

ORANGE COUNTY CONVENTION CENTER NORTH SOUTH BUILDING DEMARC HVAC UPGRADE

ORANGE COUNTY MAYOR
TERESA JACOBS

DISTRICT 1 COMMISSIONER
BETSY VANDERLEY

DISTRICT 2 COMMISSIONER
BRYAN NELSON



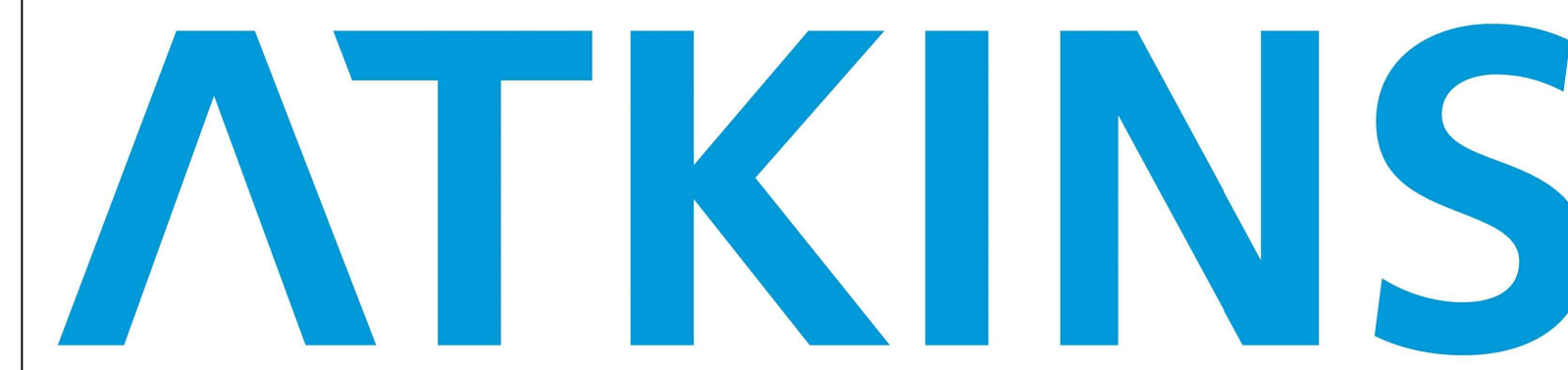
DISTRICT 3 COMMISSIONER
PETE CLARKE

DISTRICT 4 COMMISSIONER
JENNIFER THOMPSON

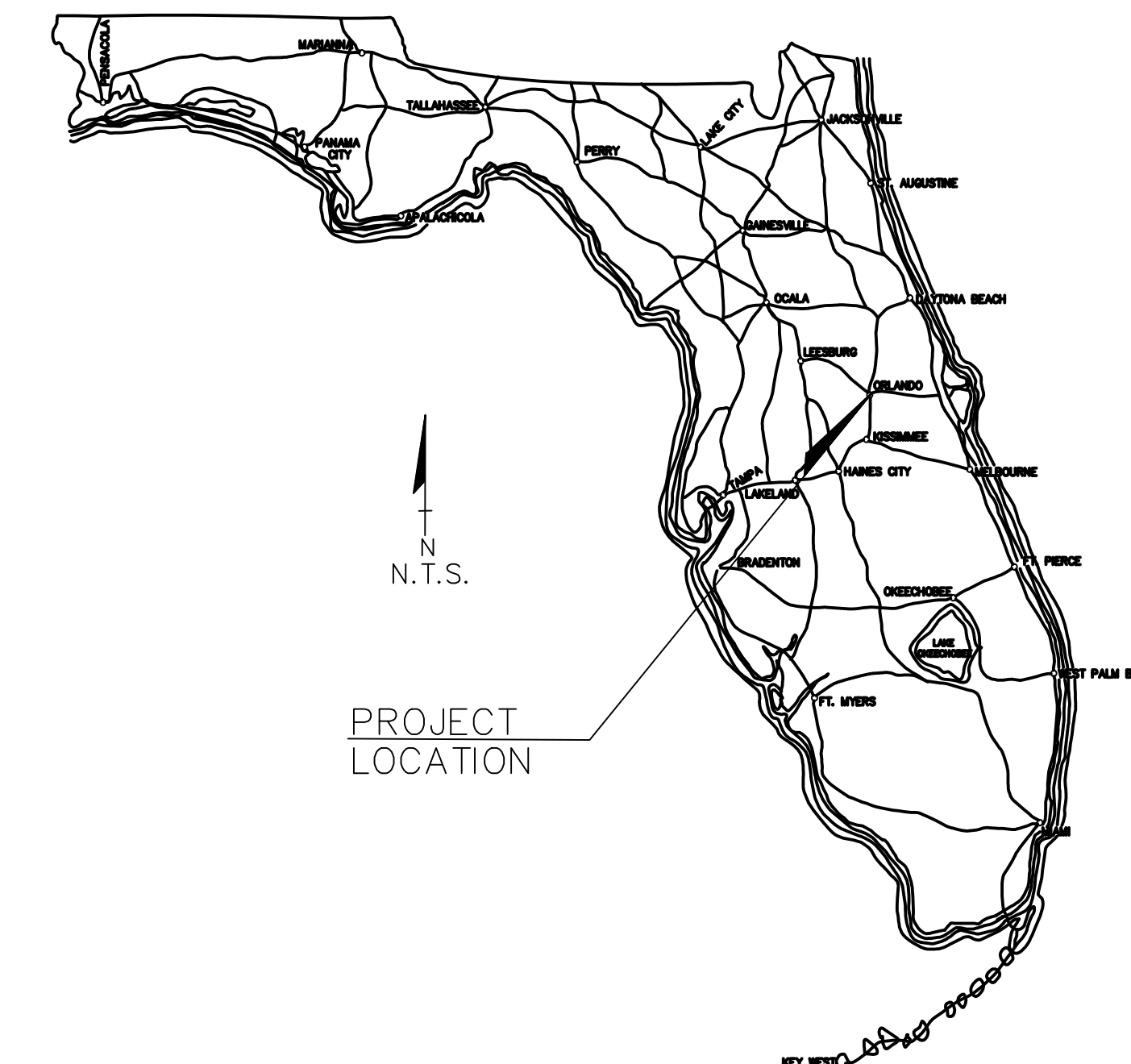
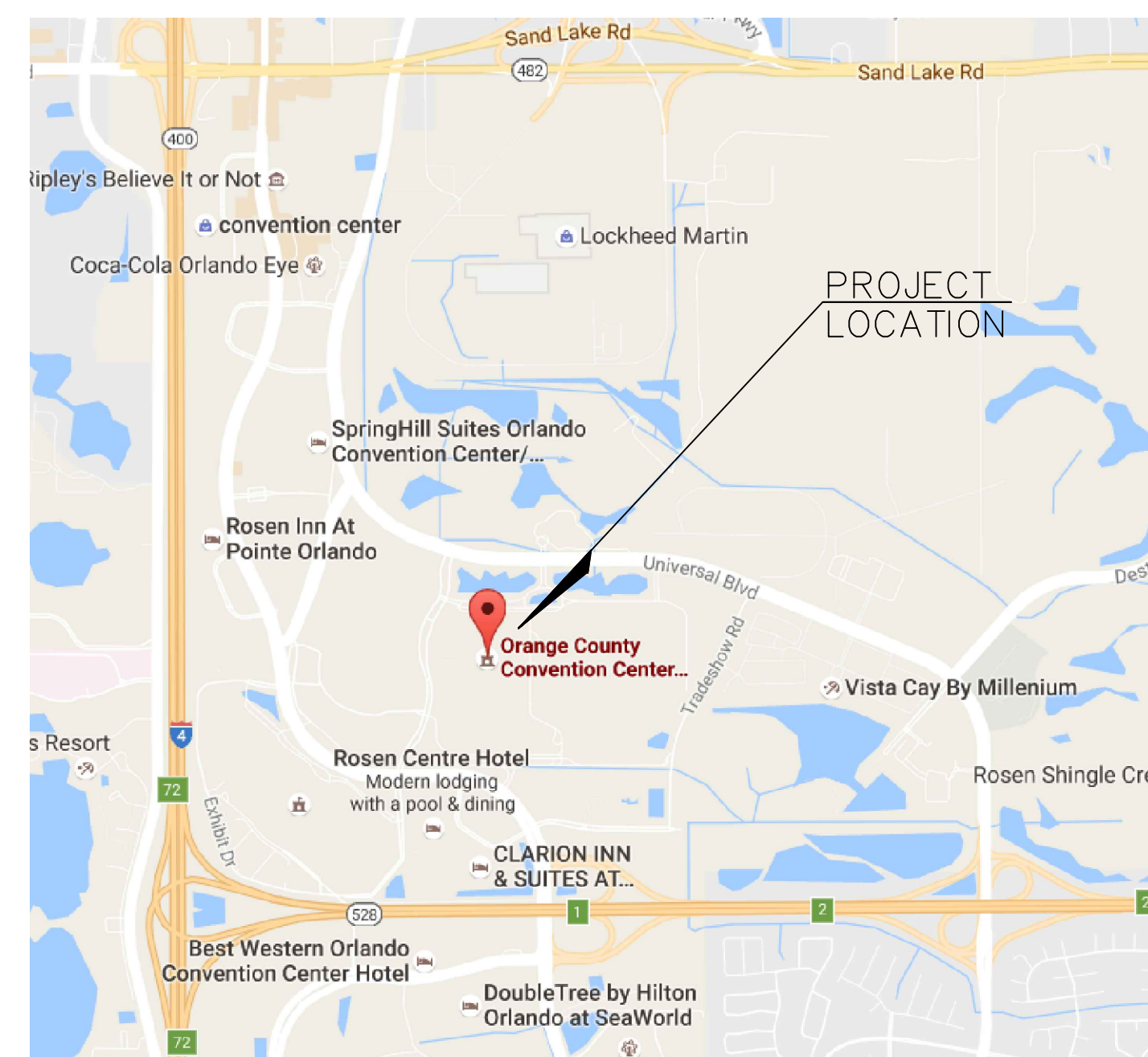
DISTRICT 5 COMMISSIONER
EMILY BONILLA

DISTRICT 6 COMMISSIONER
VICTORIA P. SIPLIN

100% Construction Documents
JANUARY 18, 2017



482 SOUTH KELLER ROAD
ORLANDO, FLORIDA 32810



Sheet Number	Sheet Name	Scale	Sheet Issued
M-000	COVER SHEET AND SHEET INDEX	No Scale	Yes
M-001	HVAC SYMBOLS LEGEND AND GENERAL NOTES	No Scale	Yes
MD-101	HVAC DEMO PLAN	1/4"=1'-0"	Yes
M-101	HVAC NEW PLAN	1/4"=1'-0"	Yes
M-201	HVAC SECTIONS AND SCHEDULES	No Scale	Yes
E-001	ELECTRICAL LEGEND	No Scale	Yes
ED-101	ELECTRICAL DEMO PLAN	1/4"=1'-0"	Yes
E-101	ELECTRICAL NEW PLAN	1/4"=1'-0"	Yes

ATKINS

482 SOUTH KELLER ROAD
ORLANDO, FL 32810
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CONSULTANT:

CLIENT:



PROJECT NAME:

**Orange County Convention Center
North South Building Demarc HVAC Upgrade**

9400 Universal Blvd, Orlando, FL 32819

100046579

No.	Date	Description

ISSUE LOG
PROFESSIONAL SEALS:

KELLIE A. RAMOS, P.E.
FLORIDA REG. NO. 76996

SHEET TITLE:

COVER SHEET AND SHEET INDEX

SHEET INFORMATION:	
JOB No. 100046579	Date Issued: JANUARY 18, 2017
Designed By: KAR	Sheet Number:
Checked By: DLH	M-000
QC Review: T.J.F.	
Phase: 100%	

CONSULTANT:

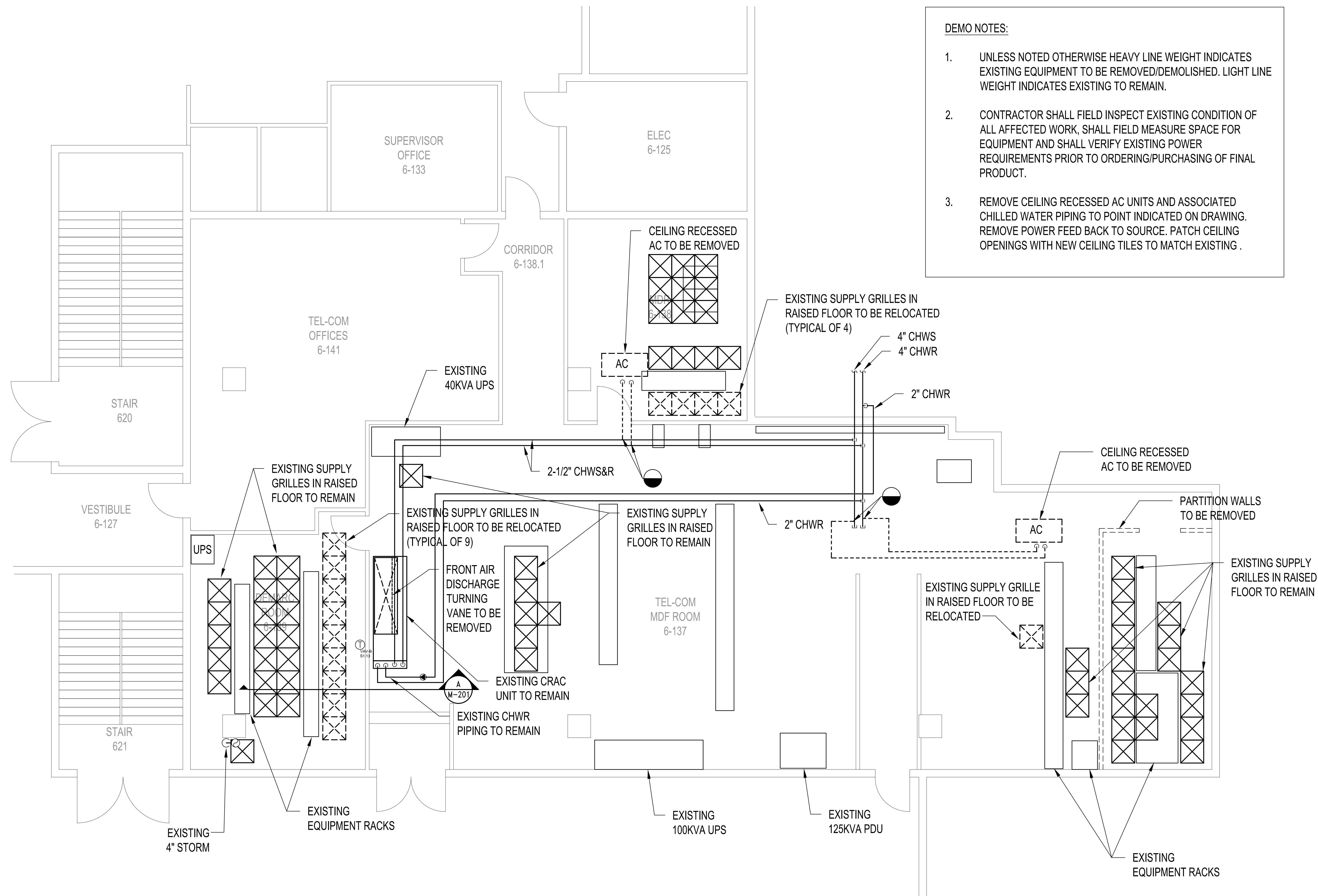
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PROJECT NAME:

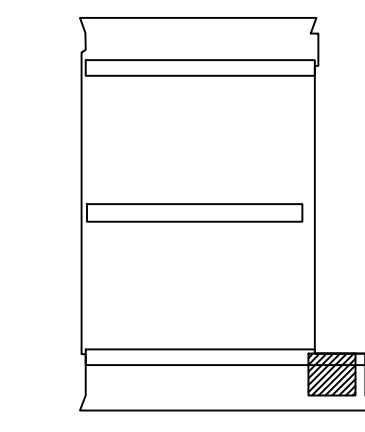
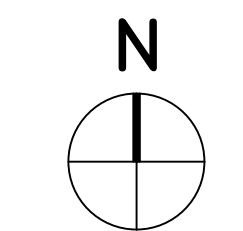
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- DEMO NOTES:**
- UNLESS NOTED OTHERWISE HEAVY LINE WEIGHT INDICATES EXISTING EQUIPMENT TO BE REMOVED/DEMOLISHED. LIGHT LINE WEIGHT INDICATES EXISTING TO REMAIN.
 - CONTRACTOR SHALL FIELD INSPECT EXISTING CONDITION OF ALL AFFECTED WORK, SHALL FIELD MEASURE SPACE FOR EQUIPMENT AND SHALL VERIFY EXISTING POWER REQUIREMENTS PRIOR TO ORDERING/PURCHASING OF FINAL PRODUCT.
 - REMOVE CEILING RECESSED AC UNITS AND ASSOCIATED CHILLED WATER PIPING TO POINT INDICATED ON DRAWING. REMOVE POWER FEED BACK TO SOURCE. PATCH CEILING OPENINGS WITH NEW CEILING TILES TO MATCH EXISTING .

A HVAC DEMO PLAN
SCALE: 1/4" = 1'-0"



KEY PLAN
PROJECT LOCATION: SOUTH CONCOURSE
SOUTHEAST CORNER, EXHIBIT LEVEL

No.	Date	Description

ISSUE LOG

PROFESSIONAL SEALS:

KELLIE A. RAMOS, P.E.
FLORIDA REG. NO. 76996

SHEET TITLE: **HVAC DEMO PLAN**

SHEET INFORMATION:	
JOB No. 100046579	Date Issued: JANUARY 18, 2017
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QC Review: T.J.F.	
Phase: 100%	

CONSULTANT:

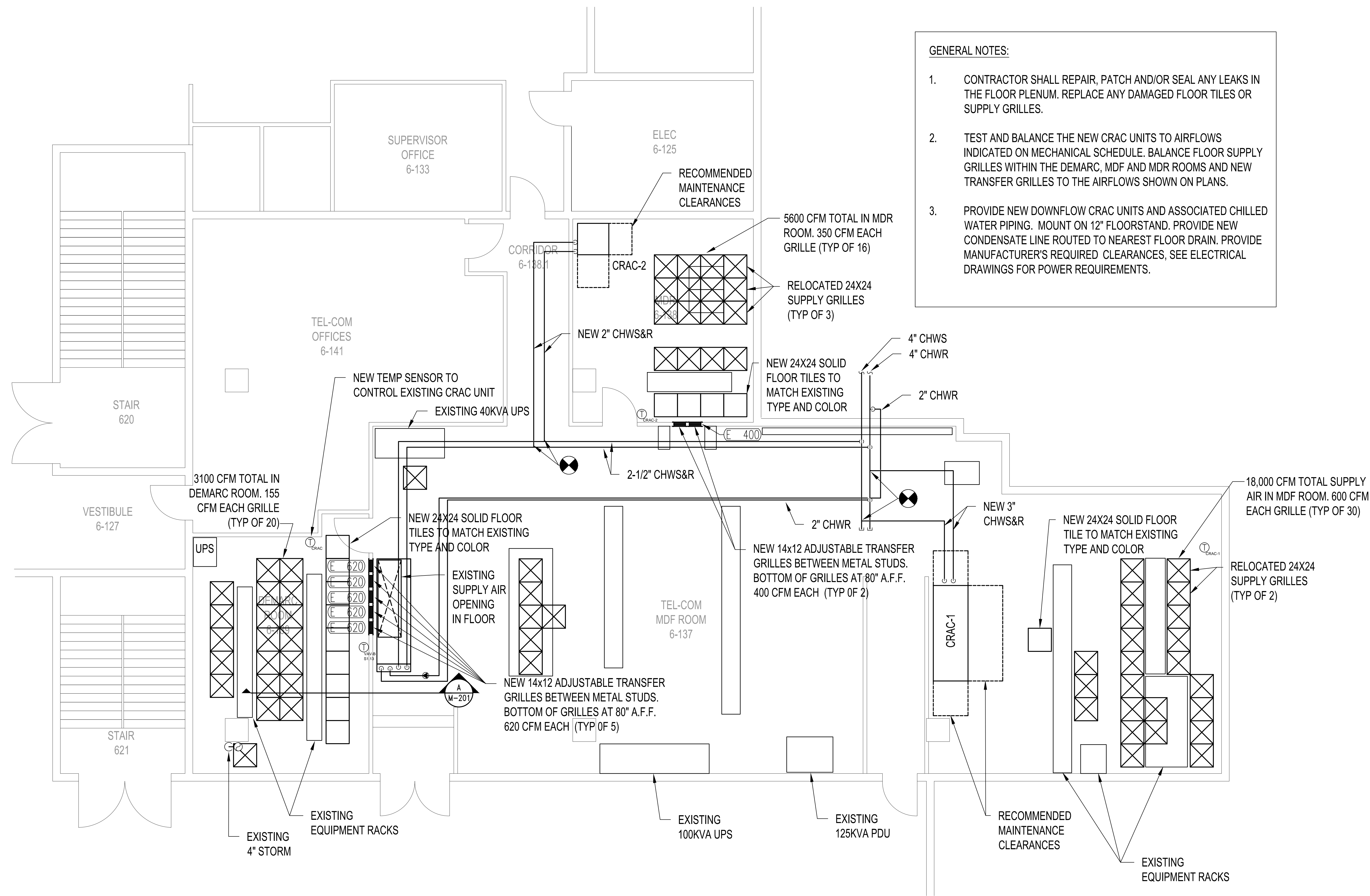
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PROJECT NAME:

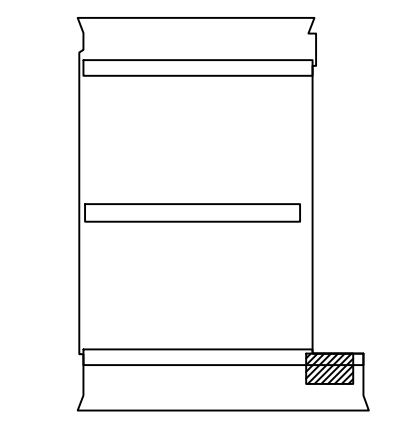
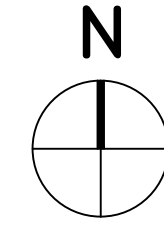
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- GENERAL NOTES:**
- CONTRACTOR SHALL REPAIR, PATCH AND/OR SEAL ANY LEAKS IN THE FLOOR PLENUM. REPLACE ANY DAMAGED FLOOR TILES OR SUPPLY GRILLES.
 - TEST AND BALANCE THE NEW CRAC UNITS TO AIRFLOWS INDICATED ON MECHANICAL SCHEDULE. BALANCE FLOOR SUPPLY GRILLES WITHIN THE DEMARC, MDF AND MDR ROOMS AND NEW TRANSFER GRILLES TO THE AIRFLOWS SHOWN ON PLANS.
 - PROVIDE NEW DOWNFLOW CRAC UNITS AND ASSOCIATED CHILLED WATER PIPING. MOUNT ON 12" FLOORSTAND. PROVIDE NEW CONDENSATE LINE ROUTED TO NEAREST FLOOR DRAIN. PROVIDE MANUFACTURER'S REQUIRED CLEARANCES. SEE ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS.

A HVAC NEW PLAN
SCALE: 1/4" = 1'-0"



KEY PLAN
PROJECT LOCATION: SOUTH CONCOURSE
SOUTHEAST CORNER, EXHIBIT LEVEL

No.	Date	Description

ISSUE LOG
PROFESSIONAL SEALS:

KELLIE A. RAMOS, P.E.
FLORIDA REG. NO. 76996

HVAC NEW PLAN

SHEET INFORMATION:

JOB No. 100046579	Date Issued: JANUARY 18, 2017
Designed By: KAR	Sheet Number:
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QC Review: T.J.F.	
Phase: 100%	

CONSULTANT:

CLIENT:



PROJECT NAME:

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9400 Universal Blvd, Orlando, FL 32819

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No.	Date	Description

ISSUE LOG

PROFESSIONAL SEALS:

KELLIE A. RAMOS, P.E.
FLORIDA REG. NO. 76996

SHEET TITLE:

HVAC SECTIONS AND SCHEDULES

SHEET INFORMATION:

JOB No. **100046579** Date Issued: JANUARY 18, 2017

Designed By: KAR Sheet Number:

Checked By: DLH

QC Review: T.J.F.

Phase: **100%**

M-201

COMPUTER ROOM UNIT SCHEDULE

MARK	MODEL NO.	FLOW TYPE	TOT. COOL CAP (MBH)	SENS. COOL CAP (MBH)	LAT DB(F)	LAT WB(F)	CHW EWT(F)	CHW LWT(F)	GPM	PD FT	H2O	ROWS	FINS /INCH	FACE VEL FPM	CFM	ESP IN.	W.G.	FAN HP	FAN QTY	VOLTS/PH/HZ	FLA	WSA	OPD	ELECTRIC REHEAT
CRAC-EX	DS077	DOWN	276.4	208.5	62.5	58.0	45	51.3	53.0	29	3	12	426	10,500	0.2	10	2	460/3/60	55.4	64.5	80	3-STAGE, 15kW		
CRAC-1	CW084	DOWN	344	263	53.4	51.7	45	54	80	28	6	11	456	11,400	0.2	4.15	2	460/3/60	47.1	58.9	60	3-STAGE, 30kW		
CRAC-2	PW029	DOWN	93.1	79.2	59.5	55.8	45	55.3	20	14	4	12	488	4,800	0.2	4.15	1	460/3/60	18.4	23.0	20	2-STAGE, 15kW		

NOTES:

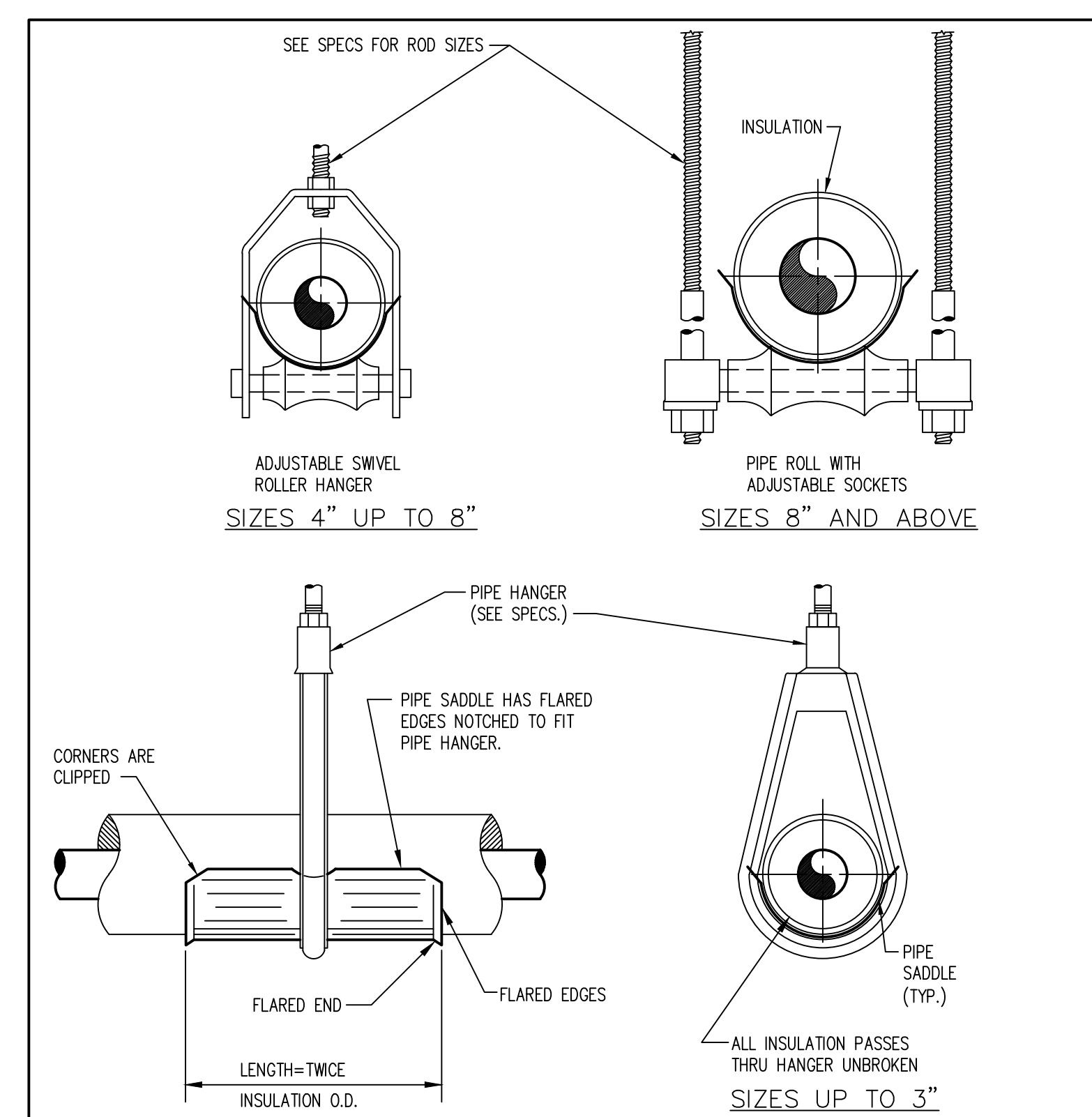
1. MANUFACTURER: LIEBERT
2. CRAC - EX IS EXISTING TO REMAIN.
3. COOLING CAPACITY BASED ON ENTERING AIR TEMPERATURE OF 75F AND 50% RH.
4. PROVIDE EC PLUG FANS, 12" FLOOR STAND, MERV 8 FILTERS, FACTORY MOUNTED CONDENSATE PUMP WITH INTEGRAL PRIMARY & SECONDARY FLOAT SWITCHES, SMOKE SENSOR, FACTORY INSTALLED LOCKING DISCONNECT SWITCH AND PERIMETER WATER DETECTION SYSTEM.
5. PROVIDE UNIT CONTROLLER COMPATIBLE WITH EXISTING JOHNSON CONTROLS METASYS BAS SYSTEM. BASIS OF DESIGN: LIEBERT ICOM & IS-UNITY-DP. CONTRACTOR SHALL CONNECT THE CRAC UNIT CONTROLLERS TO THE EXISTING JCI METASYS SYSTEM.

AIR DISTRIBUTION SCHEDULE

MARK	CFM	NECK SIZE	FACE SIZE	LENGTH	DESCRIPTION	ADDITIONAL ACCESSORIES
E	SEE PLANS FOR CFM & SIZE.				BASIS OF DESIGN: TITUS 350ZFL COLOR: WHITE MATERIAL: ALUMINUM OPPOSED BLADE DAMPERS: YES SINGLE ZERO DEGREE DEFLECTION 3/4" SPACING	

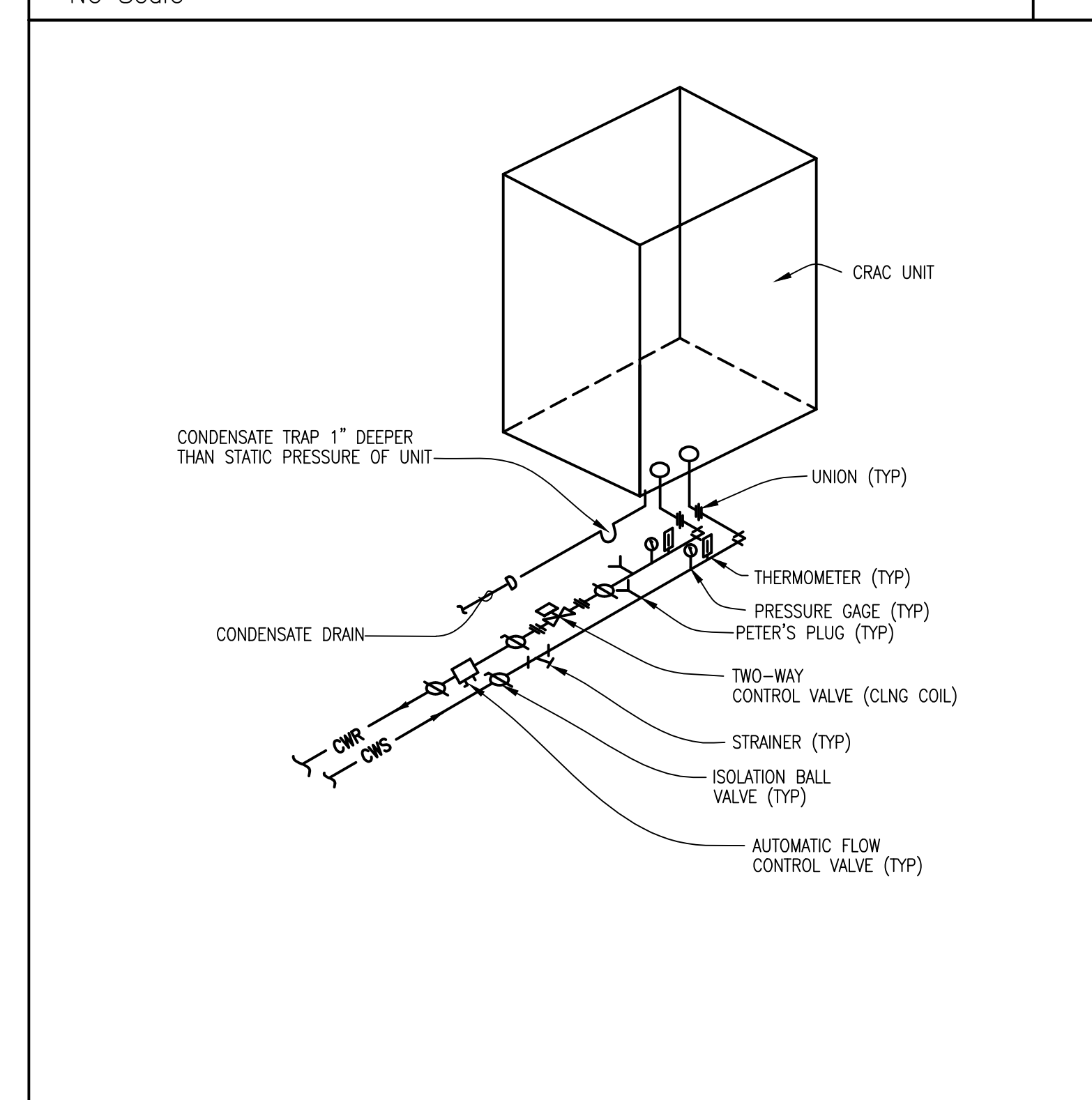
NOTES:

1. AIR DISTRIBUTION DEVICES LOCATED WITHIN ACOUSTICAL TILE CEILINGS SHALL BE PROVIDED WITH BORDER TYPE 3 FOR LAY-IN MOUNTING. AIR DISTRIBUTION DEVICES LOCATED WITHIN GYPSUM BOARD CEILINGS OR WALLS SHALL BE PROVIDED WITH BORDER TYPE 1 FOR SURFACE MOUNTING.
2. AIR DISTRIBUTION DEVICES LOCATED IN SMALL ROOMS WHERE FULL 24"x24" GRID ARE NOT AVAILABLE SHALL BE PROVIDED WITH SURFACE MOUNTING BORDERS IN LIEU OF LAY-IN. SECURE EACH DEVICE TO CEILING GRID WITH FIELD-FABRICATED SUPPORTS.



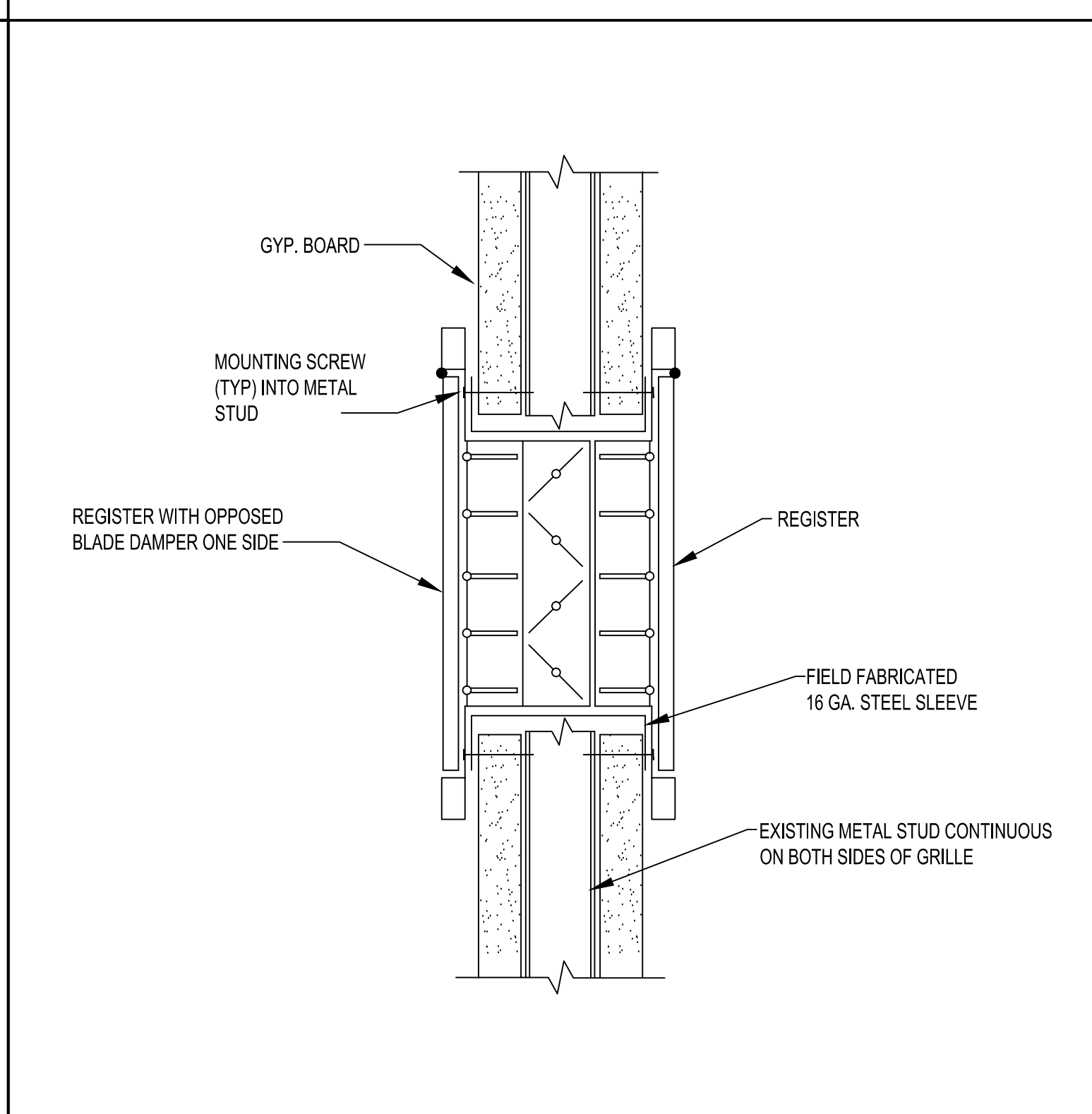
INSULATED PIPE HANGER
No Scale

1



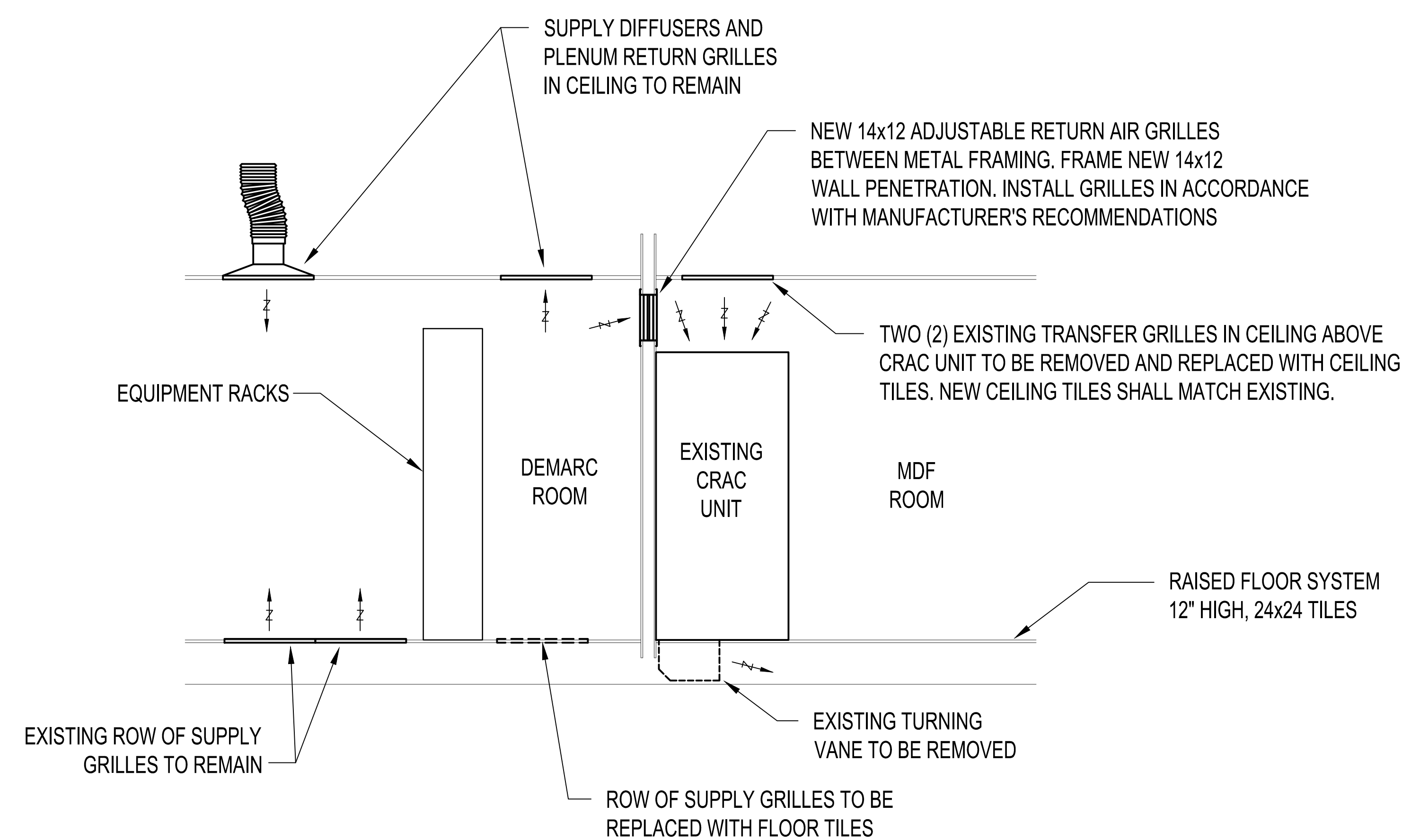
CRAC UNIT PIPING SCHEMATIC
No Scale

2



TRANSFER GRILLE CONNECTION DETAIL
No Scale

3



SECTION A

SCALE: 1/2" = 1'-0"

CONSULTANT:

CLIENT:



PROJECT NAME:

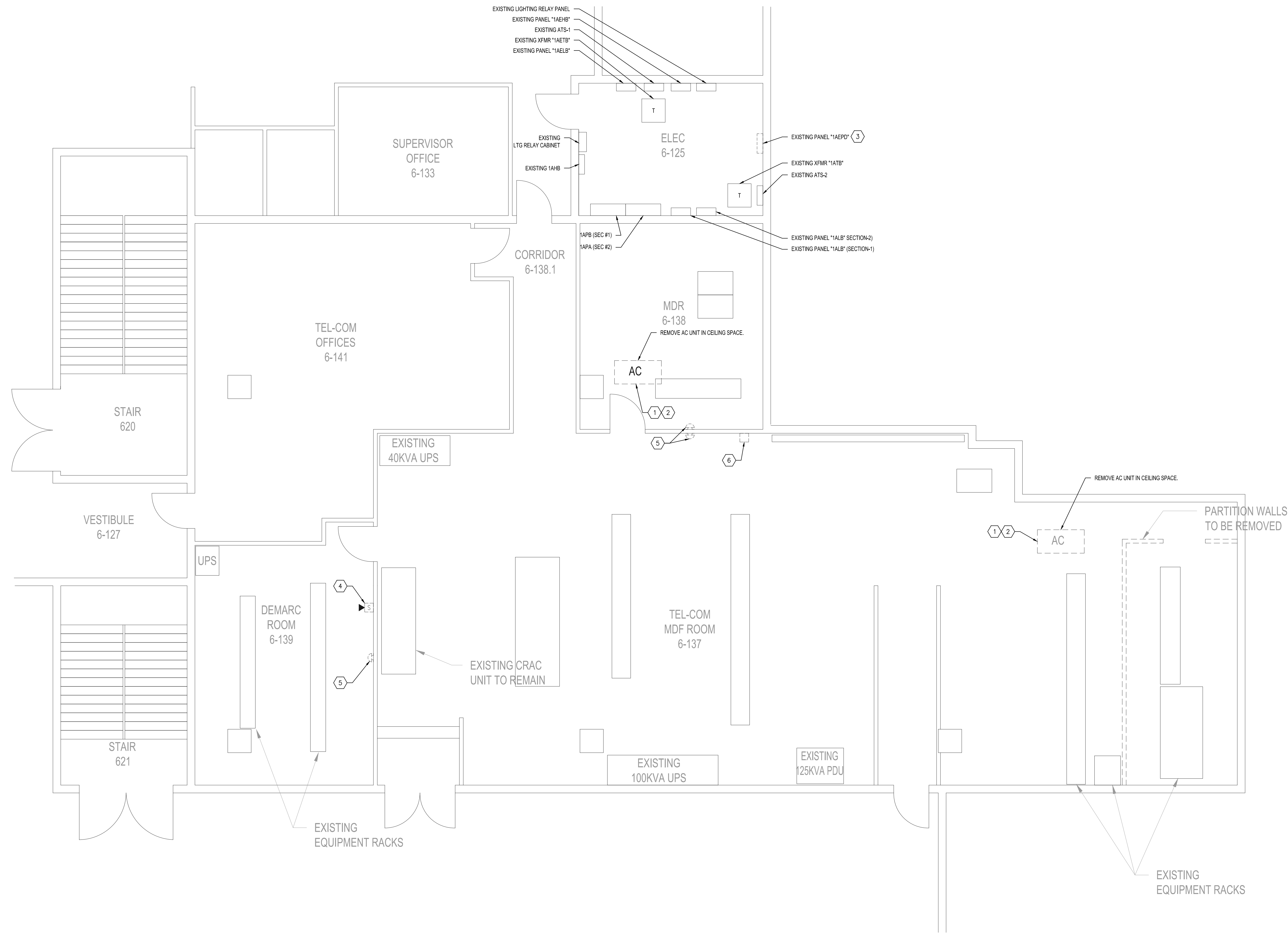
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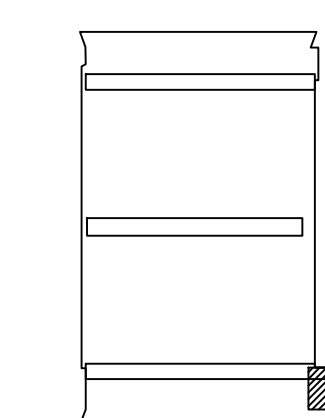
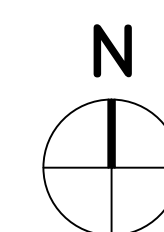
KEY NOTES:

- 1 REMOVE EXISTING CONDUIT AND WIRES FOR AC UNITS BACK TO EXISTING PANEL "1AELB".
- 2 LABEL "SPARE" BREAKERS ASSOCIATED WITH REMOVED AC UNITS.
- 3 REMOVE EXISTING PANEL "1AEPD" INCLUDING ABANDONED WIRING & CONDUIT AND RETURN TO OWNER. TRANSFORMER FOR EXISTING PANEL "1AEPD" HAS BEEN PREVIOUSLY REMOVED.
- 4 REMOVE EXISTING WALL MOUNTED FIRE ALARM STROBE WITH SPEAKER DEVICE AND REPLACE WITH NEW CEILING MOUNTED FIRE ALARM STROBE WITH SPEAKER AS SHOWN ON SHEET E-101.
- 5 EXISTING FIRE ALARM GONG TO BE RELOCATED AS SHOWN ON SHEET E-101.
- 6 REMOVE EXISTING FIRE ALARM STROBE LIGHT AND REPLACE WITH NEW CEILING MOUNTED FIRE ALARM STROBE LIGHT.



1 ELECTRICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0"



KEY PLAN

PROJECT LOCATION: SOUTH CONCOURSE
SOUTHEAST CORNER, EXHIBIT LEVEL

No.	Date	Description

ISSUE LOG

PROFESSIONAL SEALS:

ANGEL E. LORENZO, P.E.
FLORIDA REG. NO. 31137

SHEET TITLE:

ELECTRICAL DEMOLITION PLAN

SHEET INFORMATION:

JOB No. 100046579	Date Issued: JANUARY 18, 2017
Designed By: JLA	Sheet Number:
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QC Review: AEL	
Phase: 100%	

ED-101

CONSULTANT:

CLIENT:



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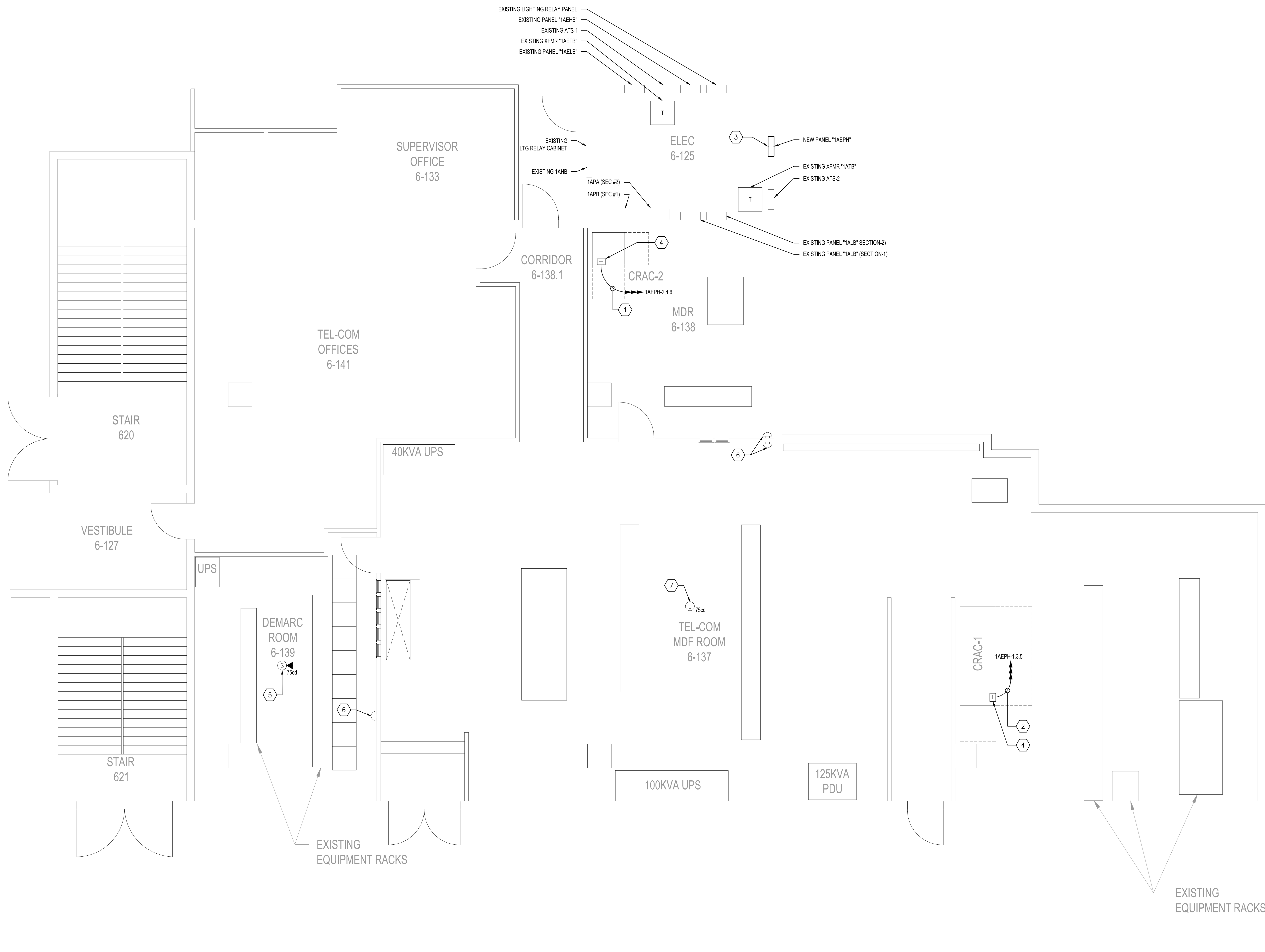
100046579

GENERAL NOTES:

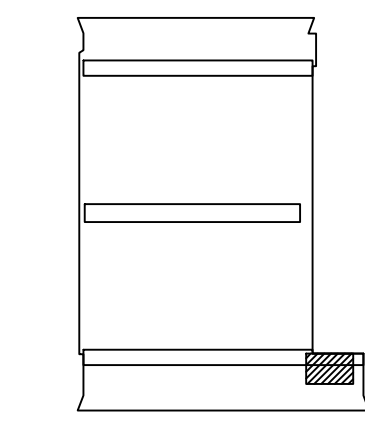
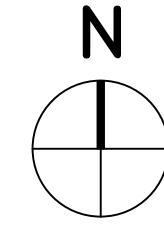
1. LABEL NEW DISCONNECT SWITCHES SHOWN ON PLAN TO MATCH EQUIPMENT BEING SERVED, PANEL AND CIRCUITS.
2. TEST FIRE ALARM DEVICES AFTER RELOCATION AND INSTALLATION FOR PROPER COMMUNICATION TO FACP AT SOUTH COMMAND CENTER ROOM.

KEY NOTES:

1. PROVIDE NEW 3M10 & 1M10 GND IN 3/4" C.
2. PROVIDE NEW 3M4 & 1M8 GND IN 1/4" C.
3. PROVIDE NEW PANEL "1AEPH". PANEL AIC RATING WITH TO CORRESPOND WITH AVAILABLE SHORT CIRCUIT AMPS OR BE EQUAL TO UPSTREAM PANELBOARD AIC RATING. SEE SHEET E-001 FOR ADDITIONAL INFORMATION.
4. INTEGRAL DISCONNECT SWITCH SIZED PER MANUFACTURE'S SPECIFICATIONS. MATCH NEW PANEL "AEPH" AIC RATING.
5. PROVIDE NEW CEILING TRUE ALERT MULTI CANDELA FIRE ALARM SPEAKER WITH STROBE. EXTEND FIRE ALARM CONDUIT AND WIRING TO NEW LOCATION.
MANUFACTURER: SIMPLEX TRUE ALERT
MODEL: 4906-9254
COLOR: WHITE
CANDELA: 75cd
6. RELOCATED FIRE ALARM GONG. EXTEND CONDUIT AND WIRING TO RELOCATED FIRE ALARM DEVICE.
7. PROVIDE NEW CEILING TRUE ALERT MULTI CANDELA FIRE ALARM STROBE. EXTEND FIRE ALARM CONDUIT AND WIRING TO NEW LOCATION.
MANUFACTURER: SIMPLEX TRUE ALERT
MODEL: 4906-9204
COLOR: WHITE
CANDELA: 75cd



1 ELECTRICAL NEW PLAN
SCALE: 1/4" = 1'-0"



KEY PLAN
PROJECT LOCATION: SOUTH CONCOURSE
SOUTHEAST CORNER, EXHIBIT LEVEL

No.	Date	Description

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FLORIDA REG. NO. 31137

ELECTRICAL NEW PLAN

SHEET INFORMATION:	
JOB No. 100046579	Date Issued: JANUARY 18, 2017
Designed By: JLA	Sheet Number:
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