

O.M.B. / D.F.M.
STATE OF DELAWARE CONTRACT NO. MC1002000770

THOMAS COLLINS BUILDING ELEVATOR UPGRADES

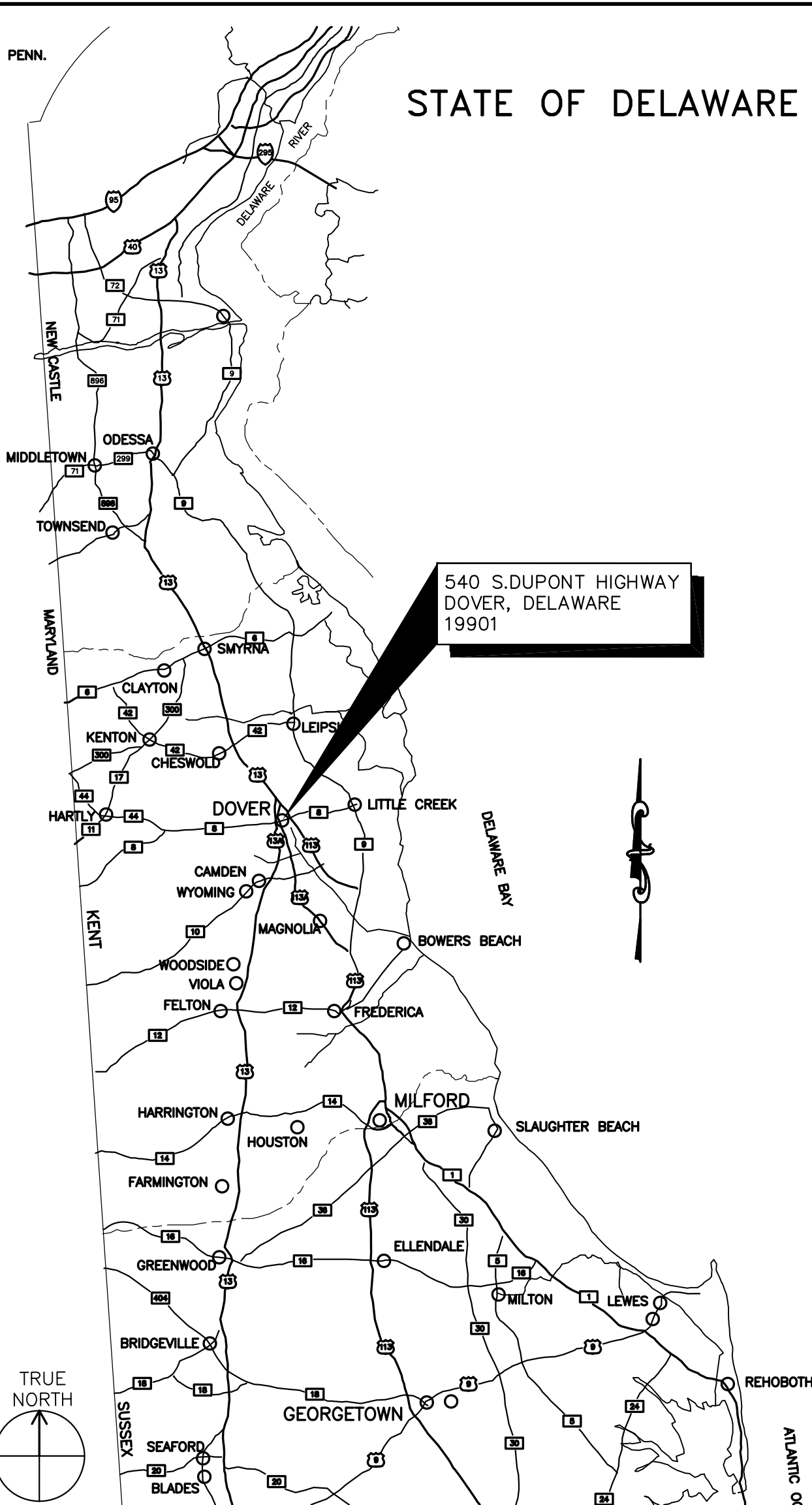
AT
540 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901

BID SET
JUNE 5, 2023

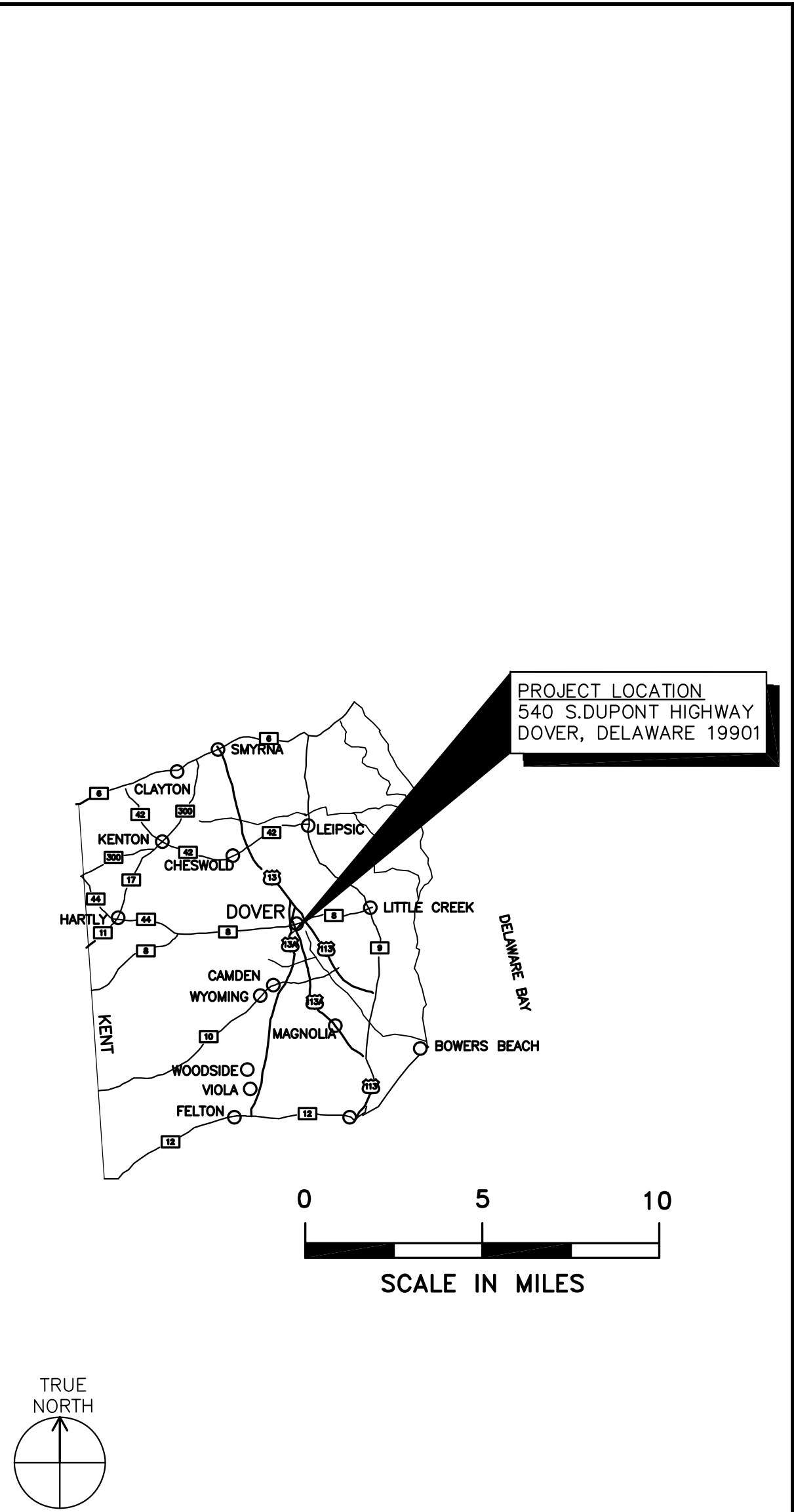
dbf DAVIS
BOWEN &
FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

**FAYDA ENGINEERING &
ENERGY SOLUTIONS, LLC**
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com

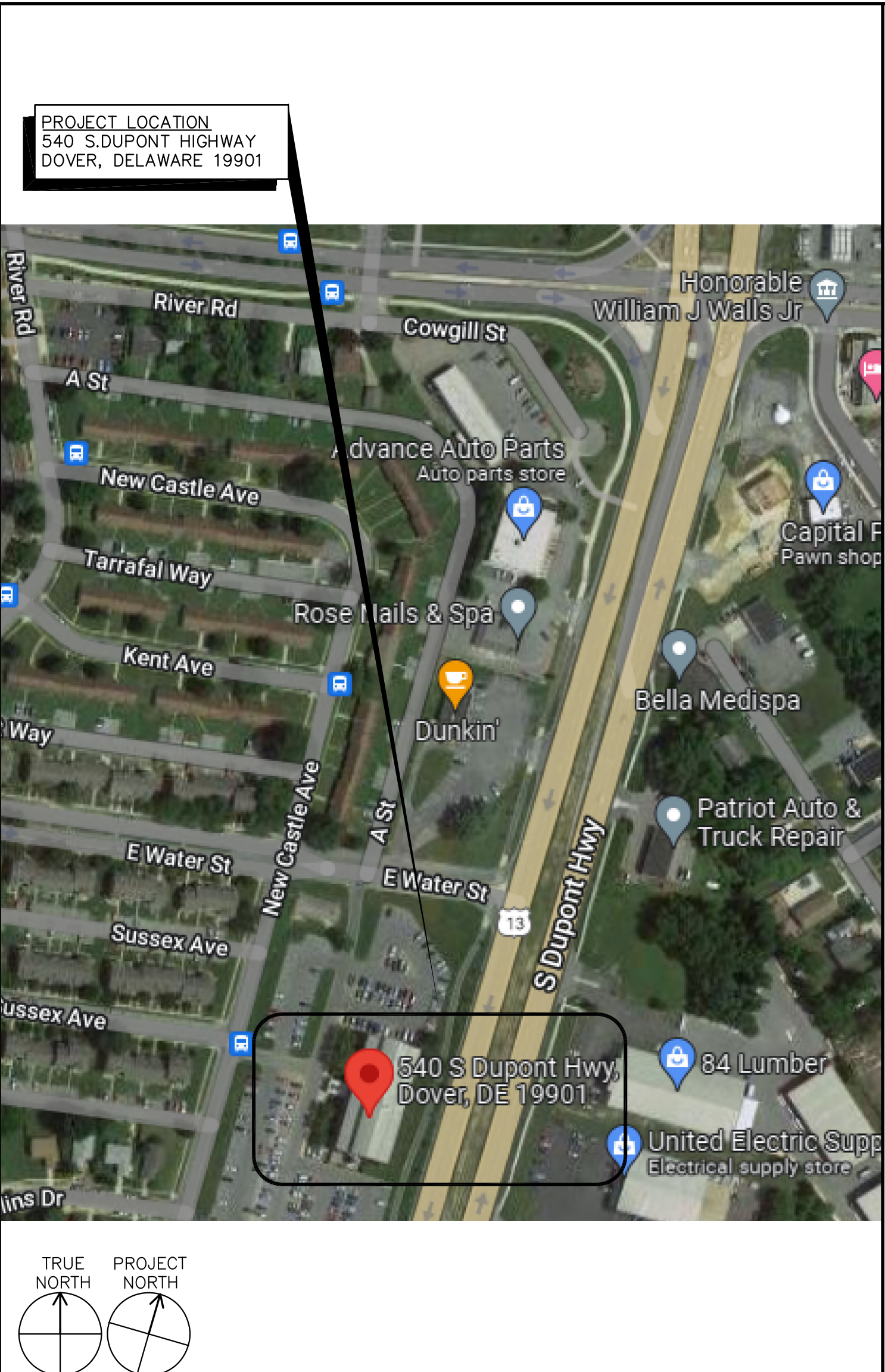
- GENERAL NOTES:**
- SCOPE OF WORK INCLUDES WORK SHOWN IN THESE DRAWINGS AND THE PROJECT SPECIFICATIONS. ALL WORK NOTED SHALL BE BASE BID UNLESS NOTED OTHERWISE.
 - THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE CONSTRUCTION. ANY VARIATIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO CONSTRUCTION.
 - ANY CHANGE OR FIELD ALTERATION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION.
 - ANY ITEMS NOT SPECIFICALLY SHOWN ON THE DRAWINGS, BUT WHICH ARE REASONABLY INCIDENTAL TO AND NECESSARY FOR THE SATISFACTORY COMPLETION OF THE PROJECT IN ACCORDANCE WITH INDUSTRY STANDARDS & JURISDICTIONAL CODE, ARE INCLUDED WITHIN THE INTENT OF THESE DRAWINGS.
 - OWNER'S ENVIRONMENTAL CONTRACTOR WILL BE RESPONSIBLE FOR TESTING AND REMOVAL OF HAZARDOUS MATERIALS.
 - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY SHORING, BRACING, AND CONSTRUCTION AIDS FOR DEMOLITION AND NEW CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL AREAS IN AND AROUND THE AREA OF WORK AND SECURE ALL MATERIALS AND EQUIPMENT. SPECIAL CARE SHOULD BE TAKEN NOT TO LEAVE HAZARDOUS CONDITIONS POTENTIALLY DANGEROUS TO THE PUBLIC.
 - BUILDING SHALL REMAIN OCCUPIED DURING CONSTRUCTION. PROTECTIVE MEASURES SAFEGUARDING VISITORS AND OCCUPANTS SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED WITHIN AND AROUND THE AREA OF WORK.
 - TEMPORARY DISRUPTION OF SERVICES THAT MAY BE REQUIRED DURING THE WORK SHALL NOT PROCEED WITHOUT PRIOR COORDINATION WITH THE OWNER.
 - PROJECT PHASING: ALL WORK ASSOCIATED WITH ELEVATOR #2, THE HOISTWAY AND THE ELEVATOR MACHINE ROOM SHALL BE INCLUDED IN PHASE 1. ALL WORK ASSOCIATED WITH ELEVATOR #1 SHALL BE INCLUDED IN PHASE 2.



LOCATION MAP



AREA MAP



SITE MAP

INDEX OF DRAWINGS

- GENERAL**
- T1 TITLE SHEET
 - T2 ARCHITECTURAL SYMBOLS, ABBREVIATIONS, & CODE DATA
 - T3 KEY PLAN
- ARCHITECTURAL**
- D1.1 DEMOLITION PLANS
 - A1.1 PARTIAL FLOOR PLANS - NEW WORK
 - A1.2 DETAILS & SCHEDULES - NEW WORK
- FIRE PROTECTION**
- FP1.1 FIRE PROTECTION - PARTIAL FIRST FLOOR PLAN
- PLUMBING**
- P1.1 PLUMBING - PARTIAL FIRST FLOOR PLAN
 - P2.1 PLUMBING SCHEDULES & NOTES
- MECHANICAL**
- DM1.1 MECHANICAL - HVAC DEMOLITION PLAN
 - M1.1 MECHANICAL - HVAC PLAN
- ELECTRICAL**
- E1.1 PARTIAL FIRST FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - REMOVAL WORK
 - E1.2 PARTIAL FLOOR PLANS - LIGHTING, POWER & SPECIAL SYSTEMS - REMOVAL WORK
 - E2.1 PARTIAL FIRST FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - NEW WORK
 - E2.2 PARTIAL FLOOR PLANS - LIGHTING, POWER & SPECIAL SYSTEMS - NEW WORK
 - E3.1 SINGLE LINE DIAGRAM, SCHEDULES & DETAILS

--	--

--	--

Project:
O.M.B. / D.F.M.
**THOMAS COLLINS BUILDING
ELEVATOR UPGRADES**
**540 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770**

Set No.: BID SET	Sheet Title: TITLE SHEET
Proj. No.: 0506B045.B01	Scale: AS NOTED
Dwn. By: LMP	Date: 6/5/23

T1

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 2023

ARCHITECTURAL WORKING

DRAWING ABBREVIATIONS

SYMBOLS used as abbreviations

∠	angle	DP	damp proofing	HOR	horizontal	PT	point	VCT	vinyl composition tile
⊕	centerline	DL	dead load	HB	hose bib	PVC	polyvinyl chloride	VB	vinyl base
⊥	perpendicular	DEM	demolish, demolition	HV	heat ventilator	PCF	pounds per cubic foot	VT	vinyl tile
PL	plate	DTL	detail	HWH	hot water heater	PLF	pounds per lineal foot		
∅	round	DIAG	diagonal	INCL	include (d) (ing)	PSF	pounds per square foot		

ABBREVIATIONS

ABV	above	EF	each face	LBL	label	RL	rail (ing)
AFF	above finish floor	E	east	LAD	ladder	RWC	rain water collector
ACC	access	ELEC	electric (al)	LB	lag bolt	REF	reference
ACFL	access floor	EWG	electric water cooler	LAM	laminated	RFL	reflect (ed) (ive) (or)
AP	access panel	EL	elevation	LAV	lavatory	REFR	refrigerator
AC	acoustical	ELEV	elevator	LH	left hand	REG	register
ACT	acoustical tile	EMER	emergency	L	length	REINF	reinforce (d) (ing)
ACD	addendum	ENC	enclose	LT	light	RCP	reinforced concrete pipe
ADH	adhesive	EQ	equal	LTL	lintel	ROW	right-of-way
ADJ	adjacent	EQP	equipment	LVR	louver	RES	resilient
ADJT	adjustable	EST	estimate	LL	live load	RET	return
AGG	aggregate	EXCA	excavate	MH	manhole	RA	return air
A/C	air conditioning	EXH	exhaust	MFR	manufacture (er)	REV	revision (s), revised
ALT	alternate	EXG	existing	MAD	masonry	RH	right hand
AL	aluminum	EJ	expansion joint	MO	masonry opening	ROW	right of way
ANC	anchor, anchorage	EB	expansion bolt	MTL	material (s)	RFL	roof hatch
AB	anchor bolt	EXP	exposed	MAX	maximum	RFG	roofing
ANDO	anodized	EXT	exterior	MECH	mechanic (al)	RM	room
APX	approximate	FE	fire extinguisher	MC	medicine cabinet	RO	rough opening
ARCH	architect (ural)	FEC	fire extinguisher cabinet	MBR	member	RB	rubber base
AD	area drain	FOF	face of finish	MCM	membrane	SCHED	schedule
ASB	asbestos	FOM	face of masonry	MET	metal	SNT	sealant
ASPH	asphalt	FOS	face of studs	MFD	metal floor decking	SECT	section
AUTO	automatic	FF	factory finish	MTFR	metal furring	SSK	service sink
BP	back plaster (ed)	FAS	fasten, fastener	MRD	metal roof decking	SHTH	sheathing
BSMT	basement	FN	fence	MTHR	metal threshold	SHT	sheet
BRG	bearing	FBD	fiberboard	MWK	millwork	SG	sheet glass
BPL	bearing plate	FGL	fiberglass	MIN	minimum	SH	shelf, shelving
BM	bench mark	FRP	fiberglass reinforced plastic	MIR	mirror	SHO	shore (d) (ing)
BEL	below	FIN	finish (ed)	MISC	miscellaneous	SIM	similar
BET	between	FFE	finished floor elevation	MOD	modular	SKL	skylight
BVL	beveled	FFL	finished floor line	MLD	molding, moulding	SL	sleeve
BIT	bituminous	FA	fire alarm	MR	mop receptor	SC	solid core
BLK	block	FE	fire extinguisher	MT	mount (ed) (ing)	S	south
BLKG	blocking	FEC	fire extinguisher cabinet	MOV	movable	SPC	spacer
BD	board	FPL	fireplace	MUL	mullion	SPL	special
BS	both sides	FLG	flashing	NAT	natural	SPEC	specification (s)
BW	both ways	FLR	floor (ing)	NOM	nominal	SQ	square
BOT	bottom	FLCO	floor cleanout	N	north	SST	stainless steel
BRK	brick	FD	floor drain	NIC	not in contract	STD	standard
BRZ	bronze	FLPL	floor plate	NTS	not to scale	STL	steel
BLDG	building	FLUR	fluorescent	OBS	obscure	STOR	storage
BUR	built up roofing	FTG	footing	OC	on center (s)	SD	storm drain
BBD	bulletin board	FND	foundation	OP	opaque	STRUC	structural
CAB	cabinet	FR	frame (d) (ing)	OPG	opening	SYM	symmetry (ical)
CPT	carpet	FBO	furnished by others	OPP	opposite	TKBD	tackboard
CSMT	casement	FUR	furred (ing)	OPH	opposite hand	TEL	telephone
CIPC	cast-in-place-concrete	FUT	future	OD	outside diameter	TV	television
CB	catch basin	GA	gage, gauge	OA	overall	TZ	terazzo
CK	caulking	GV	galvanized	OH	overhead	THK	thick (ness)
CLG	ceiling	GC	general contract (or)	PNT	paint (ed)	THRES	threshold
CHT	ceiling height	GL	glass, glazing	PNL	panel	TPTN	toilet partition
CEM	cement	GLB	glass block	PB	panic bar	TPD	toilet paper dispenser
PCPL	cement plaster (portland)	GB	grab bar	PTD	paper towel dispenser	TOL	tolerance
CTR	center	GD	grade, grading	PTR	paper towel receptor	T & G	tongue and groove
CER	ceramic	GVL	grave;	PAR	parallel	T O SLAB	top of slab
CT	ceramic tile	GT	grout	PDB	particle board	TOS	top of steel
CMT	ceramic mosaic tile	GPDW	gypsum drywall	PTN	partition	TW	top of wall
CHBD	chalkboard	HBD	hardboard	PV	pave (d) (ing)	TB	towel bar
CHAM	chamfer	HDW	hardware	PTMT	pavement	TRT	treat (ed)
CIR	circle	HWD	hardwood	PERF	perforate	TRANS	transverse
CIRC	circumference	HDR	header	PLAS	plaster	T	tread
CLR	clear or clearance	HTG	heating	PLAM	plastic laminate	TYP	typical
COL	column	HVAC	heating/ventilation/air conditioning	PL	plate	UC	undercut
COMB	combination	HD	heavy duty	PG	plate glass	UNF	unfinished
CONC	concrete	HT	height	PND	plywood	UR	urinal
CMU	concrete masonry unit	HDPE	high-density polyethylene	VB	vapor barrier	UNO	unless noted otherwise
CONTR	contract (or)	HC	hollow core	VERT	vertical		
CONST	construction	HM	hollow metal				
CONT	continuous or continue						
CLL	contract limit line						
CJT	control joint						
CPR	copper						
CORR	corrugated						
CTR	counter						
CFL	counterflashing						
CTSK	countersunk screw						
CRS	course (s)						
CFT	cubic feet						
CYD	cubic yard						
DPR	dampener						

MATERIAL LEGEND

	MASONRY IN ELEVATION
	CONCRETE IN PLAN OR DRYWALL IN PLAN OR SECTION
	CONCRETE IN SECTION
	EARTH IN SECTION
	WOOD (ROUGH) IN SECTION
	BRICK IN SECTION
	CONCRETE MASONRY UNIT IN SECTION
	BATT INSULATION IN SECTION
	RIGID INSULATION IN SECTION
	WOOD (FINISH) IN SECTION
	EXIST. 2X4 SUSPENDED ACOUSTICAL CEILING TILE
	NEW 2X2 SUSPENDED ACOUSTIC CEILING TILE & GRID
	NEW GYP. BOARD CEILING

GRAPHIC SYMBOL LEGEND

	CENTER LINE
	HIDDEN LINE
	DEMOLITION
	COLUMN LINE
	LEVEL LINE
	EXISTING WALL AND DOOR TO BE REMOVED
	EXISTING WALL AND DOOR TO REMAIN
	NEW WALL OR DRYWALL OVER EXISTING STUDS

SYMBOLS LEGEND

	DRAWING KEYNOTE
	EXISTING STUD OR MASONRY WALL
	NEW CMU WALL (SEE PARTITION TYPES FOR REQUIREMENTS)
	NEW STUD WALL (SEE PARTITION TYPES FOR REQUIREMENTS)
	DOOR TAG (SEE DOOR SCHEDULE)
	PARTITION TYPE
	WINDOW TYPE
	ROOM TAG
	ROOM FINISH DESIGNATION
	2A-10BC MINIMUM RATED WALL MOUNTED FIRE EXTINGUISHER
	FIRE EXTINGUISHER CABINET
	CORNER GUARD
	TOILET ACCESSORIES TAG
	ELEVATION XX = SHEET NUMBER YY = ELEVATION NUMBER
	CEILING HEIGHT ABOVE FINISHED FLOOR (+ 'X'-X")
	NORTH ARROW
	SECTION DETAIL

CODE DATA

I. APPLICABLE CODES:

INTERNATIONAL BUILDING CODE 2018
LIFE SAFETY - NFPA 101 (2021)
DE STATE FIRE PREVENTION REGULATIONS (2021)
ICC/ANSI A117.1 (2012)
INTERNATIONAL ENERGY CONSERVATION CODE 2018
INTERNATIONAL MECHANICAL CODE 2018
INTERNATIONAL PLUMBING CODE 2021
STATE OF DE ARCHITECTURAL ACCESSIBILITY STANDARDS
ADA/AG ADA ACCESSIBLE GUIDELINES FOR BUILDINGS AND FACILITIES
ASME A17.1-2013 AND ASME A18.1-2008 AS CURRENTLY ADOPTED IN THE 2015 INTERNATIONAL BUILDING CODE, AS AMENDED BY NEW CASTLE COUNTY AND THE NEW CASTLE COUNTY PROPERTY MAINTENANCE CODE.

II. BUILDING DATA:

- A. IBC CLASSIFICATION = BUSINESS (B)
NFPA CLASSIFICATION: EXISTING BUSINESS
- B. CONSTRUCTION TYPE: IBC: 2-B
NFPA: 2
- C. NUMBER OF STORIES: 4
- D. BUILDING HEIGHT: LESS THAN 75 FEET
- E. SPRINKLERED: YES
- F. ELEVATOR TYPE: EMERGENCY RECALL ELEVATOR PHASE I & 2.

V. FIRE RESISTIVE RATINGS FOR BUILDING ELEMENTS

- A. ELEVATOR SHAFT: 2 HR
- B. ELEVATOR MACHINE ROOM: 2 HR
- C. ELEVATOR & MACHINE RM DOORS: 90 MIN

VI. MISCELLANEOUS FIRE PROTECTION FEATURES:

- A. INTERIOR FINISHES: A OR B
- B. FIRE ALARM: A OR B
- C. PANIC HARDWARE (MACHINE RM): NOT REQUIRED
- D. EMERGENCY LIGHTING: REQUIRED

VII. ALTERATION LEVEL:

IEBC ALTERATION LEVEL: 2

ALL NEW WORK SHALL COMPLY WITH MATERIALS AND METHODS REQUIREMENTS IN THE INTERNATIONAL BUILDING CODE, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL MECHANICAL CODE, AND INTERNATIONAL PLUMBING CODE.

VIII. COMMERCIAL ENERGY EFFICIENCY (IECC):

APPLICABILITY: ADDITIONS, ALTERATIONS, RENOVATIONS, OR REPAIRS TO AN EXISTING BUILDING, OR PORTION THEREOF SHALL CONFORM TO THE REQUIREMENTS OF THE IECC AS THEY RELATE TO NEW CONSTRUCTION WITHOUT REQUIRING THE UNALTERED PORTIONS OF THE EXISTING BUILDING OR SYSTEMS TO COMPLY WITH THE IECC.

IX. ACCESSIBILITY

- A. EXISTING ELEVATOR CAR MINIMUM DIMENSIONS:
CLEAR FLOOR AREA: 16 SF
MINIMUM DEPTH: 51 INCHES
MINIMUM WIDTH: 68 INCHES
ACTUAL DEPTH: 51 INCHES
ACTUAL WIDTH: 80 INCHES
- B. BUTTONS: 3/4" MINIMUM BUTTON IN DIAMETER
- C. EMERGENCY CONTROLS: 35" MINIMUM ABOVE FLOOR LOCATED AT BOTTOM OF PANEL, ALONG WITH EMERGENCY ALARM.
- D. CONTROL BUTTONS SHALL BE IDENTIFIED WITH TACTILE CHARACTERS, AND SHALL BE 42" ABOVE FINISHED FLOOR.
- E. SEE DETAIL ON SHEET A1.2 FOR CONTROL BUTTON IDENTIFICATION REQUIREMENTS.

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com

GENERAL NOTES:
1. SEE M/E/P DRAWINGS FOR SYMBOLS AND ABBREVIATIONS PERTAINING TO THOSE DISCIPLINES.

--	--

Revision	

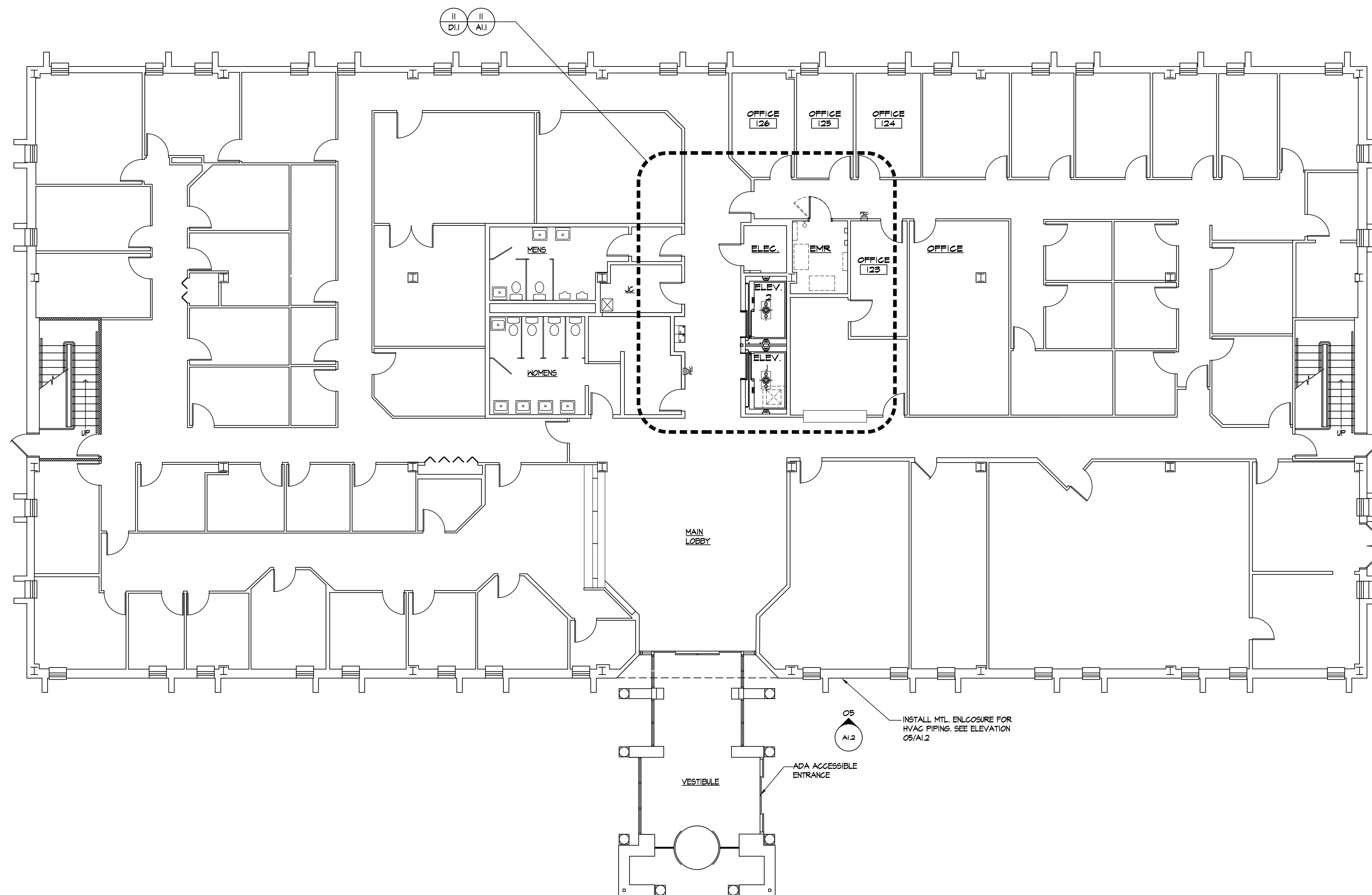
Project:
OMB / DFM
THOMAS COLLINS BUILDING ELEVATOR UPGRADES
640 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: ARCHITECTURAL SYMBOLS, ABBREVIATIONS & CODE DATA
Proj. No.: 0506BO45.B01	Scale: AS NOTED
Dwn. By: LMP	Date: 6/5/23

T2

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 2023

GENERAL NOTES:



--	--

Revision

Project:
OMB / DFM
THOMAS COLLINS BUILDING
ELEVATOR UPGRADES

540 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: KEY PLAN
----------------------------	---------------------------------

Proj. No.: 0506B045.B01	Scale: AS NOTED	Sheet No.:
Dwn. By: LMP	Date: 6/5/23	

T3

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.

COPYRIGHT © 2023

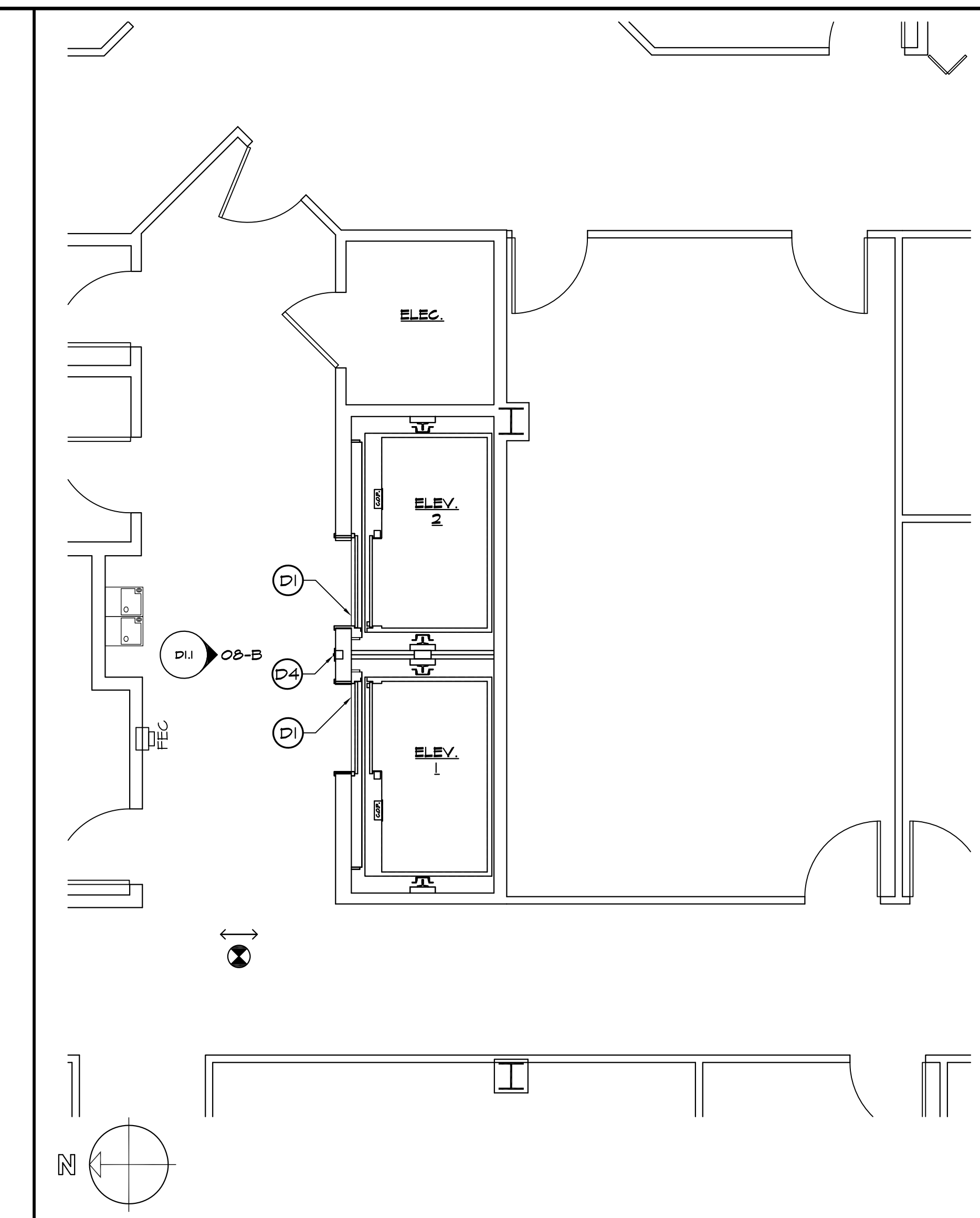
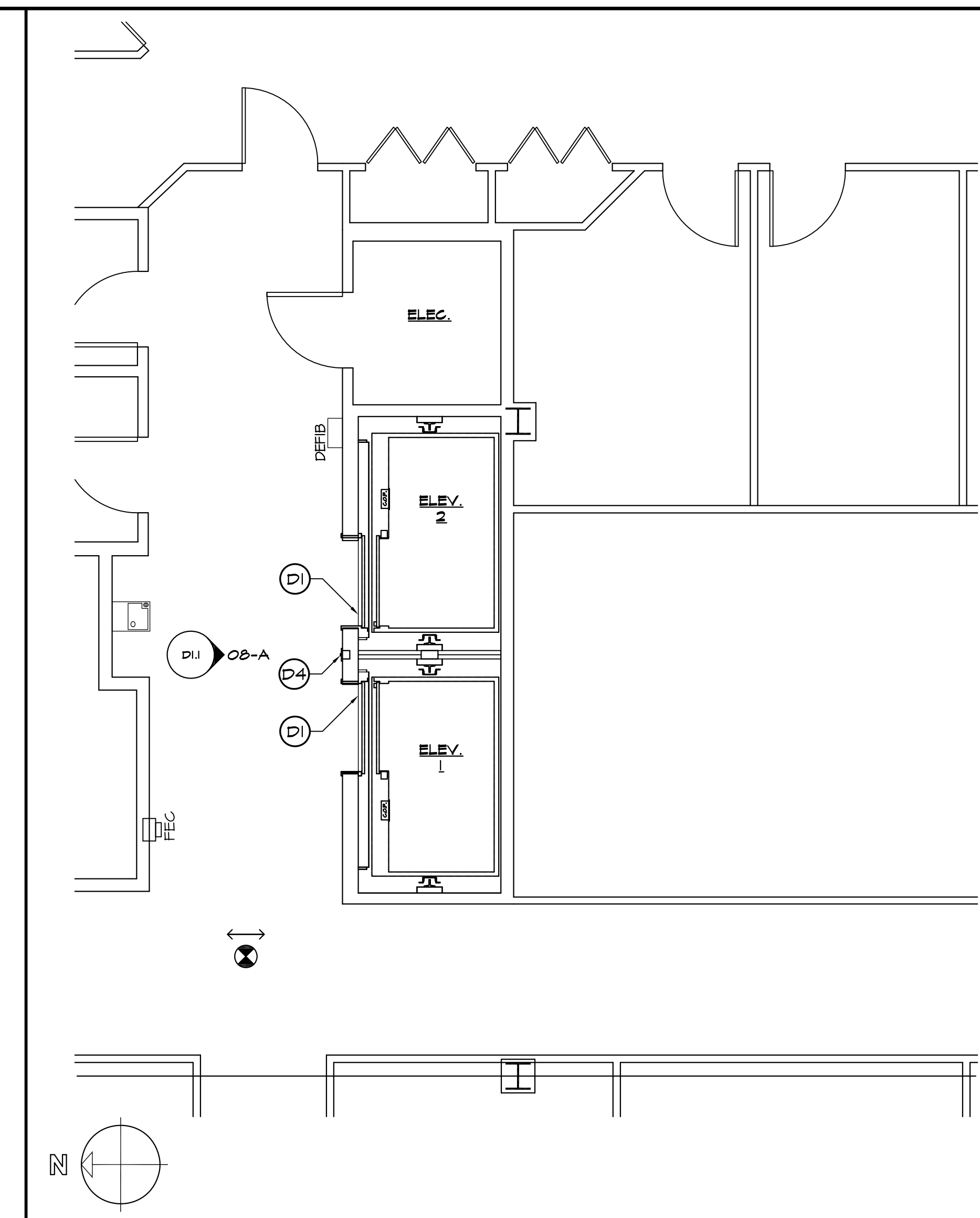
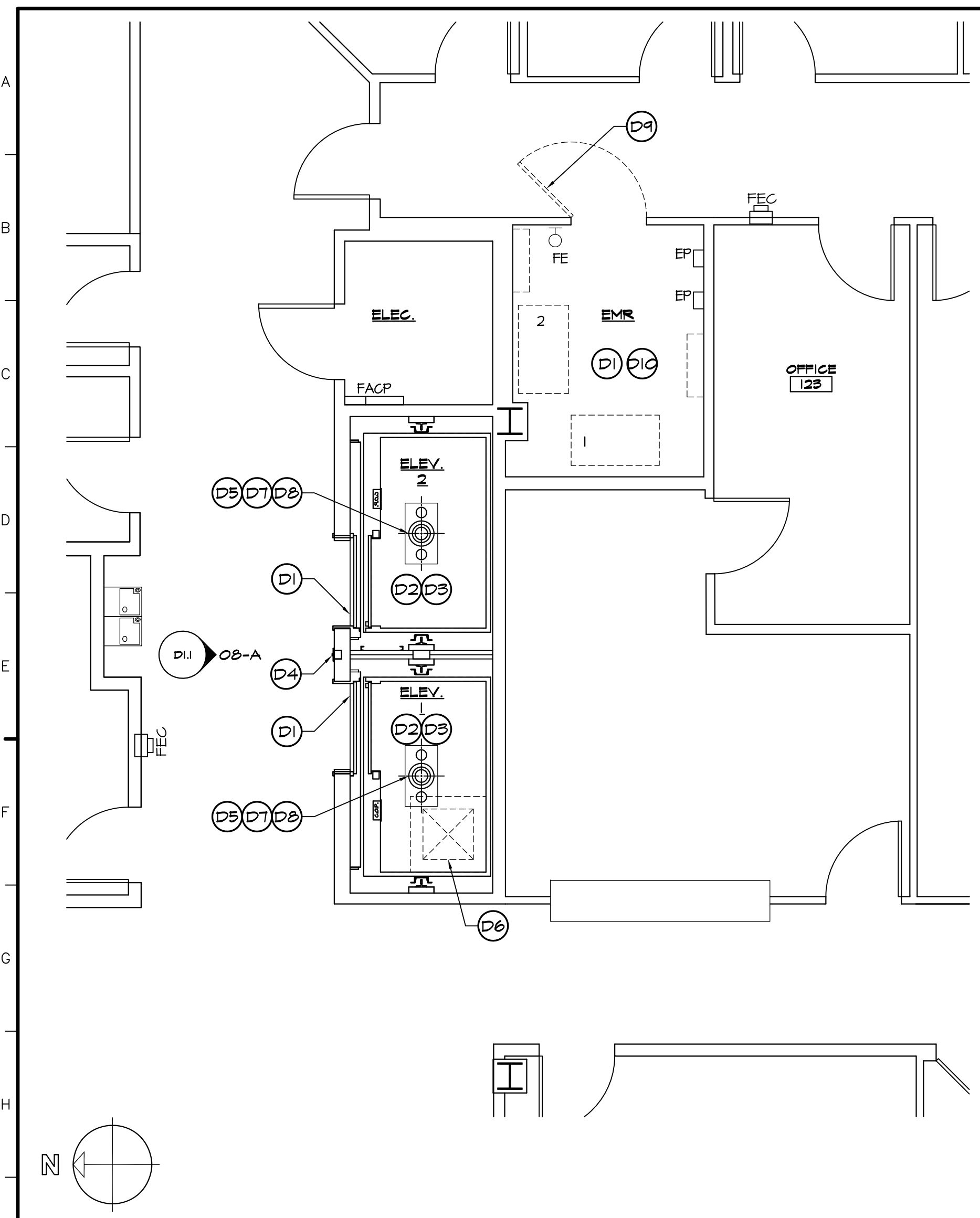
01. FIRST FLOOR KEY PLAN

1/8" = 1'-0"

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

- GENERAL NOTES:**
- REFER TO MECHANICAL, AND ELECTRICAL, DRAWINGS FOR EXTENT OF DEMOLITION OF THOSE SYSTEMS.
 - REMOVAL OF HAZARDOUS MATERIALS SHALL BE DONE BY OWNER'S VENDOR (NOT IN CONTRACT). NOTIFY OWNER IF ANY HAZARDOUS MATERIALS ARE DISCOVERED.



11 PARTIAL FIRST FLOOR DEMOLITION PLAN

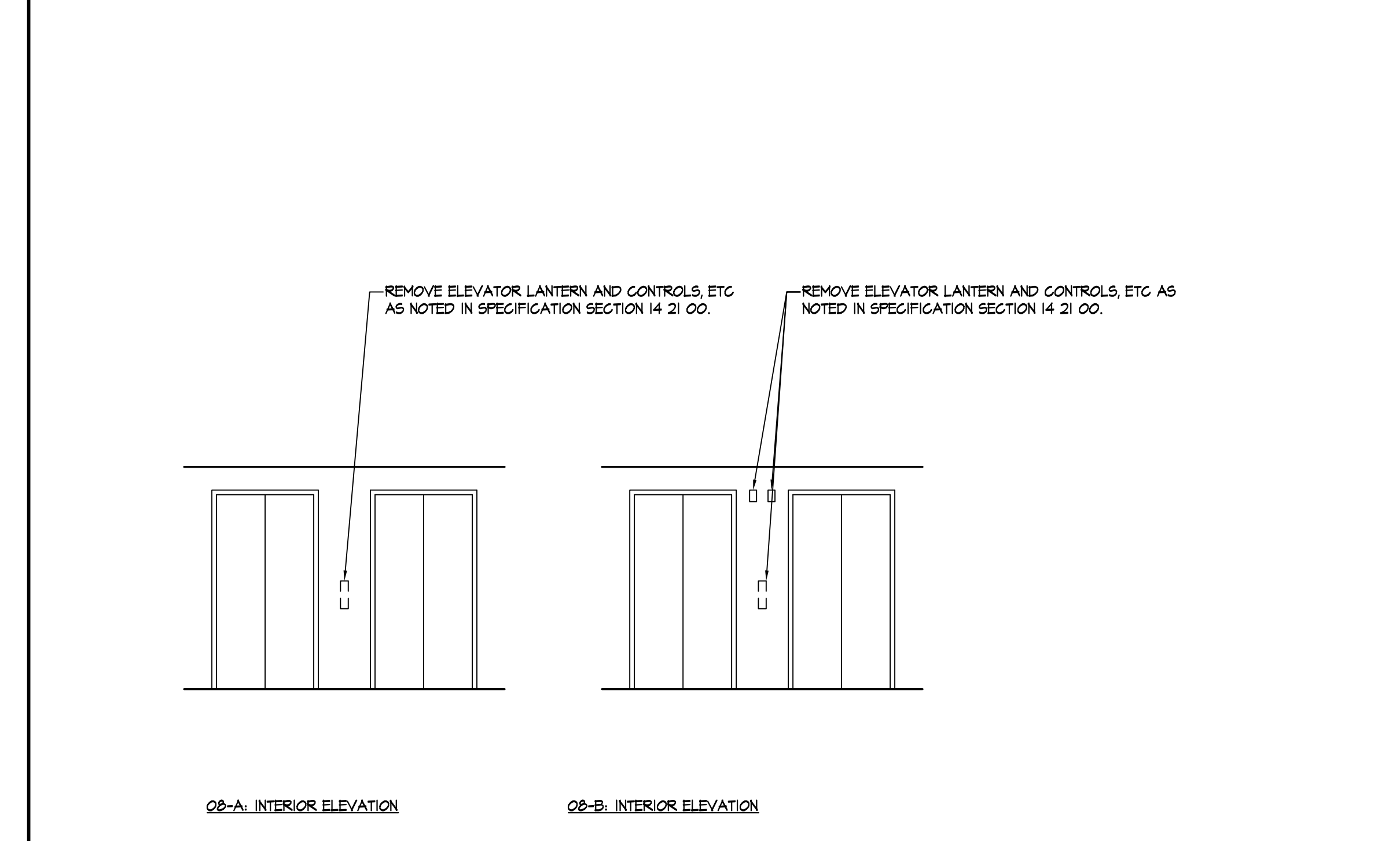
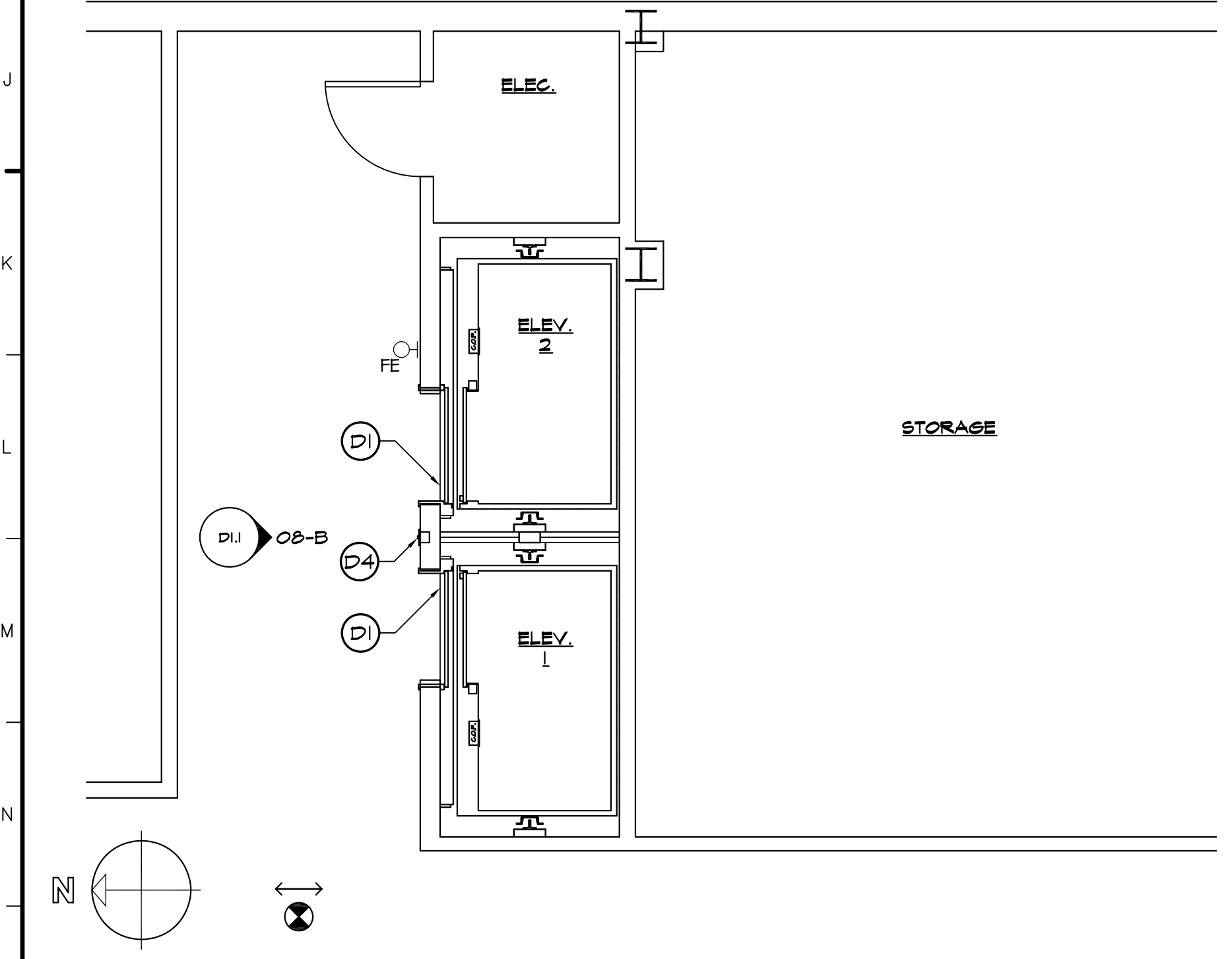
18 PARTIAL SECOND FLOOR DEMOLITION PLAN

115 PARTIAL THIRD FLOOR DEMOLITION PLAN

1/4" = 1'-0"

1/4" = 1'-0"

1/4" = 1'-0"



- D 1. REMOVE ELEVATOR EQUIPMENT PER SPECIFICATION SECTION 14 21 00.
- D 2. REMOVE ELEVATOR CAB CEILING, LIGHTING, OPERATOR EQUIPMENT, VENTILATOR, AND ROLLER GUIDES PER SPECIFICATION SECTION 14 21 00.
- D 3. REMOVE VGT FLOOR. PREP SUBFLOOR FOR NEW FINISH.
- D 4. REMOVE HALL STATIONS, TRAVEL LANTERN, CAR POSITION INDICATOR, AND CAR OPERATING PANEL PER SPECIFICATION SECTION 14 21 00.
- D 5. REMOVE ELEVATOR CONTROLLER, HOISTWAY WIRING, SWITCHES, AND TRAVEL CABLES PER SPECIFICATION SECTION 14 21 00.
- D 6. REMOVE PORTION OF EXIST. CONC. FLOOR FOR NEW SUMP PUMP PIT. SEE DETAIL O1/A1.2 FOR DIMENSIONS & SEE PLUMBING DRAWINGS FOR REQUIRED SIZE.
- D 7. REMOVE HYDRAULIC OIL FROM TANK AND OIL LINE AND DISPOSE OF AS REQUIRED.
- D 8. REMOVE HYDRAULIC LINES, SHUT-OFF VALVE, CONTROL VALVE, COUPLINGS, MUFFLER CYLINDER PACKING SEALS PER SPECIFICATION SECTION 14 21 00.
- D 9. REMOVE DOOR & FRAME.
- D 10. REMOVE LAY-IN CEILING TILE AND GRID THROUGHOUT THIS ROOM.

01 PARTIAL FOURTH FLOOR DEMOLITION PLAN

08 TYPICAL CORRIDOR ELEVATION

017 (D) DEMOLITION KEYNOTES

1/4" = 1'-0"

1/2" = 1'-0"

1/4" = 1'-0"

--	--

Revision	

Project:
OMB / DFM
THOMAS COLLINS BUILDING
ELEVATOR UPGRADES

640 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

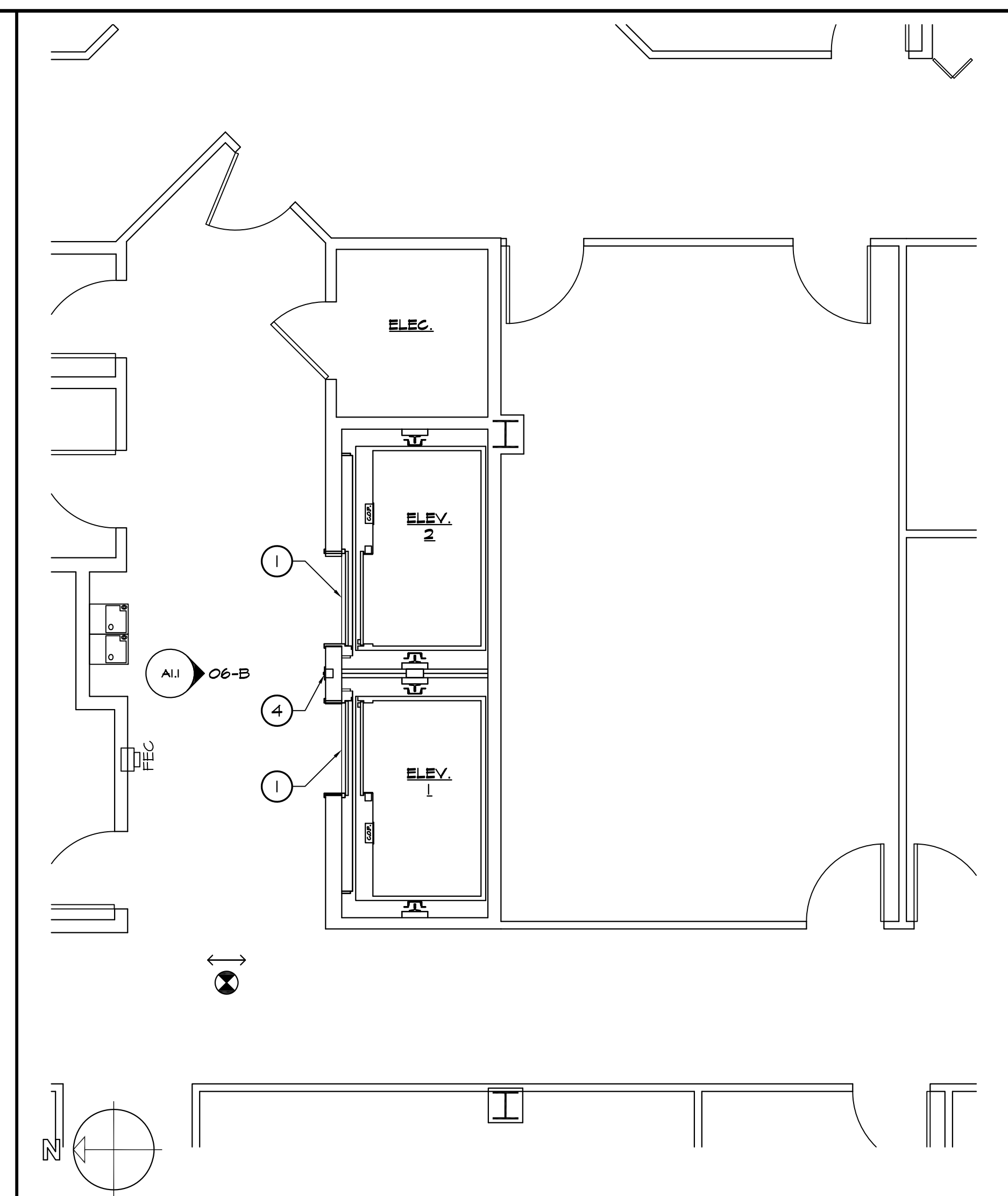
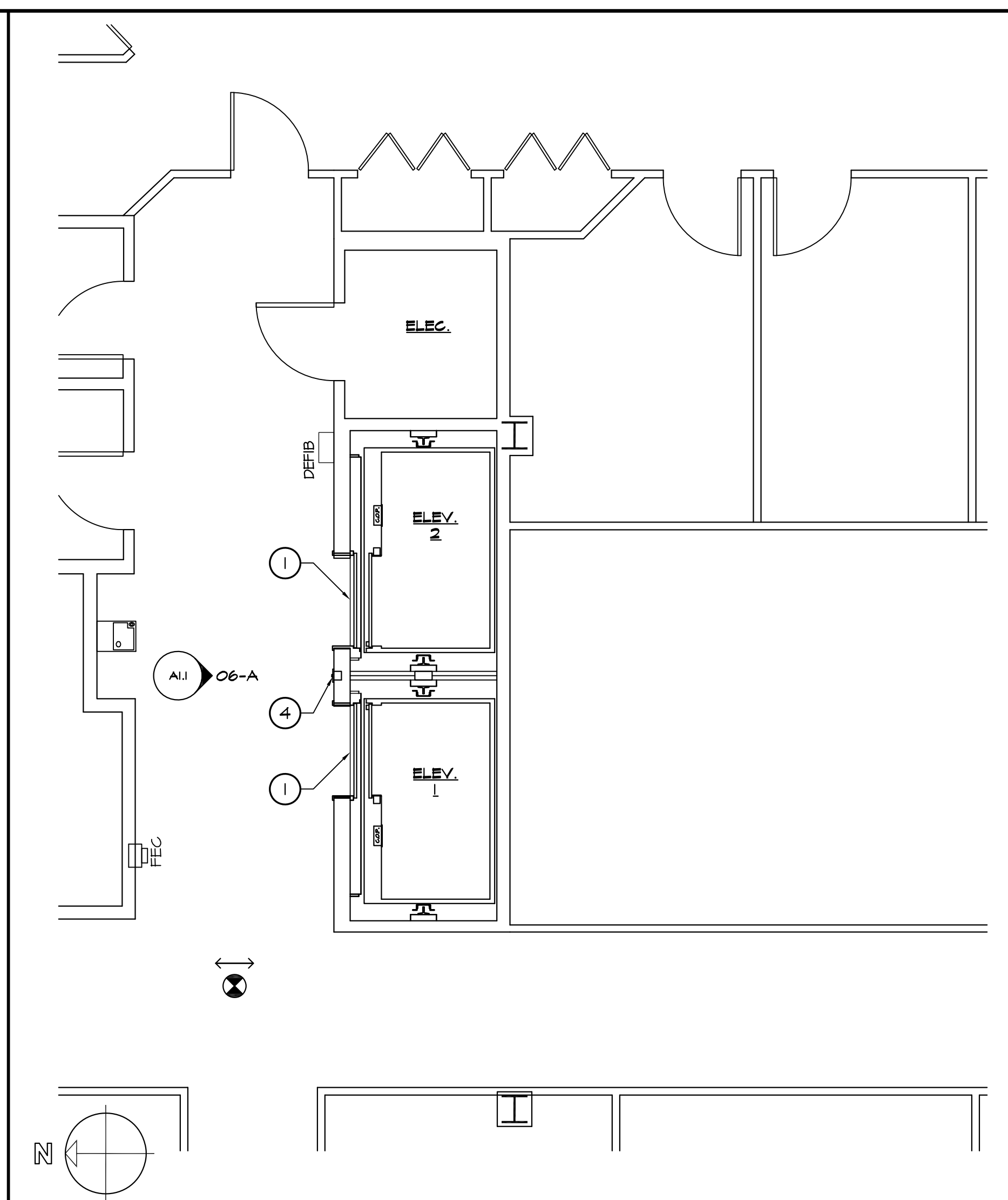
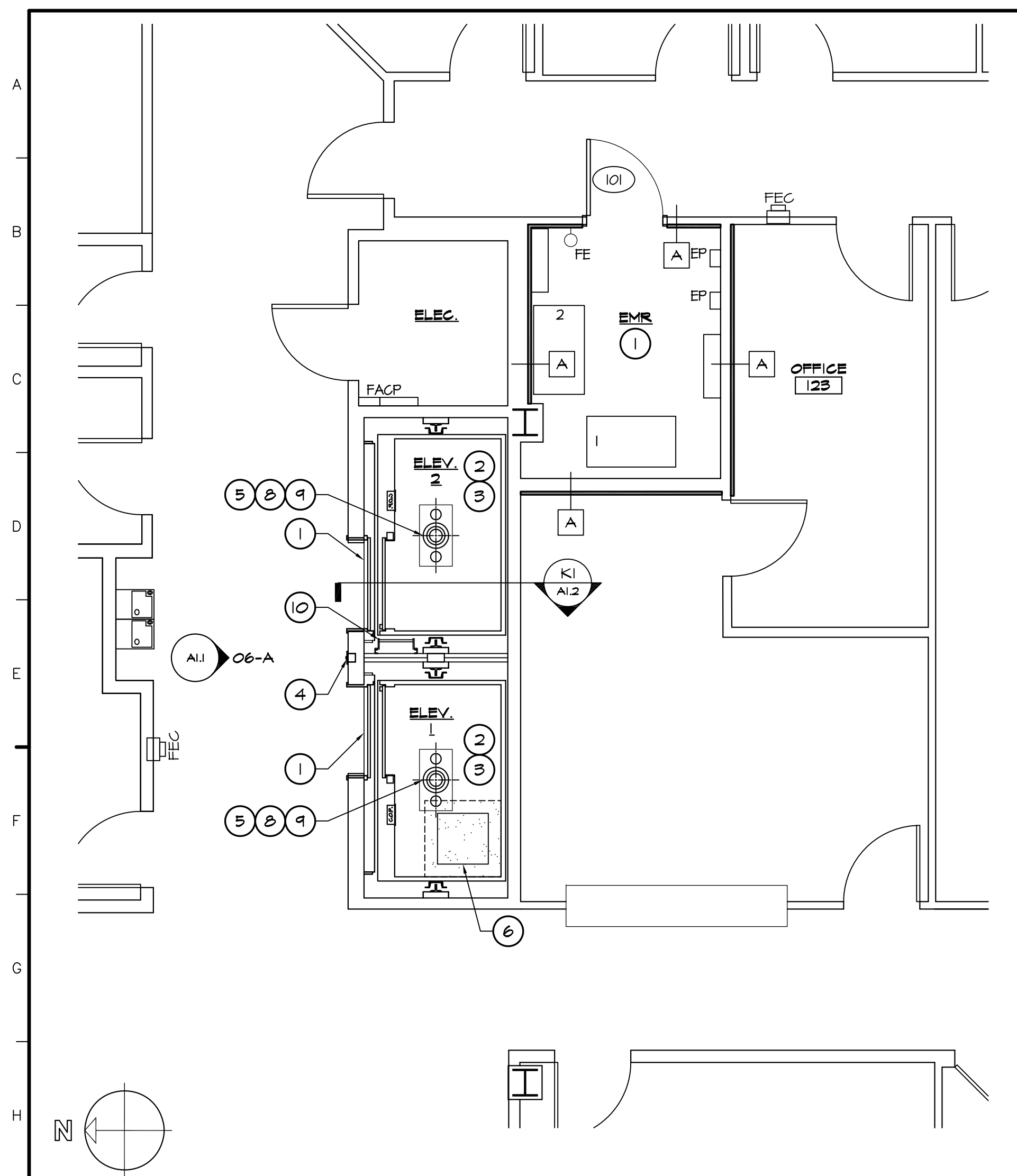
Set No.:	Sheet Title:
BID SET	DEMOLITION PLANS
Proj. No.:	Scale:
0506B045.B01	AS NOTED
Dwn. By:	Date:
LMP	6/5/23

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.

D1.1

COPYRIGHT © 2023

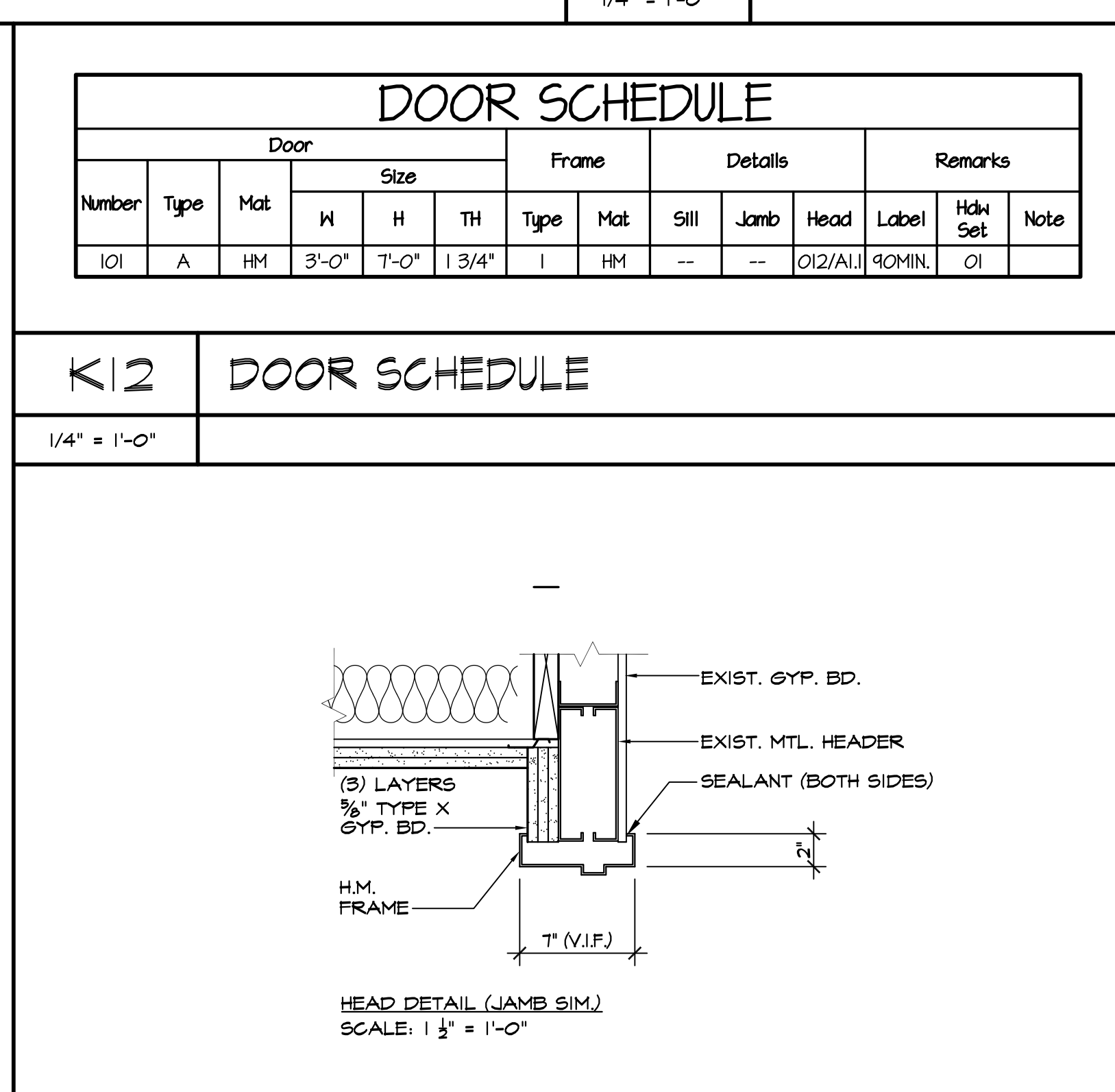
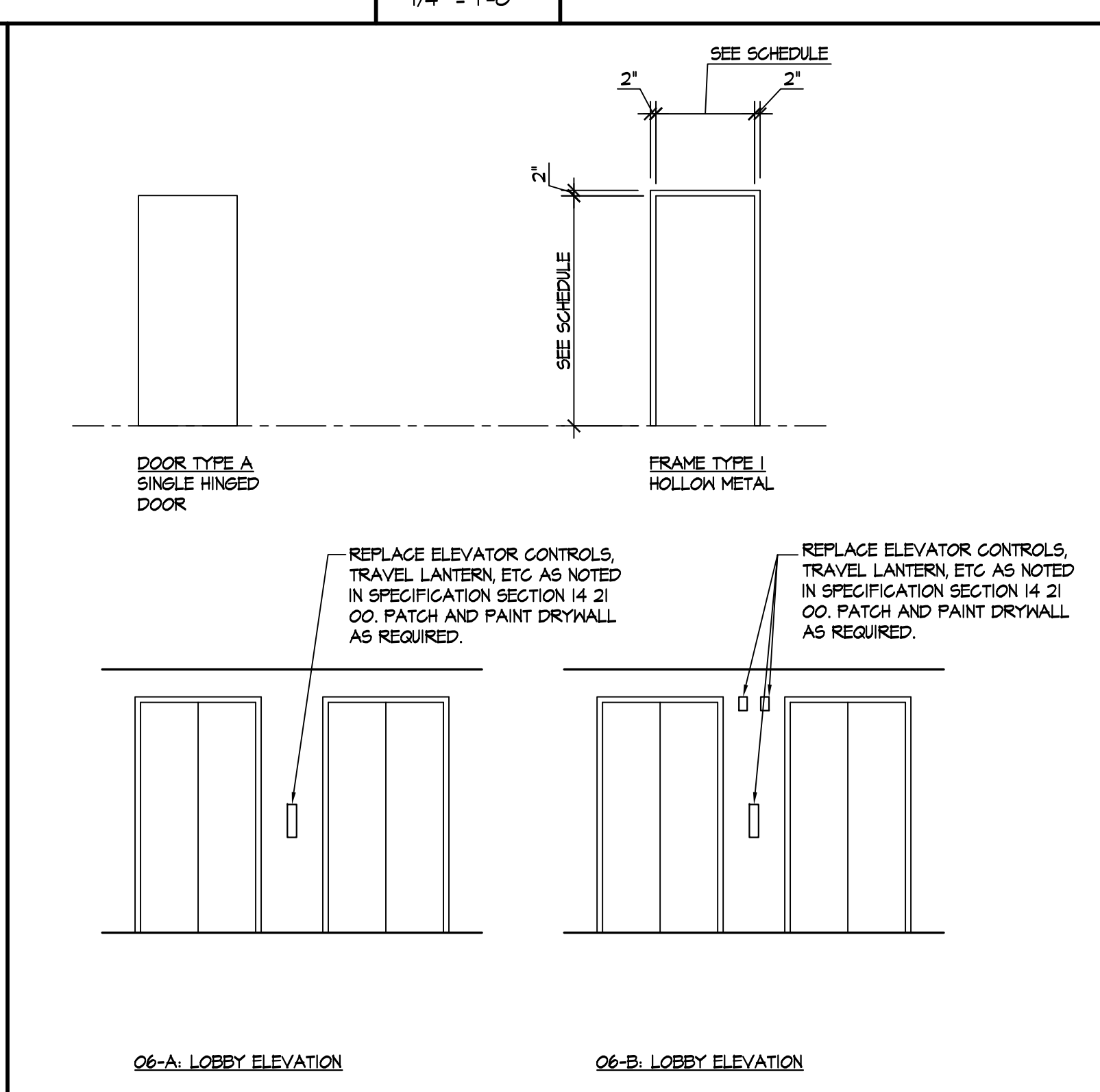
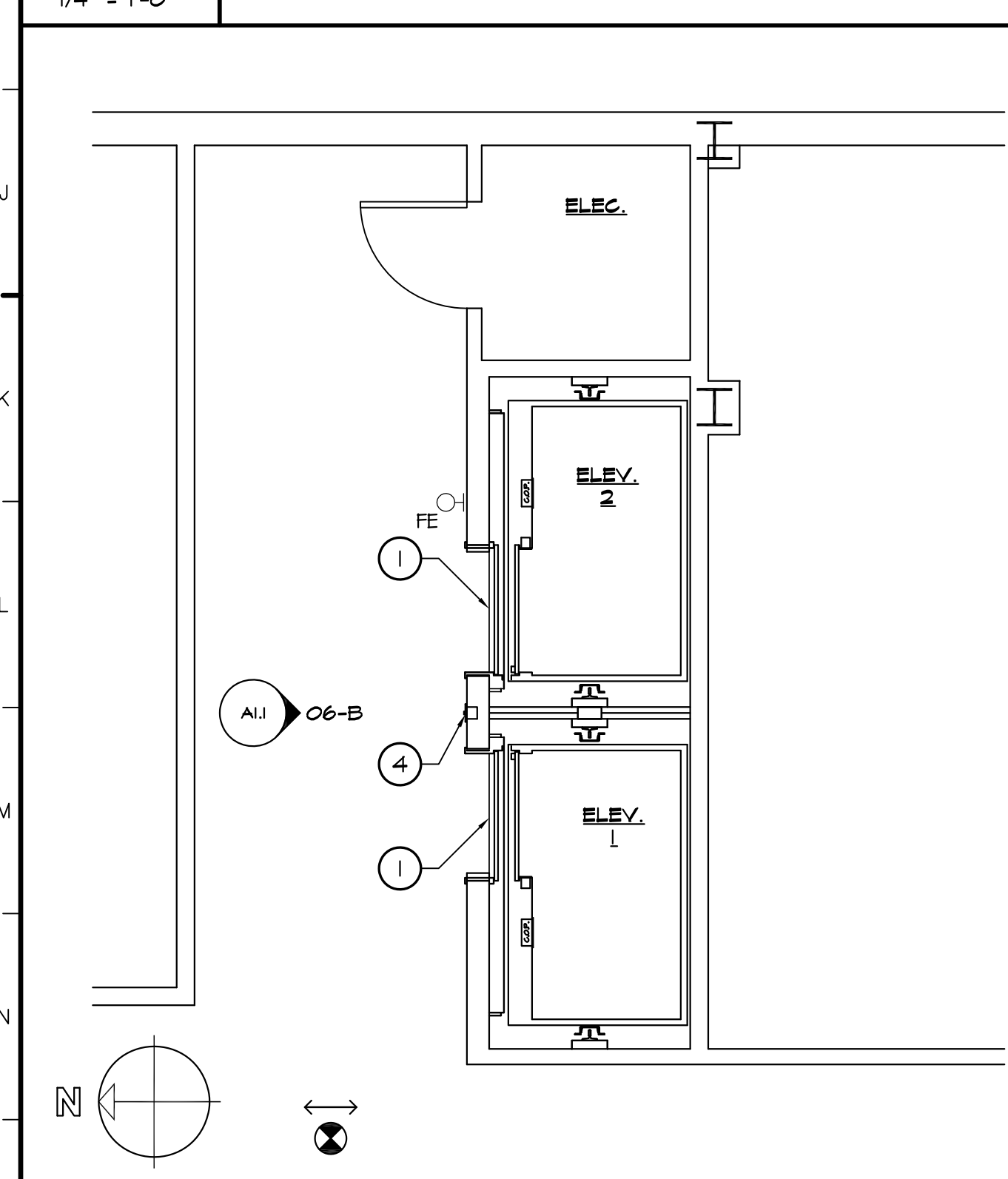
GENERAL NOTES:
 1. ALL DIMENSIONS OF EXISTING ARE APPROXIMATE. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN THE FIELD.



11 PARTIAL FIRST FLOOR PLAN - NEW WORK
 1/4" = 1'-0"

13 PARTIAL SECOND FLOOR PLAN - NEW WORK
 1/4" = 1'-0"

115 PARTIAL THIRD FLOOR PLAN - NEW WORK
 1/4" = 1'-0"



01 PARTIAL FOURTH FLOOR PLAN - NEW WORK
 1/4" = 1'-0"

06 DOOR & FRAME ELEVATIONS
 1/4" = 1'-0"

012 DOOR HEAD DETAIL
 1/2" = 1'-0"

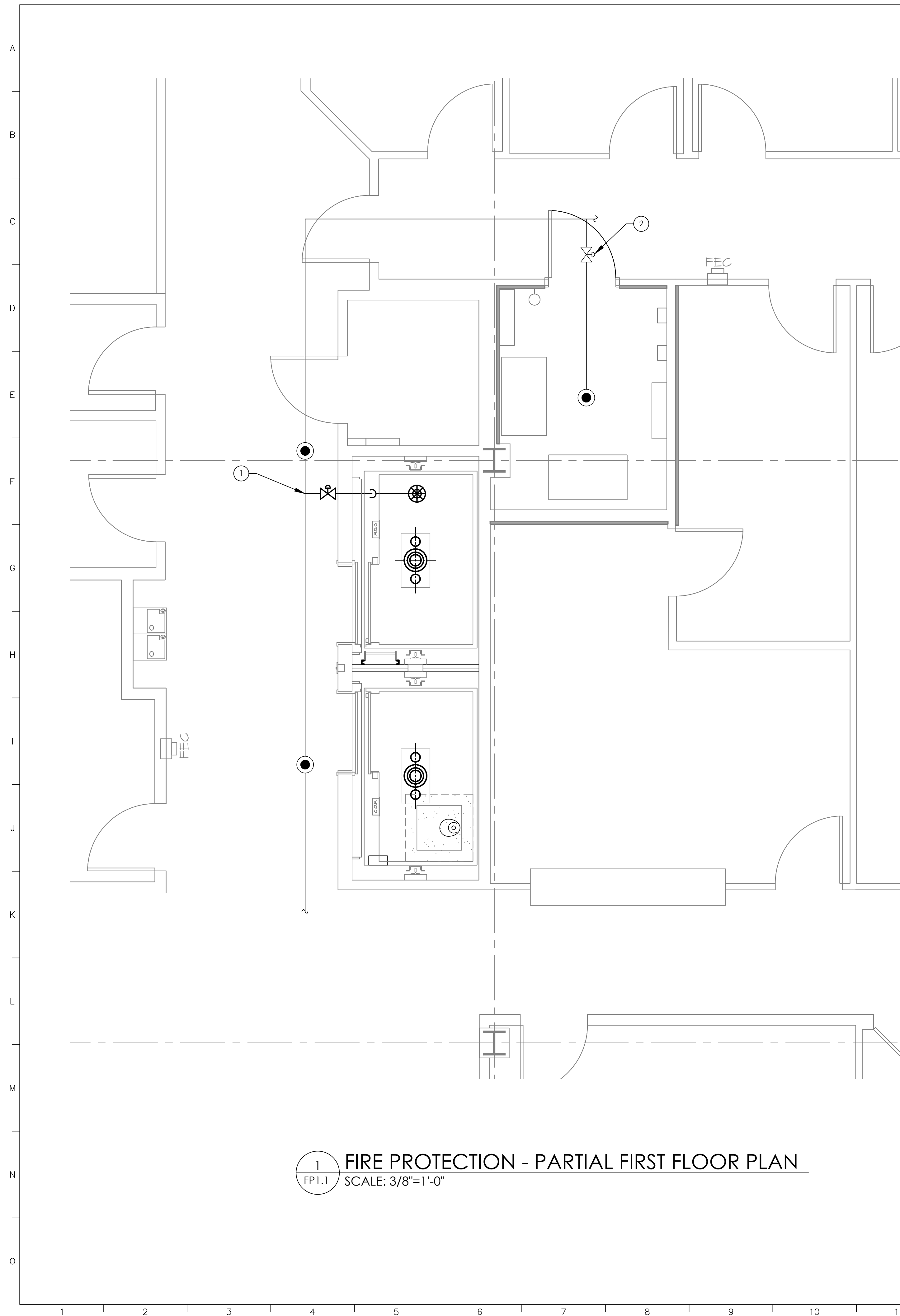
- DOOR SCHEDULE**
- | Number | Type | Mat | Door Size | | | Frame | | Details | | | Remarks | | |
|--------|------|-----|-----------|-------|--------|-------|-----|---------|------|---------|---------|---------|------|
| | | | W | H | TH | Type | Mat | Sill | Jamb | Head | Label | Hdk Set | Note |
| 101 | A | HM | 3'-0" | 7'-0" | 1 3/4" | I | HM | -- | -- | 012/ALL | 90MIN. | 01 | |
- K12 DOOR SCHEDULE**
 1/4" = 1'-0"
- REPLACE ELEVATOR EQUIPMENT PER SPECIFICATION SECTION 14 21 00.
 - REPLACE ELEVATOR CAB CEILING, LIGHTING, OPERATOR EQUIPMENT, VENTILATOR, AND ROLLER GUIDES PER SPECIFICATION SECTION 14 21 00.
 - PROVIDE RUBBER FLOOR TILE AND VINYL BASE IN ELEVATOR CAB.
 - REPLACE HALL STATIONS, TRAVEL LANTERN, CAR POSITION INDICATOR, AND CAR OPERATING PANEL PER SPECIFICATION SECTION 14 21 00.
 - REPLACE ELEVATOR CONTROLLER, HOISTWAY WIRING, SWITCHES, AND TRAVEL CABLES PER SPECIFICATION SECTION 14 21 00.
 - PROVIDE SUMP PUMP AND SUMP PIT. SEE DETAIL 01/A1.2 AND M/E/P DRAWINGS FOR REQUIRED SIZE.
 - PROVIDE RECESSED EMERGENCY ACCESS KEY BOX PER SPECIFICATION SECTION 14 21 00.
 - REPLACE HYDRAULIC OIL FROM TANK AND OIL LINE AND DISPOSE OF AS REQUIRED.
 - REPLACE HYDRAULIC LINES, SHUT-OFF VALVE, CONTROL VALVE, COUPLINGS, MUFFLER CYLINDER PACKING SEALS PER SPECIFICATION SECTION 14 21 00.
 - PROVIDE GALVANIZED STEEL PIT LADDER AND STEEL SUPPORTS ANCHORED TO EXISTING STEEL BEAMS IN HOIST WAY. SEE DETAIL K1/A1.2.

Project:
OMB / DFM
THOMAS COLLINS BUILDING
ELEVATOR UPGRADES
 640 S. DUPONT HIGHWAY
 DOVER, DELAWARE 19901
 STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: PARTIAL FLOOR PLANS - NEW WORK
Proj. No.: 0506BO45.B01	Scale: AS NOTED
Dwn. By: LMP	Date: 6/5/23

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 2023

A1.1

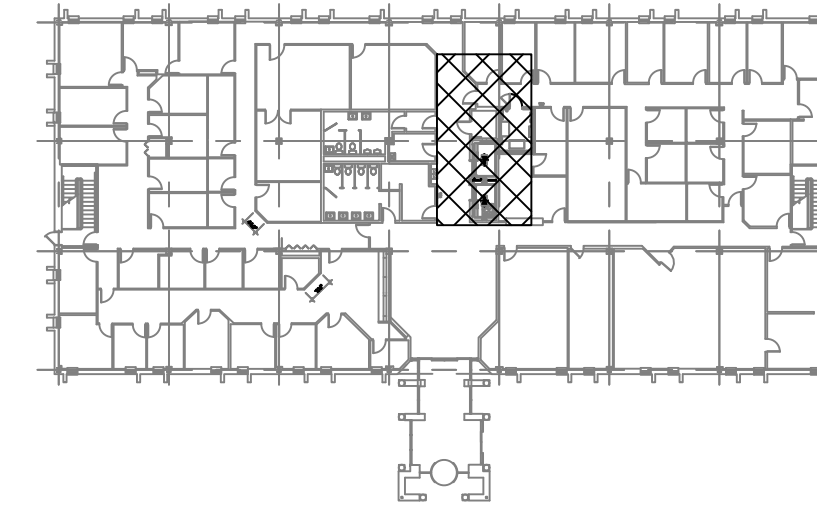


NEW WORK NOTES

- ① INSTALL NEW BRANCH LINE WITH SUPERVISED VALVE DOWN TO WITHIN 24" OF HOIST WAY FLOOR.
- ② EXISTING ELEVATOR MACHINE ROOM SUPERVISED VALVE.

LEGEND/ ABBREVIATIONS

- PENDANT SPRINKLER HEAD
- ⊗ UPRIGHT SPRINKLER HEAD



KEY PLAN
SCALE: NTS

--	--

Revision

Project:
OMB / DFM
THOMAS COLLINS BUILDING
ELEVATOR UPGRADES

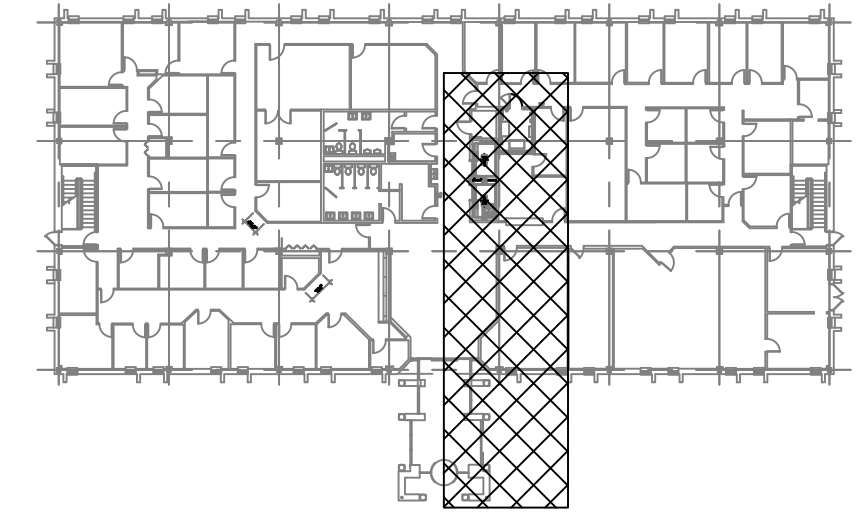
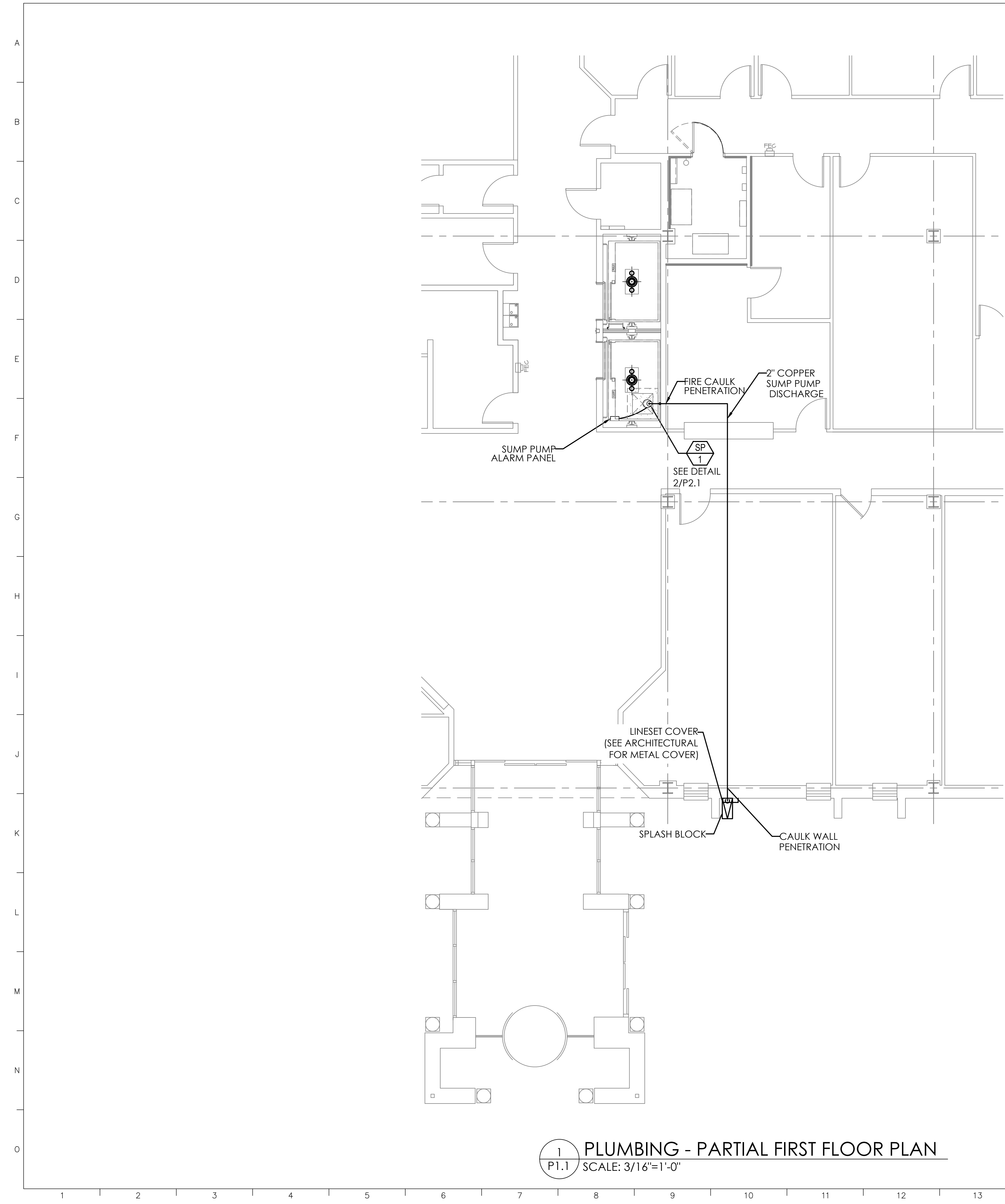
540 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: FIRE PROTECTION-PARTIAL FIRST FLOOR PLAN
----------------------------	---

Proj.No.: 0506B045.B01	Scale: AS NOTED	Sheet No.:
Dwn.By: EAU	Date: 6/5/23	

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.

FP1.1



KEY PLAN
SCALE: NTS

LEGEND	ABBREVIATION	DESCRIPTION
	SP	SUMP PUMP
		PIPING DOWN
		PIPING UP

1 PLUMBING - PARTIAL FIRST FLOOR PLAN
SCALE: 3/16"=1'-0"

dbf DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com

e² ENGINEERING
106 West Commerce Street
Smyrna, DE 19977
Tel: 302-659-9090

--	--

Revision	

Project:
OMB / D.F.M.
THOMAS COLLINS BUILDING ELEVATOR UPGRADES
640 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: PLUMBING - PARTIAL FIRST FLOOR PLAN
Proj.No.: 0506B045.B01	Scale: AS NOTED
Dwn.By: EAU	Date: 6/5/23

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 2023

P1.1

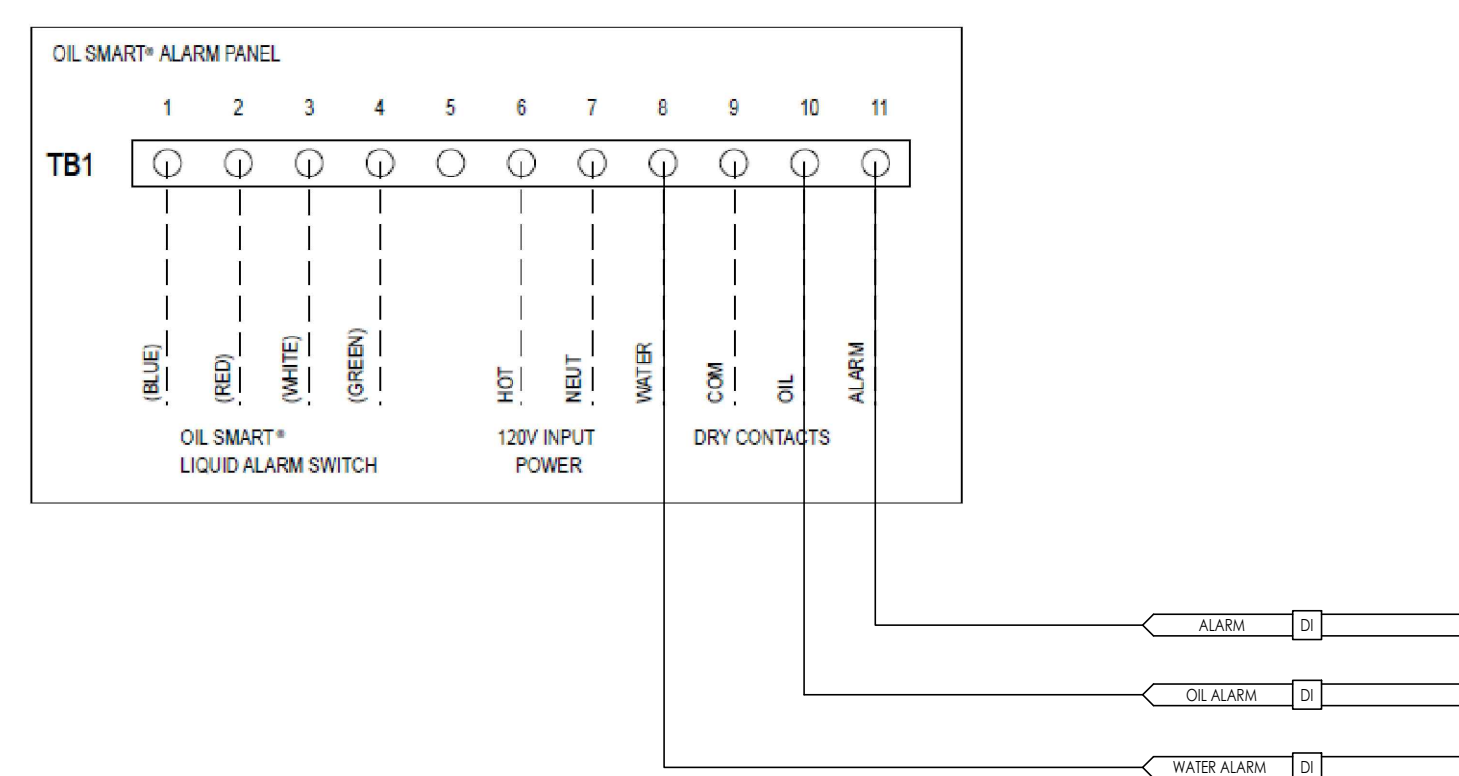
PLUMBING FIXTURE SCHEDULE							
TAG	ITEM	MODEL	MFR	VOLTAGE	HP	AMPS	REMARKS
SP-1	SUMP PUMP	161	ZOELLER	115-1-60	1/2	15	OIL GUARD PREPACKAGED SYSTEM (940-0014) WITH ALARM PANEL, OIL SWITCH, AND PUMP

GENERAL PLUMBING NOTES:

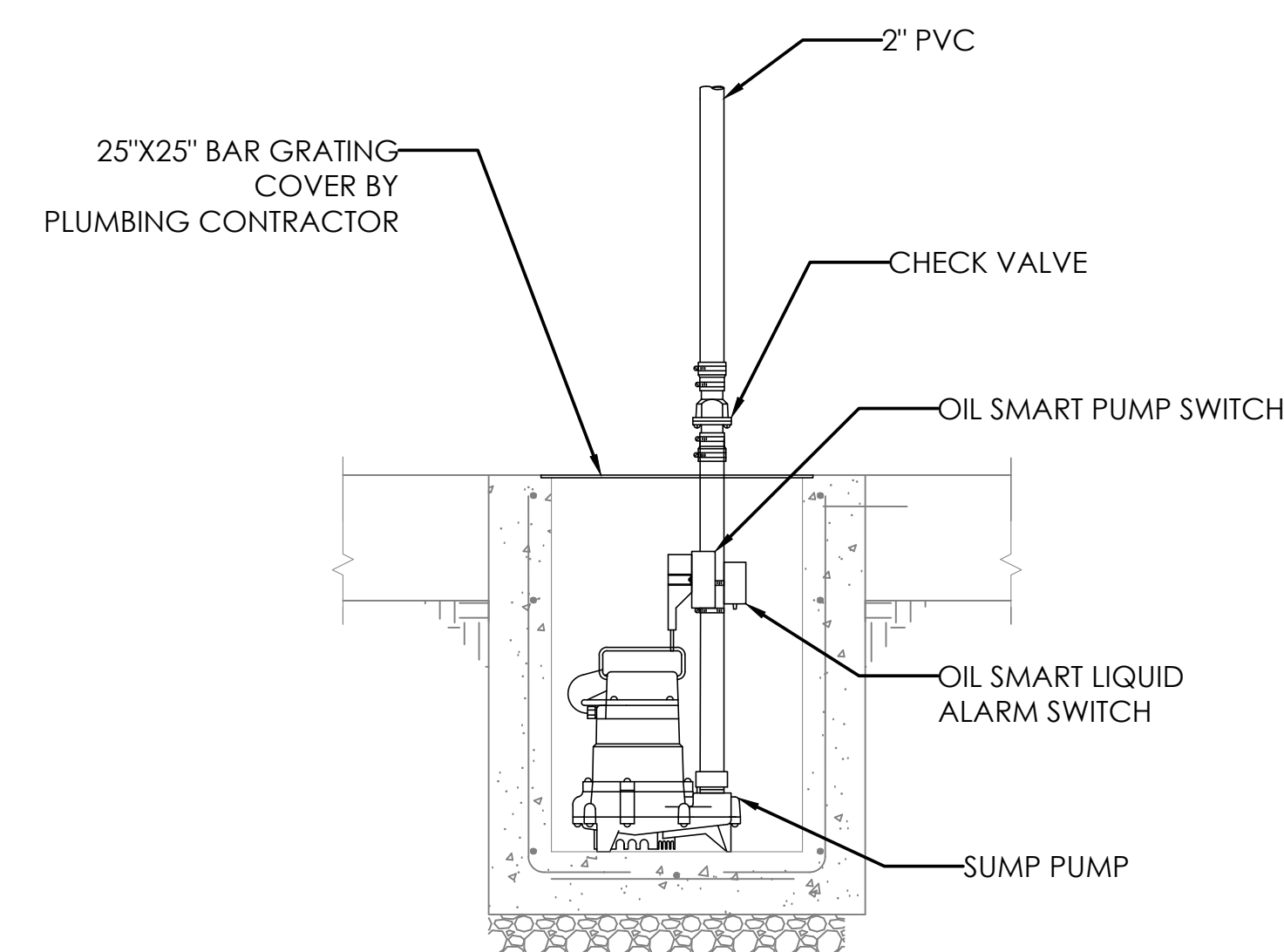
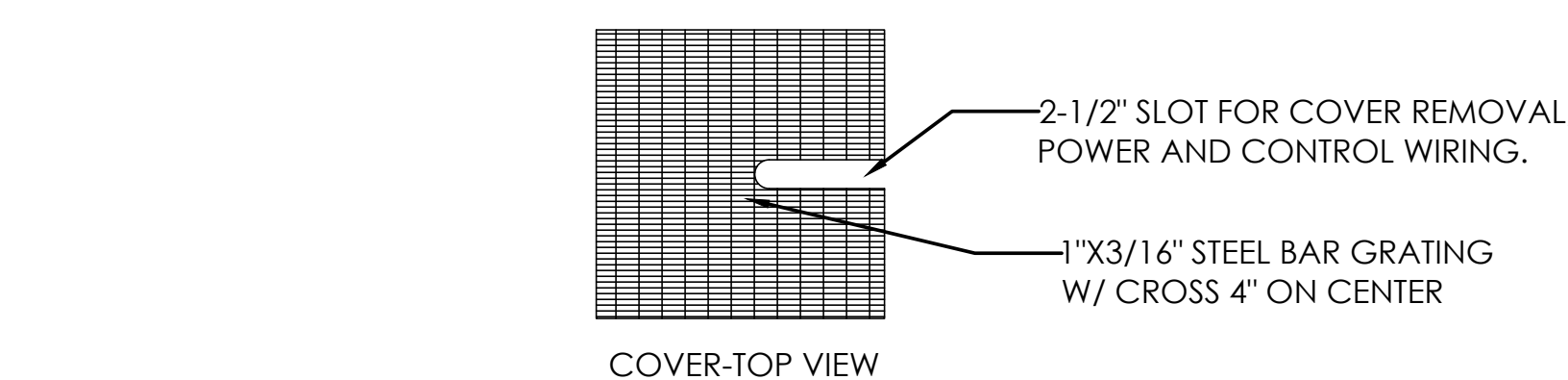
1. ALL WORK SHALL BE PERFORMED PER THE 2009 INTERNATIONAL PLUMBING CODE.
2. CONTRACTOR SHALL PROVIDE ALL LIFTS/SCFFOLDING TO PERFORM THEIR WORK.
3. SECURELY SECURE ALL NEW PIPING TO THE EXISTING STRUCTURE.
4. COORDINATE INSTALLATION OF PIPING WITH OTHER TRADES.
5. CORE DRILL ALL HOLES THROUGH EXISTING CONCRETE WALLS. SEAL ALL PENETRATIONS WITH 2-HOUR FIRE CAULK.
6. FIRESTOP ALL PENETRATIONS.
7. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SUMP PUMP ALARM PANEL NOTES:

1. CONTRACTOR SHALL CONNECT THE NEW SUMP PUMP ALARM PANEL AND OIL MINDER TO THE EXISTING AUTOMATED LOGIC BUILDING AUTOMATION SYSTEM (BY RADIUS SYSTEMS).
2. PROVIDE ALARMS LOCALLY AT THE OPERATOR'S WORKSTATION AND GENERATE EMAIL/TEXT ALARMS TO FACILITIES PERSONNEL FOR THE FOLLOWING POINTS:
 - WATER PRESENT
 - OIL PRESENT
 - PUMP IN ALARM



1 SUMP PUMP ALARM DETAIL
 P2.1 SCALE: NTS



2 SUMP PUMP DETAIL
 P2.1 SCALE: NTS

--	--

Revision

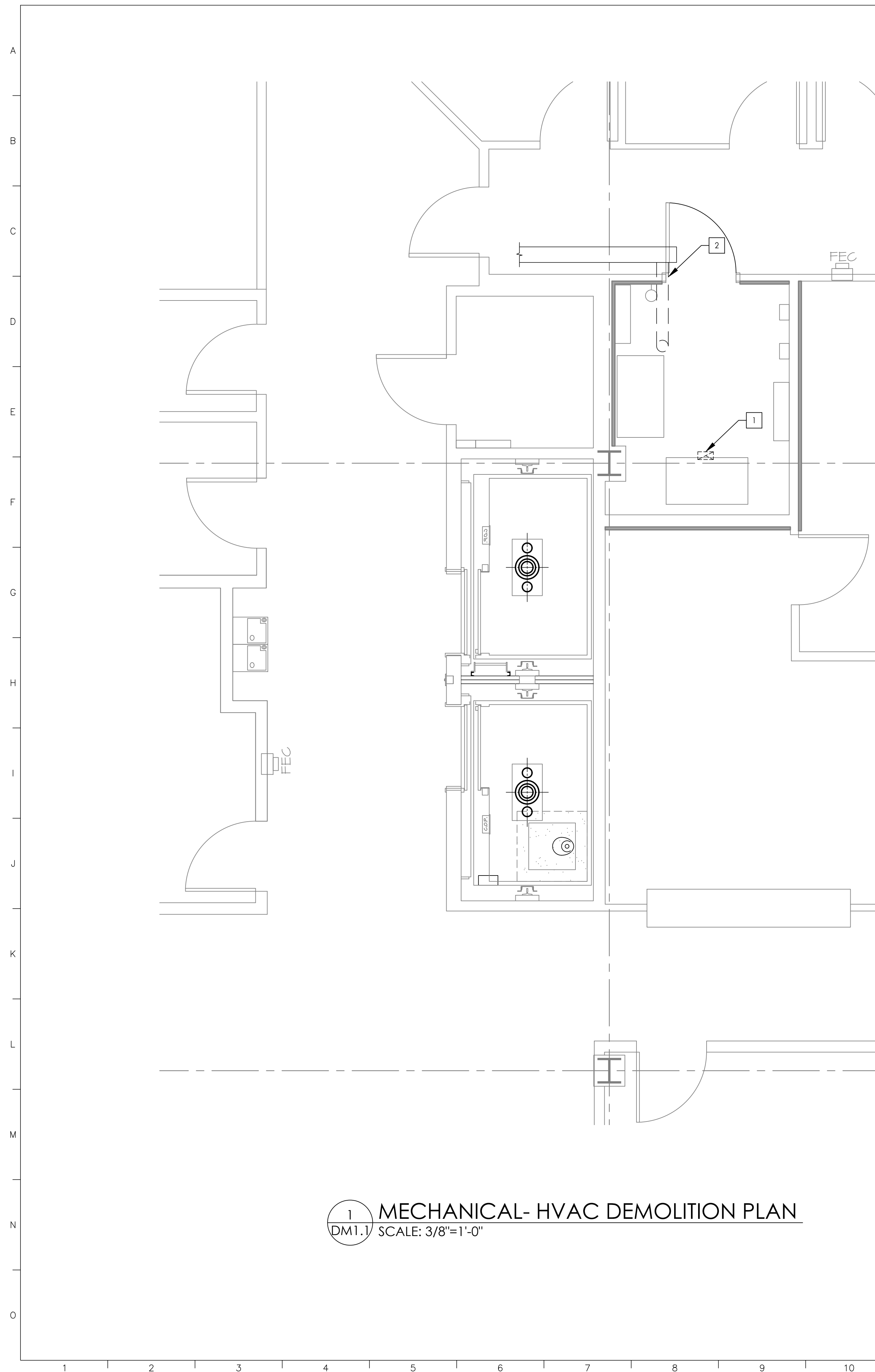
Project:
O.M.B. / D.F.M.
THOMAS COLLINS BUILDING
ELEVATOR UPGRADES

540 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

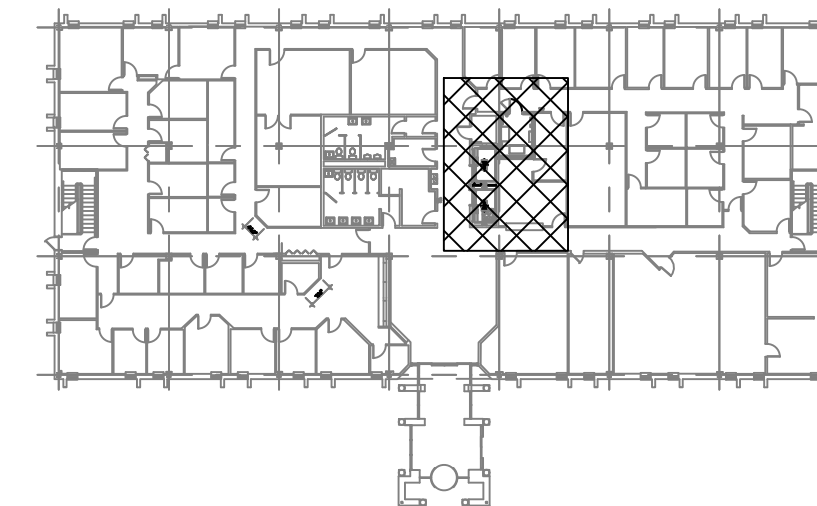
Set No.:	Sheet Title:
BID SET	PLUMBING - SCHEDULES & NOTES
Proj.No.: 0506B045.B01	Scale: AS NOTED
Dwn.By: EAU	Date: 6/5/23

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.

P2.1



- DEMOLITION WORK NOTES**
- 1 REMOVE EXISTING PLENUM RETURN GRILLE.
 - 2 REMOVE EXISTING 6" FLEX DUCT AND CAP EXISTING DUCT.



KEY PLAN
SCALE: NTS

1 MECHANICAL- HVAC DEMOLITION PLAN
DM1.1 SCALE: 3/8"=1'-0"

dbf DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com

e² ENGINEERING
106 West Commerce Street
Smyrna, DE 19977
Tel: 302-659-9090

--	--

Revision	

Project:
OMB / DFM.
THOMAS COLLINS BUILDING
ELEVATOR UPGRADES

540 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: MECHANICAL - HVAC DEMOLITION PLAN
Proj.No.: 0506B045.B01	Scale: AS NOTED
Dwn.By: EAU	Date: 6/5/23

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.

DM1.1

COPYRIGHT © 2023

VRF INDOOR UNIT SCHEDULE

System Tag	Tag Reference	M-NET Address	Mitsubishi Model	Type	Nominal Cooling Capacity (BTU/h)	Nominal Heating Capacity (BTU/h)	Cooling Design Entering Temp DB/WB (°F)	Heating Design Entering Temp DB/WB (°F)	Corrected Capacity				Estimated Cooling Coil LAT (°F)	Estimated Heating Coil LAT (°F)	Refrig Pipe Dim Liquid/Suction (inch)	Fan Speed Setting	Peak Fan Airflow (cfm)	Max Fan ESP Setting 208V/230V (IN WG)	Voltage / Phase	Electrical MCA/MFS	Condensate Removal Rate (gal/hr)	Notes / Options	
									Cooling Diversity Full/Partial (See Note 5, 6)	Cooling Total Capacity (BTU/h)	Cooling Sensible Capacity (BTU/h)	Heating Diversity Full/Partial (See Note 5, 6)											Heating Capacity (BTU/h)
System 1	IDU-1	N/A	PEAD-A18AA7	Ceiling-Concealed (Ducted)	18,000.0	19,000.0	75.0/63.0	70.0	FULL DEMAND	15,657.7	12,947.0	FULL DEMAND	00.0	54.8	70.0	1/2" / 1/4"	HIGH	600	0.14/0.20/0.28/0.40/0.60	208/230V/1-phase	Powered by Outdoor	0.51	1, 2, 3, 4, 5, 6

- Notes & Options:
 1 Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DB/WB), outdoor of 95°F (DB)
 2 Nominal heating capacities are based on indoor coil EAT of 70°F (DB), outdoor of 43°F (WB)
 3 See outdoor unit schedule for outdoor ambient conditions, connected capacity, and other factors associated with corrected capacities
 4 See schematic piping/control diagram for indication of required indoor unit remote controllers, system controllers, and integration devices
 5 Full demand corrected capacity includes de-rate associated with indoor vs. outdoor connected capacity indicated on outdoor unit schedule for associated system
 Partial corrected capacity assumes sufficient diversity exists such that the connected capacity de-rate does not apply.
 It is the designer's responsibility to ensure "Diamond System Builder" is set in the appropriate output capacity setting (full demand/partial demand) prior to generating this schedule
 6 It is recommended to always base heating corrected capacity on full demand.

MITSUBISHI ELECTRIC TRANE HVAC US: CITY MULTI VRF OUTDOOR UNIT SCHEDULE

System Tag	Tag Reference	Model Number	Nominal Cooling Capacity (BTU/h)	Nominal Heating Capacity (BTU/h)	Cooling Efficiency IEER/EER (SEER)	Heating COP @ 47°F (HSPF)	Nom System Connected Capacity (% of NOM)	Design Cooling Outdoor Temp DB (°F)	Design Heating Outdoor Temp WB (°F)	Max Pipe Length from BC or 1st Joint (feet)	Corrected Cooling Total Capacity (BTU/h)	Corrected Heating Capacity (BTU/h)	Electrical-Per Module				Notes / Options
													208/230 or (460V)	MCA 208/230	RFS	MOCP	
System 1	CU-1	PUY-A18NKA7	18,000.0	00.0	0.19.90	0 [Cic Only]	100.0%	92.0	8.9	0.0	15,657.7	00.0	208/230V / 1-phase	11	15	28	1, 2, 3, 4, 5

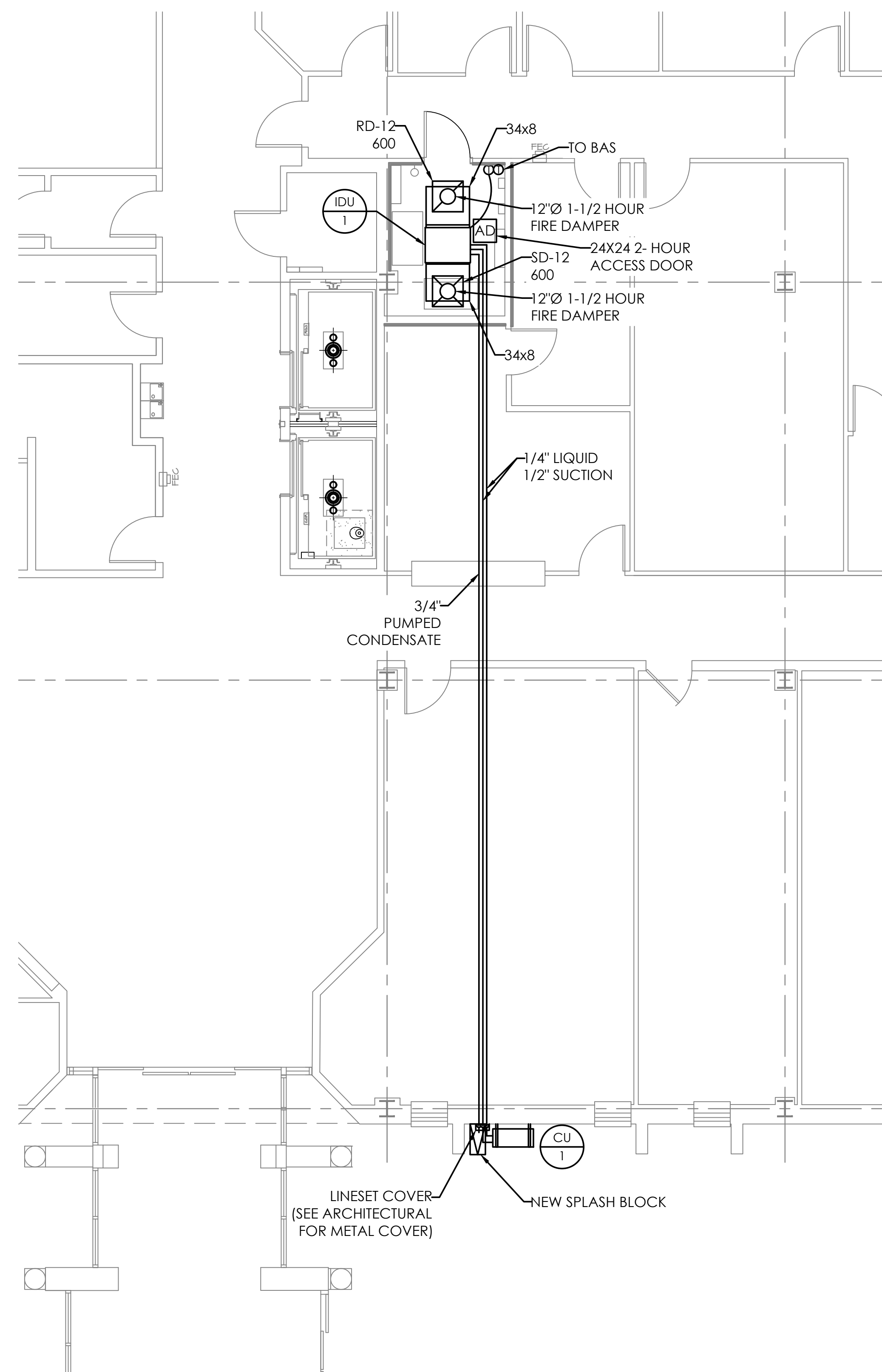
- Notes & Options:
 1 Nominal cooling capacities are based on indoor coil EAT of 80/67°F (DB/WB), outdoor of 95°F (DB)
 2 Nominal heating capacities are based on indoor coil EAT of 70°F (DB), outdoor of 43°F (WB)
 3 Efficiency values for EER, IEER, COP are based on AHRI 1230 test method for mixture of ducted & non-ducted
 4 For systems with multiple modules, refrigerant pipe dimensions indicate total system combined piping
 5 Added field charge listed is in addition to factory charge, this must be updated based upon final as-built

GENERAL MECHANICAL NOTES:

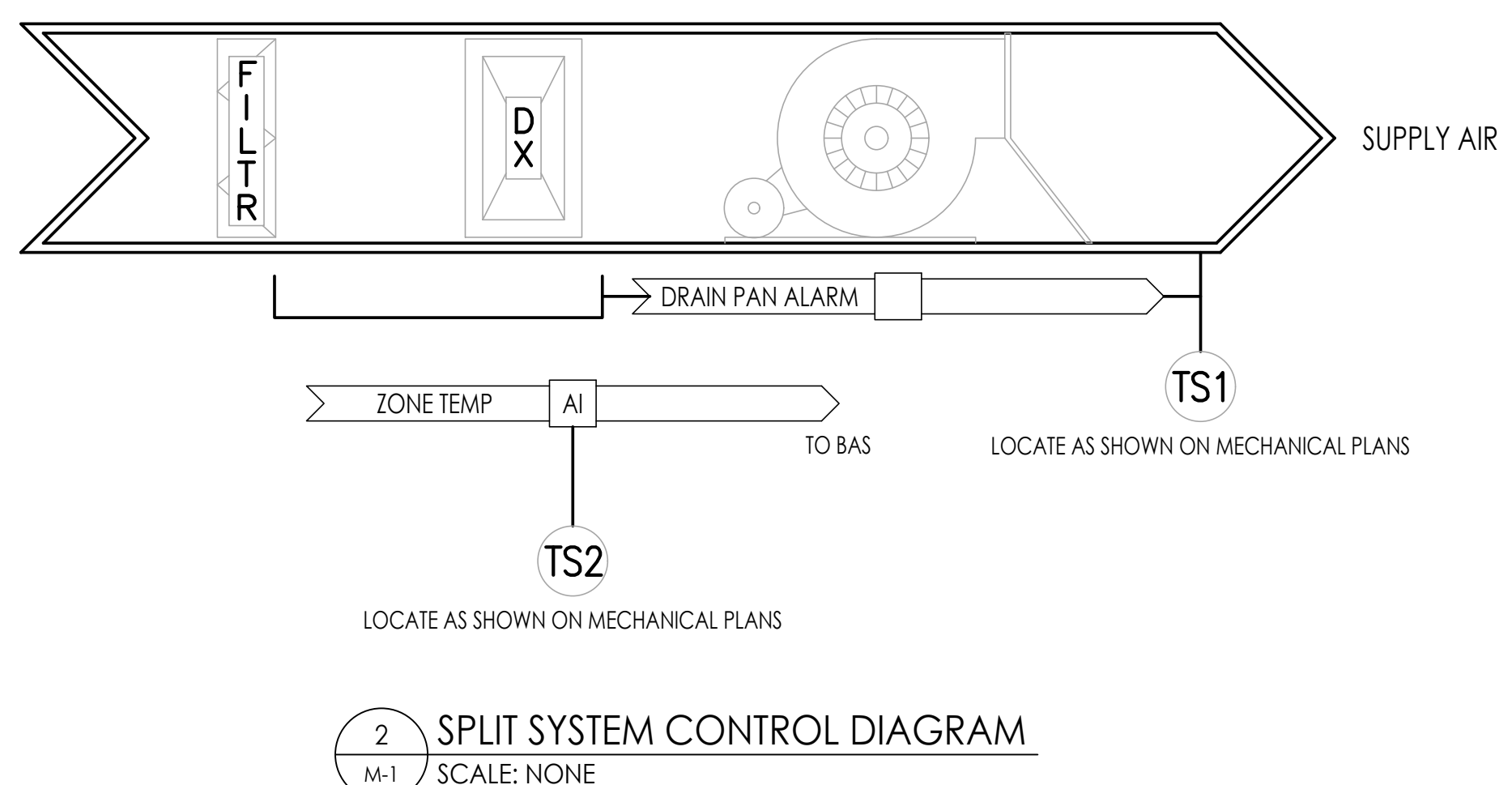
- ALL WORK SHALL BE PERFORMED PER THE 2009 INTERNATIONAL MECHANICAL CODE AND 2018 INTERNATIONAL ENERGY CONSERVATION CODE.
- CONTRACTOR SHALL PROVIDE ALL LIFTS/SCAFFOLDING TO PERFORM THEIR WORK.
- FIRESTOP ALL PENETRATIONS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- PROVIDE 1" HIGH DRAIN PAN UNDER ENTIRE IDU-1 WITH WATER SENSOR TO DISABLE COOLING WHEN WATER IS DETECTED IN THE DRAIN PAN.
- REFER THE PLUMBING DRAWINGS FOR BAS MONITORING OF THE NEW ELEVATOR SUMP PUMP SYSTEM.

GRD SCHEDULE

TAG	TYPE	NECK	FACE	MATERIAL	COLOR	MFR	MODEL
SD-12	3-STEP CONE	12"Ø	24X24	ALUMINUM	WHITE	TUTTLE & BAILEY	A 1300
RD-12	PERFORATED RETURN	12"Ø	24X24	ALUMINUM	WHITE	TUTTLE & BAILEY	A PR



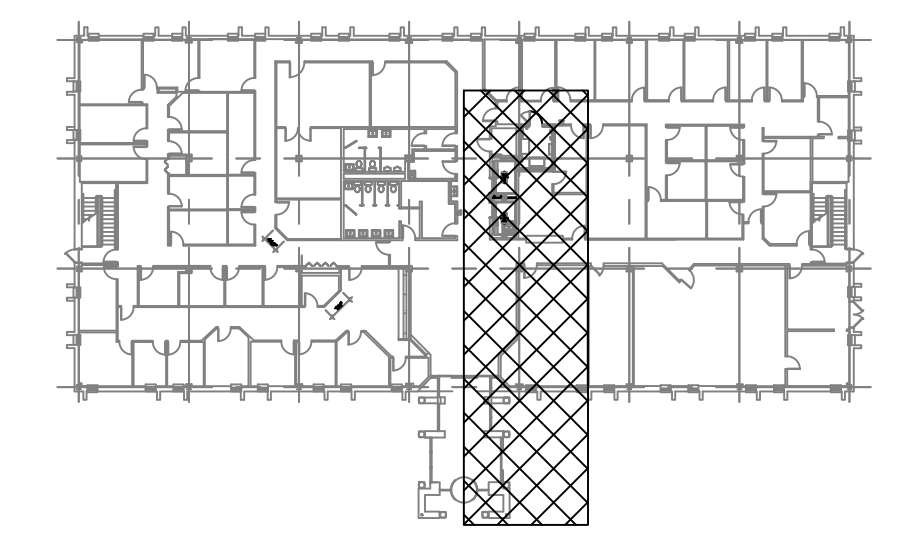
1 MECHANICAL- FIRST FLOOR PLAN
 M1.1 SCALE: 3/16"=1'-0"



2 SPLIT SYSTEM CONTROL DIAGRAM
 M-1 SCALE: NONE

CONTROL NOTES:

- BAS SHALL MONITOR THE SPACE TEMPERATURE IN THE ELEVATOR MACHINE ROOM. ALARM ABOVE 80 DEG F.
- DRAIN PAN SENSOR SHALL SHUT SYSTEM DOWN IN THE EVENT WATER IS DETECTED IN THE DRAIN PAN.
- UNIT SHALL OPERATE BASED UPON ITS STAND ALONE CONTROLS.



KEY PLAN
 SCALE: NTS

DAVIS BOWEN & FRIEDEL, INC.
 ARCHITECTS, ENGINEERS & SURVEYORS
 SALISBURY, MARYLAND ■ MILFORD, DELAWARE
 410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
 801 W. Newport Pike, Wilmington, DE 19804
 Tel: 302-999-1060, Fax: 302-999-1053
 www.FaydaEES.com

e² ENGINEERING
 106 West Commerce Street
 Smyrna, DE 19977
 Tel: 302-659-9090

--	--

Revision	

Project:
OMB / DFM
THOMAS COLLINS BUILDING ELEVATOR UPGRADES
 640 S. DUPONT HIGHWAY
 DOVER, DELAWARE 19901
 STATE CONTRACT NO: MC1002000770

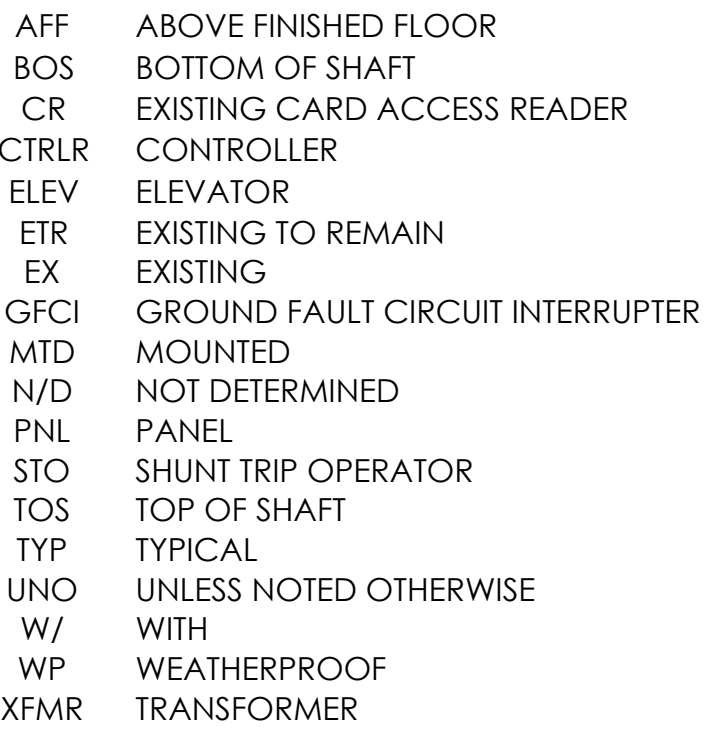
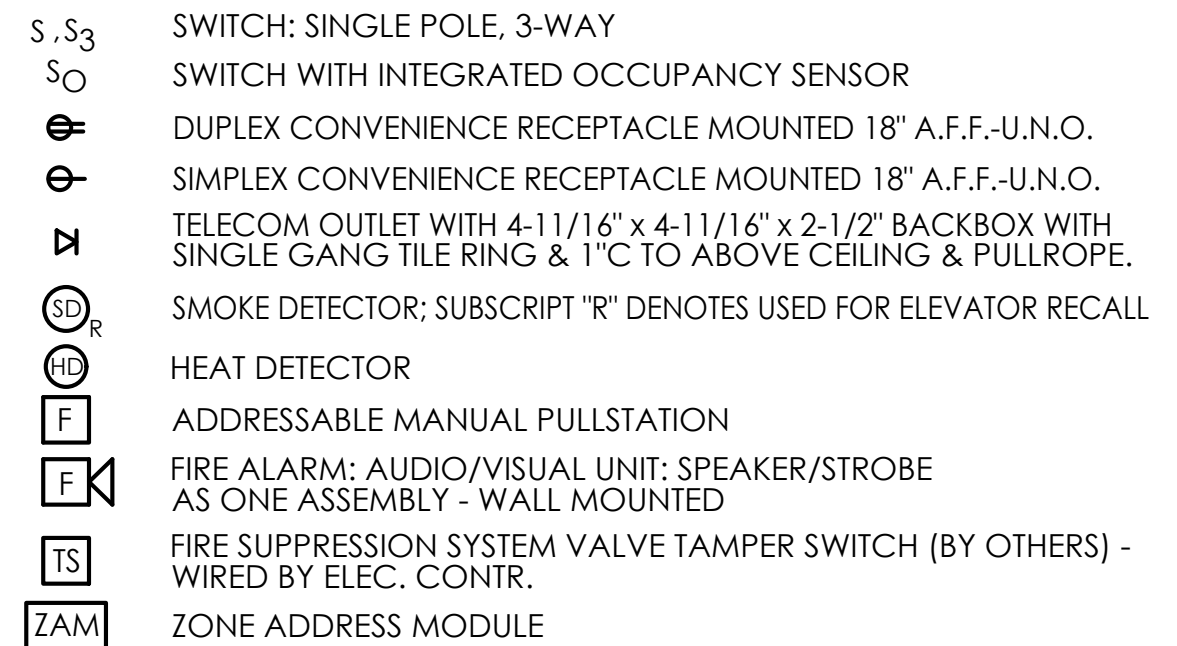
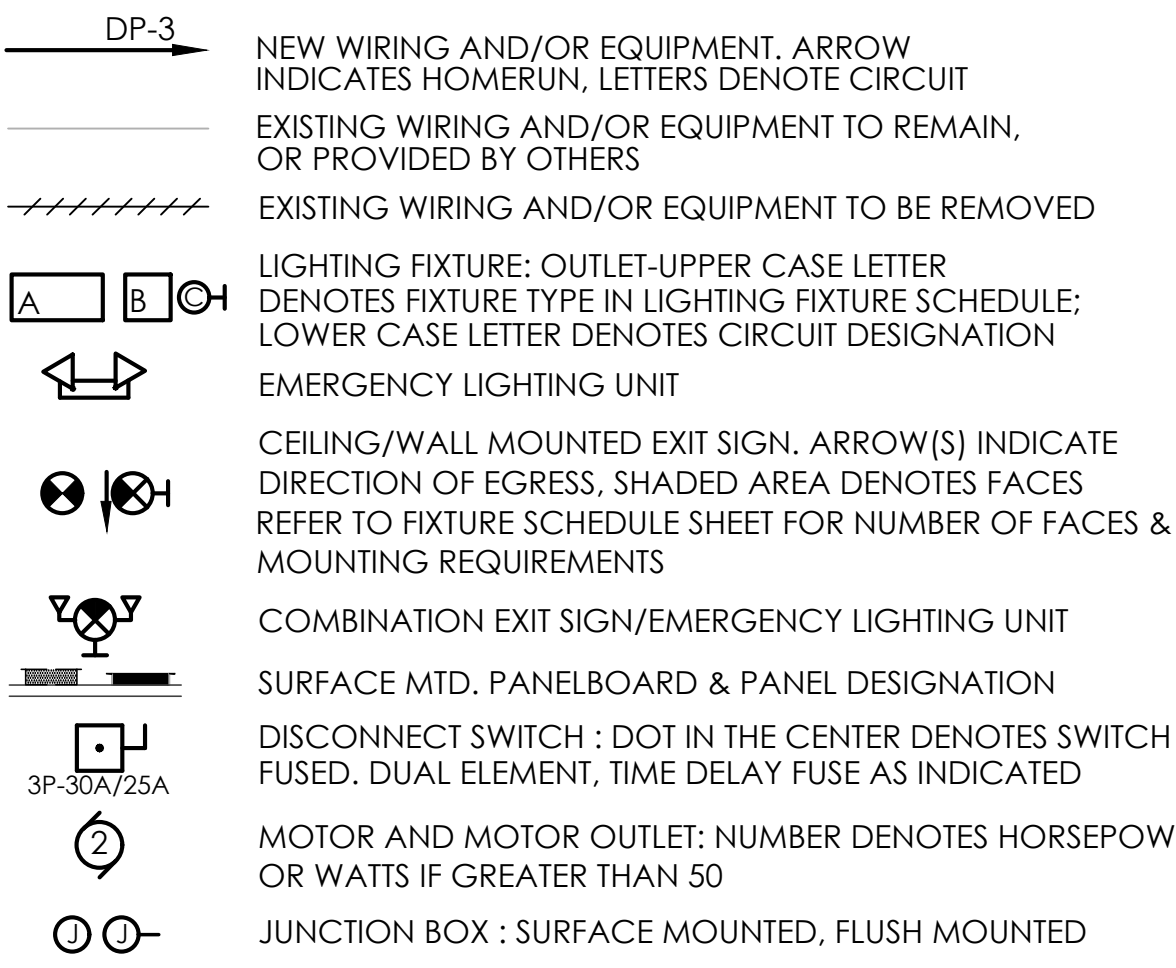
Set No.: BID SET	Sheet Title: MECHANICAL - HVAC PLAN
Proj.No.: 0506045.B01	Scale: AS NOTED
Dwn.By: EAU	Date: 6/5/23

Sheet No.: **M1.1**

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.

COPYRIGHT © 2023

LEGEND AND ABBREVIATIONS



GENERAL NOTES

- (NOT REFERENCED ON DRAWING)
- DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES, OUTLET BOXES, WIRING, CONDUIT, JUNCTION BOXES, PANELS, EQUIPMENT AND ALL RELATED APPURTENANCES NOT REQUIRED UNDER THE NEW WORK PLAN. DRAWINGS ARE FOR REFERENCE ONLY AND MAY NOT IDENTIFY THE FULL SCOPE OF DEMOLITION AND REMOVAL REQUIRED.
 - PROVIDE ALL WIRING EXTENSIONS AS REQUIRED TO ENERGIZE ALL DOWNSTREAM LOADS ONCE SERVED BY THE DISCONNECTED EQUIPMENT. CLOSELY COORDINATE THE EXTENT OF DEMOLITION WITH THE ARCHITECTURAL DRAWINGS, GENERAL CONTRACTOR AND OTHER TRADES DRAWINGS. PATCH AND PAINT ALL UNUSED OPENINGS CREATED BY THIS DEMOLITION IF NOT ALREADY INCLUDED IN THE WORK OF OTHER TRADES.
 - EXISTING BRANCH CIRCUIT IDENTIFICATIONS HAVE BEEN OBTAINED FROM RECORD DRAWINGS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER. CONTRACTOR SHALL FIELD VERIFY ALL CIRCUITING.
 - UNDER ALLOWANCE #1, THE FIRE ALARM CONTRACTOR SHALL REMOVE EXISTING DEVICES AND ASSOCIATED WIRING AS SHOWN ON REMOVAL WORK DRAWINGS. FIRE ALARM CONTRACTOR SHALL PROVIDE NEW FIRE ALARM DEVICES, WIRING, AND REINSTALLATION OF EXISTING DEVICES AND PROVIDE FINAL CONNECTIONS TO THE FIRE ALARM CONTROL PANEL AS REQUIRED.
 - UNDER ALLOWANCE #1, THE SECURITY CONTRACTOR SHALL REMOVE EXISTING ACCESS CONTROL DEVICES AS SHOWN ON REMOVAL WORK DRAWINGS. SECURITY CONTRACTOR SHALL PROVIDE NEW ACCESS CONTROL DEVICES TO EXISTING WIRING AND PROVIDE PROGRAMMING AS REQUIRED.

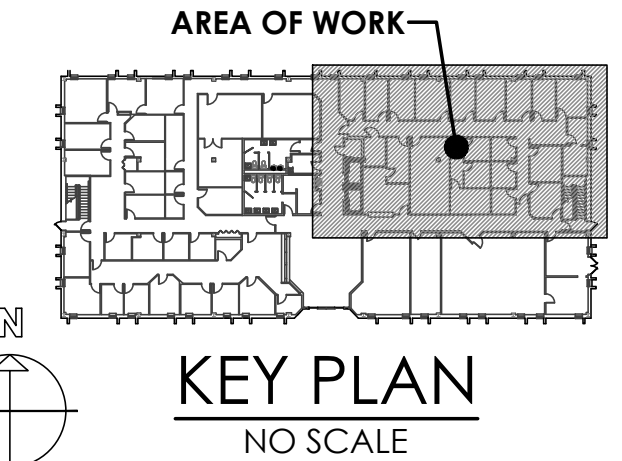
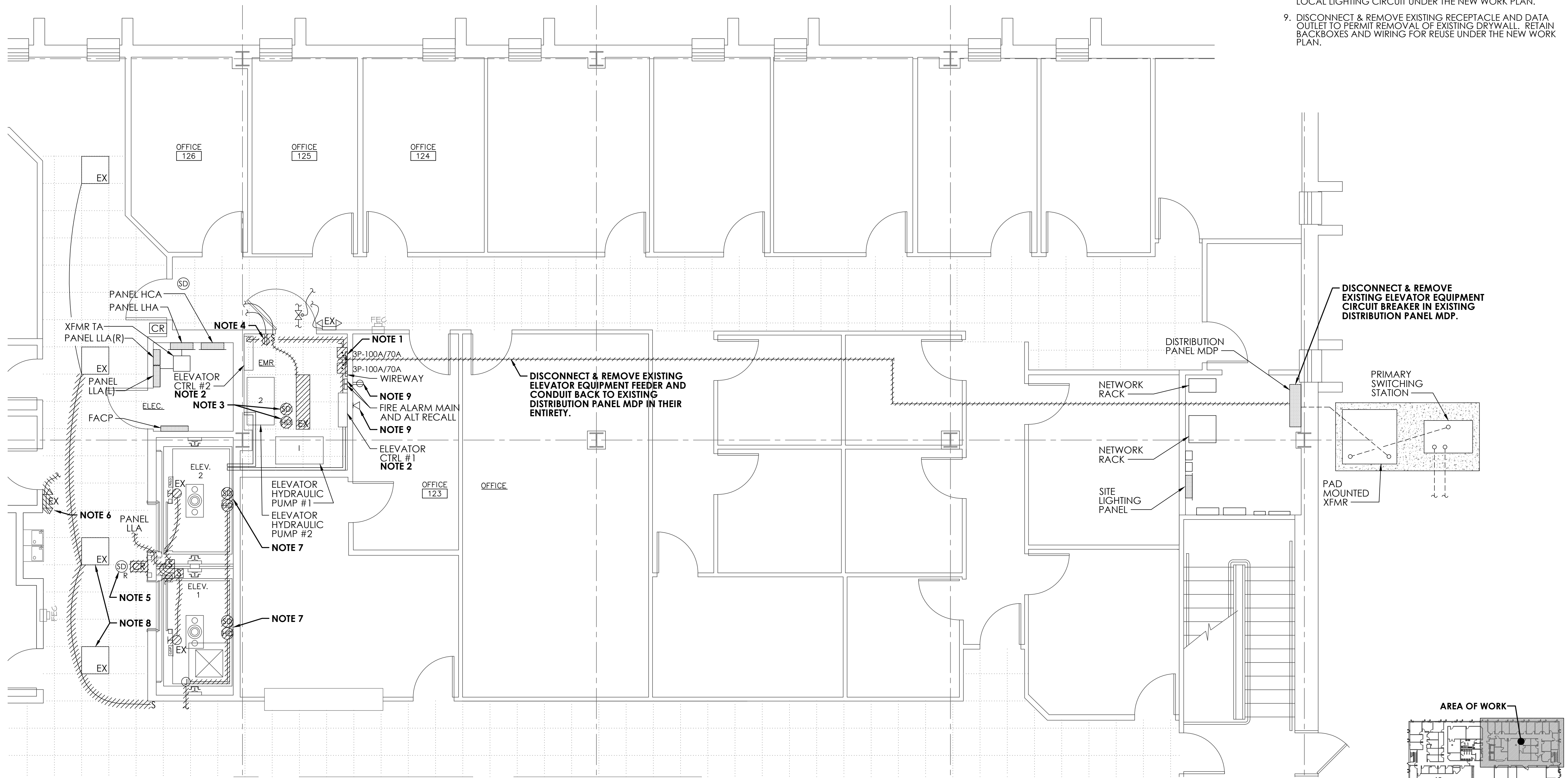
SHEET NOTES

- DISCONNECT & REMOVE EXISTING FUSED DISCONNECT SWITCHES, LINE SIDE WIRING AND CONDUIT BACK TO WIREWAY ABOVE. RETAIN EXISTING WIREWAY AND INCOMING FEEDER FROM DISTRIBUTION PANELBOARD MDP FOR REUSE UNDER THE NEW WORK PLAN. DISCONNECT AND REMOVE EXISTING LOAD SIDE WIRING AND CONDUIT TO ELEVATOR CONTROLLERS #1 & #2 IN THEIR ENTIRETY.
- DISCONNECT & REMOVE EXISTING FIRE ALARM RELAYS, ELEVATOR TELECOMMUNICATIONS AND ACCESS CONTROL CABLES FROM THE EXISTING ELEVATOR CONTROLLER AND RETAIN FOR RECONNECTION TO NEW ELEVATOR CONTROLLER. COORDINATE FINAL CONNECTIONS WITH ELEVATOR CONTRACTOR.
- DISCONNECT & REMOVE EXISTING CEILING MOUNTED SMOKE AND HEAT DETECTORS AND ASSOCIATED CONDUIT & WIRING TO PERMIT INSTALLATION OF NEW CEILING. RETAIN DEVICES FOR REINSTALLATION UNDER NEW WORK PLAN.
- DISCONNECT & REMOVE EXISTING DUPLEX RECEPTACLE AND TOGGLE LIGHTING SWITCH AS SHOWN. RETAIN EXISTING WIRING AND BACKBOX FOR REUSE UNDER NEW WORK PLAN.
- EXISTING ELEVATOR RECALL SYSTEMS SHALL BE RETAINED IN PLACE FOR RE-USE UNDER THE NEW WORK PLAN.
- DISCONNECT AND REMOVE EXISTING WALL MOUNTED EMERGENCY LIGHTING FIXTURE AND WIRING BACK TO LOCAL LIGHTING CIRCUIT OR CENTRAL BATTERY INVERTER AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING HEAT & SMOKE DETECTORS AND ASSOCIATED WIRING BACK TO NEXT UPSTREAM FIRE ALARM DEVICE. RETAIN EXISTING DEVICES FOR REINSTALLATION UNDER THE NEW WORK PLAN.
- DISCONNECT EXISTING LIGHTING FIXTURE FROM THE SWITCHED CIRCUIT AND RECONNECT TO THE UNSWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT UNDER THE NEW WORK PLAN.
- DISCONNECT & REMOVE EXISTING RECEPTACLE AND DATA OUTLET TO PERMIT REMOVAL OF EXISTING DRYWALL. RETAIN BACKBOXES AND WIRING FOR REUSE UNDER THE NEW WORK PLAN.

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com Comm No.:22-1540A

e² ENGINEERING
106 West Commerce Street
Smyrna, DE 19977
Tel: 302-659-9090



1 PARTIAL FIRST FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - REMOVAL WORK
SCALE: 1/4" = 1'-0"

Revision	

Project:
O.M.B. / D.F.M.
THOMAS COLLINS BUILDING
ELEVATOR UPGRADES

640 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: PARTIAL FIRST FLOOR PLAN - LIGHTING, POWER, & SPECIAL SYSTEMS - REMOVAL WORK	Sheet No.:
Proj.No.: 0506B045.B01	Scale: AS NOTED	Date: 6/5/23
Dwn.By: MJS	Date:	

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 2023

E1.1

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

GENERAL NOTES

(NOT REFERENCED ON DRAWING)

- DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES, OUTLET BOXES, WIRING, CONDUIT, JUNCTION BOXES, PANELS, EQUIPMENT AND ALL RELATED APPURTENANCES NOT REQUIRED UNDER THE NEW WORK PLAN. DRAWINGS ARE FOR REFERENCE ONLY AND MAY NOT IDENTIFY THE FULL SCOPE OF DEMOLITION AND REMOVAL REQUIRED.
- PROVIDE ALL WIRING EXTENSIONS AS REQUIRED TO ENERGIZE ALL DOWNSTREAM LOADS ONCE SERVED BY THE DISCONNECTED EQUIPMENT. CLOSELY COORDINATE THE EXTENT OF DEMOLITION WITH THE ARCHITECTURAL DRAWINGS, GENERAL CONTRACTOR AND OTHER TRADES DRAWINGS. PATCH AND PAINT ALL UNUSED OPENINGS CREATED BY THIS DEMOLITION IF NOT ALREADY INCLUDED IN THE WORK OF OTHER TRADES.
- EXISTING BRANCH CIRCUIT IDENTIFICATIONS HAVE BEEN OBTAINED FROM RECORD DRAWINGS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER. CONTRACTOR SHALL FIELD VERIFY ALL CIRCUITING.
- UNDER ALLOWANCE #1, THE FIRE ALARM CONTRACTOR SHALL REMOVE EXISTING DEVICES AND ASSOCIATED WIRING AS SHOWN ON REMOVAL WORK DRAWINGS. FIRE ALARM CONTRACTOR SHALL PROVIDE NEW FIRE ALARM DEVICES, WIRING, AND REINSTALLATION OF EXISTING DEVICES AND PROVIDE FINAL CONNECTIONS TO THE FIRE ALARM CONTROL PANEL AS REQUIRED.
- UNDER ALLOWANCE #1, THE SECURITY CONTRACTOR SHALL REMOVE EXISTING ACCESS CONTROL DEVICES AS SHOWN ON REMOVAL WORK DRAWINGS. SECURITY CONTRACTOR SHALL PROVIDE NEW ACCESS CONTROL DEVICES TO EXISTING WIRING AND PROVIDE PROGRAMMING AS REQUIRED.

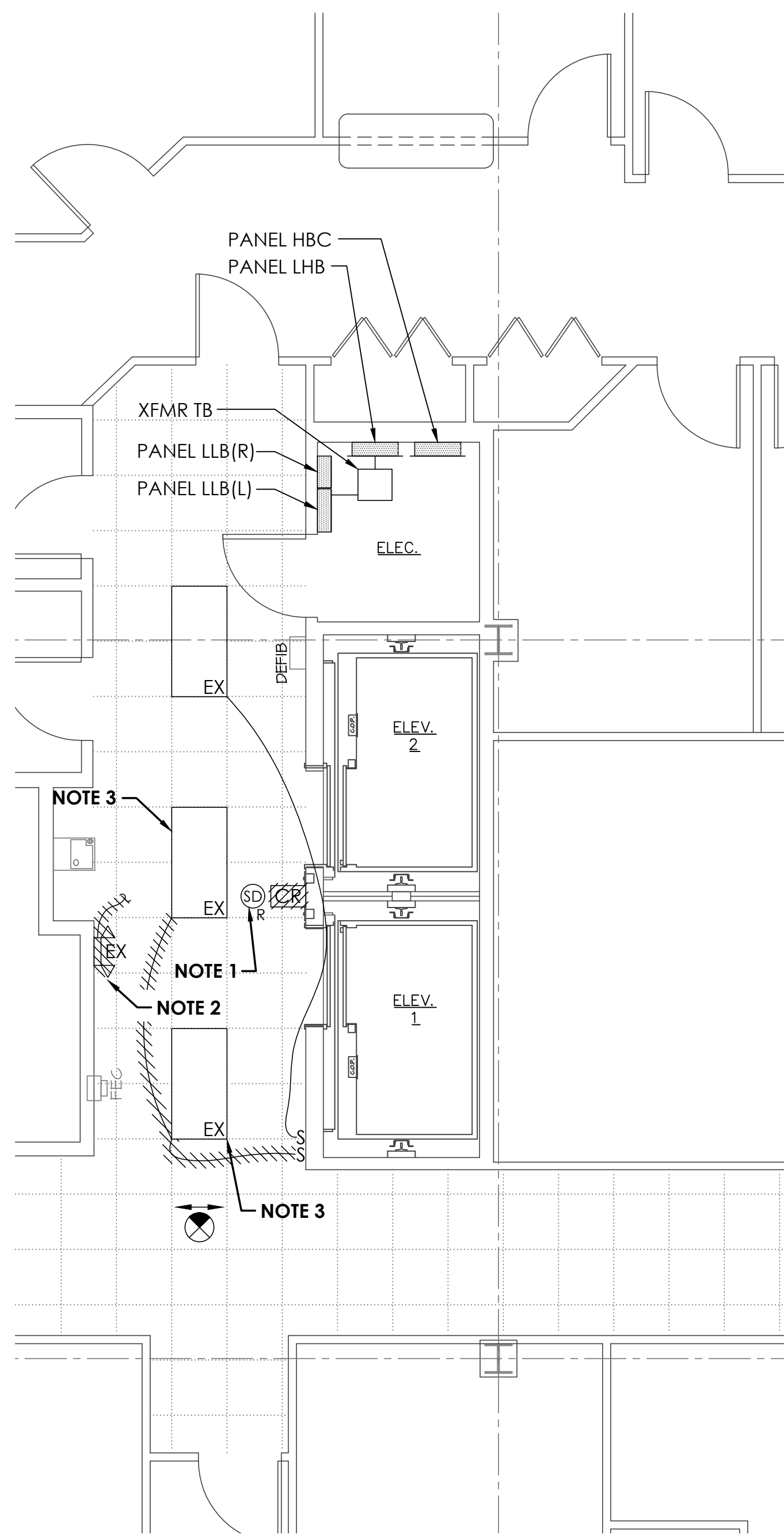
SHEET NOTES

- EXISTING ELEVATOR RECALL SYSTEMS SHALL BE RETAINED IN PLACE FOR RE-USE UNDER THE NEW WORK PLAN.
- DISCONNECT AND REMOVE EXISTING WALL MOUNTED EMERGENCY LIGHTING FIXTURE AND WIRING BACK TO LOCAL LIGHTING CIRCUIT OR CENTRAL BATTERY INVERTER AS REQUIRED.
- DISCONNECT EXISTING LIGHTING FIXTURE FROM THE SWITCHED CIRCUIT AND RECONNECT TO THE UNSWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT UNDER THE NEW WORK PLAN.
- DISCONNECT & REMOVE EXISTING FLUORESCENT LIGHTING FIXTURE IN ITS ENTIRETY. RETAIN BRANCH CIRCUIT WIRING FOR RECONNECTION TO NEW FIXTURE UNDER THE NEW WORK PLAN.

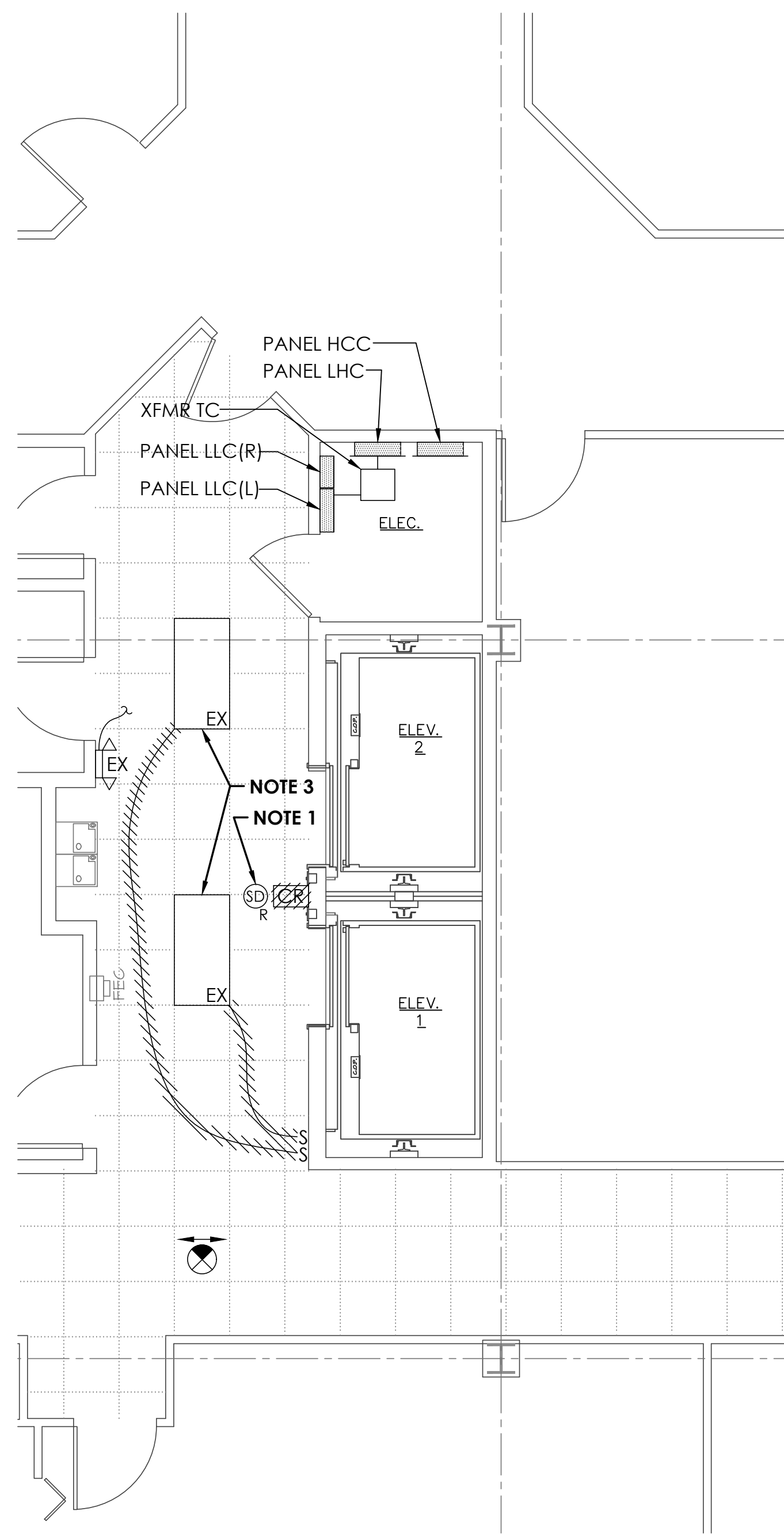
dbf DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com Comm No.:22-1540A

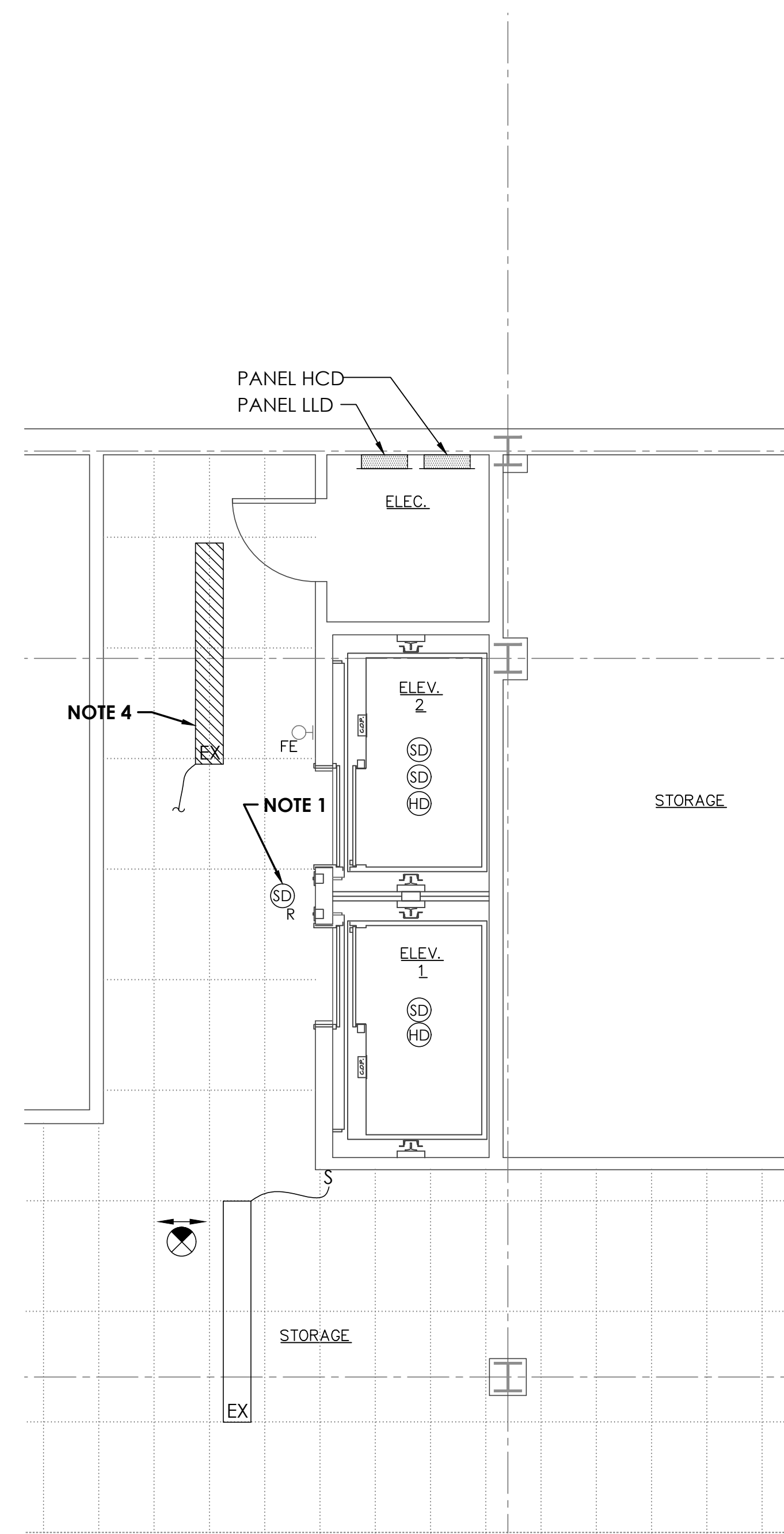
e² ENGINEERING
106 West Commerce Street
Smyrna, DE 19977
Tel: 302-659-9090



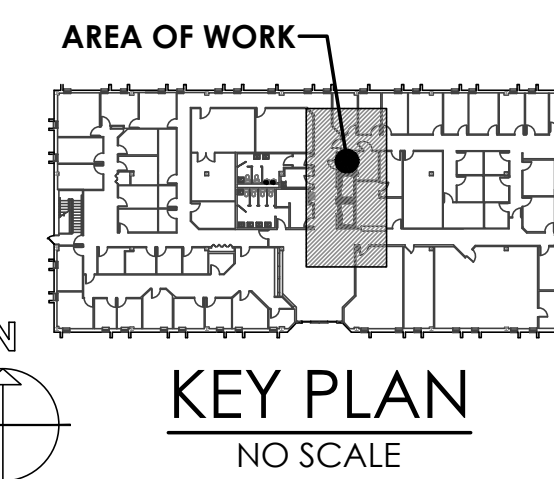
1 PARTIAL SECOND FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - REMOVAL WORK
SCALE: 1/4" = 1'-0"



2 PARTIAL THIRD FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - REMOVAL WORK
SCALE: 1/4" = 1'-0"



3 PARTIAL FOURTH FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - REMOVAL WORK
SCALE: 1/4" = 1'-0"



--	--

Revision			

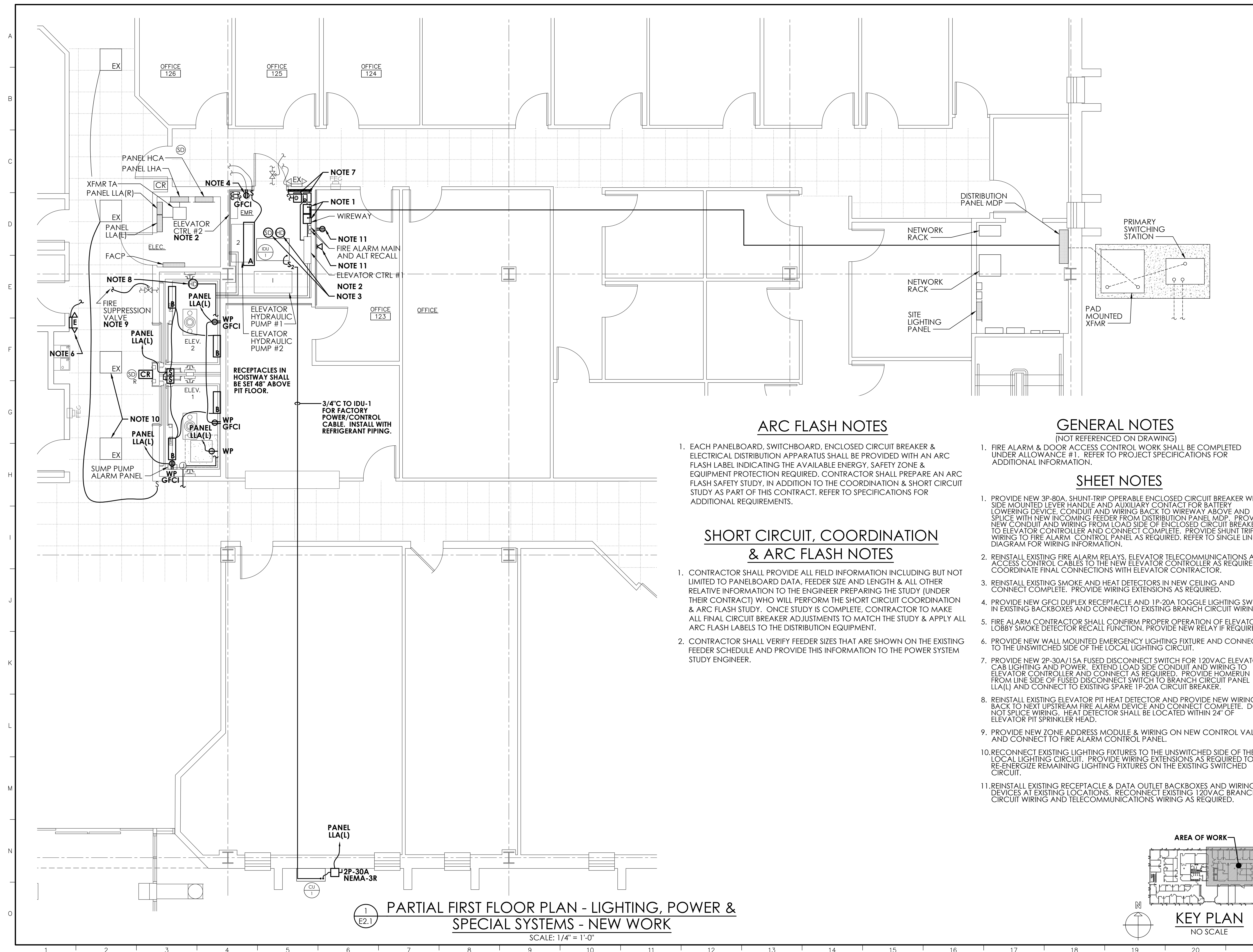
Project:
OMB / D.F.M.
THOMAS COLLINS BUILDING ELEVATOR UPGRADES
640 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: PARTIAL FLOOR PLANS - LIGHTING, POWER, & SPECIAL SYSTEMS - REMOVAL WORK	Scale: AS NOTED	Sheet No.:
Proj.No.: 0306BO45.B01	Date: 6/5/23		
Dwn.By: MJS			

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 2023

E1.2

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21



ARC FLASH NOTES

1. EACH PANELBOARD, SWITCHBOARD, ENCLOSED CIRCUIT BREAKER & ELECTRICAL DISTRIBUTION APPARATUS SHALL BE PROVIDED WITH AN ARC FLASH LABEL INDICATING THE AVAILABLE ENERGY, SAFETY ZONE & EQUIPMENT PROTECTION REQUIRED. CONTRACTOR SHALL PREPARE AN ARC FLASH SAFETY STUDY, IN ADDITION TO THE COORDINATION & SHORT CIRCUIT STUDY AS PART OF THIS CONTRACT. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

SHORT CIRCUIT, COORDINATION & ARC FLASH NOTES

1. CONTRACTOR SHALL PROVIDE ALL FIELD INFORMATION INCLUDING BUT NOT LIMITED TO PANELBOARD DATA, FEEDER SIZE AND LENGTH & ALL OTHER RELATIVE INFORMATION TO THE ENGINEER PREPARING THE STUDY (UNDER THEIR CONTRACT) WHO WILL PERFORM THE SHORT CIRCUIT COORDINATION & ARC FLASH STUDY. ONCE STUDY IS COMPLETE, CONTRACTOR TO MAKE ALL FINAL CIRCUIT BREAKER ADJUSTMENTS TO MATCH THE STUDY & APPLY ALL ARC FLASH LABELS TO THE DISTRIBUTION EQUIPMENT.
2. CONTRACTOR SHALL VERIFY FEEDER SIZES THAT ARE SHOWN ON THE EXISTING FEEDER SCHEDULE AND PROVIDE THIS INFORMATION TO THE POWER SYSTEM STUDY ENGINEER.

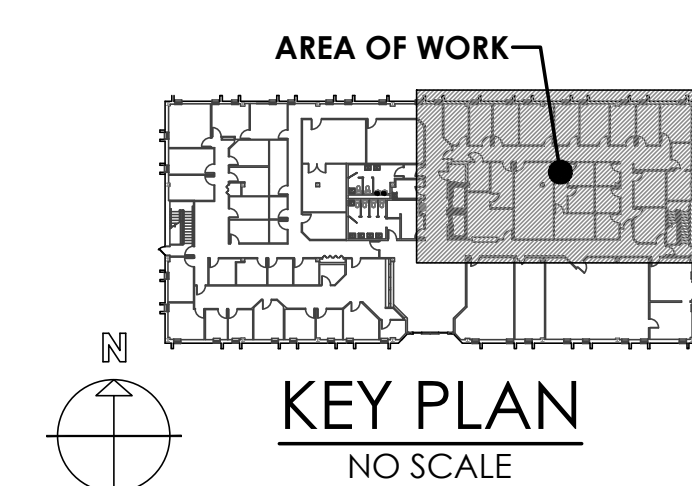
GENERAL NOTES
(NOT REFERENCED ON DRAWING)

1. FIRE ALARM & DOOR ACCESS CONTROL WORK SHALL BE COMPLETED UNDER ALLOWANCE #1. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SHEET NOTES

1. PROVIDE NEW 3P-80A SHUNT-TRIP OPERABLE ENCLOSED CIRCUIT BREAKER WITH SIDE MOUNTED LEVER HANDLE AND AUXILIARY CONTACT FOR BATTERY LOWERING DEVICE. CONDUIT AND WIRING BACK TO WIREWAY ABOVE AND SPICE WITH NEW INCOMING FEEDER FROM DISTRIBUTION PANEL MDP. PROVIDE NEW CONDUIT AND WIRING FROM LOAD SIDE OF ENCLOSED CIRCUIT BREAKER TO ELEVATOR CONTROLLER AND CONNECT COMPLETE. PROVIDE SHUNT TRIP WIRING TO FIRE ALARM CONTROL PANEL AS REQUIRED. REFER TO SINGLE LINE DIAGRAM FOR WIRING INFORMATION.
2. REINSTALL EXISTING FIRE ALARM RELAYS, ELEVATOR TELECOMMUNICATIONS AND ACCESS CONTROL CABLES TO THE NEW ELEVATOR CONTROLLER AS REQUIRED. COORDINATE FINAL CONNECTIONS WITH ELEVATOR CONTRACTOR.
3. REINSTALL EXISTING SMOKE AND HEAT DETECTORS IN NEW CEILING AND CONNECT COMPLETE. PROVIDE WIRING EXTENSIONS AS REQUIRED.
4. PROVIDE NEW GFCI DUPLEX RECEPTACLE AND 1P-20A TOGGLE LIGHTING SWITCH IN EXISTING BACKBOXES AND CONNECT TO EXISTING BRANCH CIRCUIT WIRING.
5. FIRE ALARM CONTRACTOR SHALL CONFIRM PROPER OPERATION OF ELEVATOR LOBBY SMOKE DETECTOR RECALL FUNCTION. PROVIDE NEW RELAY IF REQUIRED.
6. PROVIDE NEW WALL MOUNTED EMERGENCY LIGHTING FIXTURE AND CONNECT TO THE UNSWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT.
7. PROVIDE NEW 2P-30A/15A FUSED DISCONNECT SWITCH FOR 120VAC ELEVATOR CAB LIGHTING AND POWER. EXTEND LOAD SIDE CONDUIT AND WIRING TO ELEVATOR CONTROLLER AND CONNECT AS REQUIRED. PROVIDE HOMERUN FROM LINE SIDE OF FUSED DISCONNECT SWITCH TO BRANCH CIRCUIT PANEL LLA(L) AND CONNECT TO EXISTING SPARE 1P-20A CIRCUIT BREAKER.
8. REINSTALL EXISTING ELEVATOR PIT HEAT DETECTOR AND PROVIDE NEW WIRING BACK TO NEXT UPSTREAM FIRE ALARM DEVICE AND CONNECT COMPLETE. DO NOT SPICE WIRING. HEAT DETECTOR SHALL BE LOCATED WITHIN 24" OF ELEVATOR PIT SPRINKLER HEAD.
9. PROVIDE NEW ZONE ADDRESS MODULE & WIRING ON NEW CONTROL VALVE AND CONNECT TO FIRE ALARM CONTROL PANEL.
10. RECONNECT EXISTING LIGHTING FIXTURES TO THE UNSWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT. PROVIDE WIRING EXTENSIONS AS REQUIRED TO RE-ENERGIZE REMAINING LIGHTING FIXTURES ON THE EXISTING SWITCHED CIRCUIT.
11. REINSTALL EXISTING RECEPTACLE & DATA OUTLET BACKBOXES AND WIRING DEVICES AT EXISTING LOCATIONS. RECONNECT EXISTING 120VAC BRANCH CIRCUIT WIRING AND TELECOMMUNICATIONS WIRING AS REQUIRED.

PARTIAL FIRST FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - NEW WORK
 SCALE: 1/4" = 1'-0"



--	--

Revision	

Project:
O.M.B. / D.F.M.
THOMAS COLLINS BUILDING ELEVATOR UPGRADES
 640 S. DUPONT HIGHWAY
 DOVER, DELAWARE 19901
 STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: PARTIAL FIRST FLOOR PLAN - LIGHTING, POWER, & SPECIAL SYSTEMS - NEW WORK	Sheet No.:
Proj.No.: 0506BO45.B01	Scale: AS NOTED	
Dwn.By: MJS	Date: 6/5/23	

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
 COPYRIGHT © 2023

E2.1

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

GENERAL NOTES

(NOT REFERENCED ON DRAWING)

1. FIRE ALARM & DOOR ACCESS CONTROL WORK SHALL BE COMPLETED UNDER ALLOWANCE #1. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

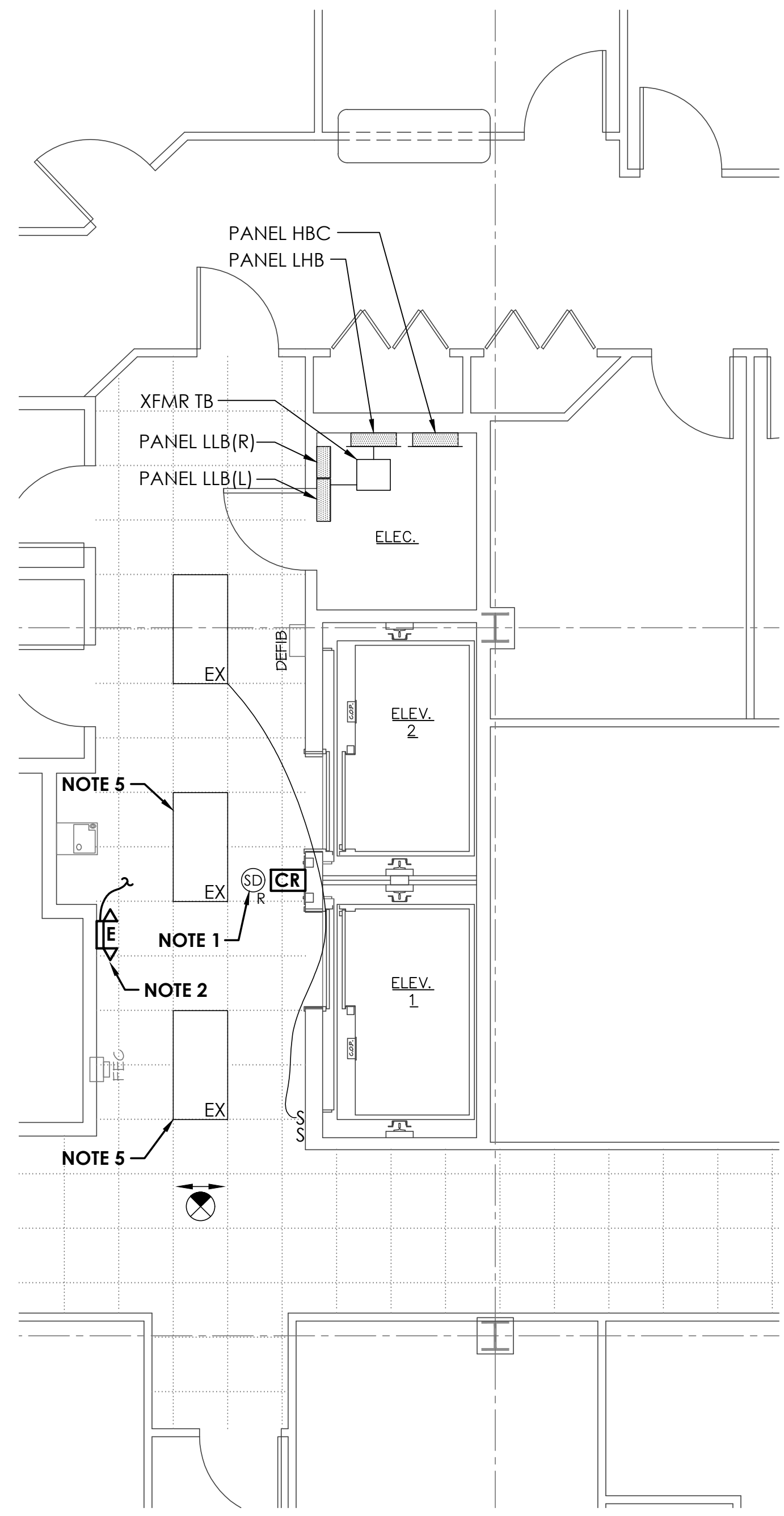
SHEET NOTES

1. FIRE ALARM CONTRACTOR SHALL CONFIRM PROPER OPERATION OF ELEVATOR LOBBY SMOKE DETECTOR RECALL FUNCTION. PROVIDE NEW RELAY IF REQUIRED.
2. PROVIDE NEW WALL MOUNTED EMERGENCY LIGHTING FIXTURE AND CONNECT TO THE UNSWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT.
3. PROVIDE NEW LED LIGHTING FIXTURE AND RECONNECT TO THE UNSWITCHED SIDE OF LOCAL LIGHTING CIRCUIT.
4. PROVIDE NEW LED LIGHTING FIXTURE AND CONNECT TO THE UNSWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT. WIRING SHALL BE (2)-#12 & (1)-#12GND - 3/4" C.
5. RECONNECT EXISTING LIGHTING FIXTURES TO THE UNSWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT. PROVIDE WIRING EXTENSIONS AS REQUIRED TO RE-ENERGIZE REMAINING LIGHTING FIXTURES ON THE EXISTING SWITCHED CIRCUIT. REMOVE ANY LIGHTING SWITCHES THAT ARE NO LONGER IN USE AND PROVIDE BLANK OFF COVER PLATES AS REQUIRED.

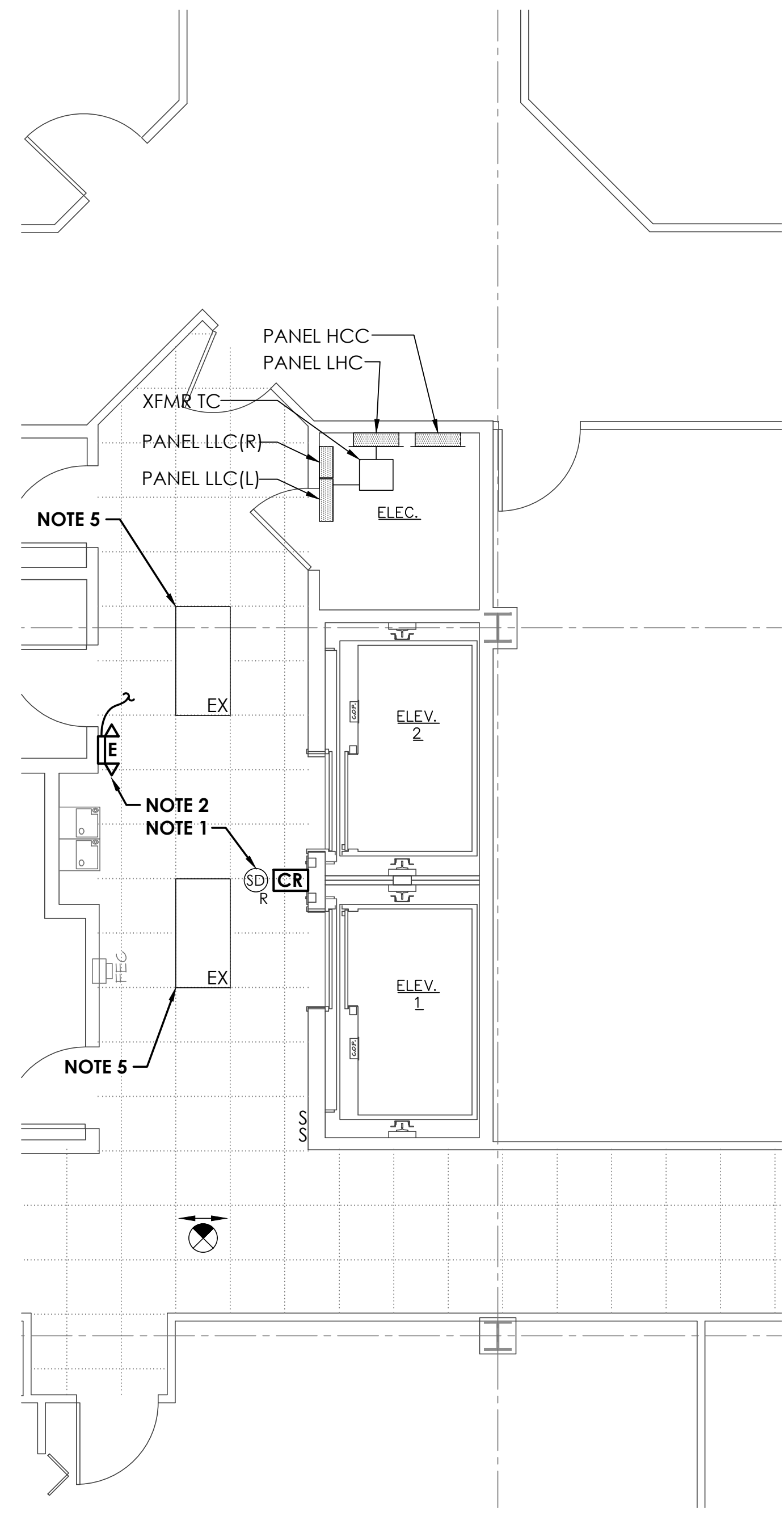
dbf DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com Comm No.:22-1540A

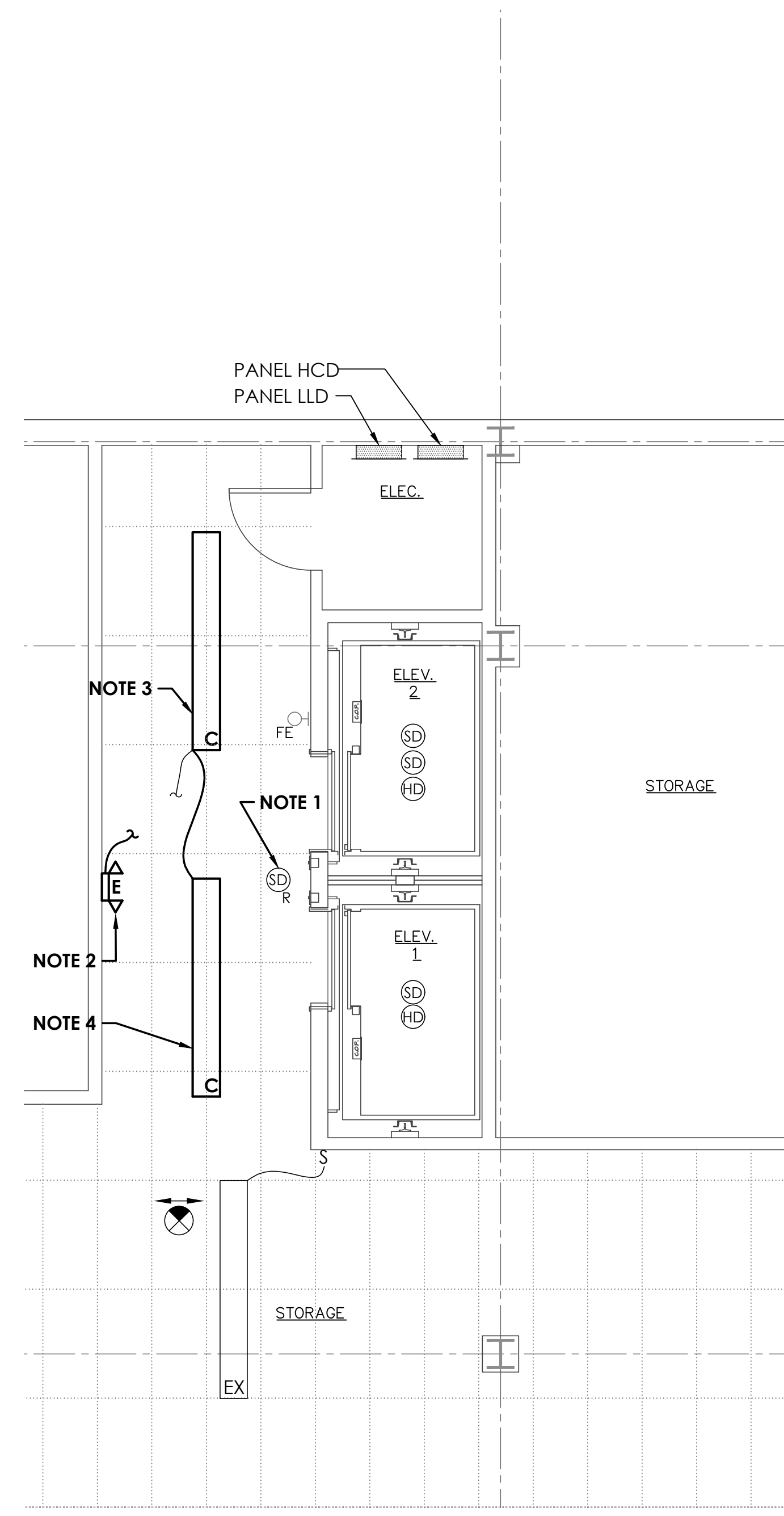
e² ENGINEERING
106 West Commerce Street
Smyrna, DE 19977
Tel: 302-659-9090



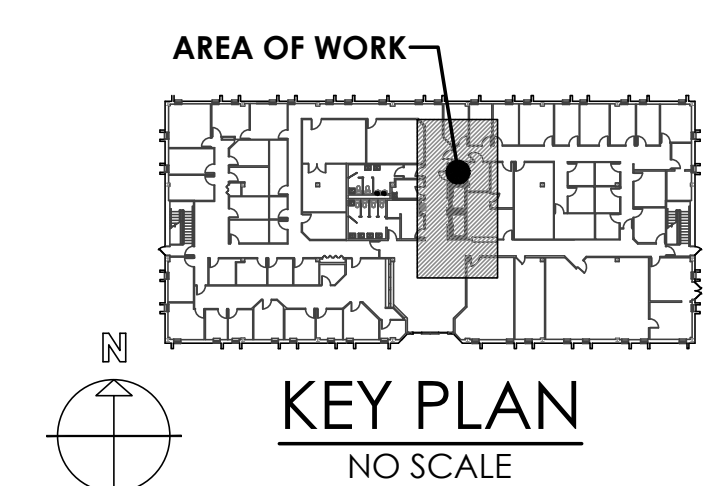
1 PARTIAL SECOND FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - NEW WORK
SCALE: 1/4" = 1'-0"



2 PARTIAL THIRD FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - NEW WORK
SCALE: 1/4" = 1'-0"



3 PARTIAL FOURTH FLOOR PLAN - LIGHTING, POWER & SPECIAL SYSTEMS - NEW WORK
SCALE: 1/4" = 1'-0"



--	--

Revision

Project:
O.M.B. / D.F.M.
THOMAS COLLINS BUILDING ELEVATOR UPGRADES
540 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: PARTIAL FLOOR PLANS - LIGHTING, POWER, & SPECIAL SYSTEMS - NEW WORK	Scale: AS NOTED	Sheet No.:
Proj.No.: 0306B045.B01	Date: 6/5/23		
Dwn.By: MJS			

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 2023

E2.2

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

LIGHTING FIXTURE SCHEDULE											
TYPE	MANUF.	CATALOG NUMBER	LAMP BLST	LAMP DATA			FIXTURE TYPE		MOUNTING	REMARKS	ALTERNATE MANUFACTURERS
				CRI	TEMP	WATT	H.I.D.	LED			
A	COLUMBIA	LCL-4-35-ML-E-U	-	-	3.5K	42	-	X	CEILING/SURFACE	ELEVATOR MACHINE ROOM	APPROVED EQUAL
B	COLUMBIA	LXEM-2-35-ML-RFA-E-U	-	-	3.5K	39	-	X	WALL/SURFACE	ELEVATOR PIT LINEAR LIGHTING FIXTURE	APPROVED EQUAL
C	COLUMBIA	CS18-LSCS-GLH5 (SET TO "LOW" LUMEN)	-	-	3.5K	74	-	X	CEILING/CABLE	8' LED FIXTURE WITH SWITCHABLE LUMENS, 4TH FLOOR LOBBY	APPROVED EQUAL
E	DUAL-LITE	LZ-15-03L	2	-	-	6	-	X	WALL/SURFACE	EMERGENCY BATTERY UNIT 2 LAMPS: 15watt CAPACITY	APPROVED EQUAL

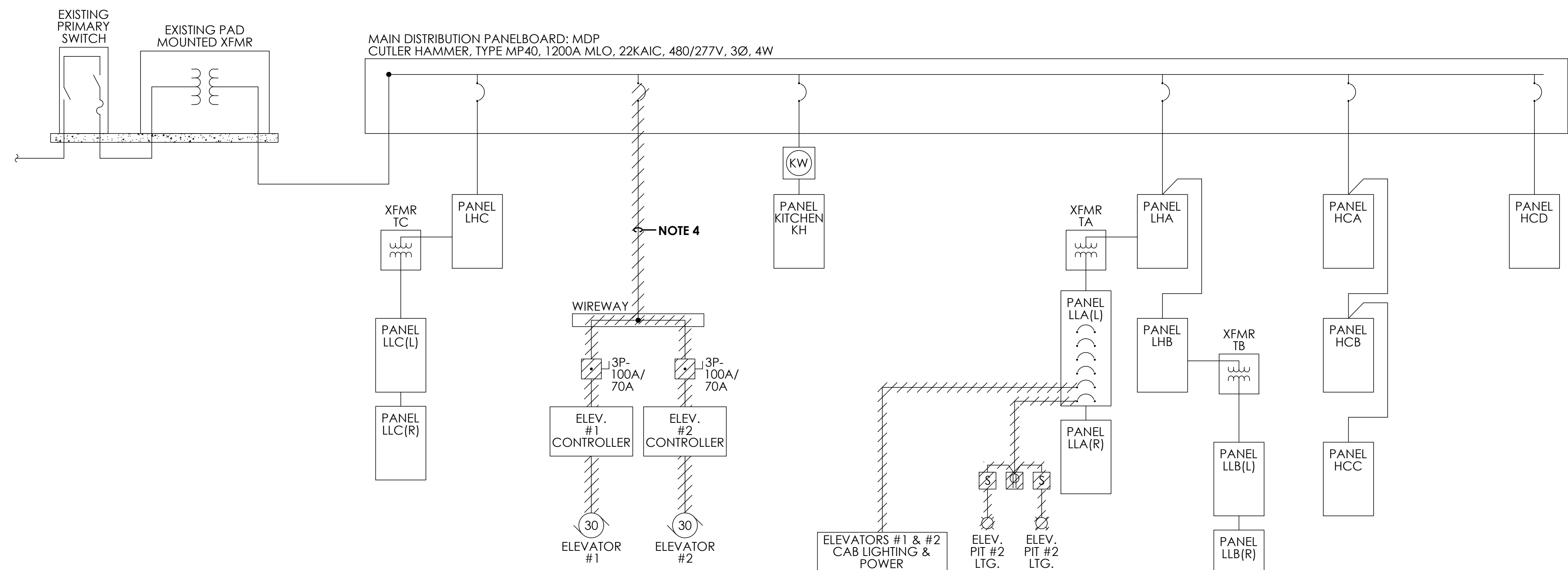
FEEDER SCHEDULE	
①	(4)-#2/0 & (1)-6GND - 2"C
②	(4)-#3 & (1)-8GND - 1-1/4"C
③	(3)-#3 & (1)-8GND - 1-1/4"C
④	(2)-#12 & (1)-#12GND - 3/4"C
⑤	(3)-#12 & (1)-#12GND - 3/4"C

GENERAL NOTES
(NOT REFERENCED ON DRAWING)

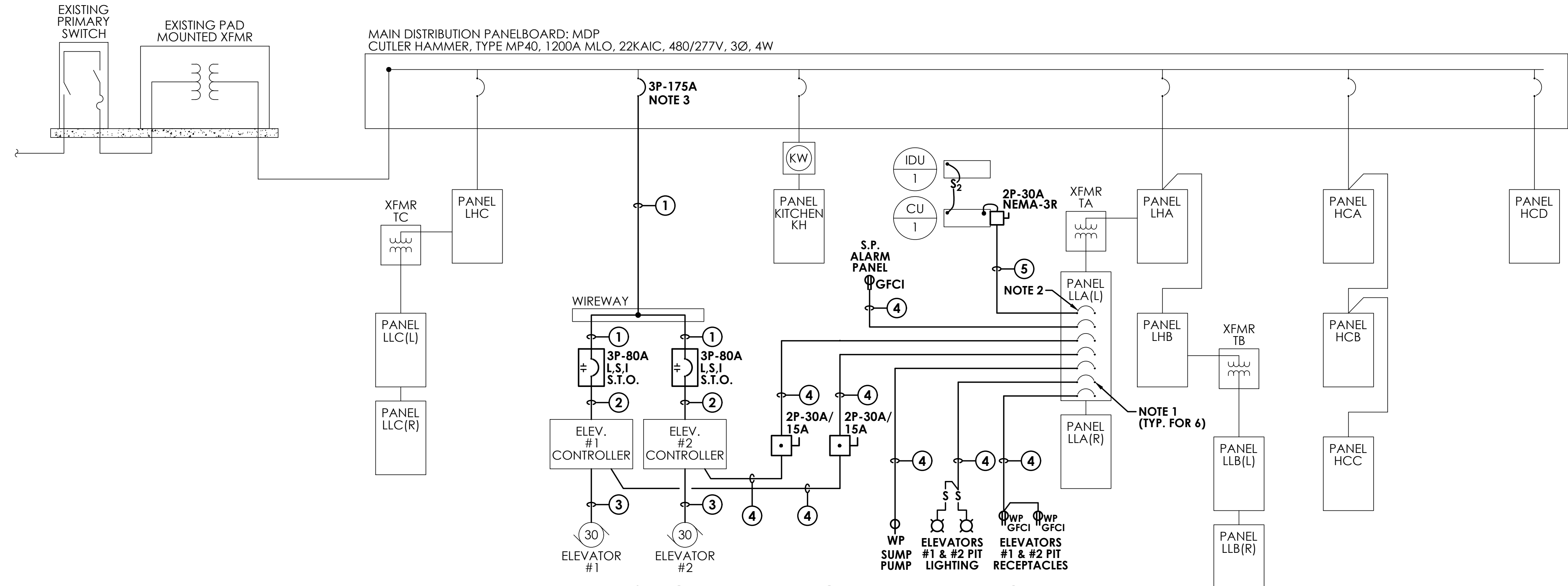
- FIRE ALARM & DOOR ACCESS CONTROL WORK SHALL BE COMPLETED UNDER ALLOWANCE #1. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SHEET NOTES

- CONNECT NEW BRANCH CIRCUIT WIRING TO EXISTING SPARE 1P-20A CIRCUIT BREAKER.
- PROVIDE NEW 2P-15A CIRCUIT BREAKER IN EXISTING PANEL LLA(L) AND CONNECT COMPLETE.
- PROVIDE NEW 3P-175A CIRCUIT BREAKER IN EXISTING DISTRIBUTION PANEL MDP AS SHOWN. NEW CIRCUIT BREAKER SHALL MATCH AIC RATING OF EXISTING DISTRIBUTION PANEL MDP.



① SINGLE LINE DIAGRAM - REMOVAL WORK
NO SCALE



② SINGLE LINE DIAGRAM - NEW WORK
NO SCALE

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND ■ MILFORD, DELAWARE
410.543.9091 302.424.1441

FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC
801 W. Newport Pike, Wilmington, DE 19804
Tel: 302-999-1060, Fax: 302-999-1053
www.FaydaEES.com Comm No.:22-1540A

e² ENGINEERING
106 West Commerce Street
Smyrna, DE 19977
Tel: 302-659-9090

--	--

Revision	

Project:
O.M.B. / D.F.M.
THOMAS COLLINS BUILDING ELEVATOR UPGRADES
640 S. DUPONT HIGHWAY
DOVER, DELAWARE 19901
STATE CONTRACT NO: MC1002000770

Set No.: BID SET	Sheet Title: SINGLE LINE DIAGRAM, SCHEDULES & DETAILS
Proj.No.: 0506045.B01	Scale: AS NOTED
Dwn.By: MJS	Date: 6/5/23

THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION.

E3.1

COPYRIGHT © 2023