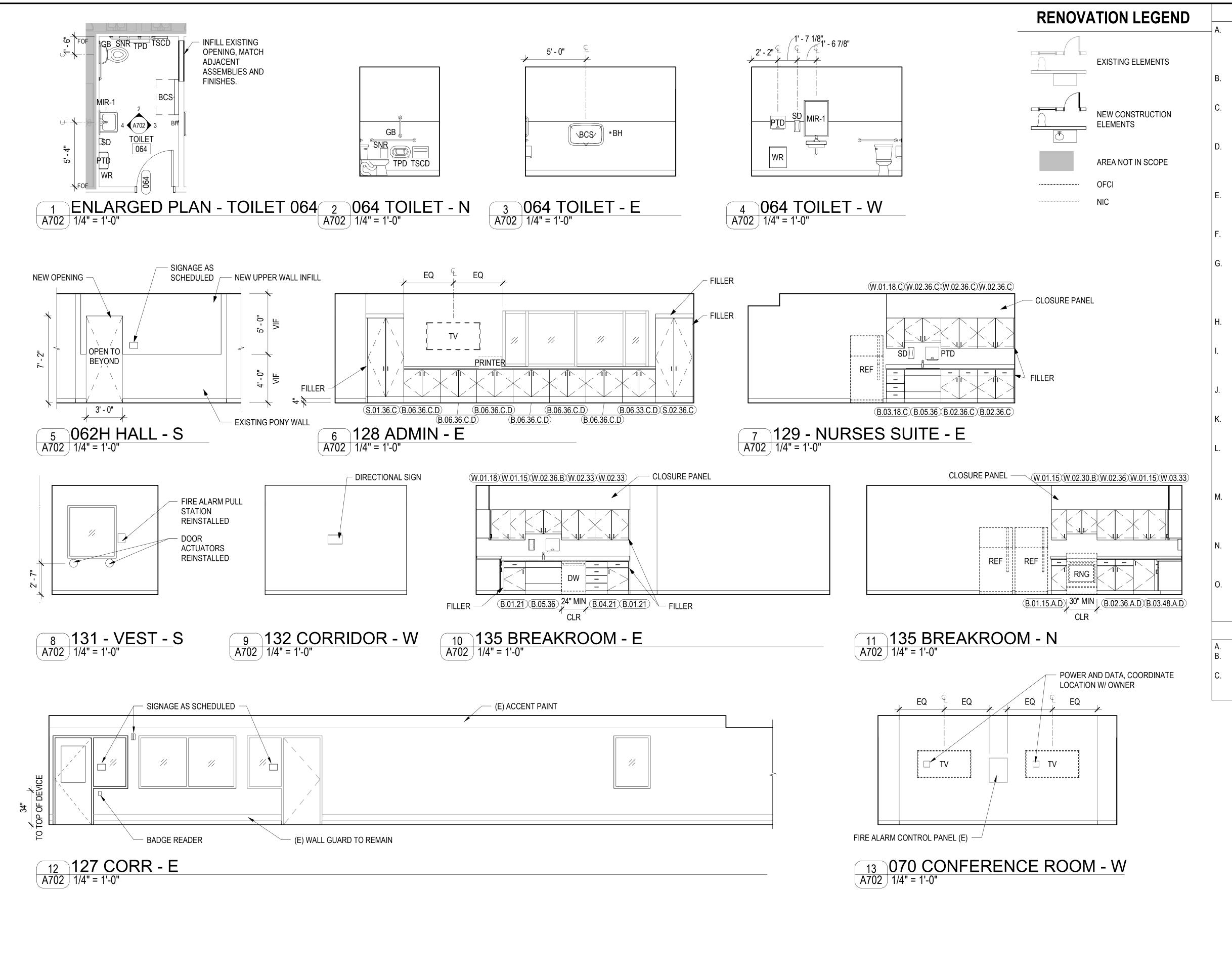
# **TENANT**

HH **OFFICES** EME DISTRIC

CONSULTANT:

PROJECT NO: DRAWN BY: CHECKED BY:

TYPICAL MOUNTING HEIGHTS



IS DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES

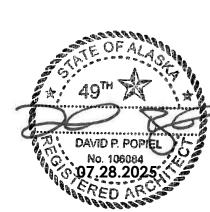
#### **GENERAL FLOOR PLAN NOTES**

- FIELD VERIFICATION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION; NOTIFY ARCHITECT AND OWNER'S REP/PROJECT MANAGER OF DISCREPANCIES.
- DIMENSIONS: DIMENSIONS ARE TO FACE OF STUD, FACE OF MASONRY, OR CENTERLINE OF OPENINGS UNLESS OTHERWISE NOTED.
- COORDINATION OF WORK: COORDINATE ALL WORK WITH ARCHITECTURAL, STRUCTURAL MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS.
- FIRE-RATED ASSEMBLIES: ALL FIRE-RATED WALLS, PARTITIONS, AND ASSEMBLIES SHALL BI CONSTRUCTED IN STRICT ACCORDANCE WITH UL OR GA LISTINGS AND CODE REQUIREMENTS PROVIDE IDENTIFICATION ABOVE CEILING.
- WALL CONSTRUCTION: REFER TO PARTITION TAGS AND SCHEDULES FOR WALL CONSTRUCTION AND WALL HEIGHTS. SEAL PENETRATIONS PER CODE.
- DOOR AND WINDOWS: REFER TO DOOR AND WINDOWS SCHEDULE FOR ADDITIONAL INFORMATION.
- FINISHES & MATERIALS: REFER TO FINISH LEGEND, FINISH SCHEDULE FOR FINISH MATERIALS SPECIFICATIONS AND LOCATIONS. FORTHCOMING FINISH PLANS AND INTERIOR ELEVATIONS WILL PROVIDE ADDITIONAL FINISH INFORMATION.
- MOUNTING HEIGHTS: REFER TO INTERIOR **ELEVATION SHEETS FOR TYPICAL MOUNTING** HEIGHTS.
- ACCESSIBILITY: ALL NEW WORK SHALL COMPL' WITH APPLICABLE ACCESSIBILITY STANDARDS. INCLUDING CLEARANCES, FIXTURE HEIGHTS, AND DOOR SWINGS.
- DOORS & HARDWARE: REFER TO DOOR SCHEDULE FOR DOOR TYPES, FRAMES, HARDWARE, AND RATINGS.
- CEILING HEIGHTS: CEILING HEIGHTS INDICATED ARE FROM FINISHED FLOOR (AFF), UNLESS OTHERWISE NOTED.
- FLOOR TRANSITIONS: PROVIDE SMOOTH AND LEVEL TRANSITIONS BETWEEN NEW AND EXISTING FLOOR MATERIALS; USE APPROPRIATE TRANSITION STRIPS OR THRESHOLDS AS REQUIRED.
- MECHANICAL & ELECTRICAL COORDINATION: COORDINATE LOCATION OF ELECTRICAL OUTLETS, LIGHT SWITCHES, THERMOSTATS, FIRE ALARMS, AND MECHANICAL DEVICES WITH ARCHITECTURAL LAYOUTS.
- CLEANUP & PROTECTION: CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE DAILY, PROTECTING EXISTING AND NEWLY INSTALLED MATERIALS THROUGHOUT CONSTRUCTION.
- TEMPORARY FACILITIES & SERVICES: PROVIDE TEMPORARY UTILITIES, LIGHTING, AND SAFETY BARRICADES AS REQUIRED DURING CONSTRUCTION.

#### **GENERAL INTERIOR ELEVATION NOTES**

- SEE SHEET, A911, FOR FINISH LEGEND. SEE SHEET, A701, FOR TYPICAL MOUNTING HEIGHTS.
- SEE SHEETS, A831, FOR CASEWORK LEGEND AND DETAILS.

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H H OFFICE Z VCS DISTRIC ASK

CONSULTANT:

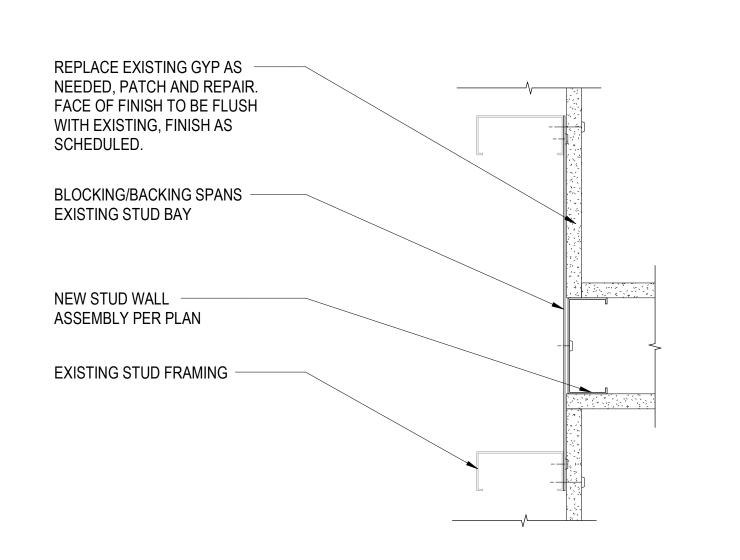
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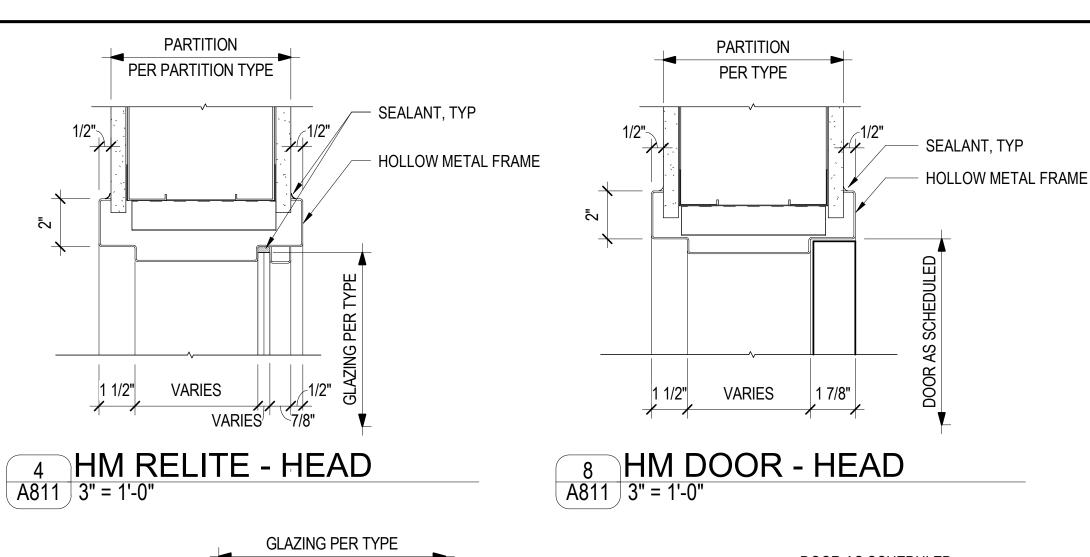
PROJECT NO: 24-121 2025-07-28 DRAWN BY: RHR, PLG CHECKED BY:

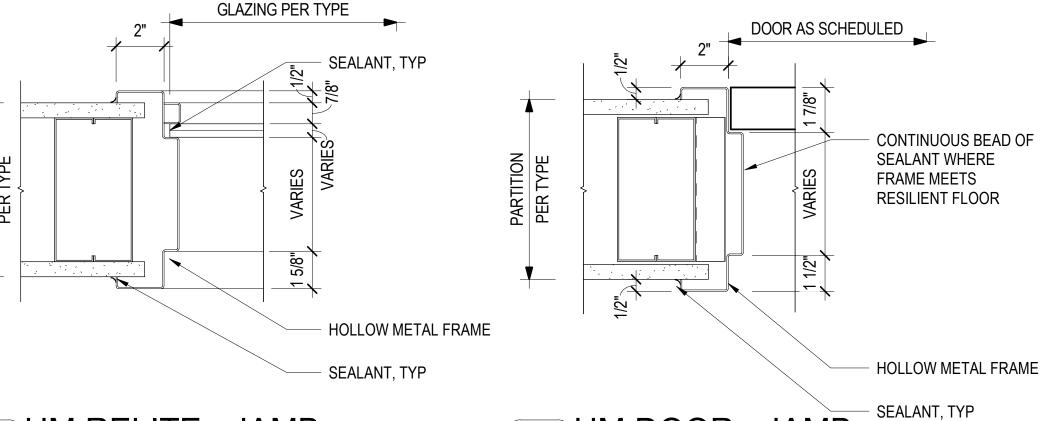
**ENLARGED PLAN & INTERIOR ELEVATIONS** 

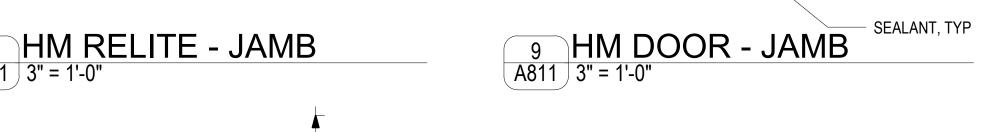
### 2 CASED OPENING @ STUDENT WTNG - E JAMB A811 3" = 1'-0"

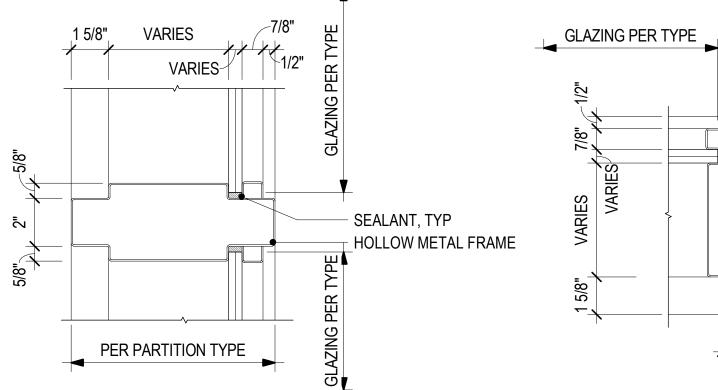


3 NEW PARTITION TO EXIST. FRAMING, TYP
A811 3" = 1'-0"

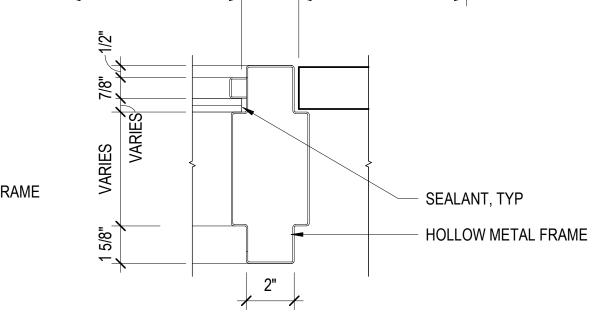




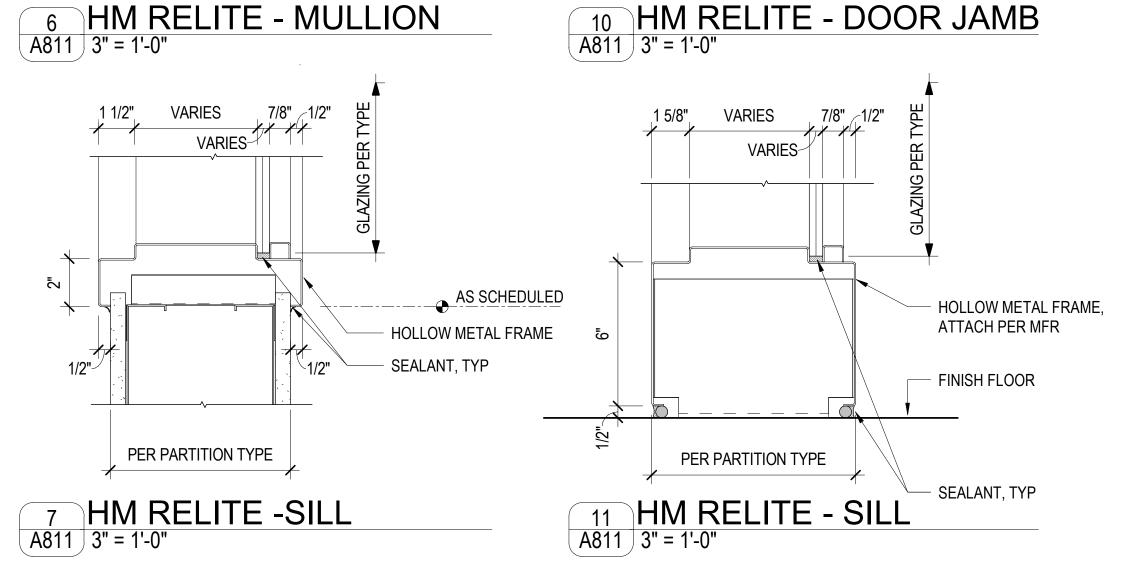


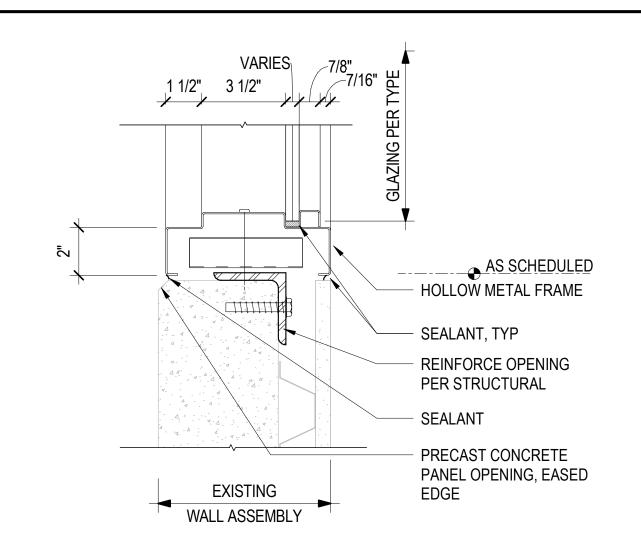


A811 3" = 1'-0"

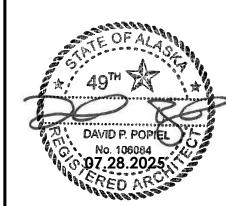


DOOR AS SCHEDULED





12 HM RELITE SILL @ PRECAST CONC A811 3" = 1'-0"



**TENANT** OFFICES -TS @ HHE

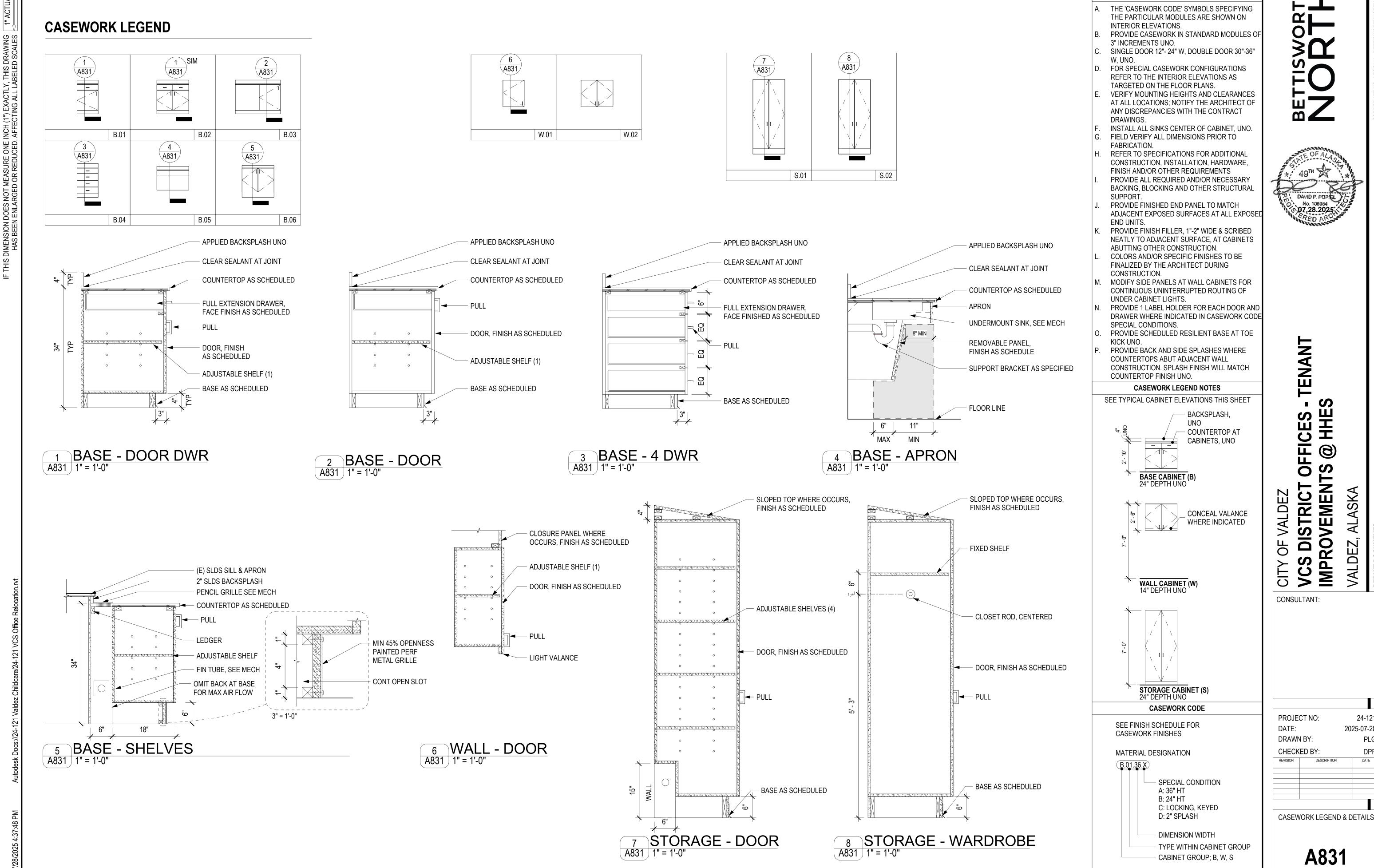
PROJECT NO: 24-121 2025-07-28 DPP, RHR DRAWN BY: CHECKED BY: REVISION DESCRIPTION

INTERIOR DETAILS - OPENINGS & PARTITIONS

**A811** 

BETTISWORTH NORTH ARCHITECTS & PLANNERS

VCS DISTRICT (IMPROVEMENT OF VALDEZ CONSULTANT:

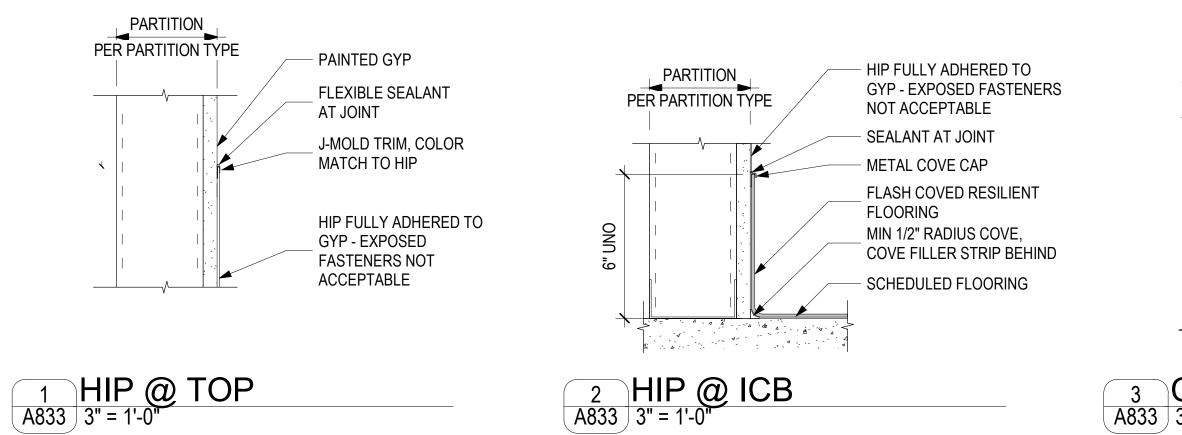


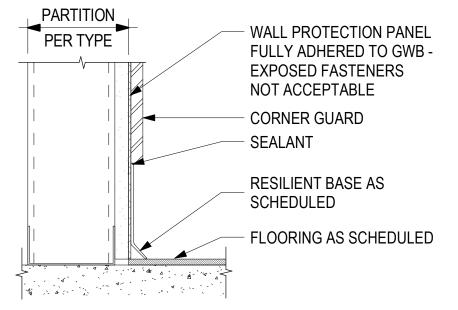
**CASEWORK LEGEND NOTES** 

24-121 2025-07-28 PLG

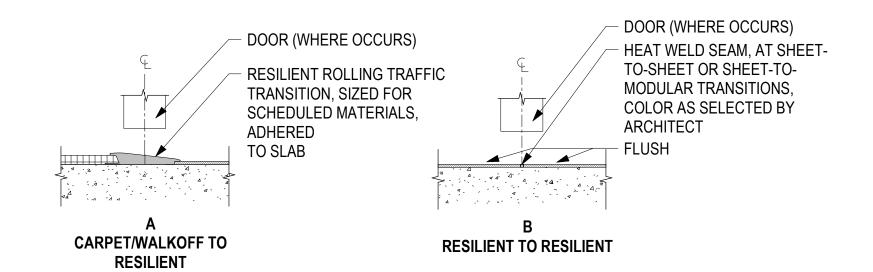
Autodesk Docs://24-121 Valdez Childcare

MG 07.707





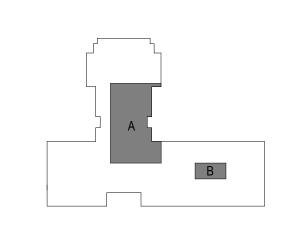
3 CORNER GUARD @ RB A833 3" = 1'-0"



TYPICAL FLOORING TRANSITION NOTES:

- 1. SEE FINISH LEGEND FOR SPECIFIC PROFILES
- 2. SEE FINISH SCHEDULE FOR ROOM-SPECIFIC FLOORING FINISH
- SEE DOOR SCHEDULE FOR THRESHOLDS SPECIFIED IN HARDWARE GROUPS
   COORDINATE SPECIFIED DOOR UNDERCUT WITH SCHEDULED FLOORING

4 FLOOR TRANSISTION - TYPICAL A833 3" = 1'-0"



SETTISWORTH NORTH



VCS DISTRICT OFFICES - TENANT
IMPROVEMENTS @ HHES
VALDEZ, ALASKA

CONSULTANT:

CONSULTAN

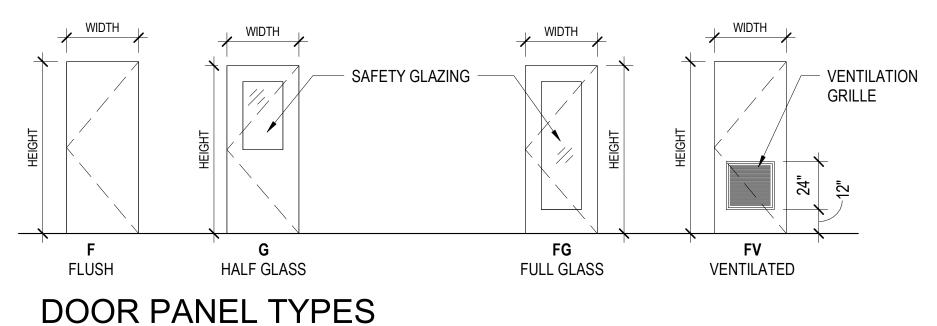
PROJECT NO: 24-121
DATE: 2025-05-23
DRAWN BY: PLG
CHECKED BY: DPP
REVISION DESCRIPTION DATE

INTERIOR DETAILS

A833

#### DOOR SCHEDULE

	PANEL FRAME					FIRE						
DOOR NO.	TYPE	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	RATING	HARDWARE	COMMENTS
064	F	3' - 0"	7' - 2"	1 3/4"	WD	FF	1	HM	P-2		HW-4	
069	F	3' - 0"	7' - 2"	1 3/4"	WD	FF	1	HM	P-2		HW-1	
070A	F	3' - 0"	7' - 2"	1 3/4"	WD	FF	6	HM	P-2		HW-2	
070B	F	3' - 0"	7' - 2"	1 3/4"	WD	FF	6	HM	P-2		HW-2	
094A	F	3' - 0"	7' - 2"	1 3/4"	WD	FF	1	HM	P-2		HW-1	
126	G	3' - 0"	7' - 2"	1 3/4"	WD	FF	7	HM	P-2		HW-2	
126C	FV	3' - 0"	7' - 2"	1 3/4"	WD	FF	1	HM	P-2		HW-1	24" X 24" VENTILATION GRILLE
128A	G	3' - 0"	7' - 2"	1 3/4"	WD	FF	6	HM	P-2		HW-3	
129	G	3' - 0"	7' - 2"	1 3/4"	WD	FF	6	HM	P-2		HW-2	
130	G	3' - 0"	7' - 2"	1 3/4"	WD	FF	6	HM	P-2		HW-2	
144	F	3' - 0"	7' - 2"	1 3/4"	WD	FF	1	HM	P-2		HW-5	
152A	FG	3' - 0"	7' - 2"	1 3/4"	HM	P-6	6	HM	P-6		HW-3	
152B	F	3' - 0"	7' - 2"	1 3/4"	WD	EXIST	1	HM	P-2		EXIST	SALVAGED DOOR AND FRAME
153A	FG	3' - 0"	7' - 2"	1 3/4"	WD	FF	5	HM	P-2		HW-2	
153B	FG	3' - 0"	7' - 2"	1 3/4"	WD	FF	5	HM	P-2		HW-2	
154	FG	3' - 0"	7' - 2"	1 3/4"	WD	FF	5	HM	P-2		HW-2	



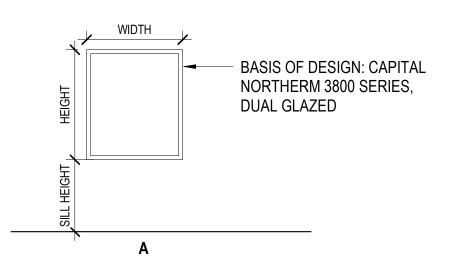
**SAFETY** SAFETY GLAZING **GLAZING** SINGLE DOOR DOUBLE DOOR SINGLE SIDELITE SINGLE HALF-LITE A SINGLE HALF-LITE B

DOOR FRAME TYPES

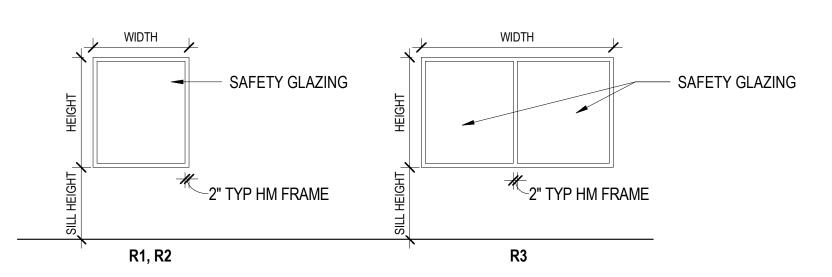
#### WINDOW SCHEDULES

EXTERIOR WINDOWS					
WINDOW TYPE	SILL HEIGHT	HEIGHT	WIDTH	COUNT	COMMENTS
A1	3' - 0"	6' - 0"	4' - 0"	3	
A2	3' - 0"	4' - 4"	2' - 0"	1	

INTERIOR WINDOWS						
WINDOW TYPE	SILL HEIGHT	HEIGHT	WIDTH	FIRE RATING	COUNT	COMMENTS
R1	3' - 0"	4' - 4"	4' - 0"	-	1	HOLLOW METAL WINDOW FRAME
R2	3' - 0"	4' - 4"	3' - 0"	-	2	HOLLOW METAL WINDOW FRAME
R3	3' - 0"	4' - 4"	8' - 0"	-	1	HOLLOW METAL WINDOW FRAME



**EXTERIOR WINDOW TYPES** 



**INTERIOR WINDOW TYPES** 

#### **GENERAL DOOR NOTES**

ALL NOTES ARE GENERAL, AS APPLICABLE. THOSE SPECIFICALLY NOTED ON SCHEDULE APPLY ONLY TO DOORS SO NOTED.

**UNLABELED DOORS:** ARE EXISTING TO REMAIN AND ARE NOT INCLUDED ON THE DOOR SCHEDULE. PAINT (E) FRAMES WITHIN SCOPE OF WORK THAT ARE TO REMAIN.

LABELED EXISTING DOORS: ARE TO REMAIN. PAINT FRAME, MODIFY HARDWARE AS NOTED.

KEYING: CONTRACTOR TO COORDINATE KEYING SCHEDULE WITH

HARDWARE FINISH: NEW HARDWARE FINISH TO BE SATIN STAINLESS STEEL (630) OR SATIN CHROMIUM PLATED (626).

ACCESS CONTROL: VERIFY ACCESS CONTROL TYPES AND LOCATIONS WITH OWNER

DOOR JAMBS: 6" FROM NEAREST CORNER, UNO.

DOOR SWING: THE DOOR SWING INDICATED ON THE FLOOR PLAN INDICATES THE HAND OF THE DOOR ONLY. DOORS SHALL SWING TO THE MAXIMUM EXTENT (BEYOND 90 DEGREES) WHERE NOT OBSTRUCTED BY ADJACENT WALLS.

DOOR FRAMES: SHALL BE PAINTED, UNLESS NOTED OTHERWISE

#### DOOR HARDWARE GROUPS: BASIS OF DESIGN

HW-1	STOREROOM:
	STOREROOM LOCKSET, CORBIN RUSSWIN LEVER SET,
	BEST LARGE FORMAT CORES, STANDARD HINGE, WAL
	DOOR STOP, DOOR SILENCERS
	HW-1

#### HW-2 ENTRANCE/OFFICE: ENTRANCE LOCKSET, CORBIN RUSSWIN LEVER SET, BEST LARGE FORMAT CORES, STANDARD HINGE, DOOR

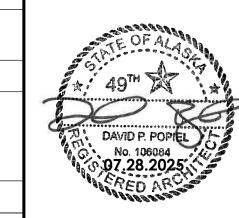
#### SILENCERS, WALL DOOR STOP HW-3 <u>ELECTRIFIED ENTRANCE/OFFICE:</u>

#### ENTRANCE LOCKSET, CORBIN RUSSWIN LEVER SET, BEST LARGE FORMAT CORES, CLOSER, MOP PLATE, CARD READER, DOOR SILENCERS, WALL DOOR STOP

#### HW-4 TOILET/PRIVACY: PRIVACY LOCKSET, CORBIN RUSSWIN LEVER SET, BEST LARGE FORMAT CORES, WALL DOOR STOP, SOUND GASKET

#### HW-5 <u>ELECTRIFIED STOREROOM:</u>

STOREROOM LOCKSET, CORBIN RUSSWIN LEVER SET. BEST LARGE FORMAT CORES, STANDARD HINGE, CARD READER, WALL DOOR STOP, DOOR SILENCERS



## **TENANT** OFFICES -TS @ HHE VCS DISTRICT (IMPROVEMENT

CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY:

DOOR SCHEDULE, WINDOW SCHEDULE

A901

#### FINISH SCHEDULE

		FL	FLOOR BASE NORTH WALL		EAST W	ALL	SOUTH W	/ALL	WEST W	ALL	WAIN	NSCOT	CASEWORK			IG	ACCESSORY			
NUMBER	ROOM NAME	SUBSTRATE	FINISH	FINISH	HEIGHT	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	HEIGHT	CABINETS	COUNTER	MATERIAL	FINISH	GROUP
061	SPED OFFICE	(E) CONC	(E) CPT   CPT-1	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1					(E) ACT	FF	
062	SPED ASSISTANT	(E) CONC	(E) CPT   CPT-1	RB-1	4"	(E) GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1					(E) ACT	FF	
062A	FILES	(E) CONC	(E) CPT   CPT-1	RB-1	4"	GYP   (E) GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-1	GYP   (E) GYP	P-1					(E) ACT	FF	
062B	WORKSPACE	(E) CONC	(E) CPT   CPT-1	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1	GYP   (E) GYP	P-1					(E) ACT	FF	
062H	HALL	(E) CONC	(E) CPT   CPT-1	RB-1	4"	GYP   (E) GYP	P-1	(E) GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-1					(E) ACT	FF	
064	TOILET	(E) CONC	SR-1	ICB	6"	(E) GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1	HIP-1	54"			MRGYP	P-1	AG-2
065	LAUNDRY / STORAGE	(E) CONC	SR-1	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1	GYP   (E) GYP	P-1					(E) ACT	FF	AG-1
069	STORAGE	(E) CONC	CPT-1	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	GYP	P-1	(E) GYP	P-1					(E) ACT	FF	
070	CONFERENCE ROOM	(E) CONC	(E) CPT   CPT-1	RB-1	4"	GYP   (E) GYP	P-1	(E) GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-4					(E) ACT	FF	
072	IT OFFICE	(E) CONC	(E) CPT   CPT-1	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1					(E) ACT	FF	
094A	STORAGE	(E) CONC	(E)	RB-1	4"	GYP   (E) GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-1	(E) GYP	P-1					(E) GYP	P-1	
095	STORAGE	(E) CONC	(E)	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	GYP	P-1	GYP	P-1					(E) GYP	P-1	
126	COUNSELOR	(E) CONC	CPT-1	RB-1	4"	GYP	P-1	(E) GYP	P-1, 5	(E) GYP	P-1	GYP	P-1					ACT-1	FF	
126C	COMM	(E) CONC	CPT-1	RB-1	4"	GYP	P-1	GYP	P-1	(E) GYP	P-1	(E) GYP	P-1					ACT-1	FF	
127	CORR	(E) CONC	WM-1	RB-1	4"	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)					(E) ACT	FF	
128	HHES ADMIN	(E) CONC	CPT-1	RB-1	4"	(E) GYP	P-1	IRGYP   (E) GYP	P-1	IRGYP	P-1	IRGYP   (E) GYP	P-1			PL-3	PL-4	ACT-1   BAF-2	FF   FF	
128A	STUDENT WAITING	(E) CONC	CPT-1	RB-1	4"	GYP   (E) GYP	P-1	GYP	P-1	GYP	P-1	GYP   (E) GYP	P-1					ACT-1	FF	
128B	HALL	(E) CONC	CPT-1	RB-1	4"	-	-	GYP	P-1	GYP	P-1	GYP	P-1					ACT-1	FF	
129	NURSES SUITE	(E) CONC	SR-1	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	GYP	P-1	GYP	P-1			PL-1	PL-2	ACT-1	FF	AG-1
130	PRINCIPAL	(E) CONC	CPT-1	RB-1	4"	GYP	P-1	GYP	P-1	GYP	P-5	(E) GYP	P-1					ACT-1	FF	
131	VEST	(E) CONC	WM-1	RB-1	4"	MRGYP	P-1	MRGYP   (E) GYP	P-1	(E) GYP	P-1	MRGYP   (E) GYP	P-1					MRGYP	P-1	
132	CORR	(E) CONC	WM-1	RB-1	4"	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)					(E) ACT	FF	
133	FACILITIES	(E) CONC	CPT-1	RB-1	4"	(E) GYP	P-1	(E) GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-4					(E) ACT	FF	
135	BREAKROOM	(E) CONC	SR-1	RB-1	4"	GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-4	(E) GYP	P-1			PL-1	PL-2	ACT-1	FF	AG-1
136	CORR	(E) CONC	WM-1	RB-1	4"	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)					(E) ACT	FF	
141	CORR	(E) CONC	WM-1	RB-1	4"	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)					(E) ACT	FF	
144	VCS RECORDS STORAGE	(E) CONC	CPT-1	RB-1	4"	GYP	P-1	GYP	P-1	GYP	P-1	GYP	P-1					ACT-1	FF	
146	PASSAGE	(E) CONC	WM-1	RB-1	4"	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)					(E) ACT	FF	
152	CORR	(E) CONC	WM-1	RB-1	4"	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)					(E) ACT	FF	
152A	WAITING	(E) CONC	CPT-1	RB-1	4"	GYP	P-1	GYP	P-1	GYP   (E) GYP	P-1	(E) GYP	P-1					ACT-1	FF	
153	OPEN OFFICE	(E)	CPT-1	RB-1	4"	GYP	P-1	GYP	P-1	GYP	P-1	GYP	P-1					ACT-1   BAF-1	FF   FF	
153A	SUPERINTEND	(E)	CPT-1	RB-1	4"	GYP	P-1	GYP	P-1	GYP	P-5	GYP	P-1					ACT-1	FF	
153B	TEACHING & LEARNING	(E)	CPT-1	RB-1	4"	GYP	P-5	GYP	P-1	GYP	P-1	GYP	P-1					ACT-1	FF	
154	BUSINESS SERVICES	(E)	CPT-1	RB-1	4"	GYP	P-1	GYP	P-1	GYP	P-1	GYP	P-5					ACT-1	FF	
164	CORR	(E) CONC	WM-1	RB-1	4"	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)					(E) ACT	FF	

#### FINISH LEGEND

F	LO(	OR	IN	G

**WALK-OFF MAT** WM-1

SHAW CONTRACT | ALL ACCESS | SWIFT 5T414 | 24x24 | 0.270 IN | TROT 14500 CONSTRUCTION | ECOSOLUTION Q100® NYLON | PERFORMANCE TREATMENTS | 28 OZ/YD2 |

ECOWORX® TILE | MONOLITHIC

**CARPET TILE** 

CPT-1 MOHAWK GROUP | TAKING STEPS | ADOPT A PLAN | 24x24 | 855 RAMON

CONSTRUCTION | FIBER CONTENT | PERFORMANCE TREATMENTS | YARD WEIGHT | BACKING

SYSTEM QUARTER TURN

CPT-1 TO MATCH EXISTING CARPET IN CURRENT LOCATION FROM A PREVIOUS RENOVATION.

**RESILIENT SHEET FLOORING** 

SHEET RUBBER | AMERICAN BILTRITE | AB PURE | 60" x 50' | 3MM | ABS 34 GLACIER NOTES:

COLD WELDED SEAMS FOR RUBBER SHEET UNO. INTEGRALLY COVED BASE WHERE INDICATED, 6"H WITH ALUMINUM CAP UNO. SR-1 TO MATCH SHEET RUBBER IN OTHER LOCATIONS OF THE

BUILDING FROM A PREVIOUS RENOVATION.

#### **WALL BASE & ACCESSORIES**

**RESILIENT BASE** 

COVED TOE | 4" | JOHNSONITE | TYPE TS | BEDROCK SEE FLOORING FOR FLASH-COVED RESILIENT SHEET

RESILIENT FLOORING TRANSITIONS & ACCESSORIES

CPT/WM TO (E) CPT | ROLLING TRAFFIC TRANSITION | JOHNSONITE | TYPE XX | MODEL

28 MEDIUM GREY

REDUCER | JOHNSONITE | TYPE XX | MODEL | 28 MEDIUM GREY RFT-3 CPT/(E) CPT TO RS | ROLLING TRAFFIC TRANSITION | JOHNSONITE | TYPE XX | MODEL

28 MEDIUM GREY

SIZED AS REQUIRED FOR MATERIALS TRANSITIONED

METAL TRANSITIONS & ACCESSORIES MT-1

CRANE COMPOSITES | CAP CP | ALUMINUM | CLEAR ANODIZED | SATIN

MT-2 COVE CAP | ALUMINUM | CLEAR ANODIZED | SATIN

SIZED AS REQUIRED FOR MATERIALS TRANSITIONED

MITERED CORNERS ARE NOT ACCEPTABLE AT BULL NOSE AND SQUARE CORNER TRIMS; PROVIDE METAL CORNERS FOR BULL NOSE AND SQUARE CORNER TRIMS UNO

#### PAINT COLORS

PAINT SYSTEMS

WALLS

1 COAT PRIMER | 2 COATS LOW-VOC LIGHT-INDUSTRIAL ACRYLIC | SEMI-GLOSS

TOILETS/JAN 1 COAT PRIMER | 2 COATS LOW-VOC WATERBORNE EPOXY | SEMI-GLOSS

P-1 GENERAL WHITE | SHERWIN WILLIAMS | SW 7004 | SNOWBOUND (LRV 83)

HM DOORS/FRAMES/RELITE | MATCH EXISTING, UNO P-2 P-3

MISC METALS | SHERWIN WILLIAMS | SW7076 | CITYSCAPE (LRV 22) ACCENTS | SHERWIN WILLIAMS | SW6509 | GEORGIAN BAY (LRV 11)

P-4 P-5

ACCENTS | SHERWIN WILLIAMS | SW6801 | REGALE BLUE (LRV 42) P-6

HM DOOR/FRAMES/RELITE | MATCH EXISTING BLUE DOORS IN VESTIBULE 131

NOTES: MATCH EXISTING FOR P-1, 2, 3, 6. CONFIRM WITH OWNER

WALL COVERING: (RIGID, HIGH-IMPACT PLASTIC PANELS) INPRO RIGID SHEET | 0.060" | LEGACY 2402 | VELVET TEXTURE

NOTES: OMIT TRIM AT TOP AND IN-PLANE VERTICAL JOINTS; PROVIDE COLOR-MATCHED SEALANT

MATCHING TRIM AT INSIDE CORNERS I CORNER GUARDS AT OUTSIDE CORNERS.

**WALL PROTECTION** 

CORNER GUARD | RESILIENT | INPRO CORP | 48" | 1" | RIGID VINYL | FEATHER 0238 | MFR STD

1 COAT PRIMER | 2 COATS LOW-VOC ARCHITECTURAL ACRYLIC LATEX | EGGSHELL

TEXTURE | SURFACE-MOUNT ALUMINUM RETAINER WITH RIGID VINYL COVER

FINAL COLOR MATCH TO EXISTING WHITE PAINT.

<u>ACOUSTICAL TREATMENTS</u>

OPEN OFFICE | PET BAFFLES | SOELBERG | GESTO | 108" L | SEE PLAN FOR LAYOUT |

ADMIN | PET BAFFLES | SOELBERG | GESTO | 108" L | SEE PLAN FOR LAYOUT | JUNIPER BAF-2

24 x 48 | ARMSTRONG | 565 CIRRUS HIGH NRC SQUARE LAY-IN | WHITE

#### **CEILINGS**

SUSPENSION SYSTEMS FOR ACOUSTIC CEILING TILE (ACT)

TYPICAL | ARMSTRONG | 15/16" PRELUDE XL EXPOSED TEE | WHITE NOTES: PROVIDE GRID-1 UNLESS INDICATED OTHERWISE

ACOUSTICAL CEILING TILES

NRC MIN 0.70 | CAC MIN 30 | LRV MIN 0.85 | CLASS A

CASEWORK, MILLWORK & DOORS SOLID SURFACE

WINDOWSILLS | POLYMER | CORIAN | CAMEO WHITE

CASEWORK | WILSONART | UPTOWN WALNUT | 7971K-12 | SOFT GRAIN FINISH

COUNTERTOP | WILSONART | WHITE CASCADE | 5003-38 | FINE VELVET FINISH

PL-2 ADMIN CASEWORK | WILSONART | MAGNOLIA | 5012K-19 | LENO WEAVE FINISH PL-3

ADMIN COUNTERTOP | FORMICA | WIDE PLANKED WALNUT | 9479-NG | NATURAL GRAIN TEXTURE

**INTERIOR DOORS** 

MATCH EXISTING

#### **EQUIPMENT & ACCESSORIES**

WINDOW TREATMENT

EXTERIOR | SINGLE SHADE | MANUAL | DRAPER | CLUTCH OPERATED FLEXSHADE | MATCH EXISTING

SHADE CLOTH | E SCREEN 7703 | 3% OPENNESS | NRC 0.15 | SAA 0.17 |

MATCH EXISTING COLOR, CONFIRM WITH CLIENT

RS-2

INTERIOR | SINGLE SHADE | MANUAL | DRAPER | CLUTCH OPERATED FLEXSHADE SHADE CLOTH | E SCREEN 7501 | 3% OPENNESS, CLIENT TO CONFIRM | NRC 0.15 | SAA 0.17 | COLOR TBD

**RESIDENTIAL APPLIANCES** 

RANGE | TBD | OFCI REFIGERATOR | TBD | OFCI DISHWASHER | TBD | OFCI DW

MICRO MICROWAVE | TBD | OFCI

HOOD RANGE HOOD | SEE MECHANICAL | CFCI

TOILET ACCESSORIES - TO BE CONFIRM BY OWNER

PTD-1 AUTOMATED | SURFACE-MOUNT | GP PRO | EN MOTION | IMPULSE 8 | BATTERY | 59437 WHITE | OFCI

WR-1 SURFACE-MOUNT | BOBRICK | CONTURA | B-277 W/ LINER MATE | SSTL AUTOMATED SOAP | FOAM | GOJO LTX-12 | BATTERY | 1980-01 | WHITE | OFCI SD-1

MIR-1 24x36 | BOBRICK | WELDED CHANNEL-FRAMED MIRROR | B-165 2436

TPD-1 SURFACE-MOUNT | JUMBO ROLL | GP PRO | DOUBLE | 59210 | BLACK

TSCD SURFACE-MOUNT | BOBRICK | CONTURA | B-4221 | SSTL SURFACE-MOUNT | BOBRICK | CONTURA | B-270 | SSTL

SNR GB GRAB BAR - WHEELCHAIR COMPARTMENT | BOBRICK | B-6806 SERIES

BABY CHANGING STATION | BOBRICK | KOALA KARE | SURFACE-MOUNT | KB300 | SSTL

BABY CHANGING STATION BAG HOOK | KOALA KARE | SURFACE-MOUNT | 310-54-KIT | SSTL

SINGLE | BOBRICK | B-233 | SSTL

#### ACCESSORY GROUPS <AG-X>

ACCESSORY GROUPS DEFINE ACCESSORY TYPES WHICH OCCUR TOGETHER IN A ROOM. FOR EACH ACCESSORY INCLUDED WITHIN A GROUP, PROVIDE 1 EACH UNO. PROVIDE 1 EACH PER TOILET, LAVATORY, OR SINK AS INDICATED IN ELEVATIONS AND TYPICAL MOUNTING HEIGHTS, SEE TYPICAL MOUNTING HEIGHTS AND INTERIOR ELEVATIONS FOR INSTALLATION LOCATIONS AND CONFIGURATIONS.

HANDWASHING: SD-1. PTD-1

AG-2 TOILET ACCESSIBLE: SD-1, PTD-1, TPD-1, PTD-1, WR-1, TSCD, SNR, GB, BCS, BH, H-1

#### **GENERAL FINISH NOTES**

- A. FINISHES SELECTED ARE BASIS OF DESIGN INTENDED FOR CONSTRUCTION PRICING. FINISHES WILL BE REVIEWED AND CONFIRMED WITH OWNER PRIOR TO COMPLETION OF CONSTRUCTION
  - DOCUMENTS. PRODUCT MANUFACTURER DESIGNATIONS INDICATE THE BASIS FOR QUALITY, PATTERN AND COLOR
- SELECTION. C. SEE INTERIOR ELEVATIONS AND FINISH FLOOR PLAN FOR LOCATIONS OF
- ACCENT/ FEATURE WALL FINISHES. D. SEE FINISH FLOOR PLAN, FOR EXTENT AND INSTALLATION PATTERN OF FLOORING AND/OR EXTENT OF ACCENTA
- FEATURE FINISHES. PROVIDE MOISTURE-RESISTANT GYPSUM WALLBOARD (MRGYP) AT WALLS WITHIN 48" OF ALL PLUMBING FIXTURES.
- WHERE IRGYP AND/OR ARGYP ARE INDICATED, PROVIDE SPECIAL PURPOSE GYPSUM BOARD TO +48" AFF AND TYPE-X GYPSUM BOARD ABOVE UNO.
- G. PROVIDE A PRIME COAT AT WALLS IN UNEXPOSED AREAS CONCEALED BY CASEWORK, PANELING, WALL COVERINGS, AND OTHER FIXED ARCHITECTURAL ELEMENTS UNO.
- EXTEND SCHEDULED WALL FINISHES AT AREAS EXPOSED BEHIND CASEWORK, STORAGE, PANELING, ETC, DUE TO REVEALS, JOINTS, KNEE SPACE, END CONDITIONS, UNO.
- FINISH REVEALS AND FILLERS TO MATCH ADJACENT LIKE FEATURE (PAINT, PLASTIC LAMINATE, ETC.) PROVIDE ALUMINUM J-MOLD TOP CAP AT
- INTEGRALLY-COVED BASE UNO. PROVIDE WAINSCOT HEIGHT AS SCHEDULED MEASURED AFF TO TOP OF
- WAINSCOT, UNO. PROVIDE RESILIENT TRANSITION ACCESSORIES AT ALL JOINTS BETWEEN DISSIMILAR FLOOR FINISHES, UNO.
- REFER TO DOOR SCHEDULE AND HARDWARE GROUPS, AND PROVIDE THRESHOLD HARDWARE IN LIEU OF RESILIENT TRANSITIONS WHERE INDICATED.
- PROVIDE **RS-2** AT ALL INTERIOR WINDOWS AND RELITE UNO. COORDINATE WITH OWNER WHERE EXISTING ARE TO REMAIN.
- PROVIDE **RS-1** AT ALL EXTERIOR WINDOWS UNO. COORDINATE WITH OWNER WHERE EXISTING ARE TO REMAIN.
- P. PROVIDE SOLID SURFACE, **SLDS-1** AT ALL
- EXTERIOR WINDOW SILLS. Q. PAINT INTERIOR HM DOORS AND FRAMES
- **P-2** UNO. R. PROVIDE SEALANT AT ALL EXPOSED JOINTS BETWEEN DISSIMILAR SURFACES AND JOINTS BETWEEN SURFACES IN DIFFERING PLANES, INCLUDING, BUT NOT LIMITED TO, RESILIENT FLOORING AT DOOR FRAMES, BACKSLASHES AT COUNTERS AND WALLS, INTEGRALLY **COVED BASE AND WALL PROTECTION** SEE INTERIOR DETAILS FOR FLOOR
- TRANSITIONS, BASE DETAILS AND **CEILING TRANSITIONS** PROVIDE CORNER GUARDS AT ALL UNPROTECTED OUTSIDE GYP CORNERS
- U. EXTEND SPECIFIED FLOORING UNDER CASEWORK UNO.
- V. FINISHES WITHIN STORAGE CLOSETS SHALL BE CONSISTENT WITH FINISHES IN THE ADJACENT ROOM UNO. W. PROVIDE WALL BASE ON ALL WALLS AND
- COLUMNS UNO. X. TYPICAL WALL FINISH: **P-1** UNO. TYPICAL BASE FINISH: **RB-1** UNO.
- PROJECT NO: 24-121 DATE: 2025-07-28 DRAWN BY: CHECKED BY: REVISION DESCRIPTION

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DAVID P. POPIEL

No. 106084

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**CONSULTANT:** 

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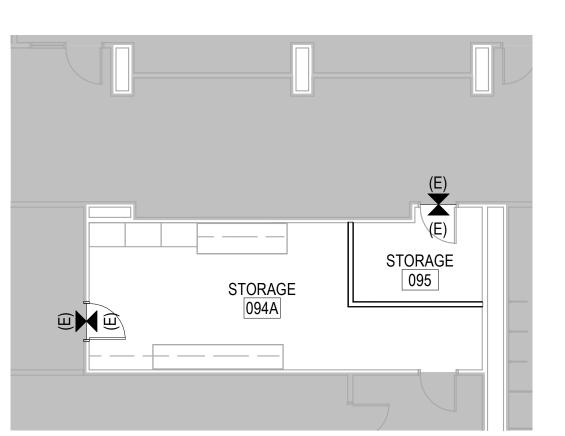
FINISH SCHEDULE & LEGEND

A911

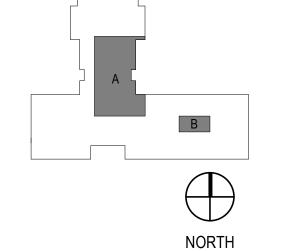
- SEE INTERIOR ELEVATIONS AND FINISH SCHEDULE FOR ADDITIONAL FINISH INFORMATION.
- DIMENSIONS, TARGETS, ETC. THAT ARE TYPICAL FOR MANY AREAS ARE NOTED ONLY ONCE.
- PROVIDE A PRIME COAT AT WALLS IN UNEXPOSED AREAS CONCEALED BY CASEWORK, PANELING, WALL COVERINGS, AND OTHER FIXED ARCHITECTURAL ELEMENTS UNO.
- D. EXTEND SCHEDULED WALL FINISHES AT AREAS EXPOSED BEHIND CASEWORK, STORAGE, PANELING, ETC. DUE TO REVEALS, JOINTS, KNEE SPACE, END CONDITIONS UNO.
- E. PROVIDE RESILIENT TRANSITION ACCESSORIES AT ALL JOINTS BETWEEN DISSIMILAR FLOOR
- FINISHES, EXCEPT CARPET-TO-WALK-OFF UNO. PROVIDE TROWELABLE CEMENTITIOUS UNDERLAYMENT TO TAPER FLOORING SUBSTRATES FOR ZERO THRESHOLD TRANSITIONS BETWEEN DISSIMILAR FLOOR FINISHES.
- REFER TO DOOR SCHEDULE AND HARDWARE GROUPS, AND PROVIDE THRESHOLD HARDWARE IN LIEU OF RESILIENT TRANSITIONS WHERE INDICATED. SEE INTERIOR DETAILS FOR FLOOR
- TRANSITIONS, BASE DETAILS AND CEILING TRANSITIONS.
- PROVIDE CORNER GUARDS AT ALL UNPROTECTED OUTSIDE GYP CORNERS UNO.
- EXTEND SPECIFIED FLOORING UNDER CASEWORK UNO.
- K. FINISHES WITHIN STORAGE CLOSETS SHALL BE CONSISTENT WITH FINISHES IN THE ADJACENT ROOM UNO.
- PROVIDE WALL BASE ON ALL WALLS AND COLUMNS UNO.
- M. TYPICAL WALL FINISH: P-1 UNO.
- N. TYPICAL BASE FINISH: RB-1 UNO.

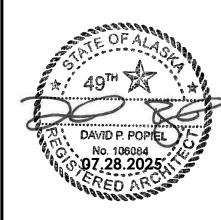
#### FINISH PLAN LEGEND

FLOOR TRANSITION X-X



2 FINISH PLAN - AREA B A912 1/8" = 1'-0"





**TENANT** 

OFFICES -TS @ HHE VCS DISTRICT (IMPROVEMENT ASK VALDEZ,

CITY OF VALDEZ CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY:

FINISH FLOOR PLAN

A912

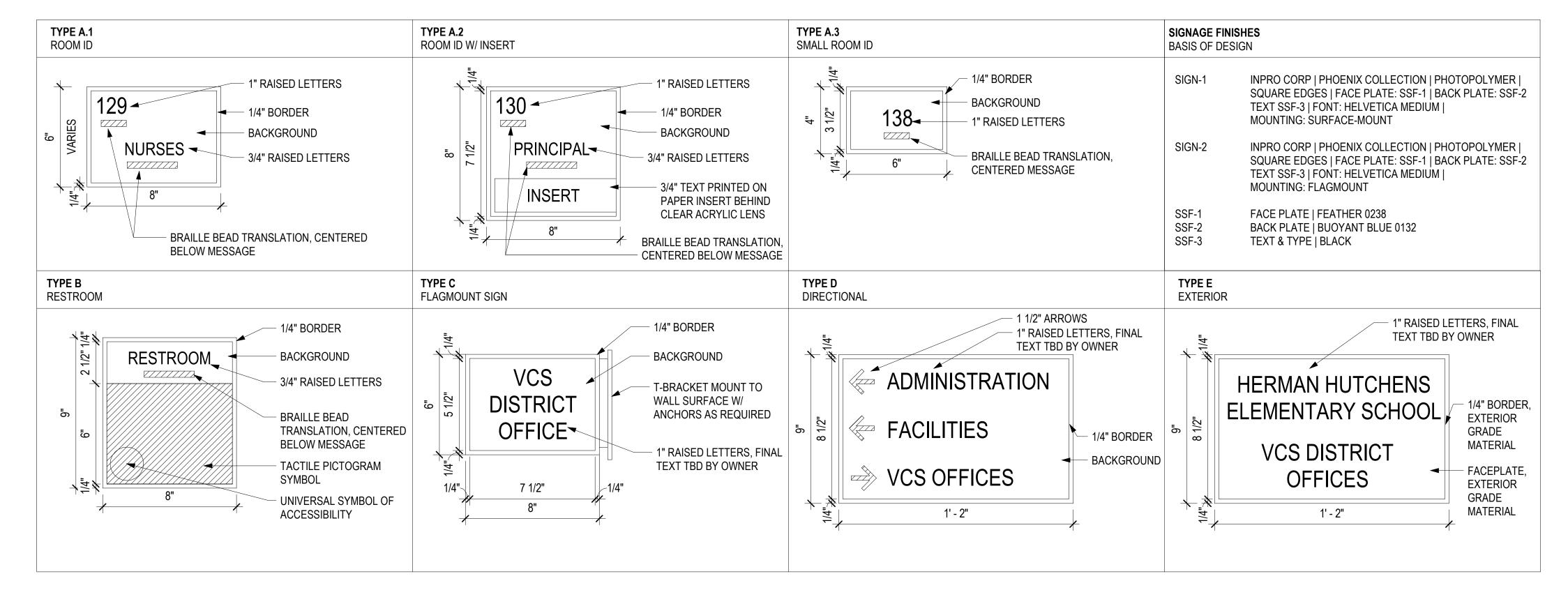
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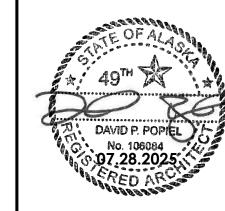
	DESCRIPTION	LOCATION	TYPE	SIGN TYPE	MOUNTING LOCATION
IBC REQ'D	TOILET ROOM DESIGNATION	PROVIDE NEAR THE ENTRANCE TO EACH TOILET FACILITY NOTE ACCESSIBLE SIGNS SHALL COMPLY WITH 1CC-A117.1	INTERIOR PANEL	SEE TYPE B	SEE SIGN LOCATION PLAN
; REQ'D	HAZARD IDENTIFICATION/ AUTHORIZED ACCESS ONLY	AT ENTRANCES TO LOCATIONS WHERE HAZARDOUS MATERIAL ARE HANDLED, STORED, OR USED. "HIGH VOLTAGE" AT ELECTRICAL ROOMS	INTERIOR PANEL	N/A	SEE SIGN LOCATION PLAN
IFC	EQUIPMENT ROOMS	AT ENTRANCES TO EQUIPMENT ROOMS - I.E. MECHANICAL, ELECTRICAL, COMMUNICATIONS, SPRINKLER CONTROL, FOAM, ETC.	INTERIOR PANEL & EXTERIOR PANEL	SEE TYPE A.3	SEE SIGN LOCATION PLAN
	FIRE DEPARTMENT CONNECTION	AT ALL FIRE DEPARTMENT CONNECTIONS SERVING FIRE SPRINKLERS, STANDPIPES OR PUMP CONNECTIONS	EXTERIOR PANEL	N/A	VERIFY IN FIELD
	BUILDING IDENTIFICATION/ STREET ADDRESS	IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD	EXTERIOR PANEL OR FREE STANDING SIGN AS INDICATED	N/A	VERIFY IN FIELD
REQ'D	EXIT IDENTIFICATION	ABOVE EXIT DOORS	ELECTRICAL SIGN	SEE ELEC	CEILING OR WALL AS INDICATED
NFPA RE	FIRE EXTINGUISHER IDENTIFICATION	FLAG-MOUNT ABOVE FIRE EXTINGUISHER	INTERIOR FLAG-MOUNT & DECAL ADHERED TO FEC	N/A	VERIFY IN FIELD
	STAIR IDENTIFICATION	AT ENTRANCES TO STAIRS	INTERIOR PANEL	N/A	N/A
	STAIR LEVEL INDICATORS	WITH STAIRS AT EACH LEVEL	INTERIOR PANEL	N/A	N/A
	ELEVATOR EGRESS	AT ENTRANCES TO ELEVATORS	INTERIOR PANEL	N/A	N/A
	ELEVATOR HOISTWAY LEVEL INDICATORS	AT JAMB OF EACH ELEVATOR HOISTWAY OPENING	INTERIOR PANEL	N/A	N/A
	EGRESS PLANS	AT EACH ELEVATOR AND EGRESS STAIR ENTRANCE	INTERIOR PANEL	N/A	N/A
	POWERED DOOR LEAF OPERATION	ON LEAF OF POWERED DOOR	DECAL	SEE DOOR HARDWARE	SEE DOOR HARDWARE
	ACCESS CONTROLLED EGRESS DOOR ASSEMBLIES	TO BE CONFIRMED	INTERIOR PANEL OR DECAL	SEE DOOR HARDWARE	SEE DOOR HARDWARE
ABA REQ'D	PERMANENT ROOM IDENTIFICATION	ADJACENT TO DOORS ACCESSING ROOM TO BE IDENTIFIED	INTERIOR PANEL	VARIES	SEE SIGN LOCATION PLAN

#### SIGNAGE SCHEDULE

MARK	TYPE	SUBTYPE	MESSAGE NUMBER	MESSAGE TEXT	MESSAGE PICTOGRAM	REMARK
154	Α	2	154	BUSINESS SERVICES	-	-
153B	Α	2	153B	TEACHING & LEARNING	-	-
153A	Α	2	153A	SUPERINTENDENT	-	-
152A.2	Α	1	125A	VCS DISTRICT OFFICES	-	-
152A.1	Α	1	152A	VCS DISTRICT OFFICES	-	-
144	Α	1	144	VCS RECORDS	-	-
135	Α	1	135	BREAKROOM	-	-
134	Α	1	134	WORKROOM	-	-
133	Α	2	133	FACILITIES	-	-
132.2	D		-	SEE SIGN LEGEND	-	-
132.1	A	1	132	HERMAN HUTCHENS ELEMENTARY SCHOOL	-	-
131	E		-	SEE SIGN LEGEND	-	-
130	Α	2	130	PRINCIPAL	-	-
129	А	1	129	NURSES	-	-
128.3	С		-	HHES ADMIN OFFICE		FINAL TEXT TBD BY OWNER
128.2	А	1	128	HHES ADMIN	-	-
128.1	Α	1	128	HHES ADMIN		
126C	Α	3	126C	-		
126	A	2	126	COUNSELOR	-	-
125A.3	С		-	VCS DISTRICT OFFICES	-	FINAL TEXT TBD BY OWNER
095	A	1	095	STORAGE	-	-
094A.2	A	1	094A	STORAGE	-	-
094A.1	A	1	094A	STORAGE	-	-
072	A	2	072	IT OFFICE	-	-
070.2	Α	1	070	CONFERENCE ROOM	-	-
070.1	Α	1	070	CONFERENCE ROOM	-	
069	Α	1	069	STORAGE	-	-
068.2	A	1	068	TBD	-	-
068.1	A	1	068	TBD	-	-
067	В		067	RESTROOM	UNISEX ADA	-
066	В		066	RESTROOM	UNISEX ADA	-
065	A	1	065	LAUNDRY	-	-
064	В		064	RESTROOM	UNISEX ADA	-
063.2	A	1	063	TBD	-	-
063.1	A	1	063	TBD	-	-
062H.2	A	1	062H	TBD -		-
062H.1	A	1	062H	TBD -		-
062A	A	1	062A	FILES	-	-
061	А	2	061	SPED OFFICE	-	-

#### SIGNAGE LEGEND





**TENANT** 

## VCS DISTRICT (IMPROVEMENT VALDEZ ASK OF. VALDEZ,

CONSULTANT:

PROJECT NO: 24-121 2025-07-28 DRAWN BY: CHECKED BY: DPP DESCRIPTION

SIGNAGE LEGEND & SCHEDULE

A921

24-121 2025-07-28

#### **GENERAL STRUCTURAL NOTES**

THE CONTRACTOR MUST VERIFY AND COORDINATE ALL DIMENSIONS AMONG THE DRAWINGS BEFORE STARTING ANY WORK OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, REFERENCE STANDARDS, SITE CONDITIONS OR GOVERNING CODE, THE MORE STRINGENT REQUIREMENTS MUST GOVERN. CONTRACTOR MUST NOTIFY THE ENGINEER OF DISCREPANCIES AND OBTAIN DIRECTION PRIOR TO PROCEEDING. NOTES ON INDIVIDUAL STRUCTURAL DRAWINGS MUST TAKE PRIORITY OVER GENERAL STRUCTURAL NOTES. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED AS TYP ON THE PLANS BUT MUST APPLY AS SHOWN OR DESCRIBED IN THE DETAILS.

ALL CONSTRUCTION MUST COMPLY WITH THE 2021 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE STATE OF ALASKA.

SAFETY - THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL FEDERAL, STATE AND LOCAL SAFETY STANDARDS. THE CONTRACTOR IS IN CHARGE OF ALL SAFETY MATTERS ON AND AROUND THE JOB SITE.

#### <u>STRUCTURAL DESIGN DATA</u>

STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE 2021 IBC AND 2021 IEBC AS AMENDED AND ADOPTED BY THE STATE OF ALASKA. WORK UNDER THE IEBC IS CONSIDERED A LEVEL II ALTERATION OR REPAIR. NO WORK WILL INCREASE THE STRESS DUE TO GRAVITY LOADS TO ANY EXISTING MEMBER BY MORE THAN 5% (10% DUE TO LATERAL LOADS). RISK CATEGORY IS III IN ACCORDANCE WITH IBC SECTION 1604.5.

REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS, SLOPES, DEPRESSIONS, NON-BEARING WALLS, FIRE-PROOFING, FASCIA, CURBS, DRAINS, RAILINGS, WATERPROOFING, FINISHES, ETC.

THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING OPERATIONAL LOADS ON THE COMPLETED STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SHORING AND BRACING DURING CONSTRUCTION.

LIVE: INTERIOR WALLS AND PARITIONS, 5 PSF HORIZONTAL LOAD

WIND: EXTERIOR WALLS, COMPONENTS AND CLADDING WIND LOAD = 58 PSF (ULTIMATE)

#### **EXISTING CONDITIONS**

CONTRACTOR MUST VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING WORK. DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. EXISTING CONDITIONS SHOWN ON DRAWINGS ARE BASED ON EITHER SITE OBSERVATIONS, ORIGINAL DRAWINGS, OR WERE ASSUMED BASED ON EXPECTED CONDITIONS. IF EXISTING CONDITIONS DO NOT CLOSELY MATCH CONDITIONS SHOWN ON DRAWINGS, OR IF EXISTING MATERIALS ARE OF QUESTIONABLE OR SUBSTANDARD QUALITY, NOTIFY ENGINEER PRIOR TO COMMENCING WORK.

THE OWNER MUST ENGAGE A SPECIAL INSPECTOR PER CHAPTER 17 OF THE IBC. SPECIAL INSPECTION IS REQUIRED FOR POST-INSTALLED ANCHORS. COPIES OF INSPECTION REPORTS MUST BE AVAILABLE TO THE CONSTRUCTION SITE FOR REVIEW BY THE CONTRACTING

STRUCTURAL OBSERVATIONS ARE NOT REQUIRED.

#### **SUBMITTALS**

THE CONTRACTOR MUST REVIEW, STAMP WITH THEIR APPROVAL, DATE AND SIGN ALL SHOP DRAWINGS AND SUBMITTALS REQUIRED BY THE CONTRACT DRAWINGS PRIOR TO SUBMITTAL TO THE ENGINEER. AT THE TIME OF SUBMISSION, THE CONTRACTOR MUST INFORM THE ENGINEER IN WRITING OF ANY DEVIATION IN THE SHOP DRAWINGS FROM THE REQUIREMENTS OF THE CONTRACT DRAWINGS. DIMENSIONS AND QUANTITIES ARE THE CONTRACTOR'S RESPONSIBILITY AND WILL NOT BE REVIEWED.

#### POST-INSTALLED ANCHORS

INSTALLATION MUST CONFORM TO MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) AND REQUIREMENTS OF ICC-ES REPORT. ALL POST-INSTALLED ANCHORS MUST HAVE A CURRENT ICC-ES REPORT AND BE AUTHORIZED FOR USE IN SEISMIC DESIGN CATEGORY D. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR ALL POST-INSTALLED ANCHORS, UON.

HOLES MUST BE HAMMER DRILLED. EXISTING BASE MUST BE SCANNED PRIOR TO DRILLING HOLES. EXISTING REBAR LOCATIONS MUST BE MARKED, AND NEW ANCHOR LOCATIONS REVISED TO AVOID EXISTING REINFORCING. NO REINFORCING BARS MUST BE CUT TO INSTALL ANCHORS. ALL DEFECTIVE ANCHOR HOLES MUST BE GROUTED AND A NEW HOLE DRILLED A MINIMUM OF 3 BOLT DIAMETERS AWAY.

**BLKG** 

BM

BOT

**BTWN** 

CL

CLR

COL

CONC

CONT

DBN

Blocking

Beam

**Bottom** 

Between

Clear

Column

Concrete

Existing

Continuous, Continue

Diaphragm Boundary Nailing

Center-Line

SCREW ANCHORS IN CONCRETE MUST BE ONE OF THE FOLLOWING (OR AN APPROVED **EQUIVALENT):** 

-HILTI "KH-EZ" (ESR-3027)

AB

**ADH** 

AR

ALT

AHJ

AFF

ADH

ADD'L

**ARCH** 

- -SIMPSON "TITEN HD" (ESR-2713)
- -ITW "TAPCON+" (ESR-3699)
- -DEWALT "SCREW-BOLT+" (ESR-3889)

**Anchor Bolts** 

Anchor Rod

Above Finish Floor

Authority Having Jurisdiction

Adhesive

Architect

Alternate

Adhesive

Additional

#### STRUCTURAL STEEL

#### MATERIALS:

ASTM A36 ALL SHAPES & PLATE:

ALL DETAILING, FABRICATION AND ERECTIONS MUST CONFORM TO AISC SPECIFICATIONS AND CODES, LATEST EDITION. FABRICATOR MUST PARTICIPATE IN THE AISC QUALITY CERTIFICATION PROGRAM OR SPECIAL INSPECTIONS AT THE CONTRACTOR'S EXPENSE. MUST BE PROVIDED IN THE FABRICATION SHOP.

ALL WELDING MUST BE DONE BY QUALIFIED WELDERS AND MUST CONFORM TO THE AWS D1.1 AND D1.8, LATEST EDITIONS. ALL WELDING ELECTRODES MUST BE PROPERLY CONDITIONED 70 KSI MINIMUM TENSILE STRENGTH, WITH DIFFUSED HYDROGEN LEVELS OF 16ml/100g (H16) OR LESS IN ACCORDANCE WITH AWS D1.8 AND A5.20.

WELDS NOT SPECIFIED MUST BE SHOP-PERFORMED CONTINUOUS OR ALL-AROUND 3/16" FILLET WELDS.

ALL STEEL MUST BE CLEANED BY METHODS COMPLYING WITH THE STEEL STRUCTURES PAINTING COUNCIL METHOD SSPC-SP3, POWER TOOL CLEANING. REMOVE OIL, GREASE, AND SIMILAR CONTAMINANTS. EXCEPT FOR MEMBERS TO BE WELDED, APPLY STRUCTURAL STEEL PRIMER PAINT IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS TO A UNIFORM DRY FILM THICKNESS OF 2.0 MILS. AFTER FINAL STEEL INSTALLATION, WIRE BRUSH EXPOSED STEEL SURFACES AND CLEAN WITH SOLVENTS BEFORE TOUCH-UP PAINTING. TOUCH-UP PAINT MUST BE THE SAME AS SHOP PAINT. STRUCTURAL STEEL TO RECEIVE SPRAY-APPLIED FIRE-PROOFING MAY BE SUPPLIED AS BARE STEEL.

STEEL EXPOSED TO WEATHER OR INDICATED AS GALVANIZED MUST BE HOT-DIP GALVANIZED PER ASTM A123. TOUCH-UP AND REPAIR GALVANIZATION MUST CONFORM TO ASTM A780. FASTENERS MUST COMPLY WITH ASTM A153.

THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW. THESE DRAWINGS MUST BE CHECKED BY THE CONTRACTOR BEFORE SUBMITTAL AND MUST SHOW SHOP FABRICATION DETAILS. FIELD ASSEMBLY DETAILS, AND ERECTION DIAGRAMS FOR ALL STRUCTURAL STEEL. ALSO SUBMIT WELDERS' QUALIFICATIONS.

ALL CONCRETE CONSTRUCTION MUST CONFORM TO ACI 301, STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE, AS MODIFIED BY IBC SECTION 1905 AND LOCAL ADOPTED AMENDMENTS.

#### ALL CAST-IN-PLACE CONCRETE:

- 1. EXPOSURE F1, S0, W0, C1 (ACI 318-14, 19.3.1.1) 2. MINIMUM 28-DAY COMPRESSIVE STRENGTH = 4,000 PSI
- 3. MAXIMUM AGGREGATE SIZE = 3/4"
- 4. MAXIMUM WATER-CEMENT RATIO = 0.45
- 5. MAXIMUM CHLORIDE ION CONTENT = 1.00%
- 6. TARGET AIR CONTENT = 6% (+/-1%), EXCEPT FOR TROWELED INTERIOR SLABS WHICH MUST NOT EXCEED 3% AIR CONTENT.

CONCRETE MUST BE PROPORTIONED TO ACHIEVE A WORKABLE MIX THAT CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER.

#### APPLICABLE ASTM STANDARDS:

- PORTLAND CEMENT = ASTM C150 AGGREGATE = ASTM C33, NORMAL WEIGHT
- WATER = ASTM C1602 WATER REDUCING ADMIXTURE = ASTM C494, TYPE A

CONCRETE PLACED DURING COLD WEATHER MUST CONFORM TO ACI 306. ALL COLD WEATHER CONCRETE AND CONCRETE EXPOSED TO WEATHER MUST CONTAIN AIR

THE FOLLOWING MINIMUM CONCRETE COVER MUST BE PROVIDED FOR REINFORCEMENT FOR CAST-IN-PLACE CONCRETE:

#### A. CONCRETE CAST AGAINST EARTH

Each

Each Way

Expansion

Foundation

Galvanized

Horizontal

Finished Floor

Glue-Laminated Beam

Hollow Structural Steel

International Building Code

Equal. Earthquake

ENTRAINMENT PER ACI 318-14 TABLE 19.3.3.1.

3-INCHES

INT

LOC

LONG

MAX

MEZZ

MIN

MFR

Interior

Lag Screw

Longitudinal

Maximum

Mezzanine

Manufacturer

On-Center

Minimum

Location

B. CONCRETE EXPOSED TO EARTH OR WEATHER -#5 AND SMALLER

MAIN REINFORCING.

EΑ

EQ

EW

EXP

FDN

**GALV** 

**GLB** 

HORZ

HSS

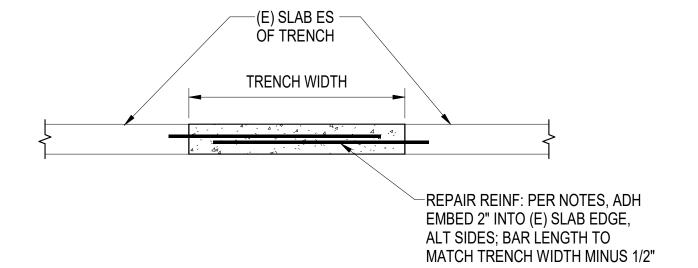
FF

1½-INCHES C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER

ALL CONCRETE REINFORCING MUST BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 315, ACI 318, CRSI MSP-1 AND ACI SP-66. DOWELS MUST MATCH SIZE AND NUMBER OF

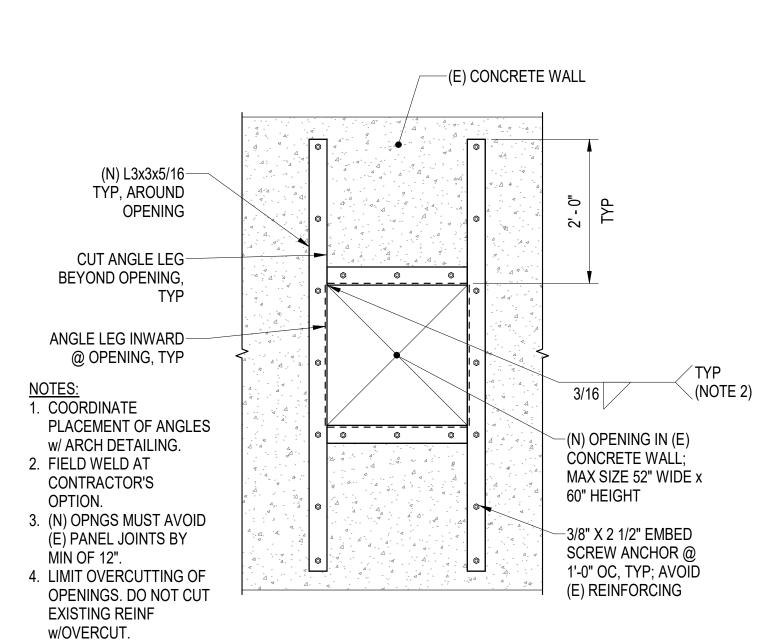
TYPICAL REINFORCING BARS MUST BE ASTM A615, GRADE 60. LAP SPLICES MUST BE CLASS B LAPS PER ACI (63 X BAR DIAMETER). LAP SPLICES MAY ALSO ACCOMPLISHED USING MECHANICAL DEVICES THAT DEVELOP 125% OF THE STRENGTH OF THE REBAR.

EMBEDDED ITEMS (CONDUIT AND SLEEVES) MUST NOT BE EMBEDDED IN OR PASS THROUGH CONCRETE WITHOUT APPROVAL. ALUMINUM ITEMS MUST NOT BE EMBEDDED IN CONCRETE. SUBMIT CONDUIT LAYOUT AND EMBEDDED ITEM PLANS FOR REVIEW PRIOR TO PLACING CONCRETE.



- A. DO NOT OVERCUT CORNERS OF TRENCH. CHIP OUT CORNERS. OVERCUT CORNERS WILL BE RECUT AND REINFORCED SIMILAR TO TRENCH AT CONTRACTORS EXPENSE.
- B. WHERE TRENCHES GO THROUGH 4" SLAB, SUPPORTED ENTIRELY ON SOIL, DOWELS SHALL BE: #3 BARS @ 12" ON-CENTER ON BOTH SIDES, LENGTH EQUAL TO THE WIDTH OF THE TRENCH, EPOXY EMBEDDED 2" INTO ORIGINAL SLAB, OVERLAP SHALL BE 4" LESS THAN THE TRENCH WIDTH
- C. WHERE TRENCHES GO THROUGH 6" SLAB OVER MECHANICAL VAULT OR UTILIDOR, DOWELS SHALL BE: #4 BARS @ 12" ON-CENTER ON BOTH SIDES, LENGTH EQUAL TO THE WIDTH OF THE TRENCH, EPOXY EMBEDDED 2" INTO ORIGINAL SLAB, OVERLAP SHALL BE 4" LESS THAN THE TRENCH WIDTH.
- D. IF PIPE TRENCH EXTENDS THROUGH EXISTING FOOTING OR FOUNDATION WALL, CONTACT ENGINEER FOR ADDITIONAL CORING AND REPAIR DETAILS PRIOR TO DEMOLITION.





SIM

SQ

STL

T&B

T&G

T.O.

T.O.B.

T.O.S.

T.O.W.

**TRANS** 

Steel

Top of Beam

Top of Steel

Top of Wall

Transverse



Overhead

Opening

Plate

Places

Required

Schedule

Rough Opening

Pounds-per-square-foot

Pounds-per-square-inch

Shearwall Boundary Nailing

OH

PL

PLS

PSF

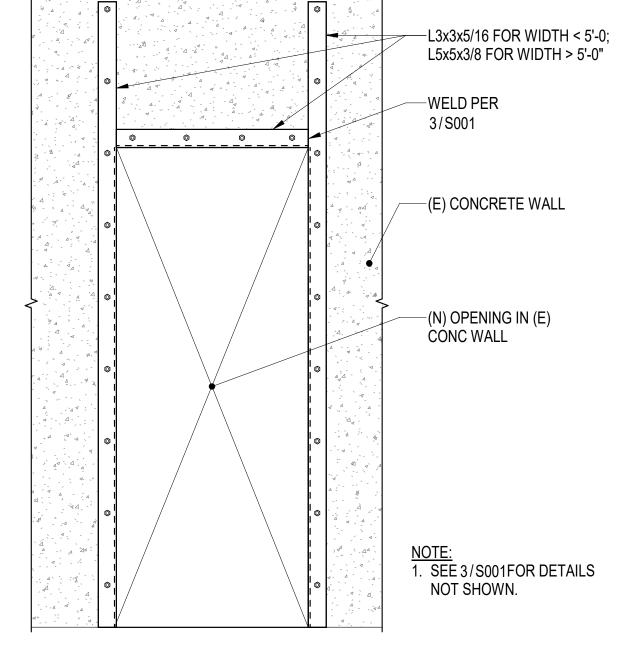
PSI

RO

SCH

REQ'D

OPNG



**WIDTH** 

11'-8" MAX

4 TYP DOOR OPENING IN (E) CONCRETE WALL S001 / 3/4" = 1'-0"

Water / Cement Ratio

Welded Wire Reinforcement

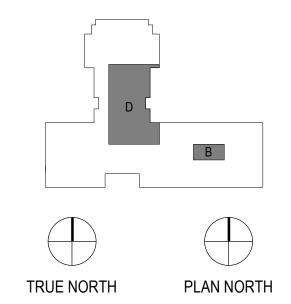
Work Point

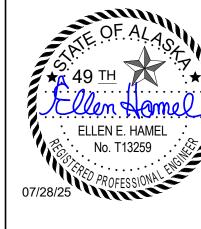
#### TYP Similar **Typical** UON **Unless Otherwise Noted** Square **VERT** Vertical W/ With Top and Bottom W/O Tongue and Groove Without W Top of Wide-Flange, Wide

W/C

W.P.

WWR





## A **JEN**

里 O TRIC ME  $\Box$ ш S > 0

IMPRO X

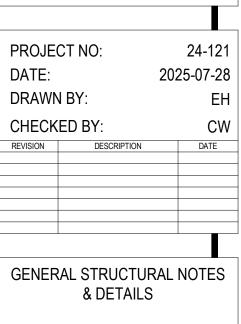
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**CONSULTANT:** 

C

**ReidMiddleton** 

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**S001** 

SYMBOL	FIXTURE	MANUFACTURER	MODE
PLUMB	ING FIXTURE	SCHEDULE	

DRYER BOX

SYMBOL	FIXTURE	MANUFACTURER	MODEL	CW	HW	WASTE	VENT	TRAP	COLOR/FINISH	TRIM/REMARKS
P-1	WATER CLOSET - ADA	AMERICAN STANDARD	MADERA FLOWISE	1"		3"	2"		WHITE	ELONGATED SEAT, AND SLOAN ROYAL MODEL 111 FLUSH VALVE. ADA HEIGHT.
P-2	LAVATORY - WALL	AMERICAN STANDARD	LUCERNE - 0355.012	1/2"	1/2"	1-1/2"	1-1/4"	1-1/4"	WHITE	PROVIDE WITH WALL CARRIER, DELTA FAUCET MODEL 515LF-HDF, METAL POP-UP DRAIN, & TRAP ARM, ASSE 1070 MIXING VALVE.
P-3	SINK - NURSE	ELKAY	LRAD3321PD	1/2"	1/2"	2"	2"	1-1/2"	STAINLESS	DOUBLE COMPARTMENT, PROVIDE WITH DELTA FAUCET 2171LF-WBHHDF, BLADE HANDLES, AND SWING GOOSENECK SPOUT, 1.5 GPM AERATOR.
P-4	SINK - BREAK - ADA	ELKAY	LRAD332155	1/2"	1/2"	2"	1-1/2"	1-1/2"	STAINLESS	DOUBLE COMPARTMENT, PROVIDE WITH DELTA FAUCET MODEL 470, SNAP-N-LOC BASKET STRAINER, & TRAP ARM, 1.5 GPM AERATOR, AIR GAP FITTING & DISHWASHER CONNECTION, ADA.
P-5	WASHER BOX	GUY GRAY	T200	1/2"	1/2"	2"	1-1/2"	2"	WHITE	1/4 ISOLATION VALVES AND WATER HAMMER ARRESTORS, WALL-MOUNT FLUSH RECESSED.
P-6	ICE MAKER OUTLET BOX	GUY GRAY	MIB	1/2"					WHITE	BRASS QUARTER TURN VALVE.
P-7	UTILITY SINK	MUSTEE	19CF UTILATUB	1/2"	1/2"	2"	1-1/2"	2"	WHITE	PROVIDE WITH COMBO-PACK: 6" SWING SPOUT FAUCET WITH AERATOR AND HOSE END, TWO 2" SUPPLY LINES AND SEALANT TAPE, 1-1/2" PVC P-TRAP WITH 12" TAILPIECE, DRAIN

**ALUMINUM** 

#### ELECTRIC WATER HEATER SCHEDULE

THE DRYER BOX

DB-480

			ELECTRICAL			
SYMBOL	MANUFACTURER	MODEL	POWER, WATTS	VOLTS/PH	LABEL	REMARKS
EWH-1	INSINKERATOR	H-CLASSIC-SS	750	120/1	UL	PROVIDE WITH FILTER & HOT WATER DISPENSER, NSF 61.

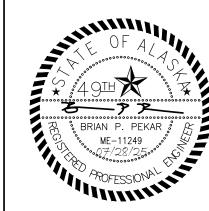
STOPPER.

22 GAUGE MOLDED ALUMINUM BOX.

#### CABINET UNIT HEATER SCHEDULE

			CAPACITY			EWT	LWT	WPD		MOTOR	DATA		
SYMBOL	MANUFACTURER	MODEL	MBH	MEDIUM	GPM	DEG F	DEG F	FT HD	CFM	AMPS	POWER	FINISH	REMARKS
CUH-1	MODINE	CW 004	25	WATER	2.5	180	160	0.5	360	1.05	120/60/1	PER ARCH	CEILING RECESSED MOUNTED, ARRANGEMENT 58.

OL



# ANT

#### N EN 里 0 **(B)** 0 $\mathbb{N}$ VCS DISTRIC VALDE 9F CITY

**CONSULTANT:** 

Corporate No.: AECC542

Mechanical and **Electrical Consulting** Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521

PROJE	CT NO:	M	14088.10
DATE:		202	25-07-28
DRAWN	I BY:		ARN
CHECK	ED BY:	В	PP/DRM
REVISION	DESCRIPTION		DATE

LEGEND, SCHEDULES AND **ABBREVIATIONS** 

M001

#### FINTUBE SCHEDULE

SYMBOL MANUFACTUR	FR MODFI	# ROWS	ELEMENT	FPF ENCLOSURE	GPM	BTU/LF	MFDIUM	EWT DEG F	LWT DEG F	EAT DEG F	REMARKS
FT-1 STERLING	C3/4-45	1	3/4" CU TUBE, 3-5/8" X 4-1/4" CU/AL		PER PLANS						SLOPED TOP, EXTRUDED ALUMINUM GRILLE. MOUNTED 4" AFF, 28" AFF TO TOP OF ENCLOSURE.
FT-2 STERLING	VERSALINE	3	3/4" CU TUBE, 4-1/4" X 4-1/4" CU/AL	50 JVB-S24	PER PLANS	2256	WATER	180	160	65	SLOPED TOP, STAMPED LOUVERS, PENCIL PROOF. MOUNTED 4" AFF, 28" AFF TO TOP OF ENCLOSURE.
FT-3 STERLING	C3/4-45	1	3/4" CU TUBE, 4-1/4" X 4-1/4" CU/AL	50 ARCHITECTURAL	PER PLANS	1006	WATER	180	160	65	BARE ELEMENT IN ENCLOSURE.

#### FAN SCHEDULE

							ESP		ELECTRICAL							
SYM	/BOL	MANUFACTURER	MODEL	TYPE	SERVICE	CFM	IN W.C.	RPM	WATTS	AMPS	VOLTS/PH	DRIVE	SONES	REMARKS		
DBF	<del>-</del> 1	FANTECH	DBF 110	INLINE	DRYER EXHAUST	70	1.2	2320	58		120/1	DIRECT		PRESSURE SENSING SWITCH, UL507.		
DBF	-2	FANTECH	DBF 110	INLINE	DRYER EXHAUST	70	1.2	2320	58		120/1	DIRECT		PRESSURE SENSING SWITCH, UL507.		
TF-	-1	GREENHECK	SP-A250	CEILING	TRANSFER AIR	250	0.25	999	83		120/1	DIRECT	2.5	PROVIDE WITH FAN SPEED CONTROLLER.		
EF-	-5	GREENHECK	SQ-140-VG	INLINE	EXHAUST	2000	0.675	1378	550	10	120/1	DIRECT	8.5	ECM MOTOR WITH SPEED CONTROL DIAL MTD ON MOTOR, SIDE INLET, TOP OUTLET.		

#### VAV BOX SCHEDULE

					HOT WATER	HEATING COIL			EAT	LAT	APD	APD FLOW	EWT	LWT	WPD		
SYMBOL M	IANUFACTURER	MODEL	INLET SIZE	CFM MAX/MIN	SYMBOL	CFM	MBH	ROWS	<b>•</b> F	•F	INWG	GPM	•F	<b>'</b> F	FTWC REMARKS		
VAV-101A T	TITUS	DESV	10"ø	890/890	HC-101A	890	28.84	1	55	85	0.5	2.0	180	160	0.50 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		
VAV-105 (E) T	TTUS	DESV	8"ø	240/145	HC-105	145	4.70	1	55	85	0.5	0.5	180	160	0.1 EXISTING VAV TO BE RE-USED, PROVIDE DUCT MOUNTED HEATING COIL.		
VAV-115 (E) T	TITUS	DESV	6"ø	240/160	HC-115	160	5.18	1	55	85	0.5	1.0	180	160	0.07 EXISTING VAV TO BE RE-USED, PROVIDE DUCT MOUNTED HEATING COIL.		
VAV-115A T	TITUS	DESV	6"ø	80/50	HC-115A	50	1.62	1	55	85	0.5	0.5	180	160	0.05 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		
VAV-115B T	TTUS	DESV	6"ø	145/85	HC-115B	85	2.75	1	55	85	0.5	0.5	180	160	0.08 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		
VAV-172 T	TITUS	DESV	6"ø	115/70	HC-172	70	2.27	1	55	85	0.5	0.5	180	160	0.08 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		
VAV-173 T	TTUS	DESV	6"ø	180/110	HC-173	110	3.56	1	55	85	0.5	0.5	180	160	0.08 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		
VAV-174 T	TITUS	DESV	6"ø	60/35	HC-174	35	1.13	1	55	85	0.5	0.5	180	160	0.07 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		
VAV-175 T	TITUS	DESV	6"ø	70/40	HC-175	40	1.30	1	55	85	0.5	0.5	180	160	0.07 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		
VAV-176 T	TTUS	DESV	6"ø	120/70	HC-176	70	2.27	1	55	85	0.5	0.5	180	160	0.08 PROVIDE WITH HEATING COIL & MULTI-OUTLET SOUND LINED PLENUM.		

#### AIR INLET/OUTLET SCHEDULE

SYMBO	MANUFACTURER	MODEL	TYPE	USE	MATERIAL	FINISH	CFM	FACE SIZE (IN.)	NC	REMARKS
A	TITUS	OMNI	CEILING	SUPPLY	STEEL	PER ARCH	PER PLANS	24"x24"	<25	LAY-IN, PROVIDE WITH EARTHQUAKE TABS.
B	TITUS	45F	EGGCRATE	R/A & E/A	ALUMINUM	PER ARCH	PER PLANS	PER PLANS	<25	PROVIDE FRAME TYPE AS REQUIRED WITH EARTHQUAKE TABS. PROVIDE TITUS FLEXABOOT R/A SOUND BOOT FOR CEILING PLENUM R/A.
<u>C</u>	TITUS	300	WALL	TRANSFER	ALUMINUM	PER ARCH	250	14/8	<25	SURFACE MOUNT, 3/4" BLADE SPACING.
D	TITUS	CT-PP-0	SILL	CABINET FINTUBE	ALUMINUM	PER ARCH			<25	192" LENGTH, 6" WIDTH, PENCIL PROOF, 0 DEG DEFLECTION, FRAME FOR SILL MOUNTING.

#### RANGE HOOD SCHEDULE

•		<b>0 -</b> 1 1 <b>0 0 -</b> 2						
				DIMENSIONS	DUCT SIZE			MOTOR DATA
S'	MBOL	MANUFACTURER	MODEL	L"x W"x H"	IN.	CFM	SONES	AMP/VOLT/PH REMARKS
RI	<del>1</del> –1	BROAN	BCSEK130	30"x20"x6"	3.25"x10"	300	5.0	0.65/120/1 TWO-SPEED ROCKER SWITCH, 1-LEVEL LED LIGHT, FINISH AND COLOR PER ARCH.

#### SECTION 21 00 00 - FIRE SUPPRESSION

CONTRACTOR IS TO REVISE EXISTING WET AUTOMATIC FIRE SPRINKLER SYSTEM TO PROVIDE COMPLETE COVERAGE OF PROJECT AREA WHERE AFFECTED BY PARTITION CHANGES. FIRE PROTECTION SYSTEM SHALL BE IN COMPLIANCE WITH CONTRACT DOCUMENTS, APPLICABLE CODES AND STANDARDS, AS WELL AS THE AUTHORITY HAVING JURISDICTION ASA DEFINED IN NFPA 13. PROVIDE NEW SPRINKLER HEADS AS REQUIRED. NEW HEADS SHALL MATCH MAKE. MODEL. AND FINISH OF EXISTING SPRINKLERS WHILE COMPLYING WITH NFPA 13 STANDARDS. THIS PROJECT REQUIRES THE SPRINKLER SYSTEM TO BE INSTALLED IN ACCORDANCE WITH FM GLOBAL STANDARDS WHERE THEY HAVE REQUIREMENTS IN EXCESS OF NFPA 13. USE OF FM GLOBAL STANDARDS ON THIS PROJECT DOES NOT PERMIT ANY INSTALLATION THAT DOES NOT FULLY COMPLY WITH NFPA 13. IN THE PERCEPTION OF A CONFLICT BETWEEN THE DOCUMENTS.

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL, DESIGNERS NICET CERTIFICATION, SHOP DRAWINGS, AND HYDRAULIC CALCULATIONS. SUBMIT FOR FM GLOBAL ACCEPTANCE AND APPROVAL OF SHOP DRAWINGS, PRODUCT DATA. HYDRAULIC CALCULATIONS, AND SEISMIC BRACING.
- B. MATERIALS:
  - 1. WET FIRE SPRINKLER PIPING: BLACK STEEL PIPING, ASTM A135 SCHEDULE 10 OR ASTME A795 SCHEDULE 40, UL LISTED OR FM APPROVED FOR FIRE SPRINKLER SERVICE. PIPING MAY BE ROLL-GROOVED, THREADED, FLANGED, OR WELDED FOR CONNECTION. ALL THREADED PIPING SHALL BE SCHEDULE 40. NO PLAIN-END FITTING CONNECTIONS ARE ALLOWED.
  - 2. FIRE SPRINKLER HEADS:
  - 2.1. PENDANT IN ALL AREAS WITH RECESSED LIGHTING FLUSH TO THE SUSPENDED CEILING FINISH, PROVIDE RECESSED STANDARD SPRAY PENDANT SPRINKLERS. SPRINKLERS AND ESCUTCHEONS TO BE CHROME FINISH. TYCO TY-FRB OR EQUAL.

#### C. INSTALLATION:

- 1. INSTALL PIPING TO CONSERVE BUILDING SPACE AND ROUTE PARALLEL TO BUILDING LINES AND AROUND ACCESS PANELS AND OPENINGS.
- PROVIDE SEISMIC PROTECTION FOR PIPING IN ACCORDANCE WITH NFPA 13 STANDARDS.
- HYDROSTATICALLY TEST THE ENTIRE SYSTEM IN ACCORDANCE WITH NFPA
- 13 STANDARDS. 4. TEST ALL SYSTEM ALARMS.
- PERFORM MAIN DRAIN TEST.

#### SECTION 22 05 00: 23 05 00 - COMMON WORK RESULTS FOR MECHANICAL

THE INFORMATION SHOWN ON THESE PLANS FOR EXISTING CONDITIONS IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE INVESTIGATION OF THE FACILITY. THE INFORMATION SHOWN FOR EXISTING CONDITIONS MAY OR MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.

PLANS - THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM. THE DRAWINGS ARE PARTLY DIAGRAMMATIC. NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF PIPING AND DUCTS UNLESS SPECIFICALLY DIMENSIONED. CONTRACTOR IS TO COORDINATE PIPING. DUCTWORK, SPRINKLER HEADS, AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL PLANS TO AVOID CONFLICTS. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITY REGULATIONS TO THE ATTENTION OF THE OWNER. CODES, ORDINANCES,

REGULATIONS, STANDARDS, OR MANUFACTURER'S INSTRUCTIONS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS. COORDINATE WITH PHASING PLAN TO PERFORM COORDINATED WORK IN SEQUENCE WITH OTHER TRADES. MAINTAIN CODE MINIMUM MECHANICAL SERVICE TO ALL AREAS IMPACTED BY WORK WHERE STILL OCCUPIED BY THE OWNER.

STANDARDS, CODES, AND REGULATIONS — ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL FIRE CODE (IFC), UNIFORM PLUMBING CODE (UPC), INTERNATIONAL ENERGY CONSERVATION CODE (IECC), INTERNATIONAL FUEL GAS CODE (IFGC), AND NATIONAL ELECTRIC CODE (NEC) AS AMENDED BY THE STATE OF ALASKA. SHEET METAL WORK SHALL BE DONE IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS.

ELECTRICAL WORK - ALL ELECTRICAL WORK IS TO BE PERFORMED BY A LICENSED ELECTRICIAN AND IN ACCORDANCE WITH NEC STANDARDS.

PERMITS - THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND FEES.

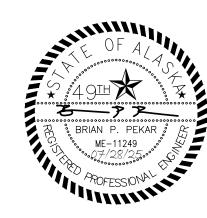
SUBMITTALS - SUBMITTALS SHALL BE IN ELECTRONIC FORM. THE DATA SHALL BE ARRANGED AND BOOKMARKED BY SPECIFICATION SECTION. SUBMIT ON ALL SCHEDULED EQUIPMENT AND ALL MATERIALS AND EQUIPMENT AS NOTED IN THE SPECIFICATIONS.

MATERIALS — ALL MATERIALS OTHER THAN OWNER SUPPLIED SHALL BE NEW AND

UNUSED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND IN THE BEST PRACTICE OF THE CRAFT. OBTAIN OWNER APPROVAL OF ALL PRODUCTS PRIOR TO ORDERING OR INSTALLING ANY PART OF ANY SYSTEM.

EQUIPMENT SUBSTITUTIONS - ALL EQUIPMENT LISTED AND SCHEDULED ARE REPRESENTATIVE OF THE STANDARD OF QUALITY AND PERFORMANCE REQUIRED. "OR EQUAL" SUBSTITUTIONS WILL BE CONSIDERED IF SUBSTITUTE DATA SHEETS ARE SUBMITTED AND ARE SHOWN TO BE OF EQUAL OR BETTER QUALITY, INCLUDING EFFICIENCY OF PERFORMANCE, AND SIZE AND WEIGHT. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL SUBSTITUTIONS.

WORKMANSHIP - INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, AND THIRD PARTY LISTINGS WHERE APPLICABLE.



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PROJECT NO: M4088.10 2025-07-28 DATE: DRAWN BY: ARN CHECKED BY: BPP/DRM REVISION DESCRIPTION DATE

MECHANICAL SCHEDULES AND SPECIFICATIONS

SECTION 22 05 00: 23 05 00 - COMMON WORK RESULTS FOR MECHANICAL (CONT) WARRANTY - ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM PROJECT COMPLETION AND OWNER ACCEPTANCE. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE WARRANTY PERIOD.

TEST AND START-UP - TEST ALL PLUMBING AND PIPING SYSTEMS WITH 60 PSIG FOR ONE HOUR BEFORE FILLING AND IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE (UPC). FILL ALL HEATING PIPING WITH TRISODIUM PHOSPHATE SOLUTION AND OPERATE FOR SEVERAL HOURS AT NORMAL OPERATING TEMPERATURE BEFORE FLUSHING AND FILLING WITH HEATING FLUID.

EQUIPMENT INSTALLATION AND ACCESS — INSTALL ALL EQUIPMENT WHERE NOTED ON THE DRAWINGS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. PROVIDE MISCELLANEOUS APPURTENANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS INCLUDING ACCESSORIES, SUPPORTS AND CONTROL CONNECTIONS REQUIRED FOR COMPLETE AND OPERATING SYSTEMS. MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES AND PROVIDE WORKABLE ACCESS TO ALL SERVICEABLE AND/OR OPERABLE EQUIPMENT

OPERATION AND MAINTENANCE MANUAL - PROVIDE THE OWNER WITH AN OPERATING AND MAINTENANCE MANUAL. TO INCLUDE DATA CUTSHEETS MARKED WITH THE SPECIFIC ITEM USED, MANUFACTURER'S SPECIFICATIONS, OPERATING AND MAINTENANCE INSTRUCTIONS, WARRANTY INFORMATION ON EACH PIECE OF EQUIPMENT, RECORD DRAWINGS WITH INSTALLED LOCATIONS NOTED, SOURCE OF SUPPLY FOR SPARE PARTS AND SERVICE. OPERATION AND MAINTENANCE MANUAL SHALL BE IN ELECTRONIC FORM AND SHALL BE SUBMITTED FOR REVIEW. THE DATA SHALL BE ARRANGED AND BOOKMARKED BY SPECIFICATION SECTION.

RECORD DRAWINGS - PROVIDE ACCURATE PROJECT RECORD DRAWINGS, SHOWN IN RED INK ON A CLEAN SET OF PRINTS. SHOWING ALL CHANGES FROM THE ORIGINAL PLANS MADE DURING INSTALLATION OF THE WORK. SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL MECHANICAL WORK THAT IS PERMANENTLY CONCEALED. SHOW ROUTING OF WORK IN PERMANENTLY CONCEALED BLIND SPACES WITHIN THE BUILDING. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS SHOWN. SUBMIT ORIGINAL COPY TO OWNER AT THE COMPLETION OF WORK AND PRIOR TO SUBSTANTIAL COMPLETION INSPECTION. PROVIDE ELECTRONIC COPY OF UPDATED CONTROLS SHOP DRAWINGS INCLUDING PLANS, PANEL WIRING DIAGRAMS, AND SEQUENCES OF OPERATIONS TO ACCURATELY REFLECT INSTALLED CONDITIONS.

SEISMIC RESTRAINT - ALL PIPING, DUCTWORK, AND EQUIPMENT INSTALLED UNDER THIS PROJECT SHALL BE SEISMICALLY RATED AND RESTRAINED FOR A SEISMIC EVENT IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE IBC AND ASCE 7. THE CONTRACTOR SHALL PROVIDE A DEFERRED SUBMITTAL FOR REVIEW TO THE ENGINEER & OWNER. FOR SEISMIC RESTRAINT DESIGN WITH CALCULATIONS AND SHOP DRAWINGS. SEISMIC RESTRAINT CALCULATIONS AND SHOP DRAWINGS SHALL INCLUDE A STRUCTURAL ENGINEERS STAMP AND SIGNATURE PRIOR TO INSTALLATION. SEISMIC CATEGORY D, COMPONENT IMPORTANCE FACTOR IP-1.0.

#### SECTION 22 05 29: 23 05 29 - HANGERS & SUPPORTS FOR PIPING & EQUIPMENT

- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- MATERIALS:
- PIPE HANGERS AND SUPPORTS
- 1.1. HANGERS FOR PIPES 1/2" TO 1-1/2" MALLEABLE IRON OR CARBON STEEL, ADJUSTABLE SWIVEL, SPLIT RING FOR STEEL PIPE, COPPER SWIVEL FOR COPPER PIPE.
- 1.2. HANGERS FOR PIPES 2" TO 4" CARBON STEEL, ADJUSTABLE CLEVIS.
- 1.3. MULTIPLE OR TRAPEZE HANGERS STEEL CHANNELS WITH WELDED SPACERS AND HANGER RODS.
- 1.4. WALL SUPPORTS FOR PIPES 1/2" TO 3" CAST IRON HOOK.
- 2. DUCT HANGERS AND SUPPORTS:
- THREADED ROD: STEEL, THREADED, ASTM A36/A36M.
- CHANNEL STRUT: 12-GAUGE FORMED STEEL CHANNELS CONFORMING TO ASTM A653 G433. ASTM 675 NUTS, ASTM 307 SCREWS.
- SHEET METAL STRAPS: ASTM A653/A653M GALVANIZED STEEL WITH

ZINC COATING.

#### INSTALLATION

- 1. DESIGNED AND INSTALLED IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE (UPC) FOR DOMESTIC WASTE, VENT, AND WATER PIPING
- 2. INSTALL HVAC PIPE HANGERS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE (IMC) AND ANSI/MSS-SP-69 AND 89.
  - INSTALL DUCT HANGERS IN ACCORDANCE WITH SMACNA.
- INSTALLED AS PER THE MANUFACTURERS' INSTRUCTIONS. PROVIDE SEISMIC SUPPORT FOR ALL PIPING AND EQUIPMENT IN ACCORDANCE WITH IBC.

#### <u>SECTION 22 05 53: 23 05 53 — IDENTIFICATION FOR PIPING AND EQUIPMENT</u>

- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- MATERIALS:
  - 1. COLORING SCHEME IN ACCORDANCE WITH ANSI A13.1, SETON OPTI-CODE OR EQUAL.
- INSTALLATION:
  - 1. LABEL ALL EQUIPMENT WITH HEAT RESISTANT LAMINATED PLASTIC LABELS HAVING ENGRAVED LETTERING 1/2" HIGH. LABEL CEILING ADJACENT TO ACCESS LOCATION FOR ALL EQUIPMENT LOCATED ABOVE CEILING.
  - IDENTIFY PIPING AND DUCTWORK TO INDICATE CONTENTS AND FLOW DIRECTION USING PIPE MARKERS OR BY A LABELED SLEEVES IN LETTERS READABLE FROM FLOOR AT LEAST ONCE IN EACH ROOM AND AT INTERVALS OF NOT MORE THAT 20' APART AND ON EACH SIDE OF PARTITION PENETRATIONS.
  - CEILING LABELS: 3/4" X 2" VINYL LABEL. 3.0 MIL SELF-ADHESIVE VINYL SIMILAR TO DURALABEL PRO. LABEL COLOR SHALL BE BLACK TEXT ON A WHITE BACKGROUND.

#### <u>SECTION 23 05 93 - TESTING, ADJUSTING, AND BALANCING FOR HVAC</u>

- SUBMITTALS: SUBMIT QUALIFICATIONS. NEBB CERTIFICATIONS OR 5 YEARS DOCUMENTED PROJECT EXPERIENCE OF SIMILAR OR GREATER MAGNITUDE. EQUIPMENT CALIBRATIONS, PRELIMINARY AND FINAL BALANCING REPORTS.
- **MATERIALS:**
- BALANCING INSTRUMENTS AS NECESSARY TO COMPLETE WORK TO MEASURE AT LEAST THE FOLLOWING: AIR VELOCITY, STATIC PRESSURE, RPM. TEMPERATURE. AND FLOW.
- C. EXECUTION:
  - THE CONTRACTOR SHALL BALANCE AIR AND HYDRONIC SYSTEMS ACCORDING TO NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) RECOMMENDED PROCEDURES AND CONTRACT DOCUMENTS, AND TO THE SATISFACTION OF THE OWNER.
  - 2. FLOWS ARE TO BE BALANCED TO WITHIN 10% OF INDICATED FLOWS. PER AMERICAN AIR BALANCING COUNCIL (AABC) RECOMMENDED METHODS.

#### SECTION 22 07 00: 23 07 00 - INSULATION

- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- B. MATERIALS
  - 1. PIPING INSULATION GLASS FIBER, RIGID, MOLDED, NON-COMBUSTIBLE INSULATION: ANSI/ASTM C547; 'K' VALUE OF 0.24 AT 75 DEG F, RATED TO 850 DEG F, VAPOR RETARDER JACKET OF KRAFT PAPER BONDED TO ALUMINUM FOIL: JOHNS MANVILLE "MICRO-LOK" OR EQUAL. COMPLETE WITH VAPOR BARRIER JACKET AND PLASTIC COVERS FOR FITTINGS.
  - 2. ADA PIPING INSULATION PREFORMED CELLULAR FOAM, PREFORMED FOR P-TRAP AND HOT WATER ANGLE STOP AND SUPPLY TUBE AT HANDICAP SINKS AND LAVATORIES. COMPLIES WITH ADA, ASTM D635. TRUEBRO "LAV GUARD 2" OR APPROVED EQUAL.
  - 3. INTERIOR DUCTWORK INSULATION FSK DUCT WRAP: FLEXIBLE GLASS FIBER: ANSI/ASTM C553; COMMERCIAL GRADE: 'K' VALUE OF 0.27 AT 75 DEG F. JOHNS MANVILLE "800 SERIES SPIN-GLAS" OR EQUAL.
  - RIGID FIBER BOARD, INSULATION ANSI/ASTM C612, 'K' VALUE OF 0.24 AT 75 DEG F, 3.0 LB./CU. FT. DENSITY. 0.00035 INCH FOIL SCRIM FACING. CERTAINTEED "CERTAPRO COMMERCIAL BOARD" OR EQUAL.
  - 5. FIBER FREE DUCT LINER CLOSE-CELL, CFC AND HCFC FREE

- FLEXIBLE ELASTOMERIC ACOUSTICAL INSULATION WITH SCRIM-REINFORCED ACRYLIC ADHESIVE ON ONE SIDE. ASTM C534 TYPE 2 (SHEET) GRADE 1, 'K' VALUE OF 0.25 AT 75°F; NOISE REDUCTION COEFFICIENT OF 0.5 AT 1" THICKNESS. UL LISTED ADHESIVE GALVANIZED STEEL PINS. K-FLEX USA "K-FLEX DUCT LINER GRAY" OR APPROVED EQUAL
- 6. PVC JACKETING ONE PIECE FITTING COVERS AND JACKETING MATERIALS, PRE-MOLDED TYPE. JOHNS MANVILLE "ZESTON 2000" OR APPROVED EQUAL. JOHNS MANVILLE "PERMA-WELD" SOLVENT WELDING ADHESIVE.

#### INSTALLATION

- 1. PIPING
- INSULATE ALL HEATING, RAIN LEADER, AND DOMESTIC WATER PIPING WITH PRE-FORMED FIBERGLASS INSULATION, COMPLETE WITH FACTORY VAPOR BARRIER AND PVC JACKETING FOR FITTINGS. PVC JACKETING TO BE PROVIDED FOR ALL PIPING BELOW 10' AFF IN FINISHED SPACES OR IN MECHANICAL ROOMS.
- 1.1.1. INSULATE ALL DOMESTIC COLD WATER PIPING SIZE 1-1/4" AND SMALLER WITH 1/2" INSULATION, SIZE 1-1/2" AND LARGER WITH 1" INSULATION.
- 1.1.2. INSULATE ALL DOMESTIC HOT WATER PIPING SIZE 1-1/4" AND SMALLER WITH 1" INSULATION, SIZE 1-1/2" AND LARGER WITH 1-1/2" INSULATION.
- INSULATE ALL HYDRONIC HEATING PIPING SIZE 1-1/4" AND SMALLER WITH 1" INSULATION, SIZE 1-1/2" AND LARGER WITH 1-1/2" INSULATION.

#### DUCTWORK

- PROVIDE 1" FIBERGLASS INSULATION ON ALL EXHAUST AND RELIEF DUCTWORK WITHIN 5' OF EXTERIOR OPENINGS.
- PROVIDE 1" DUCT LINER ON ALL TRANSFER AIR DUCTWORK, AND RETURN AND SUPPLY DUCTWORK AS INDICATED ON THE PLANS. DUCTWORK DIMENSIONS INDICATED ARE NET INSIDER DIMENSIONS REQUIRED FOR AIRFLOW. INCREASE DUCTWORK TO ALLOW FOR LINER THICKNESS.
- PROVIDE 1" FIBERGLASS INSULATION ON ALL SUPPLY AND RETURN DUCTWORK.
- PROVIDE 2" RIGID EXTERIOR FSK DUCT WRAP AND CANVAS FINISH ON ALL EXTERIOR DUCTWORK, COMBUSTION AIR DUCTWORK, AND OUTSIDE AIR DUCTWORK.
- 3. INSTALL ALL INSULATION MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND ALL APPLICABLE BUILDING CODES AND INDUSTRY STANDARDS.

#### SECTION 22 10 00 - PLUMBING PIPING

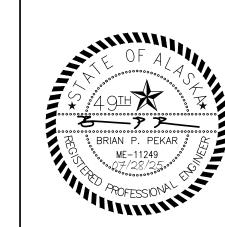
- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL, PIPING SYSTEM PRESSURE TEST RESULTS.
- MATERIALS:
- WASTE AND STORM DRAIN PIPING CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE WEIGHT. FITTINGS: CAST IRON. JOINTS: NEOPRENE GASKETS AND STAINLESS STEEL CLAMP-AND-SHIELD ASSEMBLIES.
- 2. DOMESTIC WATER PIPING.
- 2.1. POLYPROPYLENE PIPING SDR 11, IN ACCORDANCE WITH ASTM F2389. NSF 14 & 61 LISTED. PIPE AND FITTINGS SHALL BE MANUFACTURED FROM A BETA CRYSTALLINE PP-RCT RESIN MEETING THE SHORT-TERM PROPERTIES AND LONG-TERM STRENGTH REQUIREMENTS OF ASTM F 2389 AND CSA B137.11. PIPING SHALL BE EXTRUDED WITH A MIDDLE LAYER THAT HAS GLASS FIBER CONTENT TO RESTRICT THERMAL EXPANSION. ELECTRO-FUSION FITTINGS. AQUATHERM "GREEN PIPE". NUPI NIRON "CLIMA PIPE". OR APPROVED EQUAL.
- 2.2. PEX TUBING TUBING SHALL BE CROSS-LINKED HIGH-DENSITY POLYETHYLENE. TUBE SHALL BE PRODUCED USING SILANE METHOD OF CROSS-LINKING AND SHALL MEET THE DIMENSION AND PERFORMANCE SPECIFICATIONS OF ASTM F876/F877 AND CSA B137.5. TUBING SHALL ALSO COMPLY WITH ANSI/NSF 61 AS SUITABLE FOR USE WITH POTABLE WATER. TEMPERATURE AND PRESSURE RATINGS SHALL BE 160 PSI AT 73°F, 100 PSI AT 180°F, AND 80 PSI AT 200°F.

- PACKING, LEVER HANDLE. SOLDER, THREADED, OR PRESS-FIT ENDS.
- SPRING LOADED CHECK VALVES: LEAD FREE BRONZE, SPRING LOADED WITH PTFE SEAT. SOLDER, SCREWED, OR PRESS FIT ENDS.
- DIELECTRIC CONNECTIONS IAPMO/UPC LISTED, STEEL-TO-PLASTIC DIELECTRIC WATERWAY DESIGN. THERMOPLASTIC-LINED STEEL NIPPLE WITH EXTERNAL ELECTRICAL CONTINUITY. RATED FOR CONTINUOUS USE AT TEMPERATURES UP TO 225°F AND FOR PRESSURES UP TO 300 PSI. DIELECTRIC UNIONS ARE NOT PERMITTED.
- WATER HAMMER ARRESTORS BARREL—FABRICATED OF TYPE "L" HARD DRAWN COPPER WITH CAP OF COPPER OR FREE TURNING BRASS. INTERIOR PISTON MACHINED OF LOW LEAD C69300 ECO BRASS OR POLY-CARBONATE DOW CALIBRE 2061-15 MFR. O-RING SEALS OF EPDM WITH DOW-CORNING SILICONE COMPOUND #111 SEAL LUBRICANT FDA LISTED FOR USE IN POTABLE WATER SYSTEMS. TEMPERATURE RANGE: 32°F TO + 212°F. OPERATING PRESSURE: DESIGNED TO OPERATE ON ALL DOMESTIC AND COMMERCIAL SYSTEMS. NORMAL OPERATING PRESSURE 0 TO 200 P.S.I.G., MAX SPIKE PRESSURE 400 P.S.I.G. PRECISION PLUMBING PRODUCTS (PPP) MODELS 'SC-500A THROUGH SC-2000F' OR EQUAL.
- CLEANOUTS, INTERIOR FINISHED FLOOR AREAS CAST IRON, TWO-PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING COLLAR, BRONZE PLUG, ADJUSTABLE ROUND NICKEL BRONZE DEPRESSED COVER. J.R. SMITH "MODEL 4021" OR APPROVED EQUAL.

#### INSTALLATION

- ALL NEW PORTIONS OF THE DOMESTIC WATER PIPING SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 609 OF THE UPC.
- TEST ALL NEW PORTIONS OF PIPING IN ACCORDANCE WITH THE UPC.
- INSTALL ALL PIPING IN CRAFTSMANLIKE MANNER, PLUMB AND PARALLEL TO BUILDING LINES. GROUP PIPING AT COMMON ELEVATIONS WHERE PRACTICAL.
- PROVIDE CLEARANCE FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS.
- INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.
- PROVIDE PROPERLY SIZED HANDLES FOR VALVE OPERATION. HANDLES SHALL NOT BE CUT OR BENT TO MAKE FIT WHERE INSTALLED
- INSTALL BALL VALVES FOR SHUT-OFF TO ISOLATE EQUIPMENT.
- PROVIDE 3/4" DRAIN VALVES AT EQUIPMENT AND PIPING LOW POINTS FOR DRAINING OF SYSTEM.
- NO ABS PIPING SHALL BE INSTALLED OR ROUTED THROUGH PLENUMS.
- NO POLYPROPYLENE PIPING SHALL BE INSTALLED OR ROUTED THROUGH PLENUMS.

BALL VALVES: LEAD FREE BRONZE TWO-PIECE BODY, FULL PORT, FORGED LEAD FREE BRASS BALL, TEFLON SEATS AND ADJUSTABLE



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PROJECT NO: M4088.10 2025-07-28 DRAWN BY: ARN CHECKED BY: BPP/DRM REVISION DESCRIPTION DATE

MECHANICAL SPECIFICATIONS

M003

#### SECTION 23 09 23 - DIRECT DIGITAL CONTROL SYSTEM FOR HVAC

- SUBMITTALS: SUBMIT ON PRODUCT DATA AND CONTROLS SHOP DRAWINGS FOR APPROVAL.
- DDC GENERAL REQUIREMENTS:
  - PROVIDE DIRECT DIGITAL CONTROL SYSTEMS COMPATIBLE WITH EXISTING AUTOMATED LOGIC CONTROLS SYSTEM TO ACCOMPLISH THE SEQUENCE OF OPERATIONS. PROVIDE ALL CONTROLLERS, TEMPERATURE SENSORS, THERMOSTATS. CONTROL VALVES. CONTROL DAMPERS. ELECTRIC ACTUATORS, TRANSFORMERS, WIRING AND ALL OTHER ASSOCIATED COMPONENTS. THE CONTRACTOR SHALL MAINTAIN THE EXISTING BAS SYSTEM AS OPERATIONAL DURING THE RENOVATION WORK. THE RENOVATED AREAS WILL BE BROUGHT ONLINE AND CONNECTED TO THE EXISTING BAS SERVER TO ALLOW MONITORING AND CONTROL OF THE SYSTEM AT THE HEAD END SERVER. THE EXSTING DDC SYSTEM SHALL BE COMPLETE WITH GRAPHICS DISPLAYING EQUIPMENT, INDICATIONS, AND ALARMS AS NOTED IN THE SEQUENCE OF OPERATIONS.

#### MATERIALS:

- CONTROL VALVES SELECT VALVES TO FAIL SAFE IN THE HEATING POSITION UNLESS NOTED OTHERWISE. SELECT VALVES TO HAVE EQUAL PERCENTAGE PORTS FOR MODULATING SERVICE. SIZE VALVE OPERATORS TO CLOSE VALVES AGAINST PUMP SHUT OFF HEAD. SIZE MODULATING VALVES FOR 3 TO 5 PSI DROP. FOR 2-POSITION OPEN/CLOSE SERVICE, VALVE SHALL BE LINE-SIZED.
- MODULATING ACTUATORS ACTUATOR TO CONVERT ELECTRONIC 1-10VDC OR 3-20MA ANALOG SIGNAL TO A LINEAR, POSITIVE PROCESSING STROKE. PROVIDE MODULATING ELECTRONIC ACTUATORS FOR MODULATING CONTROL EXCEPT AS INDICATED. BELIMO OR EQUAL
- AQUASTAT FAHRENHEIT SCALE, FOR LOW LIMIT CIRCULATOR CONTROL, SURFACE MOUNT. 120V/1 PHASE RATED FOR 8A INDUCTIVE ELECTRICAL LOAD. HONEYWELL L6006C OR EQUAL.

#### C. INSTALLATION:

- CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE EXTENT OF EQUIPMENT TO BE PROVIDED BY OWNER AND EXTENT OF EQUIPMENT TO BE PROVIDED BY CONTRACTOR. ANY EQUIPMENT NOT PROVIDED BY OWNER SHALL BE PROVIDED BY CONTRACTOR AS NECESSARY TO ACCOMPLISH THE SEQUENCE OF OPERATIONS.
- THE CONTROL SYSTEM SHALL BE DESIGNED, FURNISHED, INSTALLED, TESTED, AND PLACED INTO SERVICE BY A CONTROL CONTRACTOR WHO IS REGULARLY ENGAGED IN THE INSTALLATION OF CONTROL SYSTEMS IN ALASKA. THE CONTROL CONTRACTOR SHALL MAINTAIN AN OFFICE IN ALASKA WITH PARTS AND MAINTENANCE PERSONNEL TO ENSURE PROMPT RESPONSE (24 HOUR MAXIMUM) TO AN EMERGENCY CALL DURING THE ONE YEAR CORRECTION PERIOD.
- CONTROL CONTRACTOR SHALL PROVIDE (11X17) SCHEMATIC CONTROL DIAGRAMS IN AUTOCAD FORMAT. CLEARLY INDICATE WIRE AND TERMINAL LABELS, SET POINTS, RESET SCHEDULES, SWITCH OVER POINTS, SIGNAL RANGES, AND OTHER POINTS REQUIRED TO COMPLETELY DESCRIBE THE SYSTEM. DEPICT CIRCUITRY ON SCHEMATIC CONTROL DIAGRAMS TO ALLOW CIRCUITS TO BE TRACED FROM CONNECTION TO CONNECTION. CONTROL SYSTEM SHALL BE AUTOMATED LOGIC CONTROLS INTEGRATED WITH THE EXISTING BUILDING AUTOMATION SYSTEM.
- INSTALL ALL WIRING IN ACCORDANCE WITH THE NEC.
- TEST ALL SYSTEMS; VERIFY ALL SYSTEMS OPERATE AS SPECIFIED IN THE SEQUENCE OF OPERATIONS AND RECORD INITIAL SETTINGS AND OPERATING POINTS IN O&M MANUALS. PROVIDE OPERATOR INTERFACE TO ALLOW FOR LOCAL SCHEDULE ADJUSTMENT, SETPOINT ADJUSTMENT, AND SYSTEM MONITORING.
- PROVIDE FLUSH-MOUNT OR TAMPER PROOF THERMOSTATS/TEMPERATURE SENSORS IN VESTIBULES, CORRIDORS AND RESTROOMS, PROVIDE LOCALLY ADJUSTABLE THERMOSTATS/TEMPERATURE SENSORS WITH TEMPERATURE DISPLAY IN ALL OTHER AREAS.
- MOUNT DAMPER OPERATORS AND OTHER CONTROL DEVICES SECURED TO INSULATED PIPING OR DUCTWORK ON BRACKETS SUCH THAT THE DEVICE IS EXTERNAL OF THE INSULATION.
- ALL CONTROLLERS, SWITCHES, RELAYS, THERMOSTATS, SENSORS, AND ACTUATORS SHALL BE PERMANENTLY TAGGED FOR IDENTIFICATION TO MATCH THE EXISTING FACILITY IDENTIFICATION SCHEME. THE TAGGING SCHEME SHALL BE REFLECTED ON THE CONTROL DRAWINGS.
- THE CONTRACTOR WILL COMPLETELY CHECK-OUT, CALIBRATE, AND TEST ALL CONNECTED HARDWARE AND SOFTWARE TO ENSURE THAT THE SYSTEM PERFORMS IN ACCORDANCE WITH THE APPROVED SPECIFICATIONS AND SEQUENCE OF OPERATIONS.
- 10. TRAINING INSTRUCT OWNERS REPRESENTATIVE(S) IN THE OPERATION, CARE, AND MAINTENANCE OF ALL SYSTEMS AND EQUIPMENT PROVIDED. PROVIDE CONTROL SYSTEMS DEMONSTRATIONS AND MINIMUM 4 HOURS OF HANDS ON TRAINING O OWNERS REPRESENTATIVE(S) PRIOR TO SUBSTANTIAL COMPLETION.

#### SECTION 23 21 13 - HYDRONIC PIPING

- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL, PIPING SYSTEM PRESSURE TEST RESULTS.
- MATERIALS:
  - COPPER TUBING ASTM B88, TYPE L, HARD DRAWN. FITTINGS: ANSI/ASME B16.18 CAST BRONZE OF ASME B16.22 WROUGHT COPPER JOINTS: ASTM B32, SOLDER, GRADE 95TA OR ANSI/AWS A5.8, BCUP SILVER BRAZE: FLUX: ASTM B813 OR VIEGA PRO PRESS SYSTEM.
  - POLYPROPYLENE PIPING SDR 11, IN ACCORDANCE WITH ASTM F2389. NSF 14 & 61 LISTED. PIPE AND FITTINGS SHALL BE MANUFACTURED FROM A BETA CRYSTALLINE PP-RCT RESIN MEETING THE SHORT-TERM PROPERTIES AND LONG-TERM STRENGTH REQUIREMENTS OF ASTM F 2389 AND CSA B137.11. PIPING SHALL BE EXTRUDED WITH A MIDDLE LAYER THAT HAS GLASS FIBER CONTENT TO RESTRICT THERMAL EXPANSION. ELECTRO-FUSION FITTINGS. AQUATHERM "BLUE PIPE". NUPI NIRON "CLIMA PIPE", OR APPROVED EQUAL.
  - BALL VALVES:
  - 3.1. SIZES 2" AND SMALLER BRONZE TWO-PIECE BODY, FULL PORT FORGED BRASS, CHROME PLATED BALL, TEFLON SEATS AND STUFFING BOX RING, LEVER HANDLE. SOLDER, THREADED, OR PRESS-FIT ENDS.
  - 3.2. SIZES 2-1/2" AND LARGER CAST STEEL TWO-PIECE BODY, FULL PORT CHROME PLATED STEEL BALL, TEFLON SEAT AND STUFFING BOX SEALS, LEVER HANDLE. FLANGED, SOLDER, THREADED, OR PRESS-FIT ENDS..
  - 4. SWING CHECK VALVES:
  - 4.1. SIZES 2" AND SMALLER BRONZE SWING DISC. SOLDER, SCREWED OR PRESS FIT ENDS.
  - 4.2. SIZES 2-1/2" AND LARGER IRON BODY, SWING DISC, RENEWABLE DISC AND SEAT, FLANGED ENDS.
  - SPRING LOADED CHECK VALVES IRON BODY, BRONZE TRIM, STAINLESS STEEL SPRING, RENEWABLE COMPOSITION DISC. SCREWED, WAFER, OR FLANGED ENDS.
  - FLANGES, UNIONS, AND COUPLINGS BRONZE UNIONS FOR COPPER PIPE, SOLDERED JOINTS.
  - 7. RELIEF VALVES BRONZE BODY, TEFLON SEAT, STAINLESS STEEL STEM AND SPRINGS, AUTOMATIC, DIRECT PRESSURE ACTUATED, CAPACITIES ASME CERTIFIED AND LABELED.

#### **INSTALLATION:**

- INSTALL ALL PIPING IN CRAFTSMANLIKE MANNER, PLUMB AND PARALLEL TO BUILDING LINES. GROUP PIPING AT COMMON ELEVATIONS WHERE
- PROVIDE CLEARANCE FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS.
- INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.
- PROVIDE PROPERLY SIZED HANDLES FOR VALVE OPERATION. HANDLES SHALL NOT BE CUT OR BENT TO MAKE FIT WHERE INSTALLED.
- INSTALL BALL VALVES FOR SHUT-OFF TO ISOLATE EQUIPMENT.
- PROVIDE 3/4" DRAIN VALVES AT EQUIPMENT AND PIPING LOW POINTS FOR DRAINING OF SYSTEM.
- PRIOR TO FLUSHING SYSTEM, VERIFY SYSTEM IS COMPLETE. THOROUGHLY FLUSH AND CLEAN THE NEW PIPING IN THE SYSTEM DRAIN ALL LOW POINTS AND REMOVE AND CLEAN ANY STRAINER BASKETS. UPON COMPLETION OF FLUSHING, FEED HEATING MEDIUM INTO SYSTEM THROUGH MAKE-UP LINE WITH PRESSURE REGULATOR WHILE VENTING HIGH POINTS. SET INITIAL FILL PRESSURE TO 5 PSIG. ADJUST PRESSURE AS NECESSARY TO ACHIEVE 12 PSIG DURING SYSTEM OPERATION.
- NO POLYPROPYLENE PIPING SHALL BE INSTALLED OR ROUTED THROUGH PLENUMS.

#### SECTION 23 21 16 - HYDRONIC SPECIALTIES

- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL
- **MATERIALS:** 
  - 1. AIR VENTS: 1.1. MANUAL TYPE - DISK TYPE VENT WITH BUILT-IN CHECK VALVE FOR MANUAL OR AUTOMATIC OPERATION, DISCS REPLACEABLE WITHOUT
  - DRAINING SYSTEM, 1/8 INCH SHANK, RATED AT 50 PSI; HOFFMAN "MODEL 508" OR APPROVED EQUAL 1.2. FLOAT TYPE: MAINTENANCE FREE SOLID BRASS CONSTRUCTION.
  - CONTINUOUS AIR VENTING, 150 PSIG STANDARD WORKING PRESSURE 240° F MAXIMUM TEMPERATURE, 1/2 INCH MALE THREAD AT VENT POINT FOR PRESSURE TESTING OR REMOTE VENTING, 1/2 OR 3/4 INCH FEMALE THREADED CONNECTIONS. PROVIDE WITH MINI BALL VALVE FOR ISOLATION. TACO "409 VENT", SPIROTHERM "SPIROTOP VTP" OR APPROVED EQUAL.
  - STRAINERS:
  - 2.1. SIZE 2" AND SMALLER SCREWED BRASS OR IRON BODY FOR 175 PSIG WORKING PRESSURE, Y PATTERN WITH 1/32 INCH STAINLESS STEEL PERFORATED SCREEN.
  - 2.2. SIZES 2-1/2" TO 4" FLANGED IRON BODY FOR 175 PSIG WORKING PRESSURE, Y-PATTERN WITH 3/64 INCH STAINLESS STEEL PERFORATED SCREEN
  - FLOW CONTROL VALVES BRASS OR BRONZE BODY WITH UNION ON INLET AND OUTLET, TEMPERATURE AND PRESSURE TEST PLUG ON INLET AND OUTLET, BLOWDOWN/BACKFLUSH DRAIN, OUTLET BALL VALVE. AUTOMATIC FLOW CONTROL VALVE CARTRIDGES SHALL AUTOMATICALLY CONTROL FLOW RATES WITH  $\pm 1/-$  5% ACCURACY OVER AN OPERATING PRESSURE DIFFERENTIAL OF AT LEAST 14 TIMES THE MINIMUM REQUIRED FOR CONTROL. FOUR OPERATING PRESSURE RANGES SHALL BE AVAILABLE WITH THE MINIMUM RANGE REQUIRING LESS THAN 3 PSI TO ACTUATE THE MECHANISM. GRISWOLD CONTROLS "ISOLATOR" OR APPROVED EQUAL.

#### INSTALLATION:

- INSTALL ALL PIPING IN CRAFTSMANLIKE MANNER, PLUMB AND PARALLEL TO BUILDING LINES. GROUP PIPING AT COMMON ELEVATIONS WHERE PRACTICAL
- PROVIDE CLEARANCE FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS.
- INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.
- PROVIDE PROPERLY SIZED HANDLES FOR VALVE OPERATION. SHALL NOT BE CUT OR BENT TO MAKE FIT WHERE INSTALLED
- INSTALL BALL VALVES FOR SHUT-OFF TO ISOLATE EQUIPMENT.
- PROVIDE 3/4" DRAIN VALVES AT EQUIPMENT AND PIPING LOW POINTS FOR DRAINING OF SYSTEM.

#### SECTION 23 31 00 - HVAC DUCTS AND CASINGS

- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL
- MATERIALS:
  - DUCTWORK:
- 1.1. GALVANIZED STEEL ASTM A653/A653M GALVANIZED SHEET, LOCK-FORMING QUALITY, ASTM A90/90M G90 ZINC COATING.
- 1.2. FASTENERS RIVETS, BOLTS, OR SHEET METAL SCREWS.
- 2. FLEXIBLE DUCTS:
- 2.1. INSULATED UL 181, CLASS 1, COATED FIBERGLASS WOVEN FABRIC SUPPORTED BY COATED HELICAL WOUND SPRING STEEL WIRE. FIBERGLASS INSULATED, ALUMINIZED POLYESTER VAPOR BARRIER FILM, THERMAL RESISTANCE OF R-4.2 16" W.G. POSITIVE AND 2.0" W.G. NEGATIVE PRESSURE RATING FOR SIZES 3"-10" DIAMETER. THERMFLEX "M-KC" OR APPROVED EQUAL.
- SINGLE WALL, ROUND SPIRAL DUCT UL 181, CLASS 1, ROUND SPIRAL LOCKSEAM, GALVANIZED STEEL. DUCT SIZE GAUGES PER SMACNA STANDARDS.
- DRYER DUCT PER IMC.
- INSTALLATION:
- LOW AND MEDIUM PRESSURE DUCTWORK FABRICATE, INSTALL, AND SUPPORT IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS AND ASHRAE HANDBOOKS, EXCEPT AS INDICATED. SEAL ALL DUCT SEAMS AND JOINTS AIRTIGHT. USE TURNING VANES IN ALL SQUARE ELBOWS AND FLAT OVAL ELBOWS. INSTALL VOLUME DAMPERS AND EXTRACTORS WHERE SHOWN ON THE DRAWINGS. ALL SHEET METAL WORK TO BE CONSTRUCTED, INSTALLED, TESTED AND BALANCED IN ACCORDANCE WITH SMACNA STANDARDS. SUPPORT LOW AND MEDIUM PRESSURE DUCTWORK PER SMACNA GUIDELINES.
- 2. CONNECT FLEXIBLE DUCTS TO METAL DUCTS WITH ADHESIVE/DRAW BANDS/ADHESIVE AND SHEET METAL SCREWS.
- PROVIDE SEISMIC SUPPORT AND RESTRAINT FOR ALL DUCTWORK AND EQUIPMENT IN ACCORDANCE WITH THE IBC.

#### <u>SECTION 23 33 00 - AIR DUCT ACCESSORIES</u>

- SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL
  - MATERIALS:
- 1. DAMPERS:
- 1.1. BACKDRAFT MULTI-BLADE, PARALLEL ACTION, GRAVITY BALANCED, 16-GAUGE GALVANIZED STEEL OR EXTRUDED ALUMINUM, CENTER PIVOTED BLADES OF 6" WIDTH MAX, VINYL BLADE SEALS, EXTERNAL LINKAGE AND TIE BAR, STEEL BALL BEARINGS. GREENHECK "EM" SERIES OR APPROVED EQUAL.
- MANUAL BALANCING DIFFERENTIAL PRESSURE RATING OF 1" W.G., VELOCITY RATING OF 2,000 FPM. DAMPER FRAME AND SLEEVE SHALL BE OF ONE-PIECE DESIGN, 20 GAUGE GALVANIZED STEEL, SINGLE BLADE. GREENHECK "MBDR-50" OR APPROVED EQUAL
- VOLUME CONTROL DIFFERENTIAL PRESSURE RATING OF 4" W.G., VELOCITY RATING OF 2,000 FPM. DAMPER FRAME AND SLEEVE SHALL BE OF ONE-PIECE DESIGN, 16 GAUGE GALVANIZED STEEL, MULTI-BLADE, TRIPLE-V TYPE. PLATED STEEL AXLES, EXTERNAL BLADE-TO-BLADE LINKAGE. GREENHECK "MBD-15" OR APPROVED EQUAL.
- 1.4. CONTROL DIFFERENTIAL PRESSURE RATING OF 8" W.G., VELOCITY RATING OF 4,000 FPM, LEAKAGE RATING OF 3 CFM/FT2 AT 1" W.G. DIFFERENTIAL STATIC PRESSURE. DAMPER FRAME AND SLEEVE SHALL BE OF ONE-PIECE DESIGN, 16 GAUGE GALVANIZED STEEL, MULTI-BLADE, AIRFOIL TYPE, PLATED STEEL AXLES, EXTERNAL BLADE-TO-BLADE LINKAGE, TPE BLADE SEALS, GREENHECK "VCD-33" OR APPROVED EQUAL.
- 2. FLEXIBLE DUCT CONNECTIONS UL AND NFPA 701 LISTED FIRE RETARDANT NEOPRENE COATED WOVEN GLASS FIBER FABRIC, MINIMUM DENSITY 30 OZ. PER SQ. YD, 3" WIDTH, CRIMPED INTO METAL EDGING STRIP. DURO-DYNE "NEOPRENE FLEXIBLE DUCT CONNECTOR" OR APPROVED EQUAL.
- TURNING VANES AIR FOIL, DOUBLE WIDTH, GALVANIZED, 2" INSIDE

#### INSTALLATION:

- 1. INSTALL COMPONENTS IN ACCORDANCE WITH NFPA 90A AND SMACNA DUCT CONSTRUCTION STANDARDS.
- 2. INSTALL 12"X12" ACCESS DOORS DOWNSTREAM OF AUTOMATIC CONTROL DAMPERS, AND DOWNSTREAM OF EACH VAV BOX. ACCESS DOORS SHALL BE INSTALLED UPSTREAM OF EACH HEATING COIL.
- INSTALL TEMPORARY DUCT TEST HOLES AS REQUIRED FOR TESTING AND BALANCING. CAP ALL HOLES WITH NEOPRENE OR THREADED PLUGS.



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**CONSULTANT:** 

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Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521 Corporate No.: AECC542

Electrical Consulting

PROJE	CT NO:	M4088.		
DATE:	2025-07-2			
DRAWN	IBY:	ARI		
CHECK	ED BY:	BPP/DR		
REVISION	DESCRIPTION		DATE	

MECHANICAL SPECIFICATIONS

M004

#### SECTION 23 52 93 — SEQUENCE OF OPERATIONS

#### CABINET UNIT HEATER, CUH-1:

- A. ALARMS:
  - 1. NONE.
- B. MANUAL CONTROL AND INDICATION:
  - 1. SPACE TEMPERATURE SETPOINT.
  - SPACE TEMPERATURE INDICATION.
  - ALARM SETPOINTS.
- C. AUTOMATED CONTROL:
  - 1. LOCAL THERMOSTAT SHALL CYCLE FAN ON/OFF AND CONTROL VALVE OPEN/CLOSED TO MAINTAIN SETPOINT.

#### FINNED TUBE, FT-1, FT-2, FT-3

- A. ALARMS:
  - 1. NONE.
- B. MANUAL CONTROL AND INDICATION:
- 2. TEMPERATURE INDICATION.

TEMPERATURE SETPOINT.

- C. AUTOMATED CONTROL:
- 1. SENSOR SHALL MODULATE CONTROL VALVE AS NECESSARY TO MAINTAIN SPACE TEMPERATURE.

#### DRYER BOOSTER FANS, DBF-1, DBF-2

- A. ALARMS:
- 1. NONE.
- B. THE DDC SHALL MONITOR THE FOLLOWING POINTS:
- 1. NONE.
- C. AUTOMATED CONTROL:
  - PRESSURE SENSING SWITCH SHALL ACTIVATE FAN UPON DETECTING DRYER OPERATION. INTEGRAL DELAY-ON-BREAK TIMER IN THE SWITCH SHALL CYCLE FAN FOR INTERVALS OF 10 MINUTES UNTIL DRYER HAS STOPPED AND THE TIMER DELAY PERIOD HAS LAPSED.

#### TRANSFER FAN, TF-1

- A. ALARMS:
- 1. HIGH SPACE TEMPERATURE.
- MANUAL CONTROL AND INDICATION:
  - SPACE TEMPERATURE SETPOINT.
  - H-O-A CONTROL.
  - 3. ON-OFF INDICATION.
  - 4. ALARM SETPOINTS.
- C. AUTOMATED CONTROL:
  - 1. UNIT SHALL CYCLE TO MAINTAIN SPACE TEMPERATURE SET POINT, INITIALLY SET AT 75°F.

#### EXHAUST FAN, EF-5

- A. ALARMS:
  - 1. FAN FAILURE.
- B. CONTROL AND INDICATION:
  - 1. ON-OFF CONTROL.
  - 2. ON-OFF INDICATION.
  - 3. DAMPER OPEN/CLOSED (WHERE NOTED ON PLANS)
  - 4. ALARM SETPOINTS.
- C. AUTOMATED CONTROL:
  - 1. OPERATION MODE: DAY AND UNOCCUPIED MODE OF OPERATION WILL BE CONTROLLED BY BAS SYSTEM WITH ASSOCIATED SUPPLY FAN FOR AREA SERVED.
  - 2. OCCUPIED MODE: FAN SHALL OPERATE CONTINUOUSLY. MOTORIZED DAMPER SHALL BE OPEN ON FANS WITH ASSOCIATED MOTORIZED
  - UNOCCUPIED MODE: FAN SHALL BE OFF. MOTORIZED DAMPER SHALL BE CLOSED ON FANS WITH ASSOCIATED MOTORIZED DAMPERS.

#### VARIABLE AIR VOLUME TERMINAL UNITS:

- A. ALARMS:
  - 1. LOW SPACE TEMPERATURE
  - 2. HIGH SPACE TEMPERATURE
- THE DDC SHALL MONITOR THE FOLLOWING POINTS:
  - SPACE TEMPERATURE SETPOINT
  - SPACE TEMPERATURE INDICATION
  - OPERATION MODE SCHEDULE ADJUSTMENT
  - OPERATION MODE INDICATION ACTUAL AIRFLOW (CFM) INDICATION
  - MINIMUM AIRFLOW SETPOINT
  - MAXIMUM AIRFLOW SETPOINT
  - DAMPER POSITION
  - CONTROL VALVE POSITION
  - 10. ALARM SETPOINTS
- C. AUTOMATED CONTROL:
  - SPACE SENSOR SHALL MODULATE DAMPER TO MAINTAIN SETPOINT.
  - WHERE ASSOCIATED WITH A TEMPERING COIL OR SPACE RADIATION HEAT, UPON CONTINUED DROP IN AREA TEMPERATURE AFTER AIRFLOW IS AT MINIMUM POSITION, MODULATE THE CONTROL VALVE ON THE RADIATION IN PARALLEL WITH THE REHEAT COIL CONTROL VALVE TO MAINTAIN THE SPACE TEMPERATURE SETPOINT.
  - MINIMUM AIRFLOW SETPOINT FOR ALL VAV BOXES SHALL BE 30% (INITIALLY, ADJUSTABLE).

#### RANGE HOOD, RH-1:

- A. ALARMS:
  - 1. NONE.
- B. AUTOMATED CONTROL:
  - 1. MANUAL SWITCH LOADED ON HOOD SHALL START/STOP THE EXHAUST FAN.



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CONSULTANT:

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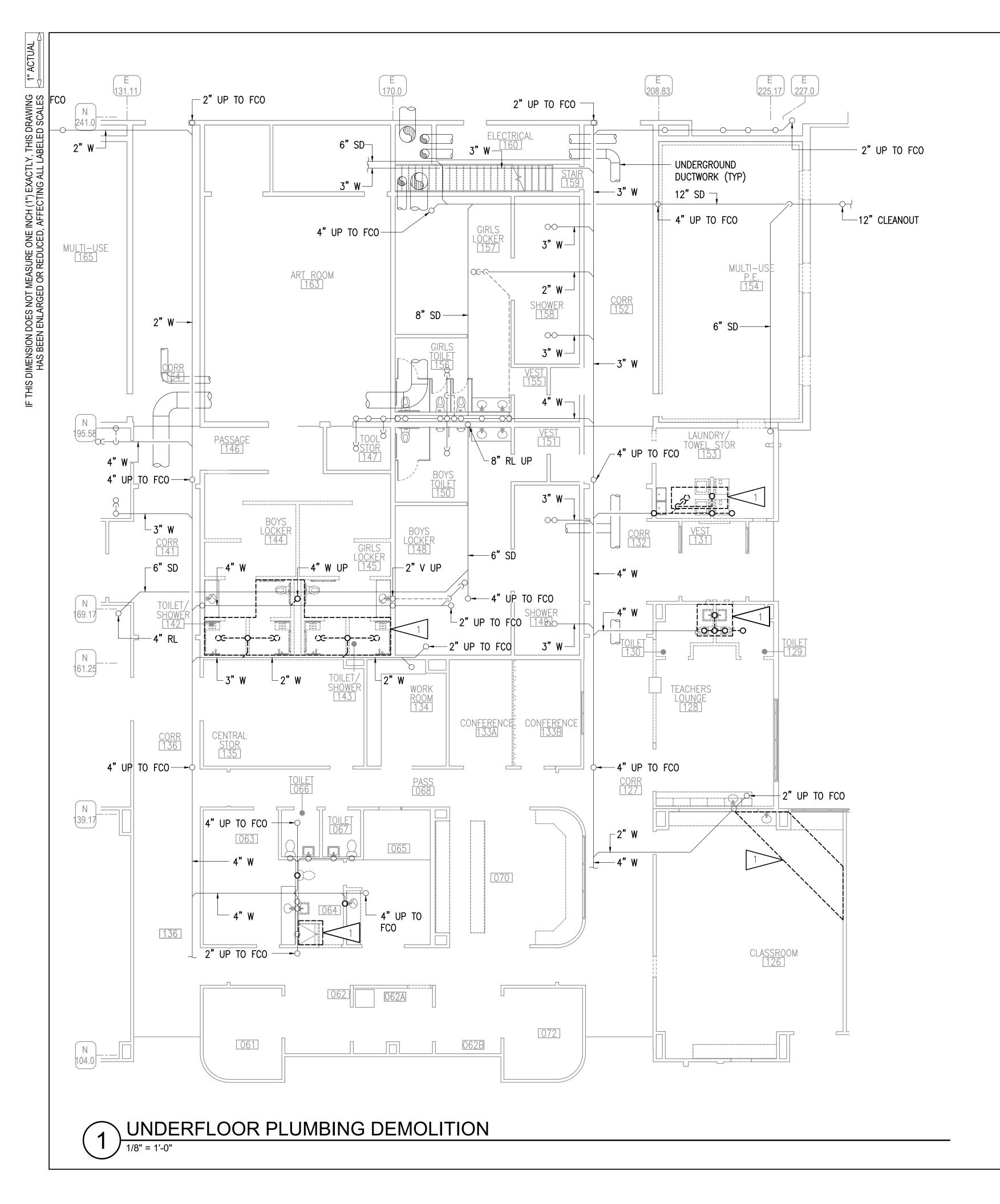
Corporate No.: AECC542

Mechanical and

M4088.10 PROJECT NO: 2025-07-28 DATE: DRAWN BY: CHECKED BY: BPP/DRM

MECHANICAL SPECIFICATIONS

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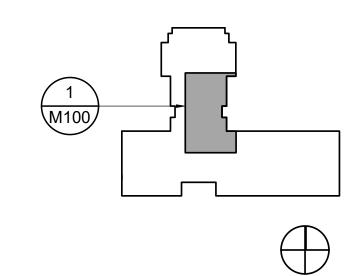


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- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START WORK.
- B. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER THE SALVAGED MATERIALS TO A LOCATION AS DIRECTED BY THE OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- C. DASHED OR DOTTED BOLD LINES INDICATE ITEMS TO BE REMOVED. UN-BOLDED LINES INDICATE EXISTING ITEMS TO REMAIN.

#### SHEET NOTES:

1. DEMOLISH SLAB AND UNDERFLOOR PIPING TO THE EXTENT REQUIRED FOR REMODEL WORK IN AREA INDICATED.



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## **TENANT OFFICES** VCS DISTRICT (IMPROVEMENT OF VALDEZ ASK

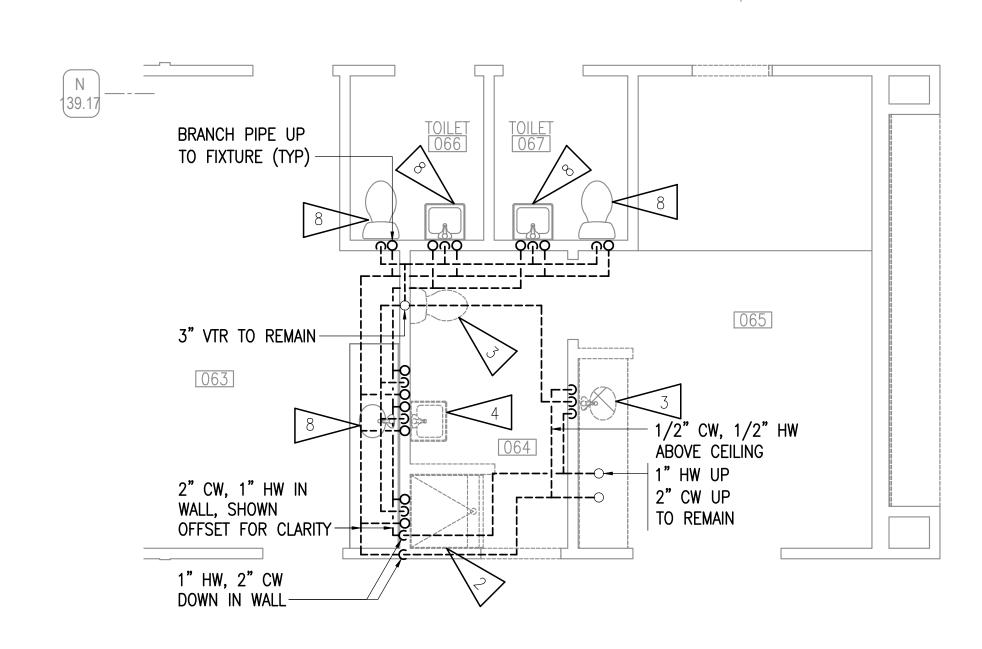
VALD CITY VCS CONSULTANT:

Mechanical and Electrical Consulting

Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521 Corporate No.: AECC542

PROJECT NO: M4088.10 2025-07-28 ARN DRAWN BY: CHECKED BY: BPP/DRM UNDERFLOOR PLUMBING DEMOLITION

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#### **GENERAL NOTES:**

A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START WORK.

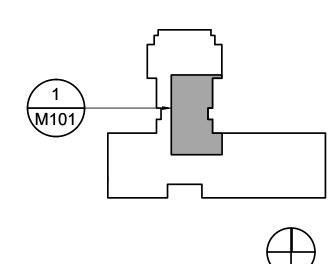
PLUMBING DEMOLITION

- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER THE SALVAGED MATERIALS TO A LOCATION AS DIRECTED BY THE OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- C. DASHED OR DOTTED BOLD LINES INDICATE ITEMS TO BE REMOVED. UN-BOLDED LINES INDICATE EXISTING ITEMS TO REMAIN.
- D. WHERE PLUMBING FIXTURES ARE INDICATED TO BE DEMOLISHED, DEMOLISH ALL ASSOCIATED WASTE, VENT, DOMESTIC COLD AND HOT WATER PIPING BACK TO MAIN AND CAP.

#### SHEET NOTES:

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- 1. DEMOLISH COUNTER MOUNTED SINK, AND ASSOCIATED PIPING AND APPURTENANCES.
- 2. DEMOLISH SHOWER, AND ASSOCIATED PIPING AND APPURTENANCES.
- 3. DEMOLISH WATER CLOSET, AND ASSOCIATED PIPING AND APPURTENANCES.
- 4. DEMOLISH WALL MOUNTED SINK, AND ASSOCIATED PIPING AND APPURTENANCES.
- 5. DEMOLISH CLOTHES WASHER, AND ASSOCIATED PIPING AND APPURTENANCES.
- 6. DEMOLISH LAUNDRY SINK, AND ASSOCIATED PIPING AND APPURTENANCES.
- 7. DEMOLISH CLOTHES DRYER, AND ASSOCIATED PIPING AND APPURTENANCES.
- 8. FIXTURE TO REMAIN, DEMOLISH CW/HW PIPING, WASTE/VENT AS REQUIRED FOR REMODEL WORK.



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CONSULTANT: RSA Mechanical and

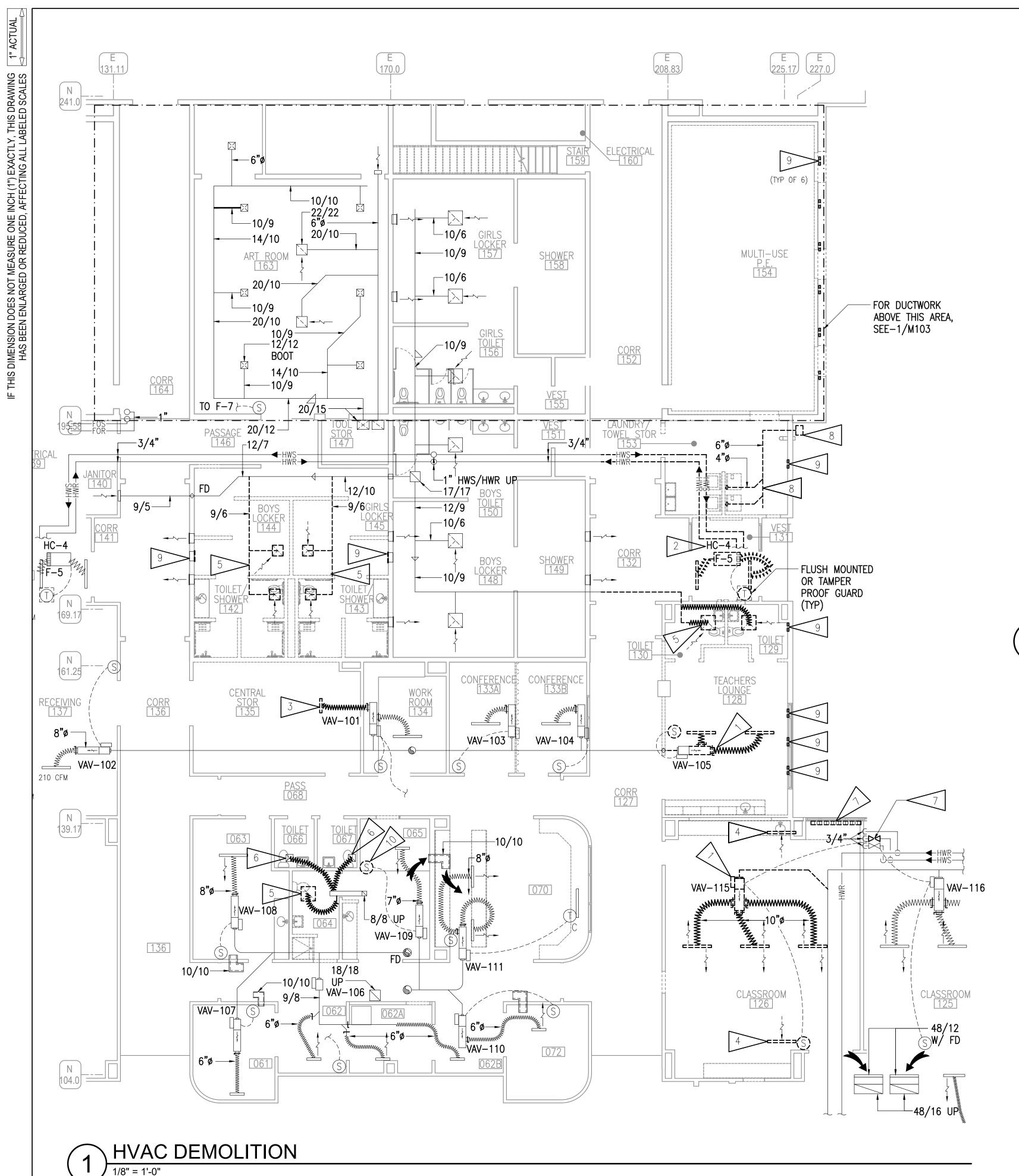
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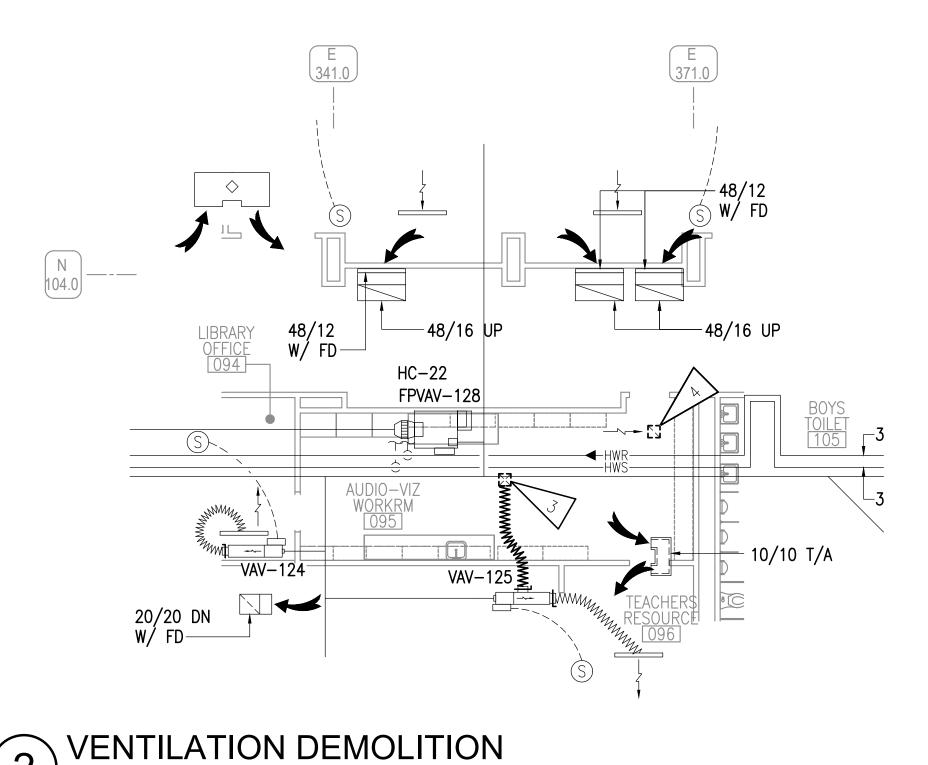
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M4088.10 PROJECT NO: 2025-07-28 DRAWN BY: ARN CHECKED BY: BPP/DRM PLUMBING DEMOLITION

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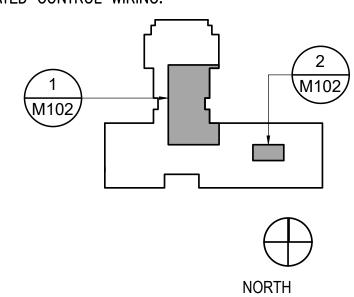
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- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER THE SALVAGED MATERIALS TO A LOCATION AS DIRECTED BY THE OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- DASHED OR DOTTED BOLD LINES INDICATE ITEMS TO BE REMOVED. UN-BOLDED LINES INDICATE EXISTING ITEMS TO

#### SHEET NOTES:



- 1. REMOVE VAV BOX AND SALVAGE FOR REMODEL. DEMOLISH SUPPLY DIFFUSERS AND ASSOCIATED DUCTWORK.
- 2. DEMOLISH VESTIBULE HEATER, HEATING COIL, HEATING PIPING, DUCTWORK AND DIFFUSERS.
- 3. DEMOLISH SUPPLY DIFFUSERS AND ASSOCIATED DUCTWORK
- 4. DEMOLISH RETURN AIR GRILLE.
- 5. DEMOLISH EXHAUST AIR GRILLES AND DUCTWORK TO EXTENT INDICATED.
- 6. DEMOLISH DUCTWORK. EXHAUST AIR GRILLE TO REMAIN.
- 7. DEMOLISH FINTUBE, PIPING AND VALVES.
- 8. DEMOLISH DRYER DUCTWORK AND EXTERIOR WALL CAP.
- 9. DEMOLISH WALL/FLOOR SUPPLY GRILLE, CAP AND SEAL, UNDERGROUND DUCT TO REMAIN.
- 10. REMOVE SENSOR AND SALVAGE FOR REINSTALLATION. DEMOLISH ASSOCIATED CONTROL WIRING.





TENANT **OFFICES** ISTRIC VEME VALDEZ

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CONSULTANT: RSA

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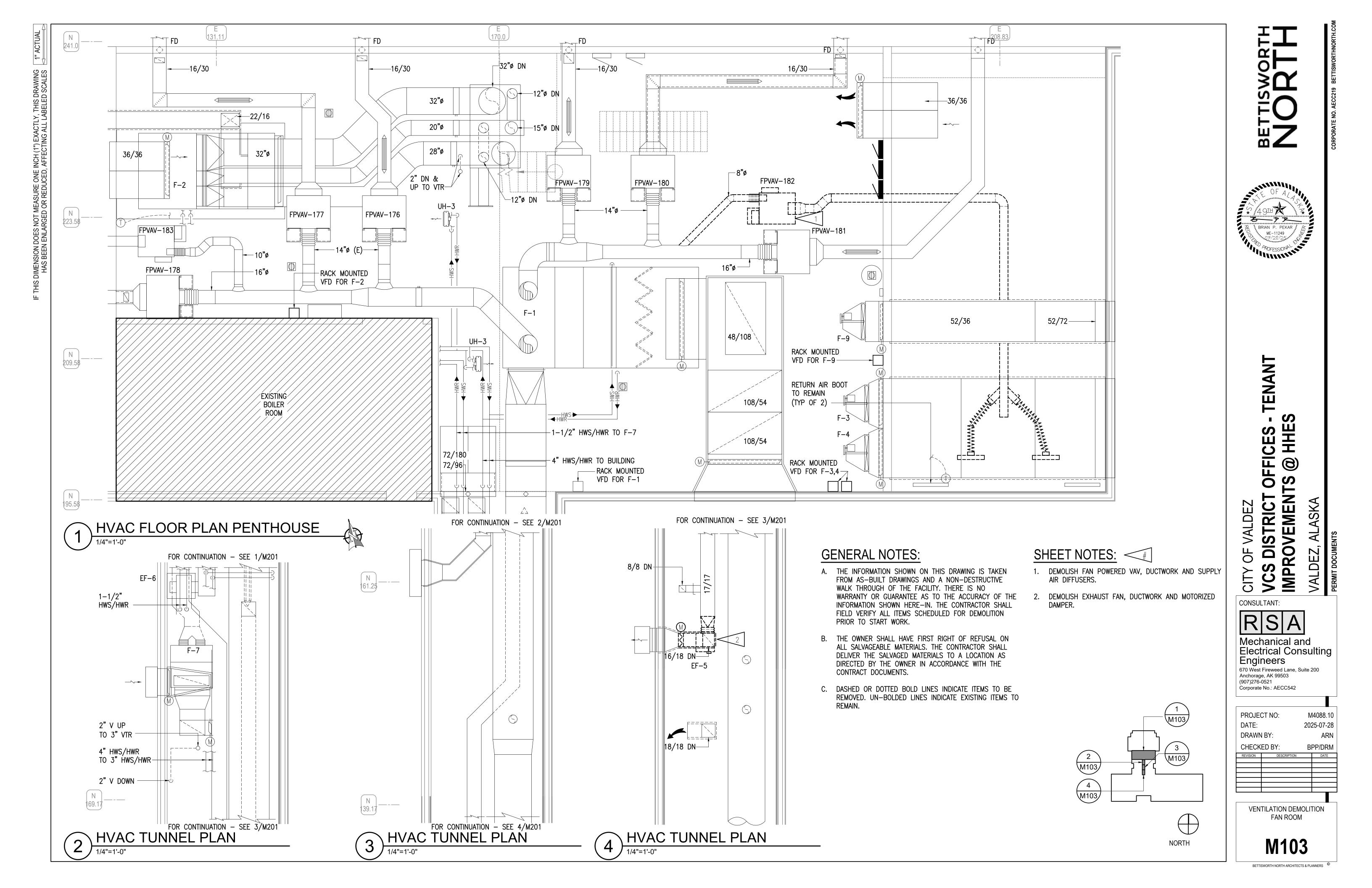
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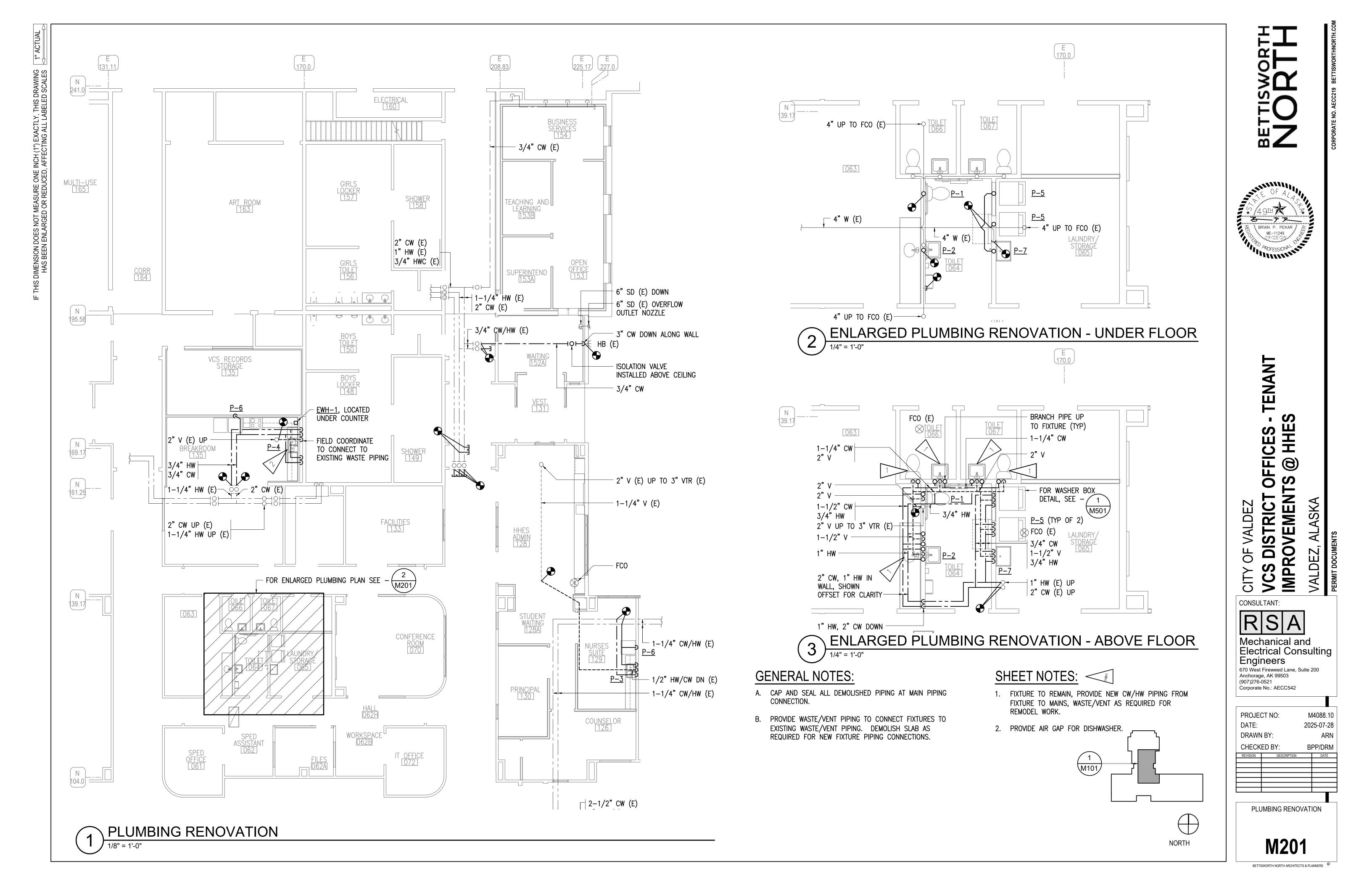
(907)276-0521 Corporate No.: AECC542

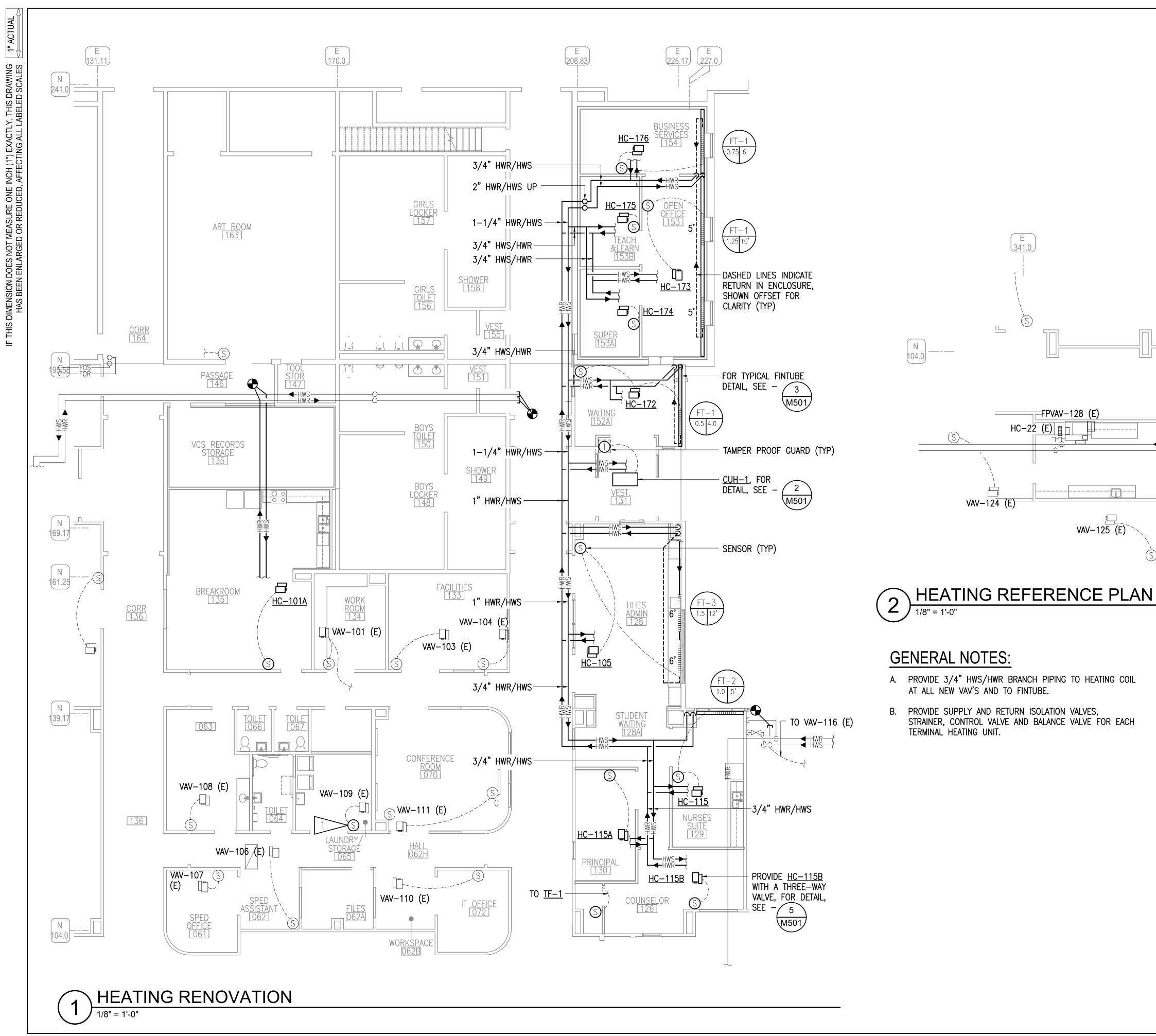
PROJECT NO: M4088.10 2025-07-28 DRAWN BY: ARN BPP/DRM

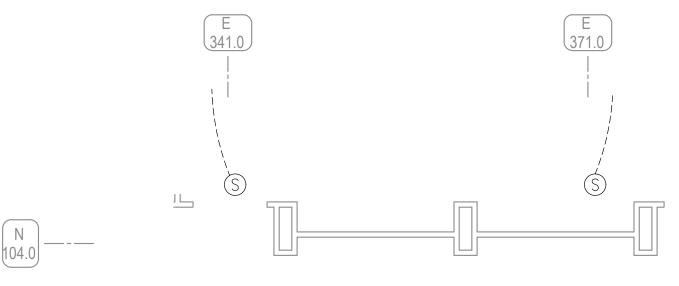
CHECKED BY: **HVAC DEMOLITION** 

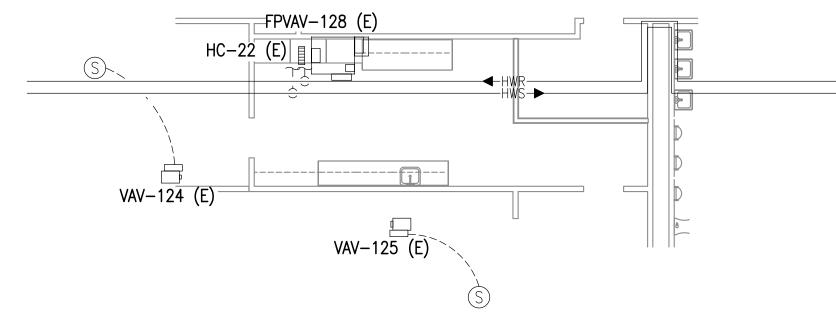
M102











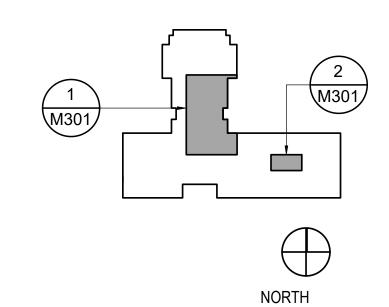
1/8" = 1'-0"

### GENERAL NOTES:

- A. PROVIDE 3/4" HWS/HWR BRANCH PIPING TO HEATING COIL AT ALL NEW VAV'S AND TO FINTUBE.
- B. PROVIDE SUPPLY AND RETURN ISOLATION VALVES, STRAINER, CONTROL VALVE AND BALANCE VALVE FOR EACH TERMINAL HEATING UNIT.

## SHEET NOTES:

1. RELOCATED SENSOR. PROVIDE NEW CONTROL WIRING.





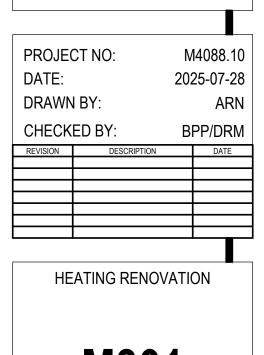


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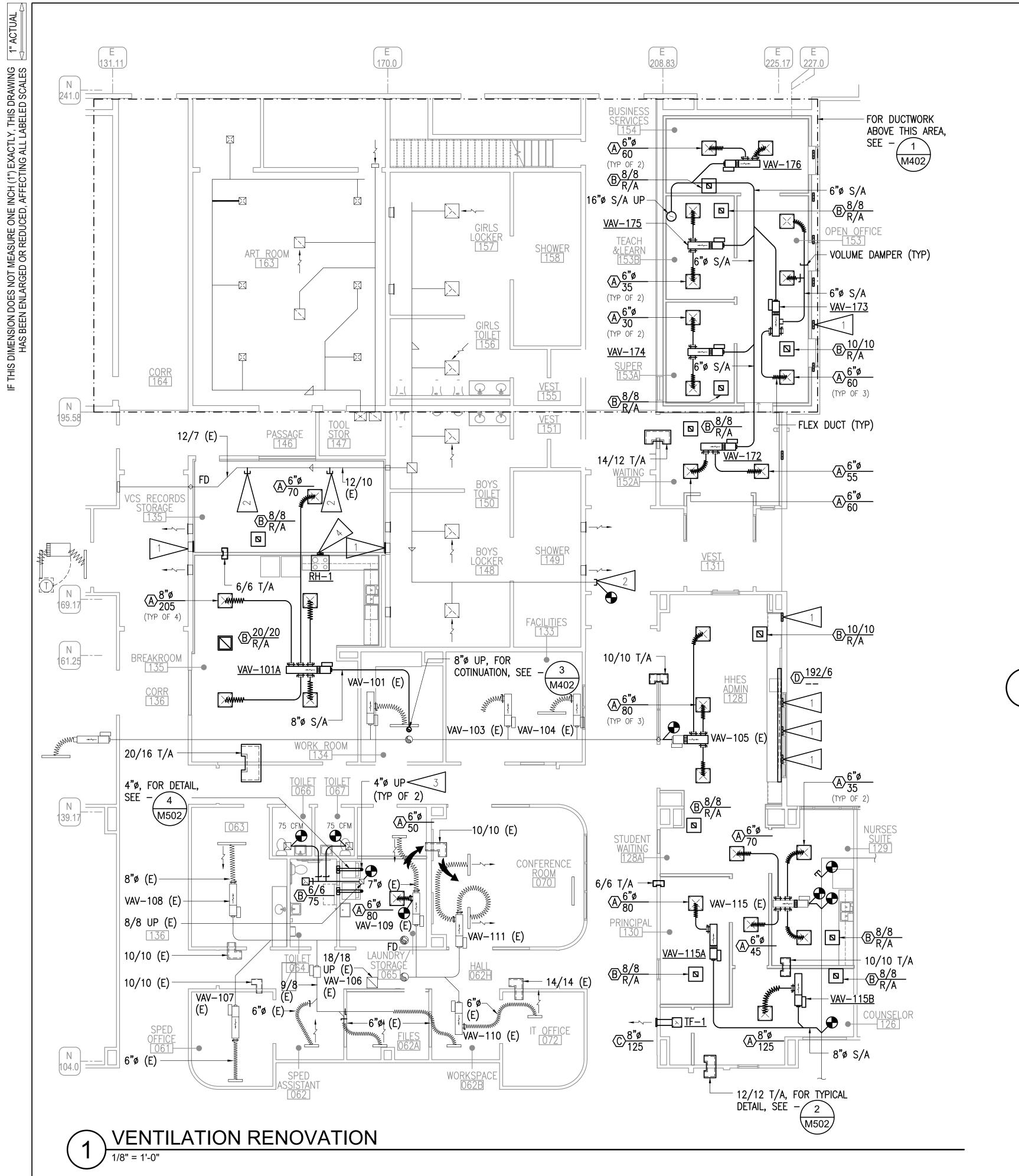
CONSULTANT: RSA Mechanical and Electrical Consulting

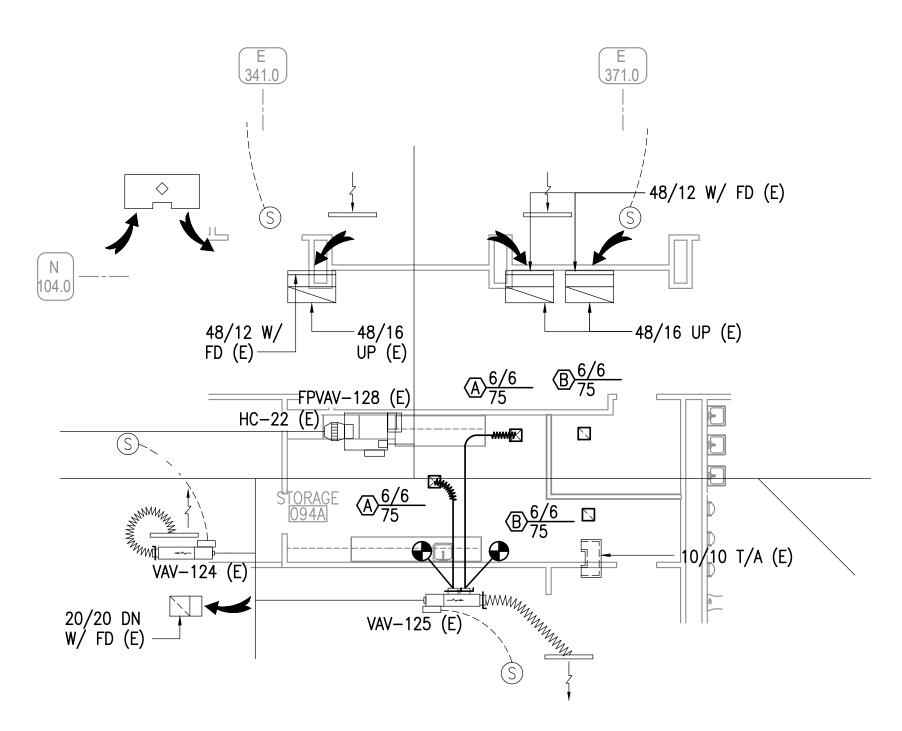
CITY VCS

Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521 Corporate No.: AECC542



M301





# VENTILATION RENOVATION

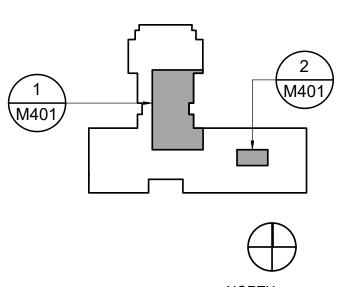
#### **GENERAL NOTES:**

- PROVIDE DUCTWORK UPSTREAM FROM EACH VAV TO CONNECT TO SUPPLY AIR MAIN, DUCT SIZE TO MATCH VAV INLET.
- PROVIDE DUCTWORK DOWNSTREAM FROM EACH VAV TO SUPLY AIR DIFFUSERS WITH MAXIMUM 5' LENGHT FLEXIBLE DUCT CONNECTION TO DIFFUSERS.
- C. FOR TYPICAL VAV DETAIL, SEE



## SHEET NOTES:

- 1. CAP AND SEAL UNDERGROUND DUCTWORK.
- 2. CAP AND SEAL EXHAUST AIR DUCTWORK.
- 3. 4"Ø DRYER DUCT UP. FOR CONTINUATION SEE
- 4. 3.25"x10" UP. FOR CONTINUATION SEE -







**TENANT** 

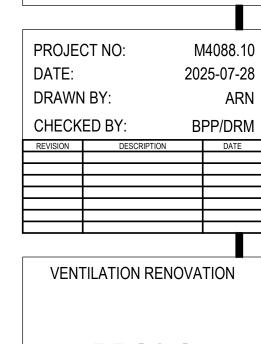
(a) HHES **OFFICES** VALDEZ DISTRIC IMPROVEME SK 9F

CITY **VCS** 

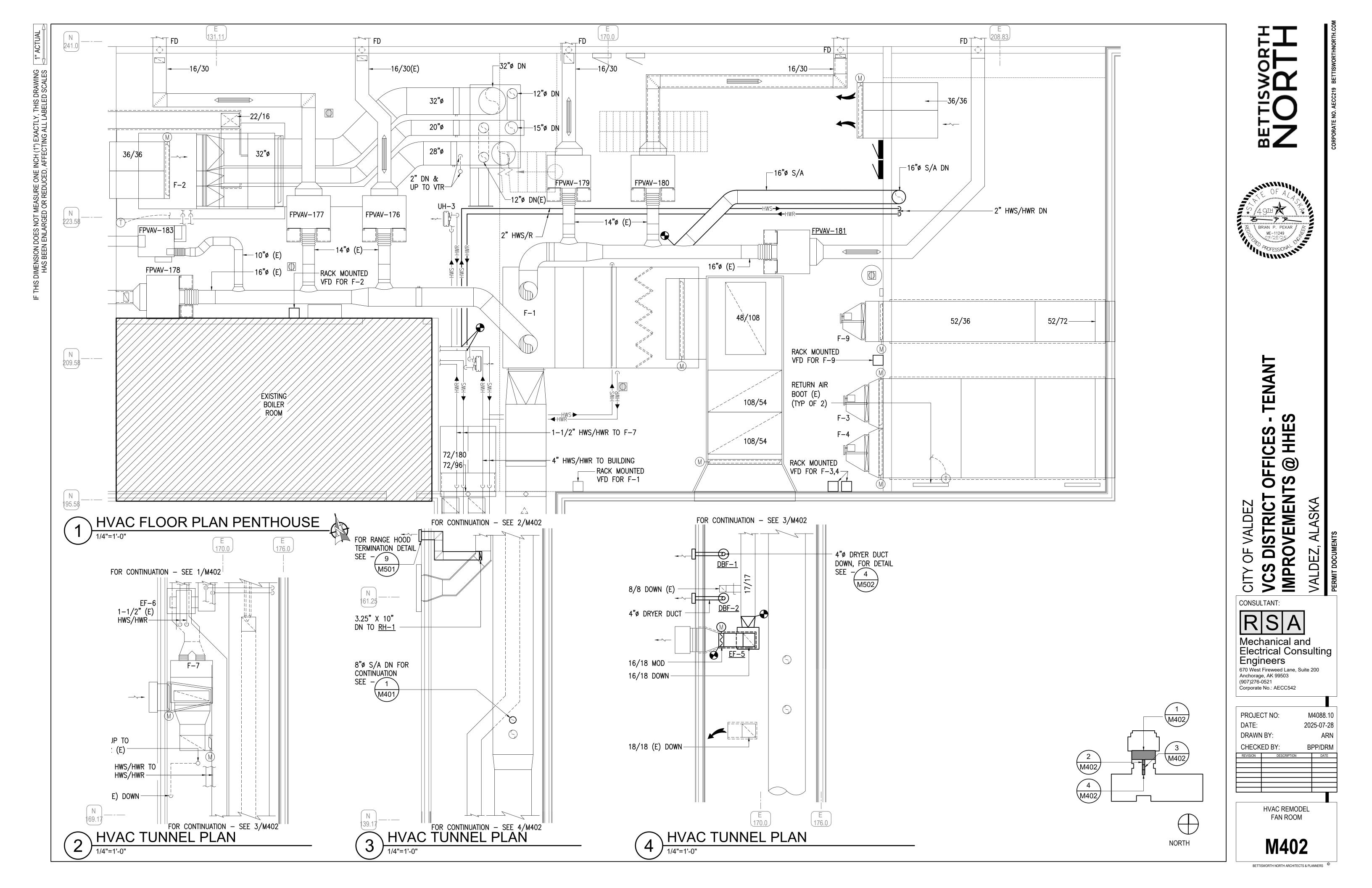
CONSULTANT: RSA Mechanical and

**Electrical Consulting** Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521

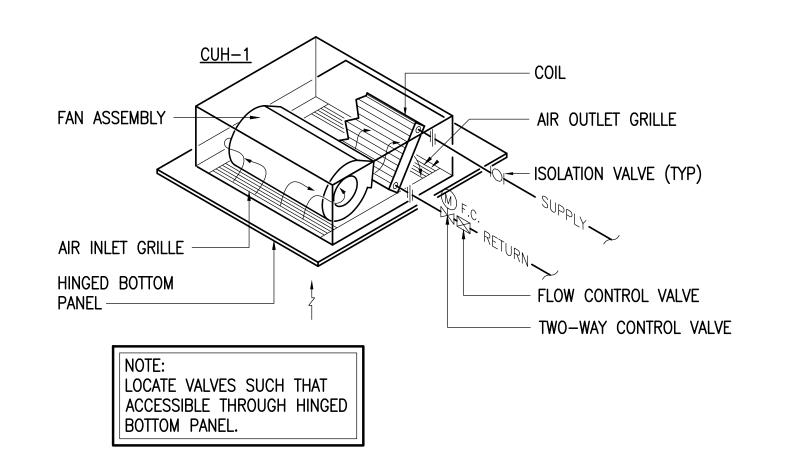
Corporate No.: AECC542



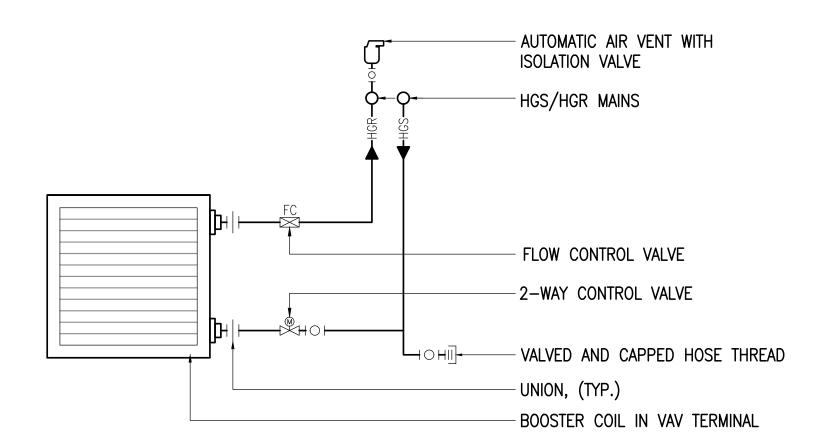
NORTH



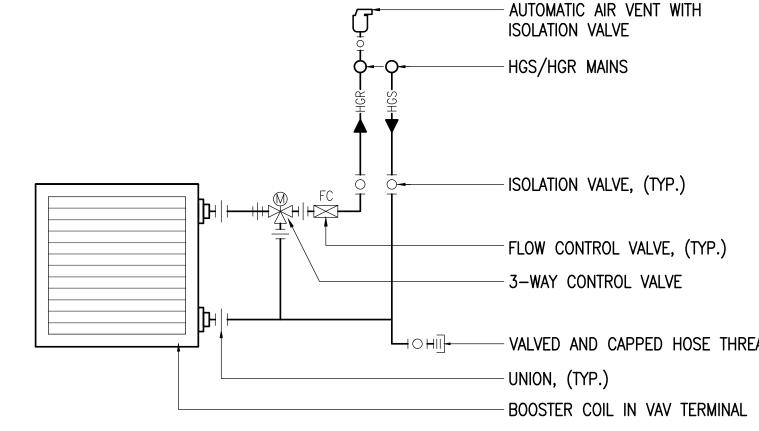
# CLOTHES WASHER BOX DETAIL



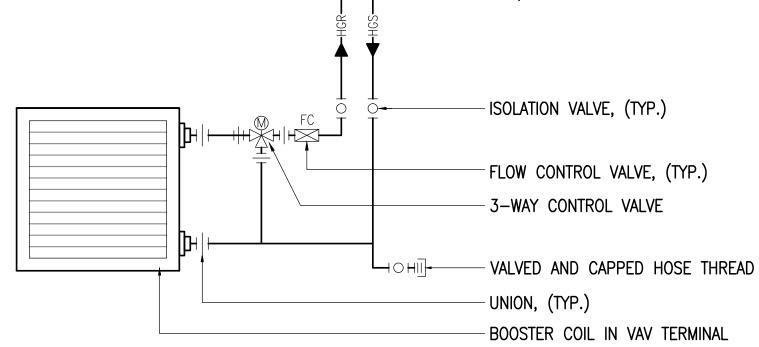




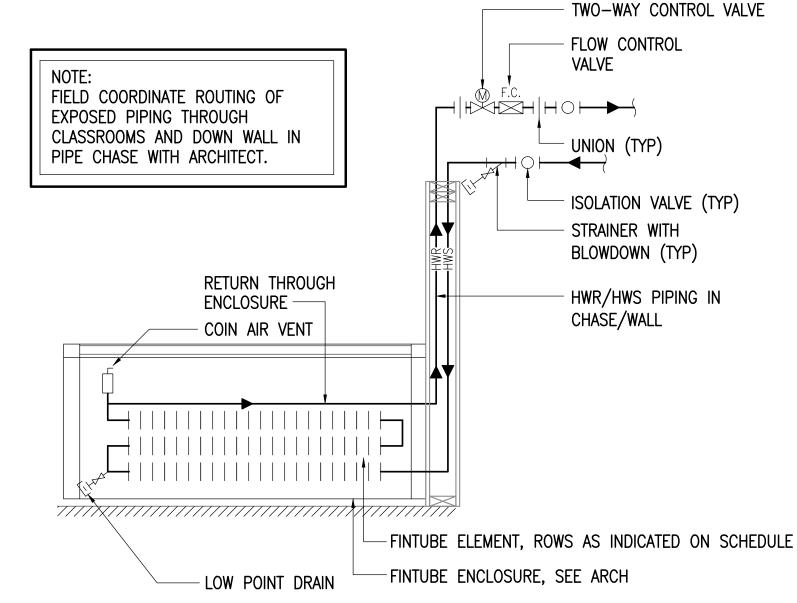




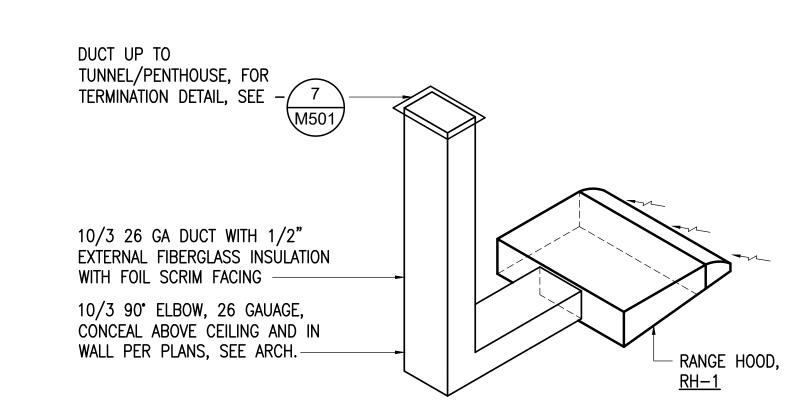
VAV BOOSTER COIL - 3-WAY VALVE NO SCALE









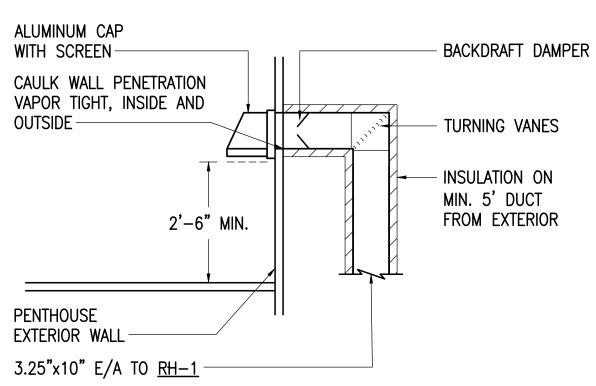




**MECHANICAL DETAILS** 

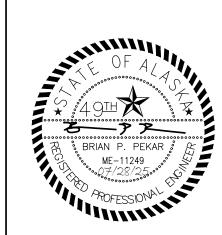
M501

BETTISWORTH NORTH ARCHITECTS & PLANNERS ©









**TENANT** 

**OFFICES** 

H

**(B)** 

PROVIDE ACOUSTICAL CAULK SEAL BETWEEN DUCT AND WALL FULL HEIGHT WALL-ON BOTH SIDES OF WALL W/ CAULKING AND BACKER ROD SUPPORT HANGER, (TYP.) ACOUSTIC LINING B"xA" CEILING WHERE \_\_ 2xA"\_ ACOUSTIC LINING . 2xA"₋ APPLICABLE -6" MIN. MIN. MIN. **OPENING** B" WIDE x A" TALL

SECTION VIEW

VAV BOX DETAIL

TRANSFER AIR BOOT

ALL DRYER DUCTWORK SHALL BE FABRICATED AND

ALL DRYER DUCTWORK SHALL BE HARD SEALED.
PROVIDE PLACARD IN ACCORDANCE WITH IMC 504.8.5.

INSTALLED IN ACCORDANCE WITH SECTION 504 OF THE IMC.

PLAN VIEW

INSULATION MIN 5'

 $-\frac{DB-1}{DETAIL}$ , FOR DETAIL, SEE  $-\frac{3}{M502}$ 

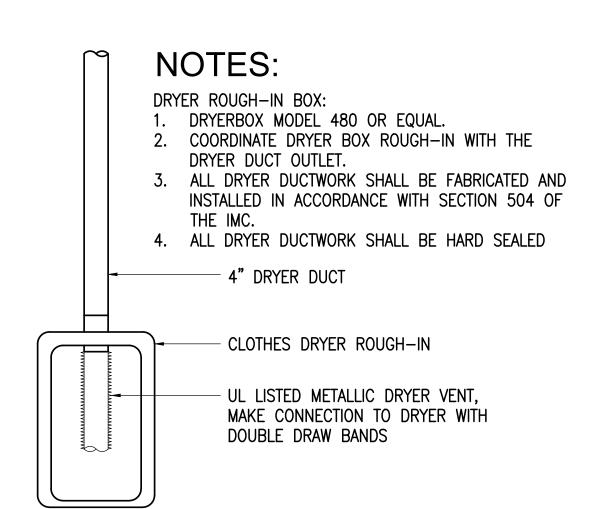
FROM EXTERIOR

TIGHT, INSIDE AND OUTSIDE -DBF-1 <u>DBF-2</u> BACKDRAFT TUNNEL 2'-6" MIN. DAMPER PENTHOUSE X UL LISTED 4"ø DRYER VENT -CLOTHES DRYER CLOTHES WASHER-

**EXTERIOR** 

CAULK WALL

PENETRATION VAPOR



DRYER BOX DETAIL NO SCALE

DRYER DETAIL NOT TO SCALE



# **TENANT** H **OFFICES**

**(B)** VCS DISTRICT (IMPROVEMENT VALDEZ S Ю CITY O

CONSULTANT:

Mechanical and

Electrical Consulting Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521 Corporate No.: AECC542

M4088.10 PROJECT NO: 2025-07-28 DATE: DRAWN BY: CHECKED BY: BPP/DRM

ARN

MECHANICAL **DETAILS** 

M502

LEGEND					
$\bigcirc$ , $\bigcirc$	ROUND LIGHT FIXTURE — SURFACE, PENDANT	Φ	CLOCK		
Ю	LIGHT FIXTURE - SURFACE MTD ON WALL		CLOCK/P.A. SPEAKER COMBO		
0,0	LIGHT FIXTURE - RECESSED DOWNLIGHT, EMERGENCY	TV	TELEVISION OUTLET		
•	EMERGENCY EXIT LIGHT — SURFACE MTD CLG	ACP	SECURITY ACCESS CONTROL PANEL		
H <b>3</b>	EMERGENCY EXIT LIGHT — SURFACE MTD WALL	©	DOOR POSITION CONTACT		
4	EMERGENCY LIGHT	CR	PROXIMITY CARD READER		
	LINEAR LIGHT FIXTURE RECESS MTD, EMERGENCY	ELD	SECURITY EMERGENCY LOCKDOWN BUTTON		
	LINEAR LIGHT FIXTURE — SURFACE MTD CLG	<u> </u>	SECURITY MOTION SENSOR		
• •	LINEAR LIGHT FIXTURE — PENDANT MTD		CLOSED CIRCUIT TELEVISION CAMERA (WALL MOUNTED)		
<u> </u>	LINEAR LIGHT FIXTURE — WALL MTD		CLOSED CIRCUIT TELEVISION CAMERA (CEILING MOUNTED)		
<u> </u>	STRIPLIGHT - PENDANT OR SURFACE MTD CLG	FCP	FIRE ALARM CONTROL PANEL		
<u> </u>	STRIPLIGHT — WALL MTD	FRA	FIRE ALARM REMOTE ANNUNCIATOR PANEL		
A	FIXTURE TAG (LETTER INDICATES TYPE)	•	FIRE ALARM PULL STATION		
\$	SINGLE POLE SWITCH	Ð	SPRINKLER ALARM BELL		
<b>\$</b> a	SINGLE POLE SWITCH (LOWERCASE LETTER INDICATES SWITCHING)		FIRE ALARM HORN (WALL, CLG MOUNTED)		
<b>\$</b> 3 , <b>\$</b> 4	THREE WAY SWITCH, FOUR WAY SWITCH		FIRE ALARM HORN/STROBE LIGHT (WALL, CLG MOUNTED)		
<b>\$</b> D	DIMMER SWITCH	x,x <sub>c</sub>	FIRE ALARM STROBE LIGHT (WALL, CLG MOUNTED)		
<b>\$</b> K	KEY OPERATED SWITCH	0	HEAT DETECTOR 135° & RATE OF RISE (OR FIXED °F IF NOTED)		
\$₽	PILOT LIGHT SWITCH	0	PHOTOELECTRIC SMOKE DETECTOR		
\$	LOW VOLTAGE LIGHT SWITCH	M	MAGNETIC HOLD OPEN		
<b>\$</b> os	OCCUPANCY SENSOR WALL SWITCH (DUALTECH)	•	END OF LINE DEVICE		
<b>\$</b> 0S2	OCCUPANCY SENSOR WALL SWITCH DUAL LEVEL (DUALTECH)	ďμ	DUPLEX RECEPTACLE TO BE REMOVED (DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED TYPICAL)		
<u>(S)</u>	OCCUPANCY SENSOR - CEILING MOUNTED (DUALTECH)		NOTE TAG (No. INDICATES NOTE)		
⊚ <sub>U</sub>	OCCUPANCY SENSOR - CEILING MOUNTED (ULTRASONIC)	X	EQUIPMENT TAG (No. INDICATES TYPE)		
Ю	OCCUPANCY SENSOR - WALL MOUNTED (PIR)	AC	ABOVE COUNTER		
P	PHOTOCELL	AFF	ABOVE FINISHED FLOOR		
	CONDUIT, CONCEALED	AFG	ABOVE FINISHED GRADE		
#10	NUMBER AND SIZE OF WIRES (NO MARKS = 3 #12)	С	CONDUIT		
A-2	HOMERUN TO PANEL (PANEL AND CIRCUIT No.)	CO	CONDUIT ONLY		
— OH/E—	OVERHEAD ELECTRICAL LINE (12470/7200V UON)	E	DENOTES EXISTING ITEM		
—— SR ——	SURFACE RACEWAY	EM	DENOTES EMERGENCY POWER		
_	PANEL	GFCI	GROUND FAULT CIRCUIT INTERRUPTER		
Ф	DUPLEX RECEPTACLE	GRSC	GALVANIZED RIGID STEEL CONDUIT		
\$	DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER	К	KELVIN		
#	QUADRAPLEX RECEPTACLE	LED	LIGHT EMITTING DIODE		
•	SPECIAL PURPOSE OUTLET	LM	LUMENS		
∞ ∞	RECEPTACLE FLOOR OUTLET — DUPLEX, QUADRAPLEX	MCB	MAIN CIRCUIT BREAKER		
0	JUNCTION BOX	MLO	MAIN LUGS ONLY		
	EMERGENCY PUSHBUTTON SWITCH	NEC	NATIONAL ELECTRICAL CODE		
<b>•••</b> , ••	PUSHBUTTON	NL	NIGHTLIGHT		
<b>♦</b>	MOTOR (SIZED AS NOTED)	NTS	NOT TO SCALE		
<b>\$</b> ⊤	FRACTIONAL HORSEPOWER MOTOR STARTER	R	DENOTES EXISTING ITEM THAT HAS BEEN RELOCATED		
	DISCONNECT SWITCH	ТТВ	TELEPHONE TERMINAL BACKBOARD		
M	TELEPHONE OUTLET	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION		
H	TELECOMMUNICATIONS OUTLET (COMBINATION TELEPHONE & DATA)	TYP	TYPICAL		
<b>⊙⊲</b>	TELECOMMUNICATIONS FLOOR OUTLET	UON	UNLESS OTHERWISE NOTED		
	P.A. SPEAKER	WAP	WIRELESS ACCESS POINT		
IC	INTERCOM STATION	WP	WEATHERPROOF		

			LIGHT FIXTURE SCHEDULE					
TYPF	TYPE LOCATION MANUFACTURER AND CATALOG NUMBER (OR APPROVED EQUAL) LUMINAIRE DESCRIPTION				MOUNTING			TOTAL
	2007	NUMBER (OR APPROVED EQUAL)	LOWING BLOOM NOT	TYPE	HEIGHT	LAMPS	BALLAST/DRIVER	
Α	AS SHOWN	COLUMBIA LIGHTING #LCAT24-40LWG-EDU	RECESSED 2x4 LED TROFFER TO MATCH THE EXISTING 2X4 TROFFERS IN THE BUILDING	RECESSED	CEILING	4,307 LM 4000K	120/277V 0-10V DIMMING	36
В	AS SHOWN	LITHONIA #LL8 10000LM 80CRI 40K EPD MIN1 ZT	8FT LINEAR LED PENDANT FIXTURE	PENDANT	8'-6" AFF	10,000LM 4000K	120/277V 0-10V DIMMING	79
С	AS SHOWN	AXIS #CTPD-1.5-MB-HI-90-40K- NMP-UNV-DP-SCR-FCP-BLK- TLA(L)	DECORATIVE LED PENDANT FIXTURE	PENDANT	7'-0" AFF	1824 LM 4000K	120/277V 0-10V DIMMING	20
D	AS SHOWN	GOTHAM #EVO6-40-10-AR-LSS-MD -MVOLT-EZ1-EL	RECESSED 6" LED DOWNLIGHT WITH WHITE HOUSING. PROVIDE WITH INTEGRAL EMERGENCY DRIVER WHERE DENOTED ON THE PLANS AS EMERGENCY	RECESSED	CEILING	994 LM 4000K	120/277V 0-10V DIMMING	10
F1	AS SHOWN	KENALL #AUCLED-S-MW-20L40K-48 -120	4FT UNDER CABINET LED FIXTURE WITH WHITE HOUSING	SURFACE	UNDER CABINET	2035 LM 4000K	120/277V 0-10V DIMMING	22
F2	AS SHOWN	KENALL #AUCLED-S-MW-11L40K-24 -120	SAME AS TYPE 'F1' EXCEPT LENGTH IS 2FT	SURFACE	UNDER CABINET	1338 LM 4000K	120/277V 0-10V DIMMING	15
G	AS SHOWN	LITHONIA #2BLT4-48L-ADP-EZ1-LP840	2'x4' LED SURFACE MOUNTED TROFFER WITH WHITE HOUSING	SURFACE	CEILING	5169 LM 4000K	120/277V 0-10V DIMMING	39
Н	AS SHOWN	LITHONIA #CLX-L48-5000LM-SEF-FDL- MVOLT-GZ1-40K-80CRI-WH	4FT LED STRIP LIGHT, LENSED, WITH WHITE HOUSING	SURFACE	CEILING	5000 LM 4000K	120/277V 0-10V DIMMING	32
Е	AS SHOWN	LITHONIA #ELM4L	EMERGENCY LIGHTING UNIT WITH WHITE HOUSING AND INTEGRAL NICAD BATTERY	WALL	7'-6" AFF	LED	120/277V DRIVER	3
X	AS SHOWN	LITHONIA #LHQM-LED-G-HO	EXIT SIGN, WHITE HOUSING, GREEN LETTERING, TWIN LED LAMP HEADS AND INTEGRAL NICAD BATTERY	WALL, SURFACE	ABOVE DOOR, CEILING	LED	120/277V 0-10V DIMMING	1





# **TENANT** CITY OF VALDEZ VCS DISTRICT OFFICES - T IMPROVEMENTS @ HHES ALASK/



Mechanical and
Electrical Consulting
Engineers
670 West Fireweed Lane, Suite 200
Anchorage, AK 99503
(907)276-0521
Corporate No.: AECC542

PROJE	CT NO:	M	14088.1
DATE:		202	25-07-2
DRAWN	I BY:		D
CHECK	ED BY:		D
REVISION	DESCRIPTION		DATE

ELECTRICAL LEGEND AND SCHEDULES

E001

#### **ELECTRICAL SPECIFICATIONS**

#### 26 05 00 - COMMON WORK RESULTS FOR ELECTRICAL

- A. SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT FOR AN EXTENSION TO THE EXISTING ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS.
- B. STANDARDS, CODES AND REGULATIONS: COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, AND INTERNATIONAL FIRE CODE INCLUDING ALL STATE AND LOCAL AMENDMENTS TO THESE CODES. COMPLY WITH THE LATEST PUBLISHED VERSION OF THE NECA STANDARD OF INSTALLATION.
- C. DRAWINGS: THE DRAWINGS ARE DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. UNLESS SPECIFICALLY DIMENSIONED. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS TO THE ATTENTION OF THE OWNER ARCHITECT/ENGINEER. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.
- D. RECORD DRAWINGS: MARK UP A CLEAN SET OF DRAWINGS AS THE WORK PROGRESSES TO SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL ELECTRICAL WORK WHICH WILL BECOME PERMANENTLY CONCEALED. SHOW ROUTING OF WORK IN PERMANENTLY CONCEALED BLIND SPACES WITHIN THE BUILDING. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS SHOWN.
- E. WORKMANSHIP: INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS AND IN ACCORDANCE WITH NECA STANDARDS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, NEMA STANDARDS AND UNDERWRITERS LABORATORIES STANDARDS WHERE APPLICABLE.
- F. SUBMITTALS: PROVIDE MATERIAL AND EQUIPMENT SUBMITTALS CONTAINING A COMPLETE LISTING OF MATERIAL AND EQUIPMENT SHOWN ON THE DRAWINGS. INCLUDE CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS AND PERFORMANCE DATA FOR ALL MATERIAL AND EQUIPMENT. SUBMITTALS SHALL BE IN ELECTRONIC .PDF FORMAT, SEPARATE FROM WORK FURNISHED UNDER OTHER DIVISIONS, INDEX AND CLEARLY IDENTIFY ALL MATERIAL AND EQUIPMENT BY ITEM NAME OR DESIGNATION USED ON THE DRAWINGS. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTALS ARE NOT CHECKED FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. WHERE DEVIATIONS OF A SUBSTITUTE PRODUCT OR SYSTEM PERFORMANCE HAVE NOT BEEN SPECIFICALLY NOTED IN THE SUBMITTAL BY THE CONTRACTOR, PROVISIONS OF A COMPLETE AND SATISFACTORY WORKING INSTALLATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- G. OPERATION AND MAINTENANCE MANUALS: PROVIDE OPERATION AND MAINTENANCE MANUALS FOR TRAINING OF THE OWNER'S PERSONNEL. PROCEDURES NECESSARY TO OPERATE THE SYSTEM INCLUDING START-UP OPERATION, EMERGENCY OPERATION AND SHUTDOWN. PROVIDE INSTRUCTIONS AND A SCHEDULE OF PREVENTIVE MAINTENANCE IN TABULAR FORM FOR ALL ROUTINE CLEANING. INSPECTION AND LUBRICATION WITH RECOMMENDED LUBRICANTS. PROVIDE INSTRUCTIONS FOR MINOR REPAIR OR ADJUSTMENTS REQUIRED FOR PREVENTIVE MAINTENANCE ROUTINES. PROVIDE MANUFACTURER'S DESCRIPTIVE LITERATURE INCLUDING APPROVED SHOP DRAWINGS COVERING DEVICES USED IN ANY CONTRACTOR-PROVIDED EQUIPMENT OR SYSTEMS WITH ILLUSTRATION, EXPLODED VIEWS. ETC.
- H. WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM BENEFICIAL OCCUPANCY. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE GUARANTEE PERIOD.
- I. PERMITS: SECURE AND PAY FOR ALL FEES, PERMITS, ETC. REQUIRED BY LOCAL AND STATE AGENCIES.
- J. REFERENCE SYMBOLS: THE ELECTRICAL "LEGEND" ON THE DRAWINGS IS A STANDARDIZED VERSION, AND ALL SYMBOLS SHOWN MAY NOT BE USED. USE THE "LEGEND" AS A REFERENCE FOR THE SYMBOLS USED ON THE DRAWINGS.
- K. PENETRATION OF FIRE BARRIERS: ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED BARRIERS SHALL BE SEALED IN ACCORDANCE WITH NEC ARTICLE 300.21 AND THE FOLLOWING:
  - ALL HOLES OR VOIDS CREATED TO EXTEND ELECTRICAL SYSTEMS THROUGH FIRE RATED FLOORS, WALLS OR CEILING SHALL BE SEALED WITH AN ASBESTOS-FREE INTUMESCENT FIRE STOPPING MATERIAL CAPABLE OF EXPANDING 8 TO 10 TIMES WHEN EXPOSED TO TEMPERATURES 250 DEGREES F OR HIGHER.
  - 2. MATERIALS SHALL BE SUITABLE FOR THE FIRE STOPPING OF PENETRATIONS MADE BY STEEL, GLASS, PLASTIC AND SHALL BE CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME, SMOKE AND GASES IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM E814. UL 1479 AND THE UL FIRE RESISTANCE DIRECTORY REQUIREMENTS FOR THROUGH-PENETRATION FIRESTOP DEVICES (XHCR)
  - 3. THE RATING OF THE FIRE STOPS SHALL BE THE SAME AS THE TIME-RATED FLOOR, WALL OR CEILING ASSEMBLY.
  - 4. INSTALL FIRE STOPPING MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
  - 5. UNLESS PROTECTED FROM POSSIBLE LOADING OR TRAFFIC, INSTALL FIRE STOPPING MATERIALS IN FLOORS HAVING VOID OPENINGS OF FOUR (4) INCHES OR MORE TO SUPPORT THE SAME FLOOR LOAD REQUIREMENTS AS THE SURROUNDING FLOOR."

26 05 05 - SELECTIVE DEMOLITION FOR ELECTRICAL

A. DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND EXISTING RECORD DRAWINGS. REPORT DISCREPANCIES TO ARCHITECT/ENGINEER BEFORE DISTURBING THE EXISTING INSTALLATION. DISCONNECT ELECTRICAL SYSTEMS IN WALLS, FLOORS, AND CEILINGS SCHEDULED FOR REMOVAL. PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN ALL EXISTING ELECTRICAL SYSTEMS (TELEPHONE, FIRE ALARM, LIGHTING, PA, ETC.) IN SERVICE DURING CONSTRUCTION. DISABLE SYSTEMS ONLY TO MAKE SWITCHOVERS AND CONNECTIONS.

B. OBTAIN PERMISSION FROM OWNER AT LEAST 24 HOURS BEFORE PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION AND MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREA. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.

- C. REMOVE, RELOCATE AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION. REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY. REMOVE EXPOSED ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILING FINISHES. WHERE ABANDONED CONDUIT ENTERS EXISTING SURFACES TO REMAIN, CUT CONDUIT FLUSH WITH WALLS AND FLOORS, AND PATCH SURFACES. DISCONNECT ABANDONED OUTLETS AND REMOVE DEVICES. REMOVE ABANDONED OUTLETS IF CONDUIT SERVICING THEM IS ABANDONED AND REMOVED. PROVIDE BLANK COVER FOR ABANDONED OUTLETS WHICH ARE NOT REMOVED.
- D. DISCONNECT AND REMOVE ELECTRICAL DEVICES AND EQUIPMENT SERVING UTILIZATION EQUIPMENT THAT HAS BEEN REMOVED. DISCONNECT AND REMOVE ABANDONED LUMINARIES. REMOVE BRACKETS, STEMS, HANGERS AND OTHER ACCESSORIES. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE.
- E. CONTRACTOR TO FIELD VERIFY CONDUITS AND ELECTRICAL ITEMS IN WALLS
- TO BE DEMOLISHED PRIOR TO START OF WORK. DEMOLISH CONDUITS, BOXES, DEVICES, EQUIPMENT, ETC. IN WALLS THAT ARE SCHEDULED FOR DEMOLITION WHERE CONDUITS PASS THROUGH THE WALLS OR CIRCUITS ARE SHARED WITH EQUIPMENT THAT IS EXISTING TO REMAIN, PROVIDE ALL WORK NECESSARY (INCLUDING EXTENDING AND RE-ROUTING CONDUITS) TO MAINTAIN ACCESS AND PROVIDE ELECTRICAL CONTINUITY TO EXISTING SYSTEMS AND CIRCUITRY

#### <u>26 05 19 – WIRE AND CABLE</u> B. SUBMITTALS: NONE REQUIRED FOR THIS SECTION C. MATERIALS:

- 1. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW, THWN, THW OR THHN INSULATION. MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE SHALL BE 12 AWG. MINIMUM CONTROL CIRCUIT CONDUCTOR SIZE SHALL BE #18
- 2. CONTROL CIRCUITS SHALL BE COPPER, STRANDED CONDUCTOR, 600V INSULATION, THHN/THWN, MINIMUM SIZE 18 AWG.
- 3. TYPE MC CABLE: SOLID COPPER CONDUCTOR, 600 VOLT THERMOPLASTIC INSULATION, RATED 90°C, INSULATED GREEN GROUNDING CONDUCTOR AND GALVANIZED STEEL ARMOR OVER MYLAR. MC CABLE USED FOR FIRE ALARM WIRING SHALL BE COLORED RED AND LISTED FOR FIRE ALARM USE
- 4. 0-10V DIMMING/POWER MC CABLE (TYPE MC-PCS), SIZE 12 THROUGH 10 AWG WITH 16-2 CONTROL CABLES: SOLID COPPER CONDUCTOR, 600 VOLT THERMOPLASTIC INSULATION, RATED 90° C DRY, 75° WET, INSULATED GREEN GROUNDING CONDUCTOR, AND GALVANIZED STEEL OR ALUMINUM ARMOR OVER MYLAR.

#### C. INSTALLATION:

- 1. COLOR CODE WIRES BY LINE OR PHASE. COLOR CODE THE 120/208V CONDUCTORS BLACK, RED, BLUE, AND WHITE. COLOR CODE THE 277/480V CONDUCTORS BROWN, ORANGE, YELLOW AND GREY.
- 2. DO NOT SHARE NEUTRAL CONDUCTORS. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT THAT REQUIRES A NEUTRAL.
- 3. USE PROPERLY SIZED INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR ALL CONDUCTORS #8 AWG AND SMALLER. TERMINATE #6 AWG AND LARGER CONDUCTORS WITH CRIMP OR COMPRESSION TYPE CONNECTORS INSTALLED WITH TOOL RECOMMENDED BY CONNECTION MANUFACTURER AND INSULATE WITH PROPERLY SIZED 600 VOLT RATED HEAT SHRINK TUBING.
- 4. INSTALLATION SCHEDULE: BUILDING WIRE IN RACEWAYS AT ALL LOCATIONS UNLESS OTHERWISE NOTED. TYPE MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING IN DRY, INTERIOR LOCATIONS. METAL CLAD CABLE USED FOR BRANCH CIRCUIT WIRING FROM A LIGHT SWITCH OR LIGHTING CONTROL STATION TO THE LIGHT FIXTURE SHALL INCLUDE A NEUTRAL CONDUCTOR. METAL CLAD CABLE USED FOR BRANCH CIRCUIT WIRING TO LED FIXTURES THAT HAVE 0-10V DIMMING CAPABILITY SHALL BE TYPE MC-PCS.
- 5. AT THE CONTRACTOR'S OPTION, PORTIONS OF THE FIRE ALARM WIRING IN DRY, CONCEALED LOCATIONS MAY BE INSTALLED IN FIRE ALARM METAL CLAD CABLE.

#### 26 05 26 - GROUNDING AND BONDING A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION. B. INSTALLATION:

- 1. PROVIDE A SEPARATE, INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL NEW BRANCH CIRCUITS AND FEEDERS. TERMINATE EACH END ON A GROUNDING LUG, BUS, OR BUSHING.
- 2. MECHANICAL CONNECTORS: NON-REVERSIBLE CRIMP TYPE LUGS ONLY. USE FACTORY MADE COMPRESSION LUG FOR ALL TERMINATIONS. FOR TELECOMMUNICATION SYSTEMS USE COPPER, COPPER ALLOY, OR TIN-PLATED COPPER, NON-REVERSIBLE LONG BARREL CRIMP TYPE BOLT LUGS WITH TWO BOLT TONGUES FOR 6 AWG OR LARGER CONDUCTORS. CRIMP TYPE ONE HOLE FOR CONDUCTORS SMALLER THAN 6 AWG.
- BOND TOGETHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT, METAL RACEWAY SYSTEMS, GROUNDING CONDUCTOR IN RACEWAYS AND CABLES, RECEPTACLE GROUND CONNECTORS, AND PLUMBING SYSTEMS.

26 05 29 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.

B. MATERIAL: SUPPORT CHANNEL SHALL BE GALVANIZED OR PAINTED STEEL. HARDWARE SHALL BE CORROSION RESISTANT.

C. INSTALLATION: EQUIPMENT WEIGHING MORE THAN 50 POUNDS SHALL BE ADEQUATELY ANCHORED TO THE BUILDING STRUCTURE TO RESIST LATERAL EARTHQUAKE FORCES. PROVIDE SAFETY CHAINS FOR LIGHT FIXTURES, SUPPORTED FROM T-BAR OR OTHER CEILING SUSPENSION SYSTEM, CAPABLE OF SUPPORTING A MINIMUM OF 200 POUNDS. ATTACH SAFETY CHAINS AT EACH CORNER OF FIXTURE CONNECTED SUCH THAT FIXTURE WILL NOT DROP BELOW A HEIGHT OF 7'-6" IN THE EVENT OF A CEILING SUSPENSION SYSTEM FAILURE.

#### 26 05 33 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS A. SUBMITTALS: SUBMIT PRODUCT DATA FOR FLOORBOXES. B. MATERIALS

- 1. RIGID STEEL CONDUIT: ANSI C80.1. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; THREADED TYPE WITH INSULATED THROAT BUSHINGS, MATERIAL TO MATCH CONDUIT.
- 2. INTERMEDIATE METAL CONDUIT (IMC): GALVANIZED STEEL. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; USE FITTINGS AND CONDUIT BODIES SPECIFIED ABOVE FOR RIGID STEEL CONDUIT.
- 3. ELECTRICAL METALLIC TUBING CONDUIT (EMT): ANSI C80.3. GALVANIZED TUBING. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON, COMPRESSION TYPE OR SET SCREW FITTINGS WITH INSULATED THROAT BUSHINGS. DIE-CAST FITTINGS ARE NOT ACCEPTABLE MAXIMUM SIZE SHALL BE 2". PROVIDE FACTORY ELBOWS ON SIZES 1-1/2" AND LARGER.
- 4. FLEXIBLE METAL CONDUIT: FS WW-C-566; STEEL, FULL WALL OR REDUCED WALL THICKNESS. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON WITH INSULATED THROAT BUSHINGS. DIE CAST FITTINGS ARE NOT ACCEPTABLE
- 5. LIQUIDTIGHT FLEXIBLE CONDUIT: FLEXIBLE METAL CONDUIT WITH PVC JACKET. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON WITH INSULATED THROAT BUSHINGS. DIE CAST FITTINGS ARE NOT ACCEPTABLE.
- 6. PROVIDE GALVANIZED OR CADMIUM PLATED, ONE PIECE PRESSED STEEL OUTLET BOXES 4 INCH SQUARE OR OCTAGONAL, 1 1/2 INCHES DEEP MINIMUM SIZE FOR USE IN INTERIOR AREAS.
- 7. FOR TELECOMMUNICATIONS SYSTEMS, OUTLET BOXES SHALL BE 4 INCHES SQUARE, 2-1/4 INCHES DEEP MINIMUM.
- 8. PROVIDE CAST ALUMINUM OR FERALLOY TYPE BOXES WITH GASKETED COVER, THREADED HUBS AND NEMA 3R RATING FOR USE IN EXTERIOR OR
- 9. CUT-IN BOXES: MINIMUM SIZE 2" X 3" X 2-1/2" DEEP. PROVIDE CUT-IN OUTLET BOXES WHERE REQUIRED FOR INSTALLATION IN EXISTING
- 10. FLOORBOXES: PROVIDE FLOORBOX SUITABLE FOR CONCRETE OR WOOD FLOOR INSTALLATION WITH UL SCRUBPROOF COVER. WIREMOLD #RFB4E-OG (OR EQUAL) 4-GANG BOX WITH ROUND, EVOLUTION COVER AND NICKEL FINISH. PROVIDE FLUSH COVER FOR TILE FLOORS (WIREMOLD #6CTNK) AND SURFACE COVER FOR CARPET FLOORS (WIREMOLD #6CTCNK). PROVIDE INTERNAL BRACKETS AS REQUIRED.

#### C. INSTALLATION:

- 1. INSTALL CONDUIT FOR ALL SYSTEMS UNLESS OTHERWISE NOTED, 1/2 INCH MINIMUM SIZE, EXCEPT CONDUIT FOR SPECIAL SYSTEMS SHALL BE 3/4" MINIMUM.
- 2. EXPOSED DRY INTERIOR LOCATIONS SHALL BE RIGID STEEL CONDUIT OR INTERMEDIATE METAL CONDUIT. ELECTRICAL METALLIC TUBING MAY BE USED EXPOSED WHEN INSTALLED ON THE CEILING. A MINIMUM OF TEN FEET ABOVE THE FLOOR OR WHERE NOT SUBJECT TO PHYSICAL DAMAGE. EMT MAY ALSO BE USED FOR CONCEALED, DRY, INTERIOR LOCATIONS.
- 3. MOTOR AND EQUIPMENT CONNECTIONS SHALL BE SHORT EXTENSIONS OF FLEXIBLE METAL CONDUIT TO ALLOW FOR VIBRATION.
- 4. INSTALL RACEWAY AND BOXES PER THE LATEST NECA (NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION) STANDARDS
- 5. PROVIDE RACEWAYS CONCEALED IN CONSTRUCTION UNLESS SPECIFICALLY NOTED OTHERWISE, OR WHERE INSTALLED AT SURFACE CABINETS, MOTOR AND EQUIPMENT CONNECTIONS AND IN MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS. DO NOT ROUTE CONDUITS ON ROOFS, OUTSIDE OF EXTERIOR WALLS, OR ALONG THE SURFACE OF INTERIOR FINISHED WALLS UNLESS SPECIFICALLY NOTED ON THE PLANS.
- 6. PAINT ALL EXPOSED CONDUIT IN FINISHED AREAS TO MATCH SURFACE TO WHICH IT IS ATTACHED OR CROSSES. CLEAN GREASY OR DIRTY CONDUIT PRIOR TO PAINTING IN ACCORDANCE WITH PAINT MANUFACTURER'S INSTRUCTIONS.
- 7. INSTALL RACEWAYS LEVEL AND SQUARE TO A TOLERANCE OF 1/8 INCH PER 10 FEET. ROUTE EXPOSED RACEWAYS AND RACEWAYS ABOVE ACCESSIBLE CEILINGS PARALLEL AND PERPENDICULAR TO WALLS, CEILING, STRUCTURAL MEMBERS AND ADJACENT PIPING.
- 8. ALL CONDUIT FOR THE TELECOMMUNICATIONS DISTRIBUTION SYSTEM SHALL BE INSTALLED WITH NO MORE THAN THREE 90-DEGREE BENDS BETWEEN PULLBOXES. PULL BOXES SHALL NOT BE USED IN LIEU OF CONDUIT BENDS. CONDULETS (LB FITTINGS) SHALL NOT BE INSTALLED IN ANY TELECOMMUNICATIONS RACEWAY.
- 9. PROVIDE OUTLET BOXES AS SHOWN ON THE DRAWINGS, AND AS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, DEVICE INSTALLATION AND CODE COMPLIANCE.
- 10. DO NOT INSTALL BOXES BACK-TO-BACK IN WALLS. PROVIDE A MINIMUM 6 INCH SEPARATION FOR MINIMUM SOUND TRANSMISSION.
- 11. USE MULTIPLE-GANG BOXES WHERE MORE THAN ONE DEVICE ARE MOUNTED TOGETHER; DO NOT USE SECTIONAL BOXES.
- 12. SUPPORT BOXES INDEPENDENTLY OF CONDUIT.
- 13. COORDINATE MOUNTING HEIGHTS AND LOCATIONS OF OUTLETS MOUNTED ABOVE COUNTERS, BENCHES AND BACKSPLASHES.

26 05 53 - IDENTIFICATION FOR ELECTRICAL SYSTEMS A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.

#### B. MATERIALS

- 1. NAMEPLATES: ENGRAVED THREE-LAYER LAMINATED PLASTIC, WHITE LETTERS ON A BLACK BACKGROUND. NAMEPLATES SHALL BE PROVIDED TO IDENTIFY ALL ELECTRICAL DISTRIBUTION AND CONTROL EQUIPMENT AND LOADS
- TAPE LABELS: ADHESIVE TAPE LABELS, WITH 3/16 INCH BOLD BLACK LETTERS ON CLEAR BACKGROUND MADE USING DYMO RHINOPRO 5000 OR EQUAL LABEL PRINTER.
- WIRE AND CABLE MARKERS: CLOTH MARKERS, SPLIT SLEEVE OR TUBING

#### C. INSTALLATION:

- GEAR: PROVIDE ENGRAVED THREE-LAYER LAMINATED PLASTIC NAMEPLATES WITH WHITE LETTERS ON A BLACK BACKGROUND TO IDENTIFY ALL ELECTRICAL DISTRIBUTION, CONTROL EQUIPMENT, LOADS SERVED, AND LOW-VOLTAGE SYSTEM PANELS.
- 2. CONDUITS: MARK ALL CONDUITS ENTERING OR LEAVING PANELBOARDS WITH INDELIBLE BLACK MAGIC MARKER WITH THE CIRCUIT NUMBERS OF THE CIRCUITS CONTAINED INSIDE. LABEL FEEDER CONDUITS AND SPARE CONDUITS AT EACH END WITH SOURCE AND TERMINATION POINT.
- JUNCTION BOXES: MARK ALL CIRCUIT NUMBERS OF WIRING ON ALL JUNCTION BOXES WITH SHEET STEEL COVERS. MARK WITH INDELIBLE BLACK MARKER. ON EXPOSED JUNCTION BOXES IN PUBLIC AREAS, MARK ON INSIDE OF COVER. MARK ALL FIRE ALARM SYSTEM JUNCTION BOXES WITH SHEET STEEL COVERS WITH "FA." MARK WITH INDELIBLE RED MARKER. MARK ALL OTHER SPECIAL SYSTEM JUNCTION BOXES WITH SHEET STEEL COVERS.
- 4. WIRE IDENTIFICATION: PROVIDE WIRE MARKERS ON EACH CONDUCTOR IN PANELBOARD GUTTERS, PULL BOXES, OUTLET AND JUNCTION BOXES, AND AT LOAD CONNECTION. MARKERS SHALL BE LOCATED WITHIN ONE INCH OF EACH CABLE END, EXCEPT AT PANELBOARDS, WHERE MARKERS FOR BRANCH CIRCUIT CONDUCTORS SHALL BE VISIBLE WITHOUT REMOVING PANEL DEADFRONT.
- DEVICE PLATES: LABEL EACH RECEPTACLE DEVICE PLATE OR POINT OF CONNECTION DENOTING THE PANELBOARD NAME AND CIRCUIT NUMBER. INSTALL LABEL ON THE TOP OF EACH PLATE.

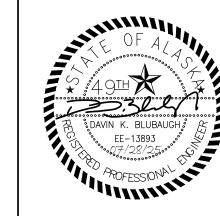
#### 26 05 83 — WIRING CONNECTIONS

A. SUBMITTALS: SUBMITTALS NOT REQUIRED FOR THIS SECTION. B. MATERIALS:

- STRAIGHT-BLADE ATTACHMENT PLUG: NEMA WD 1.
- LOCKING-BLADE ATTACHMENT PLUG: NEMA WD 5. ATTACHMENT PLUG CONFIGURATION: MATCH RECEPTACLE CONFIGURATION AT
- OUTLET PROVIDED FOR EQUIPMENT. 4. CORD CONSTRUCTION: OIL-RESISTANT THERMOSET INSULATED TYPE SO MULTICONDUCTOR FLEXIBLE CORD WITH IDENTIFIED EQUIPMENT GROUNDING
- CONDUCTOR, SUITABLE FOR EXTRA HARD USAGE IN DAMP LOCATIONS. CORD SIZE: SUITABLE FOR CONNECTED LOAD OF EQUIPMENT AND RATING OF BRANCH CIRCUIT OVERCURRENT PROTECTION.

#### C. INSTALLATION:

- 1. OBTAIN AND REVIEW SHOP DRAWINGS, PRODUCT DATA, MANUFACTURER'S WIRING DIAGRAMS, AND MANUFACTURER'S INSTRUCTIONS FOR EQUIPMENT FURNISHED UNDER OTHER SECTIONS. DETERMINE CONNECTION LOCATIONS AND REQUIREMENTS. SEQUENCE ROUGH-IN OF ELECTRICAL CONNECTIONS TO COORDINATE WITH INSTALLATION OF EQUIPMENT. SEQUENCE ELECTRICAL CONNECTIONS TO COORDINATE WITH START-UP OF EQUIPMENT
- 2. USE WIRE AND CABLE WITH INSULATION SUITABLE FOR TEMPERATURES
- ENCOUNTERED IN HEAT-PRODUCING EQUIPMENT. MAKE CONDUIT CONNECTIONS TO EQUIPMENT THAT IS SUBJECT TO VIBRATION OR MOVEMENT USING FLEXIBLE CONDUIT. USE LIQUIDTIGHT FLEXIBLE CONDUIT IN DAMP OR WET LOCATIONS.
- 4. INSTALL PRE-FINISHED CORD SET WHERE CONNECTION WITH ATTACHMENT PLUG IS INDICATED OR SPECIFIED BY THE EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS, OR USE ATTACHMENT PLUG WITH SUITABLE STRAIN-RELIEF CLAMPS.
- 5. PROVIDE SUITABLE STRAIN-RELIEF CLAMPS FOR CORD CONNECTIONS TO OUTLET BOXES AND EQUIPMENT CONNECTION BOXES.
- 6. MAKE WIRING CONNECTIONS IN CONTROL PANEL OR IN WIRING COMPARTMENT OF PRE-WIRED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PROVIDE INTERCONNECTING WIRING WHERE REQUIRED.
- 7. WHERE RECONNECTING EXISTING EQUIPMENT, EXTEND CONNECTIONS USING MATERIALS AND METHODS AS SPECIFIED.



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**ELECTRICAL SPECIFICATIONS** 

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#### **ELECTRICAL SPECIFICATIONS**

#### 26 09 23 - LIGHTING CONTROL DEVICES

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.

#### **B. MATERIALS:**

- MANUFACTURERS: WATTSTOPPER, SENSOR SWITCH, HUBBELL OR EQUAL.
- OCCUPANCY SENSOR WALL SWITCH: UL LISTED, DUAL TECHNOLOGY (PIR/ULTRASONIC OR MICROPHONICS), SELF-LEARNING, PROGRAMMABLE TIME SETTINGS, ADJUSTABLE SENSITIVITY, SUITABLE FOR INSTALLATION IN A SINGLE GANG BOX, LINE VOLTAGE OR LOW VOLTAGE, WHITE FINISH, 600W MINIMUM RATING, PROVIDE ONE OR TWO BUTTONS OR INTEGRAL DIMMER WHERE NOTED ON PLANS.
- CEILING MOUNTED OCCUPANCY SENSOR: UL LISTED, 120/277V DUAL TECHNOLOGY (PIR/ULTRASONIC OR MICROPHONICS), PROGRAMMABLE TIME SETTINGS, ADJUSTABLE SENSITIVITY, LINE VOLTAGE (120/277V) OR LOW VOLTAGE (12-24VDC), WHITE FINISH, PROVIDE MINIMUM WATTAGE RATING OR ADDITIONAL POWER PACKS AS REQUIRED TO CONTROL THE LOADS INDICATED ON THE PLANS. PROVIDE ULTRASONIC OR MICROPHONIC ONLY IN RESTROOMS WITH PARTITION STALLS
- 4. POWER PACKS: WHERE LOW VOLTAGE (12-24VDC) DEVICES ARE USED, PROVIDE POWER PACKS AS RECOMMENDED BY THE MANUFACTURER FOR THE LOADS SERVED.

#### C. INSTALLATION:

- INSTALL WALL OCCUPANCY SENSOR SWITCHES 48 INCHES ABOVE FLOOR.
- 2. FIELD ADJUST OCCUPANCY SENSORS FOR PROPER OPERATION IN THE SPACE. PROVIDE MASKING ON INFRARED LENS TO RESTRICT FIELD OF VIEW IF NECESSARY TO PREVENT UNWANTED SWITCHING FROM ADJACENT SPACES SUCH AS HALLWAYS.
- 3. PROVIDE ALL PROGRAMMING AS REQUIRED TO CONNECT AND OPERATE ALL CONNECTED FIXTURES.
- COORDINATE WITH OWNER FOR FINAL LIGHTING CONTROL SEQUENCES AND TIMER SETTINGS.
- 5. LOCATE POWER PACKS AND SIMILAR DEVICES IN CONCEALED, ACCESSIBLE AREAS.

#### 26 24 16 - PANELBOARDS

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.

#### **B. MATERIAL:**

MANUFACTURERS: MATCH EXISTING.

NEW BREAKERS IN EXISTING PANELS: NEMA AB 1; UL LISTED FOR USE IN THE PANEL. AMPERE RATING AND NUMBER OF POLES AS INDICATED ON PLANS. AIC RATING SHALL MATCH THE LOWEST RATED DEVICE IN THE PANEL

#### C. INSTALLATION:

1. INSTALL NEW BREAKER(S) IN EXISTING PANEL(S) AND TEST FOR PROPER OPERATION. UPDATE CIRCUIT DIRECTORY TO REFLECT ALL CHANGES.

#### <u>26 27 26 - WIRING DEVICES</u>

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL. **B. MATERIALS:** 

- WALL SWITCHES: SWITCHES FOR LIGHTING CIRCUITS SHALL BE ANSI/NEMA WD6 AND FEDERAL SPECIFICATION FS W-S-896 AC GENERAL USE SNAP SWITCH WITH TOGGLE HANDLE, RATED 20 AMPERES AND 120-277 VOLTS AC. HANDLE: WHITE NYLON.
- 2. RECEPTACLES: CONVENIENCE AND STRAIGHT BLADE RECEPTACLES SHALL BE NEMA AND FEDERAL SPECIFICATION FS W-C-596, TYPE 5-20R, WHITE NYLON FACE. SPECIFIC USE RECEPTACLES SHALL BE NEMA WD1 OR WD5; AS REQUIRED TO MATCH LOAD SERVED, BLACK PHENOLIC FACE. GFCI RECEPTACLES SHALL BE 20A. DUPLEX CONVENIENCE RECEPTACLE WITH INTEGRAL CLASS 'A' GROUND FAULT CURRENT INTERRUPTER AND LOCKOUT FEATURE. TAMPER-RESISTANT RECEPTACLES SHALL BE UL 489.
- WALL DIMMERS FOR 0-10V LED CIRCUITS: UL 1472; ANSI/NEMA WD6; DECORA-STYLE, COMMERCIAL GRADE PRESET WALL DIMMER SWITCH, 0-10V CONTROL FOR LED DRIVERS WITH NO POWER PACK REQUIRED TO SWITCH LINE VOLTAGE LOAD (8 A. 120-277 V): ADJUSTABLE HIGH-END AND LOW-END TRIM. COLOR: WHITE. HANDLE: PADDLE SWITCH FOR ON/OFF OPERATION WITH SMALL, DISCRETE, CAPTIVE LINEAR SLIDE FOR DIMMER ADJUSTMENT. PROVIDE SINGLE POLE UNLESS OTHERWISE INDICATED ON PLANS. DIMMER SHALL BE FULLY COMPATIBLE WITH ALL LOADS CONNECTED FOR SMOOTH, FLICKER-FREE DIMMING OPERATION.
- 4. WALL PLATES: DECORATIVE COVER PLATES IN FINISHED AREAS SHALL BE 430 OR 302 STAINLESS STEEL. PROVIDE 1/2 INCH RAISED, SQUARE, GALVANIZED OR CADMIUM PLATED. PRESSED STEEL COVER PLATE SUPPORTING DEVICES INDEPENDENT OF THE OUTLET BOX FOR ALL EXPOSED WORK.

#### C. INSTALLATION:

- 1. UNLESS OTHERWISE NOTED ON THE DRAWINGS, INSTALL RECEPTACLES 18 INCHES ABOVE FINISH FLOOR, 4 INCHES ABOVE COUNTERS AND BACKSPLASHES WITH GROUNDING POLE ON BOTTOM. UNLESS OTHERWISE NOTED DIMENSIONS ARE TO CENTERLINE OF OUTLET.
- 2. INSTALL WALL SWITCHES AND DIMMERS 48 INCHES ABOVE FLOOR, OFF POSITION DOWN.
- 3. INSTALL GALVANIZED STEEL PLATES ON OUTLET BOXES AND JUNCTION BOXES IN UNFINISHED AREAS, ABOVE ACCESSIBLE CEILINGS, AND ON SURFACE-MOUNTED OUTLETS.

#### 26 29 13 - ENCLOSED CONTROLLERS

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL. **B. MATERIALS:** 

#### MANUFACTURERS: SQUARE D, GE, EATON, OR EQUAL

2. MANUAL AND FRACTIONAL MOTOR STARTERS: NEMA ICS 2, AC GENERAL PURPOSE CLASS A, MANUALLY OPERATED UNIT WITH NUMBER OF POLES AS REQUIRED BY THE LOAD SERVED, FULL-VOLTAGE CONTROLLER FOR FRACTIONAL HORSEPOWER INDUCTION MOTORS, WITH THERMAL OVERLOAD UNIT, RED PILOT LIGHT, AND TOGGLE OPERATOR.

#### C. INSTALLATION

- 1. SELECT AND INSTALL HEATER ELEMENTS IN MOTOR STARTERS TO MATCH INSTALLED MOTOR CHARACTERISTICS.
- 2. AFTER FINAL CONNECTIONS ARE MADE, CHECK AND CORRECT THE ROTATION
- 3. MOTOR STARTING EQUIPMENT SHALL BE LISTED FOR USE AND PROPERLY SIZED FOR OPERATION WITH THE MOTORS SPECIFIED BY MECHANICAL.

#### <u>26 50 00 – LIGHTING FIXTURES</u>

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL

#### B. MATERIALS:

- LUMINAIRES: PROVIDE AND INSTALL ALL LIGHTING EQUIPMENT OR APPROVED EQUAL AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE "FIXTURE SCHEDULE". PROVIDE LIGHTING EQUIPMENT COMPLETE, WIRED ASSEMBLED, WITH PROPER FLANGES, MOUNTING SUPPORTS, HARDWARE ETC. ALL LIGHTING EQUIPMENT INSTALLED IN LAY-IN TYPE CEILINGS SHALL BE PROVIDED WITH SAFETY CHAINS, CAPABLE OF SUPPORTING 200 POUNDS, SECURELY FASTENED TO THE LIGHT FIXTURE AND THE BUILDING STRUCTURE SO THAT NO PART OF THE FIXTURE WILL DROP BELOW A HEIGHT OF 7'-6" ABOVE THE FLOOR IN THE EVENT OF A CEILING SUSPENSION SYSTEM FAILURE.
- 2. LED DRIVERS: PROVIDE UL LISTED POWER SUPPLY AS RECOMMENDED BY THE LED FIXTURE MANUFACTURER FOR OPERATION OF THE SPECIFIED LED LAMPS. POWER SUPPLY SHALL BE INTEGRAL TO THE LUMINAIRE UNLESS OTHERWISE NOTED ON THE PLANS. POWER SUPPLY SHALL OPERATE AT THE SUPPLY VOLTAGE INDICATED ON THE PLANS AND SHALL BE LISTED FOR STARTING AND OPERATING THE LAMPS AT 75F AVERAGE INDOOR TEMPERATURE.
- 3. LED DIMMING DRIVERS: PROVIDE UL LISTED 0-10V DIMMING BALLAST AS RECOMMENDED BY THE LED FIXTURE MANUFACTURER FOR OPERATION OF THE SPECIFIED LED LAMPS, FULLY COMPATIBLE WITH THE DIMMING SYSTEM OR DIMMING SWITCH CONTROLLING THE FIXTURE. DRIVER SHALL BE INTEGRAL TO THE FIXTURE AND CAPABLE OF DIMMING THE LUMINAIRE TO 20% OUTPUT MINIMUM UNLESS OTHERWISE SCHEDULED ON THE PLANS. POWER SUPPLY SHALL BE DUAL VOLTAGE (120/277V) WHERE AVAILABLE AND OPERATE AT THE SUPPLY VOLTAGE INDICATED ON THE PLANS.
- 4. LED LAMPS: UNLESS OTHERWISE SCHEDULED ON THE PLANS, PROVIDE NOMINAL 4000 K, WITH MINIMUM 75CRI AND A MINIMUM L70 LAMP LIFE OF 50,000 HOURS.
- 5. LED EMERGENCY DRIVERS: UL LISTED, FACTORY INSTALLED, SELF-CONTAINED EMERGENCY POWER SUPPLY AS RECOMMENDED BY THE LUMINAIRE MANUFACTURER, WITH MINIMUM WATTAGE, VOLTAGE AND AMPERE RATINGS SUITABLE OF AUTOMATICALLY OPERATING THE SPECIFIED FIXTURE AT 90 MINUTES UNDER LOSS OF UTILITY POWER. 120/277V INPUT.

#### C. INSTALLATION: PENDANT LUMINARIES SHALL BE INSTALLED PLUMB AND LEVEL.

- 2. INSTALL RECESSED LUMINAIRES TO PERMIT REMOVAL FROM BELOW. USE PLASTER FRAMES IN HARD CEILINGS.
- 3. SUPPORT LUMINARIES IN SUSPENDED CEILINGS FROM STRUCTURE ABOVE USING A MINIMUM OF (4) ANCHORS IN ACCORDANCE WITH SECTION 26 05
- 4. PROVIDE LUMINAIRE DISCONNECTING MEANS IN BALLAST/DRIVER CHANNEL OF EACH LIGHT FIXTURE. WHERE THE LUMINAIRE IS FED FROM A MULTI-WIRE BRANCH CIRCUIT. PROVIDE MULTI-POLE DISCONNECT TO SIMULTANEOUSLY BREAK ALL SUPPLY CONDUCTORS TO THE BALLAST, INCLUDING THE GROUNDED CONDUCTOR.
- 5. AIM ALL LUMINAIRES AND EMERGENCY LIGHTING UNITS THAT HAVE ADJUSTABLE LAMPS OR LENSES.
- 6. TEST OPERATION OF ALL EMERGENCY LIGHTS BY SIMULATING A POWER OUTAGE FOR 90 MINUTES. CONFIRM THAT ALL EMERGENCY LIGHTING IS OPERATIONAL AND MEETS THE REQUIREMENTS OF NEC 700.12(A). CORRECT ALL DEFICIENCIES PRIOR TO SUBSTANTIAL COMPLETION.

#### 27 10 00 - STRUCTURED CABLING

A. SUMMARY: THIS SECTION INCLUDES REQUIREMENTS FOR THE DESIGN AND INSTALLATION OF AN EXTENSION TO THE EXISTING TELECOMMUNICATIONS CABLING SYSTEM INCLUDING COMMUNICATIONS CABLE, TELECOMMUNICATIONS JACKS, RACEWAYS, ETC. AS REQUIRED FOR A COMPLETE AND FUNCTIONAL TELECOMMUNICATIONS CABLING SYSTEM. QUALITY ASSURANCE: ALL PRODUCTS SHALL BE OF ONE MANUFACTURER'S STRUCTURED CABLING SYSTEM. THE MANUFACTURER SHALL BE A COMPANY SPECIALIZING IN MANUFACTURING THE PRODUCTS SPECIFIED WITH A MINIMUM 5 YEARS DOCUMENTED EXPERIENCE. THE INSTALLER SHALL BE A COMPANY SPECIALIZING IN PERFORMING THIS TYPE OF WORK WITH A MINIMUM 3 YEARS DOCUMENTED EXPERIENCE AND MANUFACTURER'S CERTIFICATION TO INSTALL THE PRODUCT. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS: ANSI/TIA 568-B.1-3, ANSI/TIA 569\_A, AND ANSI/TIA 607.

#### B. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL,

#### C. MATERIALS:

- 1. UTP TELECOMMUNICATION CABLE: PLENUM-RATED CL2P, CATEGORY 6, 4 PAIR, 24 AWG SOLID COPPER CONDUCTOR TELECOMMUNICATIONS CABLE. SUPERIOR ESSEX "DATAGAIN" CMP OR APPROVED EQUAL.
- 2. UTP TELECOMMUNICATIONS JACK: RJ-45, CATEGORY6, T568A/B, 8P8C SINGLE, WHITE FINISH, TELECOMMUNICATIONS JACK WITH FLUSH EXIT WITH SINGLE-GANG FACEPLATES WITH FINISH TO MATCH JACK. ORTRONICS "TRACJACK CLARITY 6" #OR-TJ600 OR APPROVED EQUAL.
- 3. UTP MODULAR PATCH PANEL: INSTALL NEW CABLES ON EXISTING PATCH
- 4. PATCH CABLES ALL PATCH CABLES SHALL BE FACTORY MANUFACTURED TO MATCH THE APPLICABLE CABLE/CONNECTIVITY SOLUTION (I.E. THE BERK-TEK/ORTRONICS SYSTEM SHALL USE ORTRONICS MANUFACTURED PATCH CORDS, ETC.). PROVIDE 7-FOOT CATEGORY 6 PATCH CABLES WITH WHITE OR IVORY JACKET FOR CROSS-CONNECT BETWEEN THE TELEPHONE PATCH PANEL AND THE TELECOMMUNICATIONS PATCH PANELS. PROVIDE ONE PATCH CABLE FOR EACH PORT IN ALL THE TELEPHONE PATCH PANELS. PROVIDE 7-FOOT CATEGORY 6 PATCH CABLES WITH BLUE JACKET FOR INSTALLATION BETWEEN NETWORK EQUIPMENT IN THE RACK AND DEDICATED DATA PORTS IN THE TELECOMMUNICATIONS PATCH PANELS. PROVIDE ONE PATCH CABLE FOR EACH PORT IN ALL THE TELECOMMUNICATIONS PATCH PANELS. PROVIDE 9-FOOT LONG CATEGORY 6 PATCH CABLE WITH WHITE OR IVORY JACKET FOR INSTALLATION BETWEEN THE DATA JACKS IN EACH TELECOMMUNICATIONS OUTLET AND THE OWNER-PROVIDED COMPUTERS. PROVIDE ONE PATCH CABLE FOR EACH DATA JACK IN ALL THE TELECOMMUNICATIONS OUTLETS, PLUS 25% ADDITIONAL CABLES FOR FUTURE EXPANSION OR REPLACEMENT CABLES.
- 5. CABLE SUPPORT: ALL CABLES NOT INSTALLED IN CONDUIT SHALL BE SUPPORTED USING J-HOOKS, CADDY CABLECAT SERIES OR APPROVED EQUAL, WITH A MINIMUM J-HOOK SIZE EQUIVALENT TO CADDY #CAT32 OR APPROVED EQUAL. SIZE ALL J-HOOKS TO SUPPORT THE QUANTITY OF CABLES INSTALLED, PLUS A MINIMUM OF 25% SPARE CAPACITY.

#### D. INSTALLATION:

- 1. UNLESS OTHERWISE NOTED, ALL CABLES SHALL BE INSTALLED IN CONDUIT FROM THE TELECOMMUNICATIONS JACK TO THE SPACE ABOVE THE ACCESSIBLE CEILING AND IN CONDUIT THROUGH INACCESSIBLE AREAS. SUPPORT CABLES INSTALLED IN CEILING SPACES WITH J-HOOKS ANCHORED TO THE ROOF STRUCTURE. MAXIMUM SPACING BETWEEN SUPPORTS SHALL BE 4 FEET, MAXIMUM NUMBER OF CABLES ON EACH SUPPORT SHALL BE 25. CABLES SHALL BE ROUTED A MINIMUM OF 5 INCHES FROM POWER LINES 2 KVA OR LESS, 12 INCHES FROM FLUORESCENT OR HID BALLASTS, 36 INCHES FROM POWER LINES 5 KVA OR GREATER, 40 INCHES FROM TRANSFORMERS AND MOTORS. STORE A MAXIMUM OF 12 INCHES OF SLACK CABLE AT EACH OUTLET AND A MINIMUM OF 10 FEET OF SLACK CABLE AT EACH RACK. CABLE JACKET SHALL BE MAINTAINED TO WITHIN .5 INCH OF JACK AND TWISTS SHALL BE MAINTAINED TO WITHIN .25 INCH OF TERMINATION POINT. COMPLY WITH CABLE MANUFACTURERS MAXIMUM PULLING TENSION AND MINIMUM BEND RADIUS REQUIREMENTS. DO NOT STRETCH, STRESS, TIGHTLY COIL, BEND OR CRIMP CABLES. CABLES SHALL BE ROUTED SO THAT CABLE LENGTHS DO NOT EXCEED 90 METERS PER ANSI/TIA REQUIREMENTS. PERFORM END-TO-END TESTS OF EACH CABLE AFTER INSTALLATION AND TERMINATION TO SHOW COMPLIANCE WITH ANSI/TIA REQUIREMENTS.
- EACH UTP CABLE SHALL BE TESTED FOR COMPLIANCE WITH ANSI/TIA 568-B.1 AND ANSI/TIA 568B.2 CATEGORY 6 STANDARDS AFTER INSTALLATION USING A FLUKE #DTX OR APPROVED EQUAL TESTER. PROVIDE TEST RESULTS FOR ALL TESTS NOTED ABOVE IN THE FORM OF PRINTOUTS FROM THE TEST EQUIPMENT AND PROVIDE AN ELECTRONIC COPY OF THE TEST DATA FOR EACH CABLE. WHERE ANY PORTION OF THE SYSTEM DOES NOT MEET THE SPECIFICATIONS, THE CONTRACTOR SHALL CORRECT THE DEVIATION AND REPEAT ANY APPLICABLE TESTING AT NO ADDITIONAL COST TO THE OWNER. ACCEPTANCE OF THE TELECOMMUNICATIONS SYSTEM SHALL BE BASED ON THE RESULTS OF THE ABOVE TESTS, FUNCTIONALITY, AND THE RECEIPT OF DOCUMENTATION.

#### <u> 28 46 00 – FIRE DETECTION AND ALARM</u>

A. SUMMARY: THIS SECTION INCLUDES CONTRACTOR DESIGNED AND INSTALLED EXTENSION TO THE ADDRESSABLE FIRE ALARM AND SMOKE DETECTION SYSTEM AND RELOCATION OF EXISTING DEVICES. THIS IS A PERFORMANCE TYPE SPECIFICATION DESCRIBING THE MINIMUM ACCEPTABLE FIRE ALARM SYSTEM. THE CONTRACTOR SHALL DESIGN AND INSTALL THE FIRE ALARM AND SMOKE DETECTION SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 72 AND ADAG. THE FIRE ALARM DEVICES ON THE DRAWINGS ARE SHOWN IN SUGGESTED LOCATIONS. THE FINAL LOCATIONS OF ALL DEVICES SHALL BE SOLELY DETERMINED BY THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH NFPA 72 AND ADAG. ALL NEW DEVICES ADDED TO THE EXISTING FIRE ALARM CONTROL PANEL SHALL BE UL LISTED FOR OPERATION ON THE EXISTING PANEL.

#### B. SUBMITTALS: SUBMIT PRODUCT DATA AND SHOP DRAWINGS FOR APPROVAL. C. MATERIALS:

- 1. MANUFACTURER: MATCH EXISTING.
- 2. CONTROL PANEL: UPGRADE EXISTING CONTROL PANEL AND BATTERIES AS REQUIRED TO ACCOMMODATE THE NEW AND RELOCATED DEVICES. PROVIDE ALL PROGRAMMING AND TESTING AS REQUIRED. EXISTING FIRE ALARM CONTROL PANEL IS EDWARDS EST 3.
- 3. FIRE ALARM SYSTEM POWER BRANCH CIRCUITS: BUILDING WIRE AS SPECIFIED IN SECTION 26 05 19.
- 4. NOTIFICATION APPLIANCE CIRCUITS: MINIMUM #12 AWG COPPER BUILDING WIRE, AS SPECIFIED IN SECTION 26 05 19.
- 5. INITIATING AND SIGNALING LINE CIRCUITS: TWISTED, SHIELDED OR UNSHIELDED FIRE ALARM CABLE AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER. MINIMUM SIZE #16 AWG.

#### D. INSTALLATION:

- THE COMPLETE FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 2. INSTALL MANUAL PULL STATIONS WITH THE OPERATING HANDLE 48 INCHES ABOVE THE FLOOR. INSTALL AUDIBLE AND VISUAL SIGNAL DEVICES 80 INCHES ABOVE THE FLOOR OR 6" BELOW THE CEILING, WHICHEVER IS
- 3. MAKE ALL CONNECTIONS TO DOOR RELEASE DEVICES, ELEVATOR CONTROL PANELS, SPRINKLER FLOW SWITCHES, SPRINKLER VALVE TAMPER SWITCHES, SPRINKLER WATER TANK ALARM SENSORS, FIRE PUMP CONTROLLER. AND DUCT SMOKE DETECTORS.
- 4. INSTALL ALL SMOKE DETECTORS A MINIMUM OF THREE FEET FROM ANY AIR SUPPLY, RETURN, OR EXHAUST DIFFUSER AND A MINIMUM OF ONE FOOT FROM ANY LIGHT FIXTURE.
- 5. DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER THE CONSTRUCTION CLEAN UP OF ALL TRADES IS COMPLETE AND FINAL. PROTECTIVE DUST COVERS SHALL BE INSTALLED ON ALL DETECTORS PRIOR TO FINAL
- 6. FIELD LOCATE REMOTE VISUAL INDICATORS AND TEST/RESET STATIONS FOR DUCT DETECTORS IN AN ACCESSIBLE LOCATION.
- 7. TEST IN ACCORDANCE WITH NFPA 72 AND LOCAL FIRE DEPARTMENT REQUIREMENTS. PROVIDE A COMPLETED NFPA 72 INSPECTION AND TESTING FORM FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUAL AT THE COMPLETION OF TESTING AND COMMISSIONING THE FIRE ALARM SYSTEM.
- INSTALL FIRE ALARM WIRING IN A DEDICATED RACEWAY OR CABLING SYSTEM PER SECTION 26 05 33 AND 26 05 19.

#### 28 10 00 - ACCESS CONTROL

A. SUMMARY: THIS SECTION INCLUDES THE DESIGN AND INSTALLATION OF A PROXIMITY CARD ACCESS CONTROL SYSTEM.

- B. SUBMITTALS: SUBMIT PRODUCT DATA AND DETAILED SHOP DRAWINGS FOR APPROVAL SHOWING LAYOUT OF ALL CARD READERS, DOOR CONTACT SWITCHES, POWER SUPPLIES, CONDUIT/WIRING PATHWAYS, ETC. INCLUDE RISER DIAGRAMS AND WIRING DIAGRAMS INCLUDING A DOOR CONNECTION DIAGRAM FOR EACH UNIQUE TYPE OF DOOR. COORDINATE WITH DOOR HARDWARE SUPPLIER PRIOR TO PREPARING SHOP DRAWINGS TO ENSURE THAT THE DOOR HARDWARE PROVIDED FOR THE PROJECT IS COMPATIBLE WITH THE ACCESS CONTROL SYSTEM.
- C. QUALIFICATIONS: THE ACCESS CONTROL SYSTEM SHALL BE DESIGNED, ASSEMBLED AND INSTALLED BY A SECURITY SYSTEMS INTEGRATOR. THE SECURITY SYSTEMS INTEGRATOR SHALL HAVE A MINIMUM OF THREE YEARS DOCUMENTED EXPERIENCE ASSEMBLING AND INSTALLING THESE TYPES OF SYSTEMS.
  - 1. PROVIDE EXTENSION TO THE EXISTING ACCESS CONTROL SYSTEM CONSISTING OF CARD READERS AT DOORS SHOWN ON PLANS, DOOR CONTACT SWITCHES, AND POWER SUPPLIES. INCLUDE ALL ACCESSORIES, CABLES AND EQUIPMENT CONNECTIONS FOR A COMPLETE AND FUNCTIONAL SYSTEM.
  - CARD READERS: UL294, PROXIMITY CARD READER WITH 2.4GHZ, 13.56 MHZ AND 125 KHZ CREDENTIAL COMPATIBILITY, 1.6"-4" READ RANGE, 12VDC, EAL 5+ CERTIFIED SECURITY ELEMENT HARDWARE, -31F TO 150F OPERATING TEMPERATURE, BLACK HOUSING, AND LED INDICATOR LIGHT. PROVIDE WITH SINGLE GANG MOUNTING UNLESS OTHERWISE NOTED. PROVIDE MULLION MOUNTING WHERE INDICATED ON PLANS. HID SIGNO 40 SERIES OR EQUAL. PROVIDE OWNER WITH 25 BLANK COMPATIBLE CARDS.
  - 3. DOOR CONTROLLERS: INTELLIGENT SYSTEM CONTROLLER HID MERCURY
  - 4. REQUEST TO EXIT SENSOR: UL 294, PASSIVE INFRARED SENSOR, INTERIOR USE, BOSCH #DS161. INTERFACE MODULE: DUAL READER INTERFACE MODULE - HID MERCURY #MR62E.
  - 6. POWER SUPPLY AND ENCLOSURE: EXISTING LIFE SAFETY POWER #FP0150-B100C8D8PE4M TO REMAIN. PROVIDE NEW INTERFACE MODULE AS REQUIRED TO ACCOMMODATE NEW DOORS IN THIS PROJECT.
- 7. DOOR CONTACTS: RECESSED STEEL DOOR CONTACT WITH WIRE LEADS, 1" DIAMETER, DPDT, WHITE, INTERLOGIX #1078W-N OR EQUAL. 8. SOFTWARE: EXISTING AVIGILON ACCESS CONTROL MANAGER SERVER
- #AC-APP-16RET2-6 TO REMAIN. 9. WIRE AND CABLE: PLENUM RATED CABLE AS RECOMMENDED BY THE
- MANUFACTURER.

#### E. INSTALLATION: 1. INSTALL AND TEST IN ACCORDANCE WITH THE MANUFACTURER'S

- RECOMMENDATIONS. 2. INSTALL WIRING IN RACEWAY (3/4 INCH MINIMUM SIZE) IN CONCEALED OR
- EXPOSED AREAS. WIRING ABOVE ACCESSIBLE CEILINGS MAY BE INSTALLED IN J-HOOK PATHWAYS ON 48" CENTERS MAX. 3. WIRING SPLICES ARE TO BE AVOIDED TO THE EXTENT POSSIBLE, AND IF NEEDED
- THEY MUST BE MADE ONLY IN JUNCTION BOXES AND SHALL BE CRIMP CONNECTED. WIRE NUT-TYPE CONNECTIONS ARE NOT ACCEPTABLE. 4. LABELING: PROVIDE RIVETED NAMEPLATE ON ALL HEADEND EQUIPMENT. PROVIDE
- LABEL ON EACH SECURITY FIELD DEVICE, DENOTING DEVICE ADDRESS. INSTALL WIRE MARKER FOR EACH CABLE AT CABINETS, PULL BOXES, JUNCTION BOXES, AND EACH LOAD CONNECTION. WIRE ID NUMBER TO MATCH AT EACH END. 5. INSTALL 1-FOOT CABLE SERVICE LOOP FOR ALL SECURITY SYSTEM CABLE AT THE
- LAST J-HOOK NEAREST THE RACEWAY DOWN TO THE DEVICE, OR AS NEAR AS POSSIBLE TO THE DEVICE WHEN J-HOOKS ARE NOT INSTALLED.
- 6. DOOR CONTACTS: SECURE THE MAGNET SIDE OF RECESSED DOOR CONTACTS IN THE DOOR, USING METAL MOUNTING BRACKETS AS REQUIRED. MAGNET SHALL NOT BE MOUNTED ON A WOOD SPACER BLOCK TO MAKE IT FLUSH WITH THE TOP OF THE DOOR
- 7. DEMONSTRATION: DEMONSTRATE PROPER OPERATION OF ALL SECURITY FUNCTIONS, SCHEDULES AND DOOR OPERATION.
- 8. TRAINING: FURNISH 4 HOURS OF INSTRUCTION EACH FOR TWO PERSONS, TO BE CONDUCTED AT PROJECT SITE WITH MANUFACTURER'S REPRESENTATIVE.

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**CONSULTANT:** RSA

Mechanical and

**Electrical Consulting** Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521 Corporate No.: AECC542

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	DATE: DRAWN BY: CHECKED BY:			25-07-28		
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	REVISION	DESCRIPTION		DATE		

**ELECTRICAL SPECIFICATIONS** 

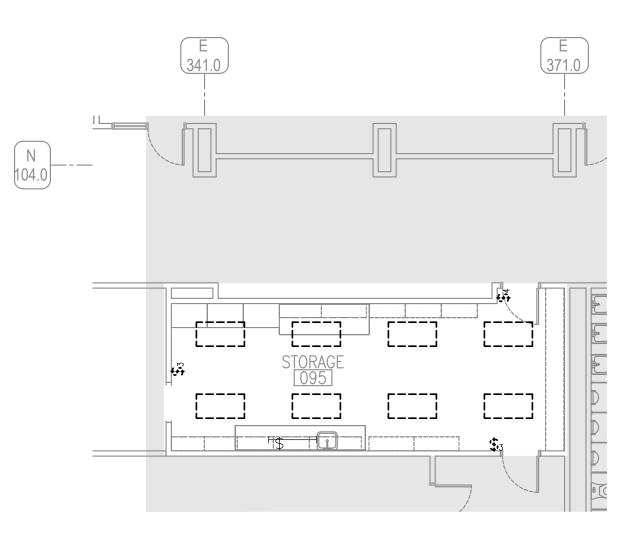
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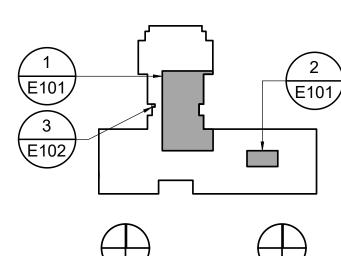
- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.
- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.
- C. DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- D. UNLESS OTHERWISE NOTED, DISCONNECT, REMOVE AND SALVAGE ALL 2'x4' LIGHT FIXTURES FOR RELOCATION.
- E. UNLESS OTHERWISE NOTED, FOR ALL AREAS OF WORK DEMOLISH ALL CONDUIT AND WIRING BACK TO A POINT WHERE THE LIGHTING CIRCUITS CAN BE REUSED.

#### SHEET NOTES

- 1. REMOVE POWER FEED TO RACKETBALL ROOM FIXTURES AND ABANDON IN PLACE (REFERENCE NOTE 2 BELOW).
- 2. 5-GANG SWITCH BOX NOTED CONTAINS LIGHT SWITCHES FOR THE LAUNDRY ROOM, RACKETBALL ROOM, AND 3 HALLWAY/CORRIDOR LIGHTING CIRCUITS. DEMOLISH ALL SWITCHES. DEMOLISH THE RACKETBALL SWITCH LEG TO FURTHEST EXTENT PRACTICAL. SALVAGE THE BOX AND REMAINING CIRCUITS FOR REUSE WITH NEW SWITCHES IN SAME LOCATION.

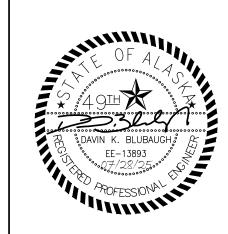


LIGHTING DEMOLITION PLAN



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# **TENANT** H OFFICES **(B)** NTS CITY OF VALDEZ VCS DISTRICT

DISTRICT IMPROVEME



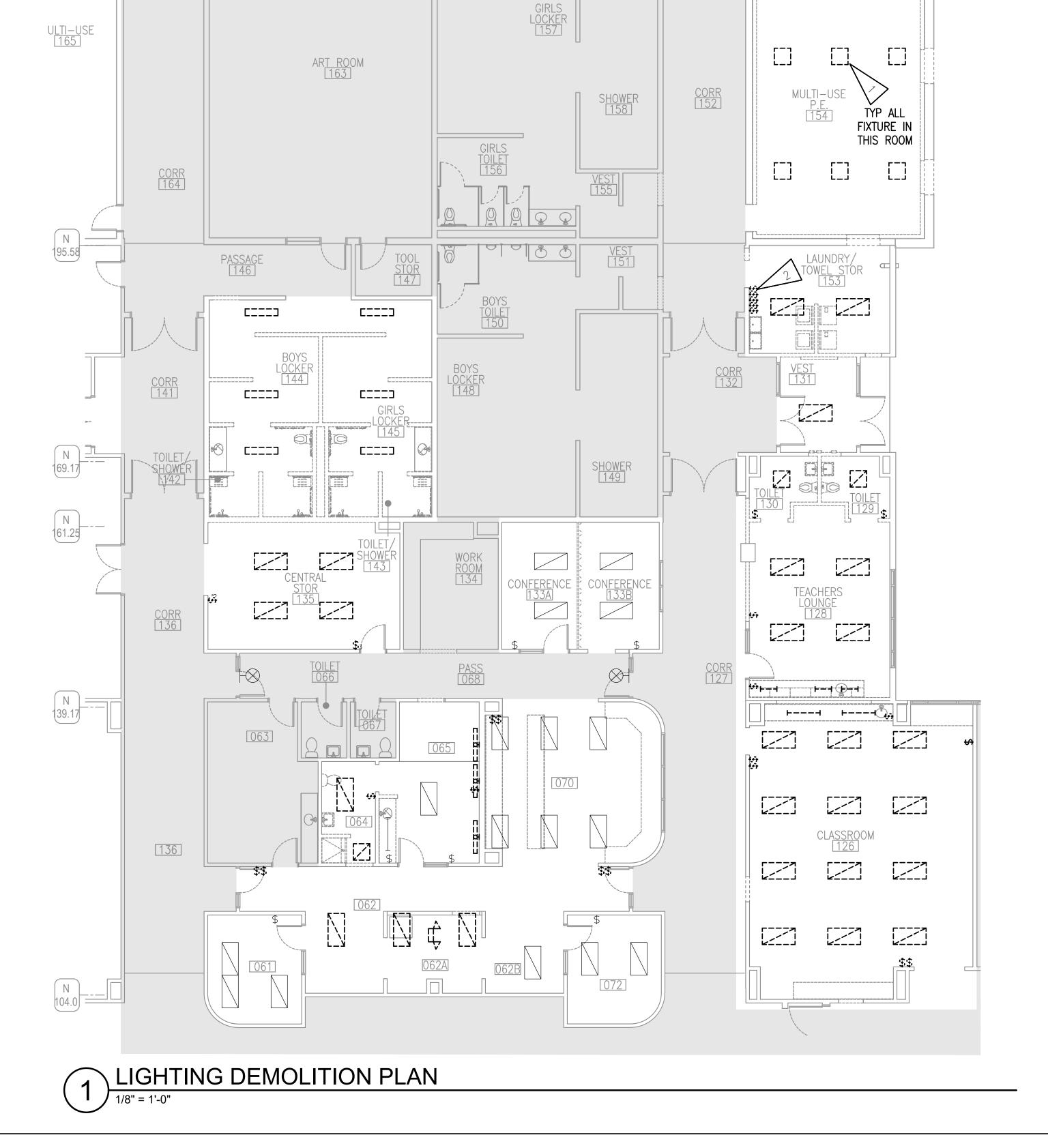
Engineers
670 West Fireweed Lane, Suite 200
Anchorage, AK 99503
(907)276-0521

Corporate No.: AECC542

PROJECT NO: M4088.10 2025-07-28 DATE: DB DRAWN BY: CHECKED BY: LIGHTING DEMOLITION PLANS

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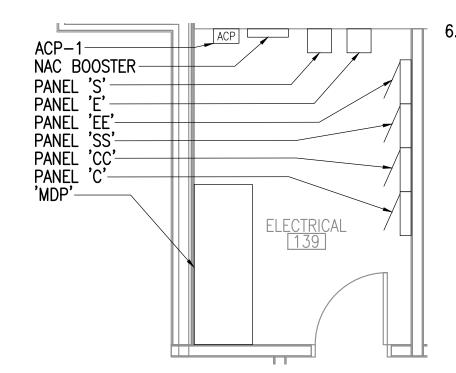
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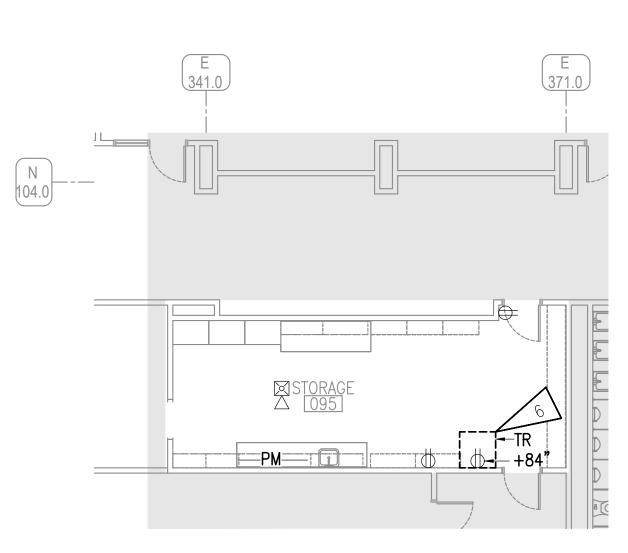
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- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.
- C. DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- D. UNLESS OTHERWISE NOTED, SALVAGE ALL FIRE ALARM DEVICES AND PA SYSTEM DEVICES (CLOCKS/SPEAKERS/INTERCOM STATION) FOR RELOCATION.

### SHEET NOTES

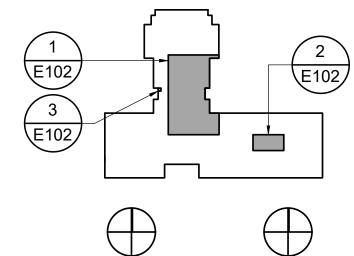
- DISCONNECT, REMOVE, AND SALVAGE ADA OPERATORS AND FIRE ALARM PULL STATION WITHIN VESTIBULE FOR RELOCATION.
- SAWCUT FLOOR IN APPROXIMATE LOCATION SHOWN FOR POWER AND DATA ACCESS.
- 3. PANEL NOTED TO BE RELOCATED. DISCONNECT ALL REMAINING BRANCH CIRCUITS AND FEEDER AND SALVAGE FOR REUSE/RELOCATION.
- DISCONNECT POWER TO MECHANICAL EQUIPMENT WHICH IS BEING DEMOLISHED. REMOVE CONDUCTORS BACK TO SOURCE. RETAIN CONDUIT FOR REUSE WHERE CODE COMPLIANT AND SAVE FOR CONNECTION TO NEW EQUIPMENT. LOCATED IN HVAC TUNNEL, SEE MECHANICAL.
- 5. LOCATED IN HVAC TUNNEL, SEE MECHANICAL.
- DEMOLISH ABANDONED TELECOM RACK AND EMPTY WIREMOLD UP TO CEILING. RECEPTACLE TO REMAIN.



# ELECTRICAL ROOM REFERENCE PLAN



POWER & SIGNAL DEMOLITION PLAN



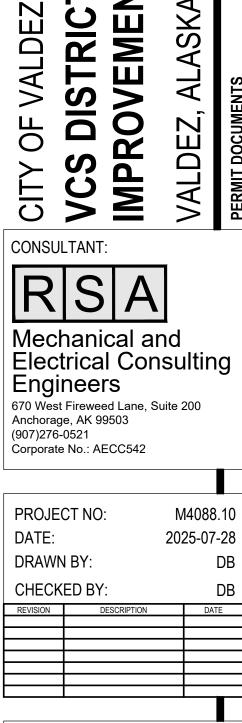
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POWER & SIGNAL **DEMOLITION PLANS** 





POWER & SIGNAL DEMOLITION PLAN

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LIGHTING RENOVATION PLAN

#### **GENERAL NOTES:**

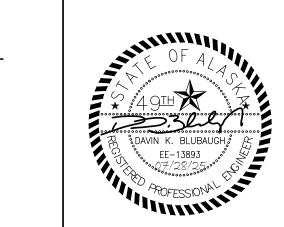
- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS PRIOR TO START OF WORK.
- B. CLEAN ALL SALVAGED <u>2'x4' LIGHT FIXTURES</u> PRIOR TO RELOCATION/INSTALLATION.
- C. UNLESS OTHERWISE NOTED, UTILIZE EXISTING LOCAL LIGHTING CIRCUITS FOR ALL RELOCATED AND NEW FIXTURES. PROVIDE NEW SWITCHING AS SHOWN. LIGHTING CIRCUITING AND CONTROL WIRING NOT SHOWN FOR CLARITY, BUT SHALL BE PROVIDED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- D. PROVIDE AN UNSWITCHED CONDUCTOR FROM LOCAL LIGHTING CIRCUIT TO ALL EMERGENCY FIXTURES.

### SHEET NOTES

1. PROVIDE NEW 5-GANG SWITCH COVER (ONE BLANK) FOR THE NEW LIGHT SWITCHES SHOWN. RECONNECT THE 3 HALLWAY/CORRIDOR LIGHTING CIRCUITS TO THE NEW KEYED SWITCHES AND CONNECT THE LOCAL ROOM LIGHTING TO THE DIMMING SWITCH.

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# **TENANT** HE OFFICES **(B)** DISTRICT CITY OF VALDEZ VCS DISTRICT

IMPROVEME

M4088.10 2025-07-28

DB

CONSULTANT:

Mechanical and Electrical Consulting Engineers
670 West Fireweed Lane, Suite 200
Anchorage, AK 99503
(907)276-0521
Corporate No.: AECC542

PROJECT NO: DATE: DRAWN BY:

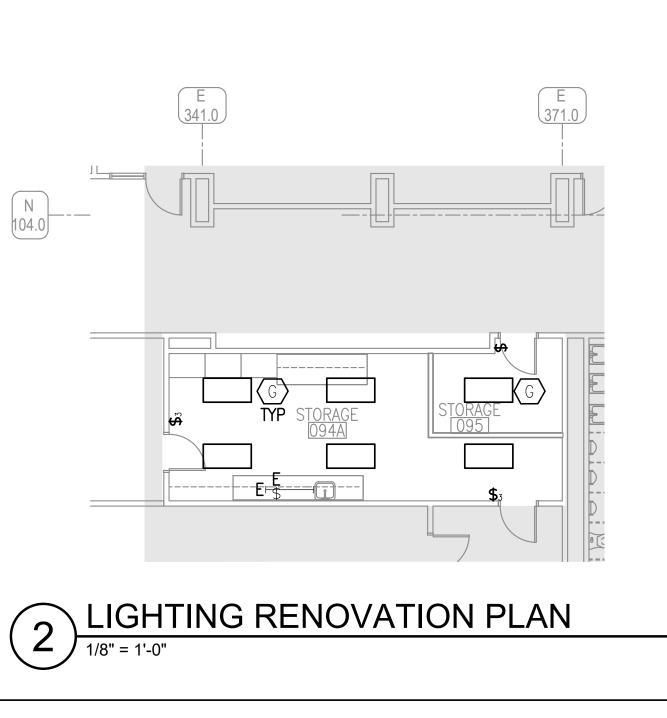
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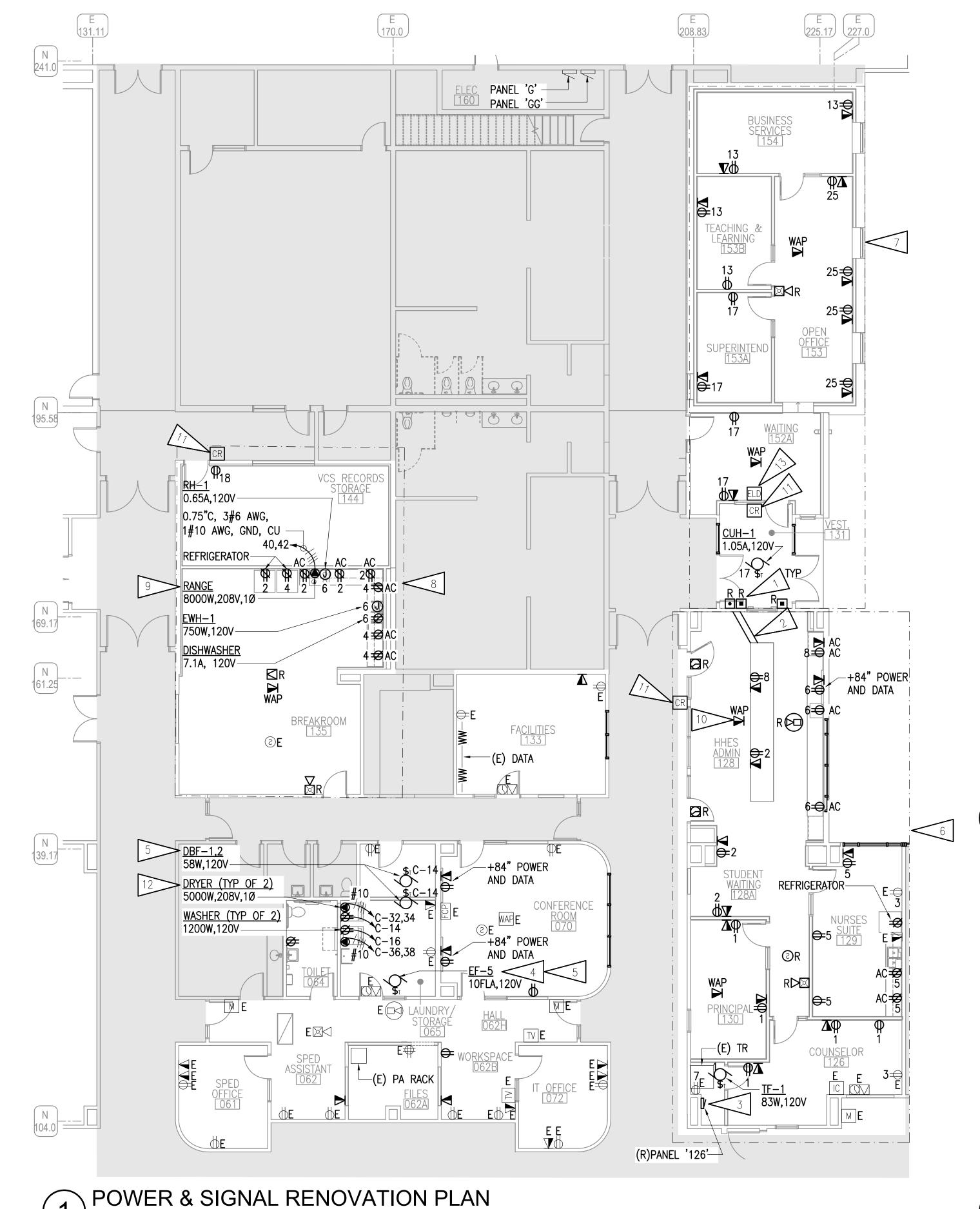
LIGHTING RENOVATION PLANS

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#### **GENERAL NOTES:**

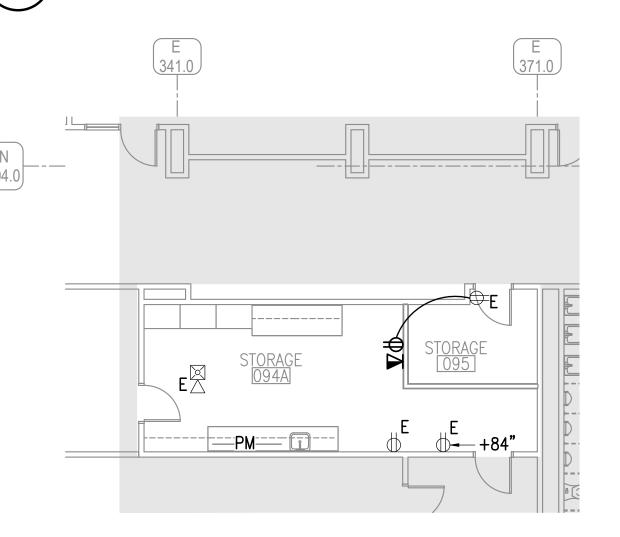
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- NEW RECEPTACLES THAT ARE NOT SPECIFICALLY NOTED OR SHOWN WITH CIRCUIT NUMBERS ARE TO BE FED FROM THE NEAREST LOCAL RECEPTACLE CIRCUIT WITHIN THE SAME
- PROVIDE (2) CAT 6 CABLES TO EACH TELECOM AND WAP DEVICE LOCATION. UNLESS OTHERWISE NOTED, ALL NEW DATA CABLING SHALL BE ROUTED BACK TO THE EXISTING MAIN TELECOM ROOM 027 ON THE WEST END OF THE SCHOOL, REFERENCE THE KEY PLAN FOR APPROXIMATE LOCATION.
- PROVIDE TAMPERPROOF RECEPTACLES WHERE REQUIRED BY THE NEC.
- E. RELOCATE FIRE ALARM AND PA SYSTEM DEVICES AS SHOWN. PROVIDE NEW WIRING TO (E) FIRE ALARM CONTROL PANEL IN CONFERENCE ROOM 070 AND (E) PA RACK IN FILES 062A, RESPECTIVELY.
- PROVIDE TESTING/RE-CERTIFICATION OF THE FIRE ALARM SYSTEM AS REQUIRED BY STATE AND NFPA 72 REQUIREMENTS.
- G. SEE THE ACCESS CONTROL SYSTEM DETAILS ON SHEET E401.
- H. SEE THE PANEL SCHEDULES ON SHEET E401.

# (E)ACP-1— (E)NAC BOOSTER (E)PANEL 'S'— (E)PANEL 'E'— (E)PANEL 'EE'-(E)PANEL 'SS'-(E)PANEL 'CC'-(E)PANEL 'C'-(E)'MDP'-

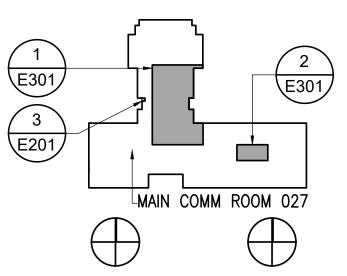
- STATION WITHIN VESTIBULE TO ACCOMMODATE NEW
- 2. ROUTE NEW POWER AND DATA TO DESK/FURNITURE THROUGH

- 6. ALL NEW RECEPTACLES IN AREA NOTED TO BE FED FROM (R) PANEL '126' IN COMM ROOM 130C. NUMBERS ADJACENT TO DEVICES CORRESPOND TO THE CIRCUIT NUMBER IN PANEL '126'. ALL NEW DATA JACKS TO CONNECT TO SPARE PATCH PANELS WITHIN (E) TELECOM RACK IN COMM ROOM 130C.
- 50A, 2-POLE BREAKER LISTED FOR USE WITHIN (E) PANEL 'C' WHICH IS A SQAURE D TYPE NOOB PANELBOARD. COORDINATE WITH FINAL SELECTED RANGE FOR EXACT RECEPTACLE AND WIRING CONFIGURATION PRIOR TO ROUGH-IN.
- 11. PROVIDE NEW CARD READER AND CONNECT TO EXISTING DOOR SECURITY SYSTEM ACP-1 WITHIN ELECTRICAL ROOM 139.
- 12. PROVIDE NEMA 14-30R RECEPTACLE FOR DRYERS AND CONNECT TO (E) 30A, 2-POLE BREAKER WITHIN (E) PANEL 'C'. COORDINATE WITH FINAL SELECTED DRYER FOR EXACT RECEPTACLE AND WIRING CONFIGURATION PRIOR TO ROUGH-IN.
- 13. PROVIDE NEW EMERGENCY LOCKDOWN BUTTON AT RECEPTION

# ELECTRICAL ROOM REFERENCE PLAN



POWER & SIGNAL RENOVATION PLAN



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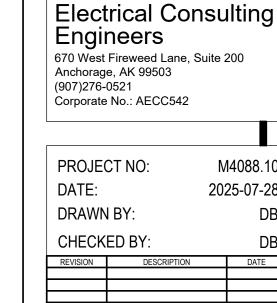
SHEET NOTES

RELOCATE SALVAGED ADA OPERATORS AND FIRE ALARM PULL CONSTRUCTION. PROVIDE EXTENSION OF EXISTING CONDUIT AND WIRING AS REQUIRED.

SAWCUT FLOOR THEN PATCH AND REPAIR FLOOR.

- RELOCATE PANEL AS SHOWN. PROVIDE EXTENSION OF EXISTING FEEDER AND BRANCH CIRCUIT CONDUIT AND WIRING AS REQUIRED TO CONNECT TO RELOCATED PANEL. ASSUME FEEDER SIZE IS 1.25"C, 4#2 AWG, 1#8 AWG GND, CU AND FIELD VERIFY PRIOR TO STARTING WORK.
- 4. EXTEND AND RECONNECT EXISTING SAVED CONDUIT TO NEW EQUIPMENT. PROVIDE ADDITIONAL CONDUIT AND JUNCTION BOXES PROVIDE NEW CONDUCTORS (SIZED AS SHOWN). UPDATE PANELBOARD CIRCUIT DIRECTORY TO REFLECT CHANGE.
- 5. LOCATED IN HVAC TUNNEL, SEE MECHANICAL.
- 7. ALL NEW RECEPTACLES IN AREA NOTED TO BE FED FROM (E) PANEL 'G' IN ELECTRICAL ROOM 160. NUMBERS ADJACENT TO DEVICES CORRESPOND TO THE CIRCUIT NUMBER IN PANEL 'G'.
- 8. ALL NEW RECEPTACLES IN AREA NOTED TO BE FED FROM (E) PANEL 'C' IN ELECTRICAL ROOM 139. NUMBERS ADJACENT TO DEVICES CORRESPOND TO THE CIRCUIT NUMBER IN PANEL 'C'.
- 9. PROVIDE NEMA 14-50R RECEPTACLE FOR RANGE. PROVIDE NEW
- 10. DATA DROP FOR OWNER FURNISHED CONTRACTOR INSTALLED WIRELESS ACCESS POINT.
- DESK AND CONNECT TO EXISTING DOOR SECURITY SYSTEM ACP-1 WITHIN ELECTRICAL ROOM 139.





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**CONSULTANT:** 

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M4088.10 2025-07-28 DB **POWER & SIGNAL RENOVATION PLANS** 

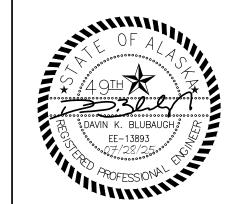
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A.	THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT
	DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY.
	THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE
	INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL
	ITEMS PRIOR TO START OF WORK.

#### B. NEW A

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	0.4.01.50	4415	DE #050

- 1. CABLES AND DEVICES SHOWN ARE TYPICAL FOR ALL EXISTING AND NEW DOORS.
- 2. SEE ARCHITECTURAL PLANS FOR DOOR NUMBERS ON ALL CONTROLLED DOORS.
- CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT SYSTEM LAYOUT, AND ALL QUANTITIES AND LOCATIONS OF ACCESS CONTROL PANELS. COORDINATE WITH OWNER FOR APPROVAL OF ALL PANEL LOCATIONS PRIOR TO START OF WORK.



# OI OFFICES -PROVEMENTS **OFFICES** DISTRICT ANT IMPR OF VALDEZ

ANT ALDI TEN 

CITY

CONSULTANT: Mechanical and Electrical Consulting

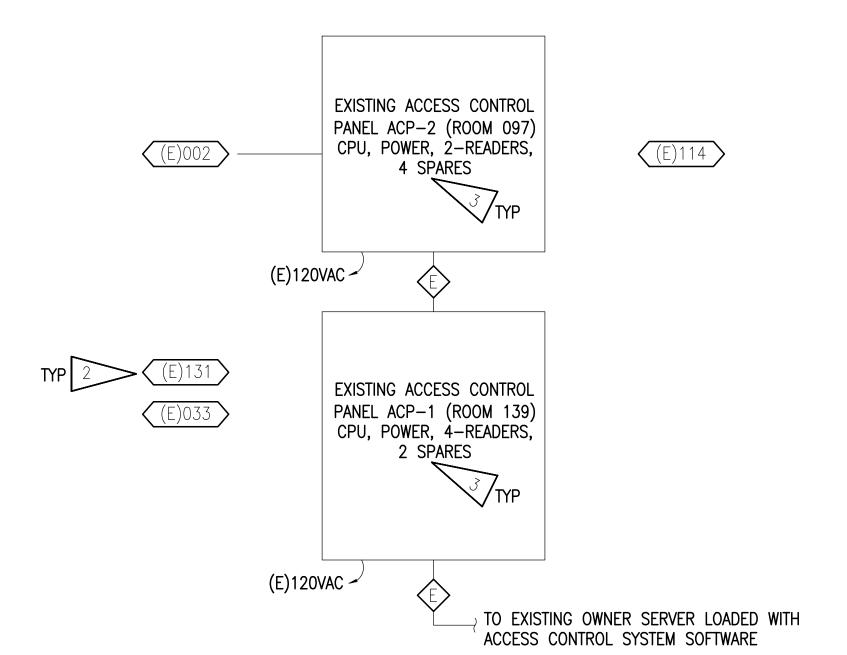
Engineers 670 West Fireweed Lane, Suite 200 Anchorage, AK 99503 (907)276-0521 Corporate No.: AECC542

PROJEC	CT NO:	M	14088.1
DATE:		202	25-07-28
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CHECK	ED BY:		DE
REVISION	DESCRIPTION		DATE

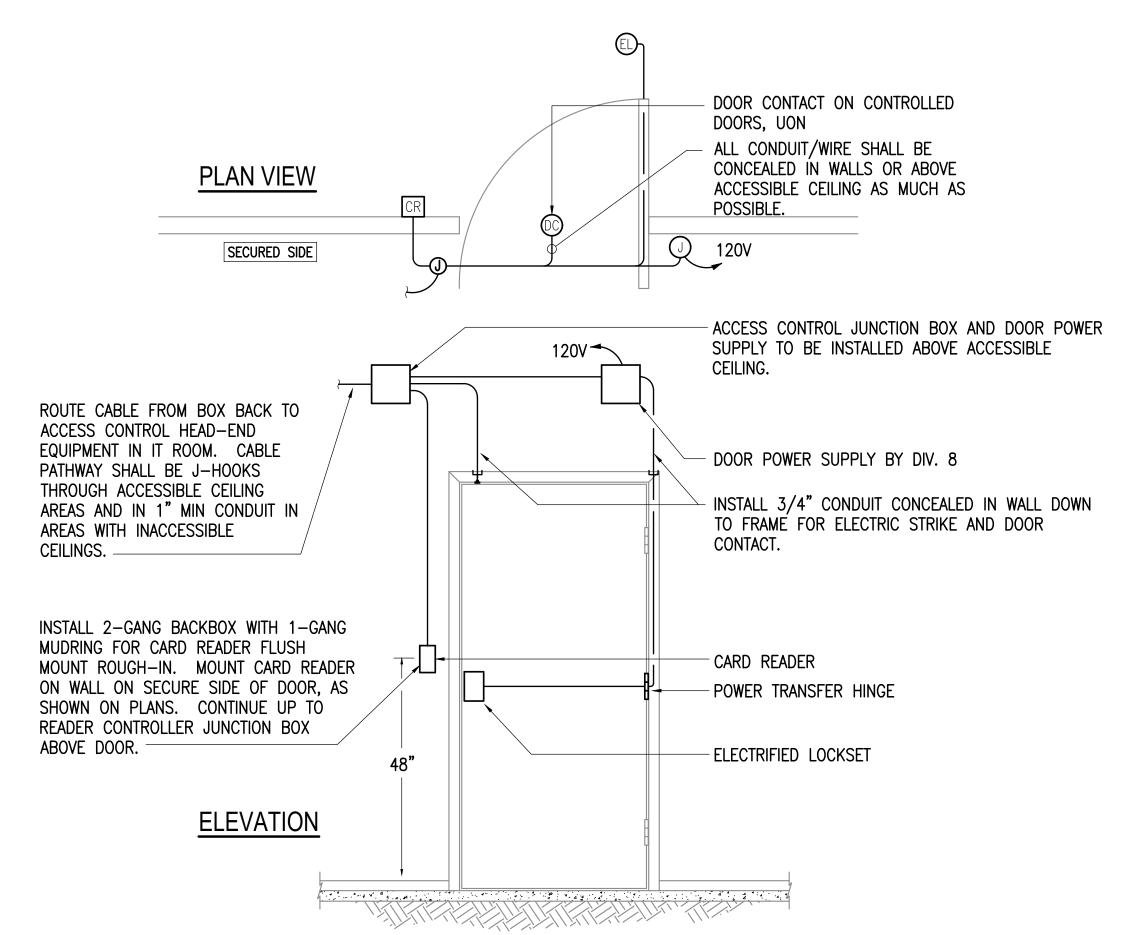
**ELECTRICAL DETAILS** 

E401

ACCESS CONTROL SYSTEM CABLE SCHEDULE						
CABLE NUMBER	DESCRIPTION	CABLE TYPE				
$\diamondsuit$	CARD READER CABLE	3-PAIR, 22 AWG, ORANGE COLOR				
B	REX CABLE	4-CONDUCTOR, 22 AWG, BLUE COLOR				
$\Diamond$	DOOR CONTACT CABLE	2-CONDUCTOR, 22 AWG, WHITE COLOR				
	LOCK/STRIKE CABLE	4-CONDUCTOR, 18 AWG, GREY COLOR				



ACCESS CONTROL SYSTEM RISER DIAGRAM NO SCALE



TYPICAL CONTROLLED DOOR

NO SCALE