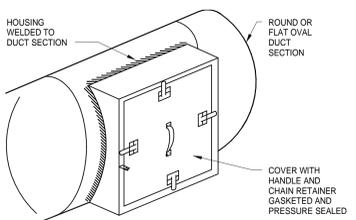
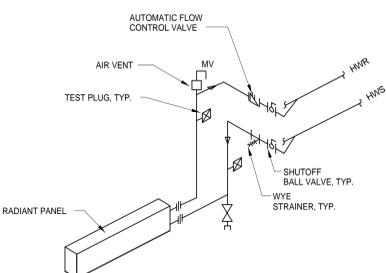


NOM. SIZE		MAXIMUM PIPE/TUBING SUPPORT SPACING																							
IN. [mm]	THRU 3/4 THRU [20]	1 [25]	1 1/4 [32]	1 1/2 [38]	2 [50]	2 1/2 [63]	3 [75]	4 [100]	5 [125]	6 [150]	8 [200]	10 [250]	12 [300]	14 [350]	16 [400]	18 [450]	20 [500]	24 [600]							
FT. [mm]	5 FT. [1500]	6 [1800]	7 [2100]	8 [2400]	9 [2250]	10 [3000]	11 [3300]	12 [3750]	13 [4000]	14 [4500]	15 [4800]	16 [5250]	17 [5500]	18 [6000]	19 [6750]	20 [7000]	21 [7500]	22 [8250]	23 [8500]	24 [9000]					
TUBING	5 FT. [1500]	6 [1800]	7 [2100]	8 [2400]	9 [2250]	10 [3000]	11 [3300]	12 [3750]	13 [4000]	14 [4500]	15 [4800]	16 [5250]	17 [5500]	18 [6000]	19 [6750]	20 [7000]	21 [7500]	22 [8250]	23 [8500]	24 [9000]					

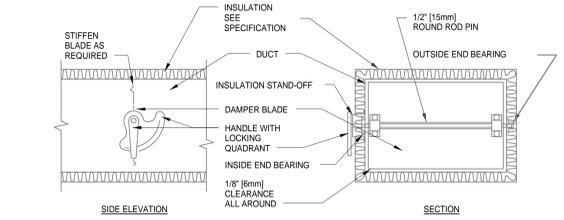
10 PIPE HANGERS N.T.S.



11 ACCESS SECTION FOR ROUND/OVAL DUCT N.T.S.



12 HYDRONIC RADIANT PANEL - PIPING CONNECTIONS N.T.S.

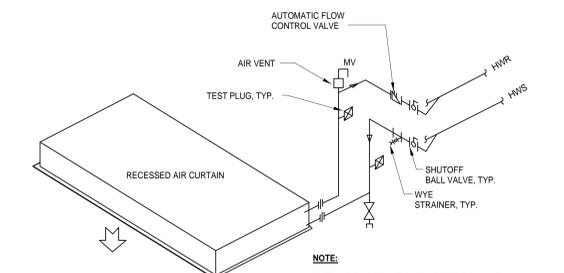


NOTE:
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

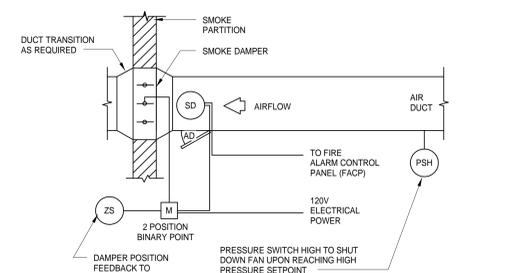
6 VOLUME DAMPER DETAIL N.T.S.

HANGER STRAPS OR RODS			
MAX. DUCT DI. IN. [mm]	QUANTITY/SIZE IN. [mm]	MAX. LOAD LBS. [kg]	MAX. SPACING IN. [mm]
26 [660]	ONE 1 [25] x 22 GA STRAP	260 [119]	144 [3600]
36 [900]	ONE 1 [25] x 18 GA STRAP	420 [190]	144 [3600]
50 [1250]	ONE 1 [25] x 16 GA STRAP	700 [317]	144 [3600]
60 [1500]	TWO 3/8 [10] RODS	1320 [598]	144 [3600]
84 [2100]	TWO 1/2 [13] RODS	2500 [1133]	144 [3600]

7 ROUND DUCT HANGERS N.T.S.

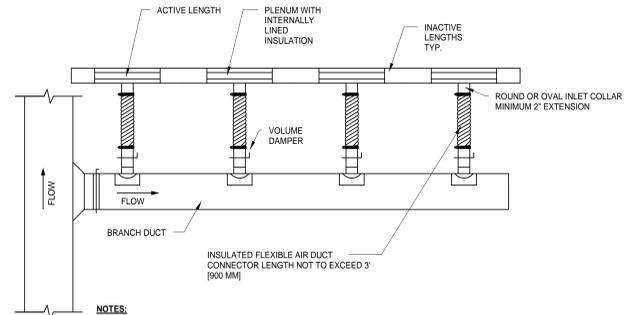


8 HYDRONIC AIR CURTAIN - PIPING CONNECTIONS N.T.S.



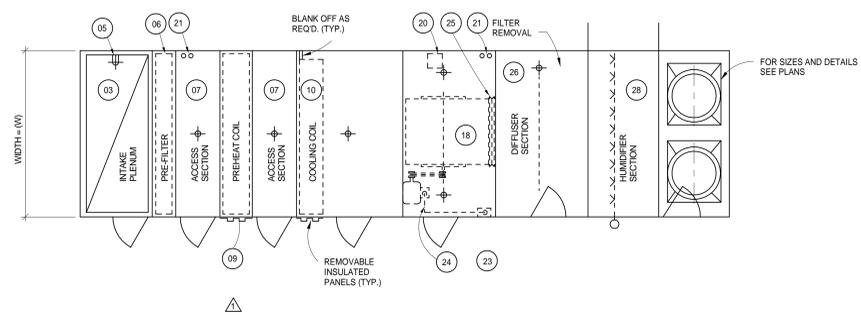
NOTE:
1. UPON DETECTION OF SMOKE BY THE SMOKE DETECTOR, THE SMOKE DAMPER SHALL CLOSE & SEND AN ALARM TO THE ECC.

9 SMOKE DAMPER CONTROL DIAGRAM N.T.S.

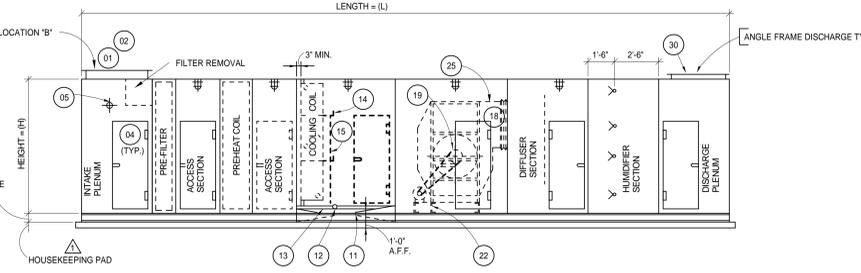


NOTE:
1. COORDINATE SLOT DIFFUSER FRAME/BORDER TYPE AND END BORDER CONFIGURATION WITH CEILING TYPE.

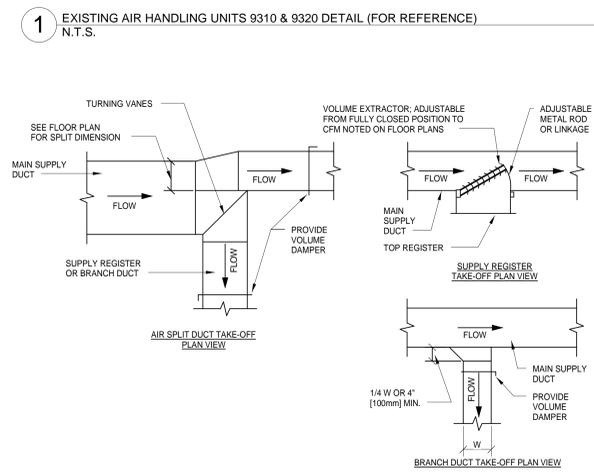
13 LINEAR SLOT DIFFUSER N.T.S.



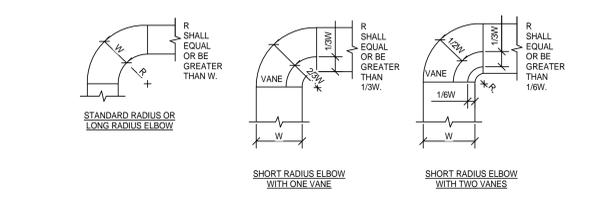
1 EXISTING AIR HANDLING UNITS 9310 & 9320 DETAIL (FOR REFERENCE) N.T.S.



4 SUPPLY DUCTWORK TAKE-OFFS N.T.S.



4 SUPPLY DUCTWORK TAKE-OFFS N.T.S.

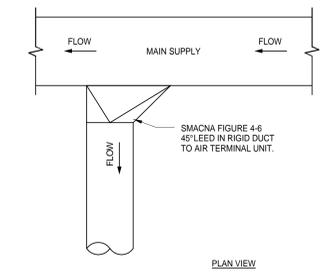


NOTE:
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

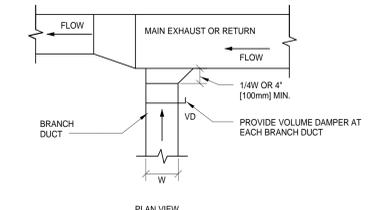
5 DUCTWORK RADIUS ELBOWS N.T.S.

- LEGEND**
- INLET DAMPER
 - FLANGED DUCT CONNECTION WITH HOLES ON 4 1/2" CENTERS WITH ACTUATORS & POSITIVE POSITIONERS.
 - RETURN DAMPER. (SAME AS 01 ABOVE)
 - INTAKE PLENUM.
 - QUICK OPENING ACCESS DOOR.
 - MARINE LIGHT COMPLETE WITH SWITCH MOUNTED ON EXTERIOR AT DOOR.
 - PREFILTER.
 - ACCESS SECTION COMPLETE WITH 04 & 05 ABOVE. FOR LOCATIONS REFER TO PLANS.
 - HEAT RECOVERY COIL SECTION. PROVIDE REMOVABLE INSULATED PANELS.
 - PREHEAT COIL. FACTORY PREPARE COIL AND INSULATE IN ACCORDANCE WITH SPECIFICATIONS TO OUTSIDE CASING. PROVIDE REMOVABLE INSULATED PANELS. REFER TO PLANS FOR CONNECTION LOCATIONS.
 - COOLING COIL SECTION WITH 04 & 05 ABOVE. FACTORY PREPARE COIL TO OUTSIDE CASING. PROVIDE REMOVABLE INSULATED PANELS.
 - PROVIDE SUPPORTS BELOW CONDENSATE DRAIN TANK TO SUPPORT COOLING COIL.
 - 1 1/2" INSULATED CONDENSATE DRAIN LINE. SEE TRAP DETAIL.
 - CONDENSATE DRAIN PAN DOUBLE SURFACE INSULATED.
 - INTERMEDIATE STAINLESS STEEL COIL DRAIN PAN.
 - FACTORY PREPARED 3/4" DRAIN LINES DIRECTLY PIPED TO DRAIN TANK.
 - REHEAT COIL. FACTORY PREPARED TO OUTSIDE THE UNIT. PROVIDE REMOVABLE INSULATED PANEL.
 - NOT USED
 - FAN SECTION WITH 04 & 05 ABOVE.
 - OSHA BELT GUARD. REMOVABLE WITH TACHOMETER OPENINGS. (WIRE MESH)
 - PRE-WIRED JUNCTION BOX. 115 V.-1 PHASE ON TOP OF UNIT CASING FOR SINGLE POINT ELECTRICAL CONNECTION TO SERVE UNIT LIGHTS. (SWITCHES AT EACH DOOR)
 - STUB 3/4" CONDUITS THRU TOP OF UNIT CASING TO ACCOMMODATE FIELD INSTALLATION OF CONTROLS. COORDINATE NUMBER & ACTUAL LOCATIONS WITH CONTROL SUBCONTRACTOR.
 - VIBRATION ISOLATORS. REFER TO SPECIFICATIONS FOR ISOLATOR REQUIREMENTS.
 - DISCONNECT SWITCH INSIDE FAN HOUSING (UNDER DIV. 16 - ELECTRICAL). STUB 1 1/4" CONDUIT THRU TOP OF UNIT CASING TO ACCOMMODATE MAIN POWER FEED. FOR DESCRIPTION REFER TO THE ELECTRICAL SPECIFICATIONS.
 - CONDUIT & WIRE. DISCONNECT TO MOTOR. WITH FLEXIBLE CONNECTION AT MOTOR. POWER SUPPLY TO DISCONNECT. WIRE & CONDUIT (UNDER DIV. ELECTRICAL).
 - FLEXIBLE CONNECTION.
 - DIFFUSER SECTION WITH 04 & 05 ABOVE. PERFORATED DIFFUSER PLATE. LOCATION SHALL BE AS RECOMMENDED BY EQUIPMENT SUPPLIER.
 - FINAL FILTER.
 - HUMIDIFIER SECTION WITH MANIFOLD STEAM HUMIDIFIER. COORDINATE NUMBER OF MANIFOLD WITH SCHEDULE AND SPECIFICATIONS.
 - DISCHARGE PLENUM WITH 04 & 05.
 - DISCHARGE PLENUM WITH HOLES ON 4 1/2" CENTERS MINIMUM. TYPE II BELLMOUTH WITH FLANGED OUTLET.
 - STRUCTURAL STEEL SUPPORTS.

2 ALTERNATE SUPPLY DUCT TAKEOFF - AIR TERMINAL UNITS N.T.S.



2 ALTERNATE SUPPLY DUCT TAKEOFF - AIR TERMINAL UNITS N.T.S.



3 EXHAUST OR RETURN BRANCH DUCTWORK N.T.S.

<p>CONSULTANTS:</p> <p>725 Prudden Street Lansing, MI 48906 - 517.371.1200</p> <p>123 West Main Street, Suite 200 Gaylord, MI 49735 - 989.732.8131</p> <p>648 Monroe Avenue NW, Suite 210 Grand Rapids, MI 49503 - 616.454.9414</p> <p>1211 Ludington Street Escanaba, MI 49829 - 906.233.9360</p> <p>c2ae elevating human achievement</p>		<p>Department of Veterans Affairs John D. Dingell VA Medical Center 4646 John R Street Detroit, MI 48201</p>		<p>Property of the United States Government For Official Use Only Do not remove this notice Properly Destroy documents when no longer needed.</p>		<p>Drawing Title MECHANICAL DETAILS</p>		<p>Project Title RENOVATIONS TO THE SOUTH LOBBY ENTRANCE</p>		<p>Date 03/01/2016</p> <p>Project Number 553-304</p>		<p>Office of Facilities Management</p>			
<p>Revisions:</p>		<p>Date</p>		<p>File Name</p>		<p>Approved: Division Chief</p>		<p>Building Number</p>		<p>Checked EJR</p>		<p>Drawn JCW</p>		<p>Drawing Number M-500</p>	
<p>VA FORM 08-6231, OCT 1978</p>		<p>1 2 3 4 5</p>		<p>File Location</p>		<p>Approved: Service Director</p>		<p>Location 4646 JOHN R. STREET DETROIT, MI 48201</p>		<p>Department of Veterans Affairs</p>		<p>BD DOCUMENTS</p>			

DESIGN CONDITION	HVAC DESIGN DATA						REMARK
	SUMMER			WINTER			
	DB TEMP.	WB TEMP.	% HUMIDITY	DB TEMP.	DEWPOINT TEMP.	% HUMIDITY	
OUTSIDE	81 F	78 F	50	3 F	3 F		
LOBBY	75 F	62 F	60	70 F	37 F	20	1
WAITING ROOMS	75 F	62 F	60	70 F	37 F	20	1
TOILET ROOMS	NA	NA	NA	68 F	NA	NA	1
CORRIDORS	75 F	62 F	60	70 F	37 F	20	1
VESTIBULES	NA	NA	NA	50 F	NA	NA	1

1. FROM VA HVAC DESIGN MANUAL.

AIR HANDLING UNIT SCHEDULE															REMARKS			
MARK	LOCATION	AREA AND/OR BUILDING SERVED	TYPE	AIRFLOW TYPE	SUPPLY CFM	EXHAUST CFM	RETURN CFM	SUPPLY FAN MARK	RETURN FAN MARK	EXHAUST FAN MARK	PREFILTER MARK	AFTER FILTER MARK	HEAT RECOVERY MARK	PREHEAT COIL MARK		COOLING COIL MARK	REHEAT COIL MARK	HUMIDIFIER MARK
AH-9310	MECH. RM. A8001	ZONE 5 - SOUTH LOBBY	P	VAV	26000 CFM	0 CFM	26000 CFM	SF-9310	RF-9310	---	PF-9310	AF-9310	NA	PH-9310	CC-9310	NA	SH-9310	1
AH-9320	MECH. RM. A8001	ZONE 5 - SOUTH LOBBY	P	VAV	26000 CFM	0 CFM	26000 CFM	SF-9320	RF-9320	---	PF-9320	AF-9320	NA	PH-9320	CC-9320	NA	SH-9320	1

1. EXISTING AIR HANDLING UNIT IS TO REMAIN. ENTIRE UNIT TO BE CLEANED. FANS TO BE REPLACED (REFER TO ADDITIONAL SCHEDULES). FILTERS SHALL BE REPLACED AFTER COMPLETION OF CONSTRUCTION.

MARK	LOCATION	AREA AND/OR BUILDING	SYSTEM AND/OR SERVICE	AIRFLOW				FAN				MOTOR ELECTRICAL						REMARKS		
				PRESENT	FUTURE	TYPE	TSP	WHEEL	CLASS	ARRANGEMENT, ROTATION, AND DISCHARGE	DIAMETER	MIN % EFF	DRIVE	MAX. RPM	BHP	HP	PHASE		VOLTS	SPEED CONTROL
RF-9310	MECH. RM. A8001	ZONE 5 - SOUTH LOBBY	AH-9310	26200 CFM	26000	INLINE	2.00 in-wg	AFSW	I	ARR. 9	40"	65	BELT	1100	16.19	20.00	3	460 V	VFD	1, 2
RF-9320	MECH. RM. A8001	ZONE 5 - SOUTH LOBBY	AH-9310	25600 CFM	26000	INLINE	2.00 in-wg	AFSW	I	ARR. 9	40"	65	BELT	1100	16.19	20.00	3	460 V	VFD	1, 2
SF-9310	MECH. RM. A8001	ZONE 5 - SOUTH LOBBY	AH-9320	26200 CFM	26000	CENTRIFUGAL	5.50 in-wg	AFDW	II	CCW/THD	30"	65	BELT	1800	31.42	40.00	3	460 V	VFD	1, 3
SF-9320	MECH. RM. A8001	ZONE 5 - SOUTH LOBBY	AH-9320	25600 CFM	26000	CENTRIFUGAL	5.50 in-wg	AFDW	II	CCW/THD	30"	65	BELT	1800	31.42	40.00	3	460 V	VFD	1, 3

1. PROVIDE WITH VFD.
2. PROVIDE WITH SPRING ISOLATORS.
3. FANS MUST COME SHIPPED READY FOR INSTALL INTO EXISTING AHU. PROVIDE WITH EQUIPMENT BASE AND SPRING ISOLATORS.

HOT WATER RADIANT PANEL SCHEDULE									
MARK	LOCATION	AREA AND/OR BUILDING	TYPE	SIZE	TOTAL MIN CAPACITY	EWT	FLOW	WPD	REMARKS
5-RP-1	CORRIDOR CC191	ZONE 5 - SOUTH LOBBY	FLOOR MTD.	34'-0"	1118.0 Btu/h	180 F	3.5 GPM	3.00 in-wg	1, 2, 3, 4
5-RP-2	VESTIBULE A1002	ZONE 5 - SOUTH LOBBY	FLOOR MTD.	11'-0"	610.0 Btu/h	180 F	0.6 GPM	0.50 in-wg	1, 2, 3, 4
5-RP-3	VESTIBULE A1002	ZONE 5 - SOUTH LOBBY	FLOOR MTD.	11'-0"	610.0 Btu/h	180 F	0.6 GPM	0.50 in-wg	1, 2, 3, 4
5-RP-4	LOBBY CA110	ZONE 5 - SOUTH LOBBY	FLOOR MTD.	28'-0"	1118.0 Btu/h	180 F	3.0 GPM	1.75 in-wg	1, 2, 3, 4
5-RP-5	LOBBY CA110	ZONE 5 - SOUTH LOBBY	FLOOR MTD.	10'-0"	1118.0 Btu/h	180 F	1.0 GPM	0.25 in-wg	1, 2, 3, 4

1. BASIS OF DESIGN - RUNTAL RF OR RFP PANELS. UNITS TO BE MOUNTED TO FLOOR.
2. PROVIDE WITH FACTORY PRE-WIRED CONTROL PANEL, 120V CONTROL SYSTEM. BASED ON RAYWALL MODEL FPC4110
3. UNITS SHALL BE CONNECTED TO EXISTING BMS.
4. STANDARD COLOR SELECTED BY ARCHITECT.

INFRARED HEATER SCHEDULE (ELECTRIC)									
MARK	LOCATION	AREA AND/OR BUILDING	TYPE	SIZE	CAPACITY (KW)	POWER SUPPLY			REMARKS
						AMP	PHASE	VOLT	
5-IRH-1	CANOPY	ZONE 5 - SOUTH LOBBY	PANEL	33' x 15' x 11'	5.00	12.00	3	480	1, 2, 3, 4
5-IRH-2	CANOPY	ZONE 5 - SOUTH LOBBY	PANEL	33' x 15' x 11'	5.00	12.00	3	480	1, 2, 3, 4

1. BASIS OF DESIGN - RAYWALL MODEL 342-430-THSS AND 463-60-THSS.
2. PROVIDE WITH FACTORY PRE-WIRED CONTROL PANEL, 120V CONTROL SYSTEM. BASED ON RAYWALL MODEL FPC4110
3. PROVIDE WITH RECESSED FRAME. UNITS TO BE RECESSED IN CANOPY CEILING.
4. UNITS SHALL BE CONNECTED TO EXISTING BMS AND RUN WHEN OUTDOOR AIR TEMPERATURE FALLS BELOW 35F (ADJ.).

HYDRONIC AIR CURTAIN SCHEDULE															
MARK	LOCATION	AREA AND/OR BUILDING SERVED	TYPE	NOZZLE WIDTH	CFM	GPM	EWT	LWT	TOTAL HEATING CAPACITY (MBH)	WPD	POWER SUPPLY				REMARKS
											HP	PHASE	VOLT	WEIGHT	
5-ARC-1	VESTIBULE A1002	ZONE 5 - SOUTH LOBBY	IN-CEILING	48"	1600	6.0	180 F	160 F	48.5	1.0	1/2	1	208	152 LBS	1, 2, 3, 4
5-ARC-2	VESTIBULE A1002	ZONE 5 - SOUTH LOBBY	IN-CEILING	48"	1600	6.0	180 F	160 F	48.5	1.0	1/2	1	208	152 LBS	1, 2, 3, 4
7-ARC-1	VESTIBULE CC200	ZONE 7 - SOUTH ENTRY	IN-CEILING	72"	4144	9.0	180 F	160 F	81.4	1.0	2 @ 1/2	1	208	233 LBS	1, 2, 3, 4

1. BASIS OF DESIGN - BERNER MODEL ARC12-1048W, AND ARC12-2072W.
2. UNIT TO BE ACTIVATED UPON OPENING OF AUTOMATIC DOOR AND RUN FOR 1 MINUTE (ADJ.). UNIT SHALL BE ACTIVATED UPON DROP IN SPACE TEMPERATURE BELOW 60F (ADJ.). PROVIDE WITH NECESSARY OPTIONS.
3. UNIT TO BE TIED TO EXISTING BMS. PROVIDE WITH NECESSARY OPTIONS.
4. STANDARD COLOR SELECTED BY ARCHITECT.

AIR DEVICE SCHEDULE (LINEAR)															
MARK	TYPE	AIR FLOW			# OF SLOTS	SLOT WIDTH	BORDER	LENGTH	NECK SIZE	THROW PATTERN	THROW TYPE	NC	DAMPER	FINISH	REMARKS
		MIN	MAX	MAX APD											
LD-1	CEILING LINEAR SLOT	0 CFM	250 CFM	0.20 in-wg	2	3/4"	FLUSH	5'-0"	SEE DUCT	HORIZONTAL	2-WAY	30	NO	WHITE	1, 2, 3
LD-2	SIDEWALL LINEAR SLOT	0 CFM	350 CFM	0.20 in-wg	--	2 1/2"	HIDDEN FLANGE	5'-0"	SEE DUCT	HORIZONTAL	1-WAY	30	NO	ANOD. ALUM.	1, 2, 3
LD-8	1/2" x 1/2" GRID	100 CFM	300 CFM	0.15 in-wg			LAY-IN	24" x 24"	10"			30	NO	WHITE	1, 2, 3
LD-9	LOUVER	0 CFM	200 CFM	0.15 in-wg			LAY-IN	24" x 24"	8"			30	NO	WHITE	1, 2
LD-10	1/2" x 1/2" GRID	100 CFM	300 CFM	0.15 in-wg			LAY-IN	24" x 24"	10"			30	NO	WHITE	1, 2, 3
LD-12	1/2" x 1/2" GRID	0 CFM	100 CFM	0.15 in-wg			LAY-IN	8" x 8"	6"			30	NO	WHITE	1, 2, 3
LD-13	LOUVER	0 CFM	200 CFM	0.15 in-wg			LAY-IN	24" x 24"	8"			30	NO	WHITE	1, 2

1. PROVIDE ALL SPECIALTIES, FRAMES, TRIM, AND CORNER PIECES FOR COMPLETE CONTINUOUS APPEARANCE.
2. CONTRACTORS RESPONSIBLE FOR CUSTOM SHEET METAL SUPPLY AIR PLENUMS. PLENUMS TO BE INSULATED AND PAINTED BLACK.
3. PROVIDE WITH BORDER FOR HIDDEN FLANGE INSTALLATION. PROVIDE PROPER SUPPORT FROM THE STRUCTURE. CONCEALED FASTENERS.

AIR DEVICE SCHEDULE (SUPPLY)											
MARK	TYPE	AIR FLOW			MOUNTING	PANEL/FRAME SIZE	NECK SIZE	NC	DAMPER	FINISH	REMARKS
		MIN	MAX	MAX APD							

1. PROVIDE ALL SPECIALTIES, FRAMES, AND BORDERS REQUIRED FOR INSTALLATION IN CEILING TYPE INDICATED IN ARCHITECTURAL DOCUMENTS.
2. PROVIDE PROPER SUPPORT FROM THE STRUCTURE.
3. CUSTOM COLOR TO BE SELECTED BY ARCHITECT. COLOR OF AIR DEVICE TO MATCH COLOR OF CEILING.

AIR DEVICE SCHEDULE (EXHAUST)											
MARK	TYPE	AIR FLOW			MOUNTING	PANEL/FRAME SIZE	NECK SIZE	NC	DAMPER	FINISH	REMARKS
		MIN	MAX	MAX APD							

1. PROVIDE ALL SPECIALTIES, FRAMES, AND BORDERS REQUIRED FOR INSTALLATION IN CEILING TYPE INDICATED IN ARCHITECTURAL DOCUMENTS.
2. PROVIDE BLACK COLORED INSULATED PLENUMS.
3. PROVIDE PROPER SUPPORT FROM THE STRUCTURE.

HOT WATER FINNED TUBE RADIATION SCHEDULE												
MARK	LOCATION	AREA AND/OR BUILDING SERVED	TYPE	ENCLOSURE TYPE	MOUNTING	ENCLOSURE LENGTH	CAPACITY (BTU/FT)	TEMPERATURES EWT	LWT	GPM	MAX. WPD (FT HD.)	REMARKS
7-FH-1	CC200	UNIT 7	FLOOR MTD.	FULL COVER	FLOOR	12'-0"	1810	180 F	160 F	2	2	1, 2, 3

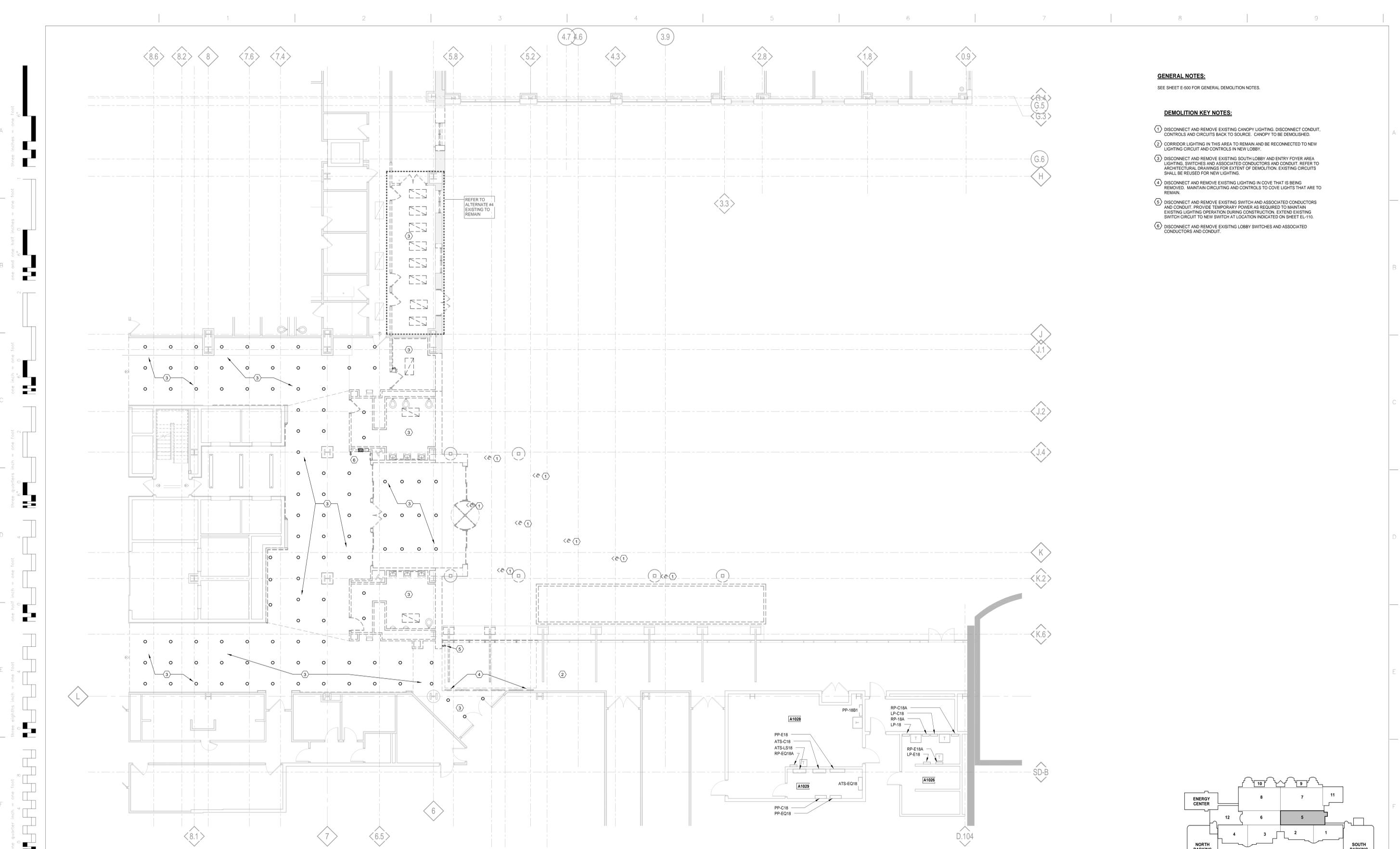
1. FIELD-VERIFY ENCLOSURE LENGTHS.
2. BASIS OF DESIGN - RUNTAL RFP SERIES.
3. PROVIDE WITH UNIT MOUNTED THERMOSTAT.

HVAC SYMBOLS LEGEND:	
SYMBOL	DESCRIPTION
	SUPPLY AIR
	RETURN AIR
	EXHAUST AIR
	HEATING HOT WATER SUPPLY
	HEATING HOT WATER RETURN
	STEAM
	CONDENSATE RETURN
	REFRIGERANT LIQUID
	REFRIGERANT SUCTON
	REFRIGERANT HOT GAS
	MAKE-UP WATER
	EXISTING TO BE REMOVED
	NATURAL GAS
	DIRECTION OF FLOW
	REDUCER OR INCREASER
	TOP CONNECTION, 45 OR 90
	BOTTOM CONNECTION, 45 OR 90
	SIDE CONNECTION
	CAPPED OUTLET
	RISE OR DROP IN PIPE
	UNION
	PIPE UP
	PIPE DOWN
	GATE VALVE
	GLOBE VALVE
	GATE VALVE WITH 3/4" HOSE ADAPTER
	CHECK VALVE
	WYE STRAINER (WITH BALL VALVE & HOSE CONNECTION)
	WYE STRAINER WITH VALVED DRAIN AND QUICK-COUPLE HOSE CONNECTION
	FLEXIBLE CONNECTION
	ANGLE GLOBE VALVE
	BUTTERFLY VALVE
	BALL VALVE
	MODULATING CONTROL VALVE
	MODULATING CONTROL BUTTERFLY VALVE
	TWO POSITION CONTROL VALVE
	THREE-WAY MODULATING CONTROL VALVE
	THREE-WAY TWO POSITION CONTROL VALVE
	PRESSURE REGULATING VALVE
	PRESSURE SAFETY VALVE
	AUTOMATIC BALANCING CONTROL VALVE
	WATER BALANCE DEVICE
	BALANCING VALVE
	THERMOMETER
	PRESSURE GAGE
	THERMOSTAT
	HUMIDISTAT
	SENSOR
	PRESSURE SENSOR
	POINT OF CONNECTION
ABBREVIATION	DESCRIPTION
ALL	ACOUSTICALLY LINED
AF	ABOVE FINISH FLOOR
ADJ	ADJUSTABLE
BDD	BACKDRAFT DAMPER
CA	COMPRESSED AIR
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CO	CLEANOUT
CND	CONDENSATE RETURN
CFM	CUBIC FEET PER MINUTE
CD	DRAIN (CONDENSATE)
DB	DRYBULB
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RETURN
EFF	EFFICIENCY
EWT	ENTERING WATER TEMPERATURE
EA	EXHAUST AIR
EX	EXISTING
ESP	EXTERNAL STATIC PRESSURE
F&Y	FLOOR AND THERMOSTATIC
FOO	FLOOR CLEANOUT
FD	FIRE DAMPER
FPD	FIRE PROTECTION (DRY)
FPW	FIRE PROTECTION (WET)
G	NATURAL GAS
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
IN WC	INCHES WATER COLUMN
KW	KILOWATTS
LWT	LEAVING WATER TEMPERATURE
LPS	LOW PRESSURE STEAM
MA	MEDICAL AIR
MCA	MINIMUM CIRCUIT AMPACITY
MFS	MAXIMUM FUSE SIZE
MG	MEDICAL GAS
MOKP	MAXIMUM OVERCURRENT PROTECTION
MR	MANUFACTURER'S RECOMMENDATIONS
NTS	NOT TO SCALE
O	OXYGEN
OA	OUTDOOR AIR
PD	PRESSURE DROP
PRV	PRESSURE REDUCING VALVE
PRPFP	REDUCED PRESSURE BACKFLOW PREVENTER
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RLA	RUNNING LOAD AMPS
SAN	SANITARY
SOV	SHUTOFF VALVE
SCW	SOFT COLD WATER
STM	STORM
ODL	STORM OVERFLOW
SA	SUPPLY AIR
SD	SMOKE DAMPER
SS	STEAM
MBH	THOUSAND BTUHR
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VENT
VAC	VACUUM
WCO	WALL CLEANOUT
WHA	WATER HAMMER ARRESTER
WB	WET BULB

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED.

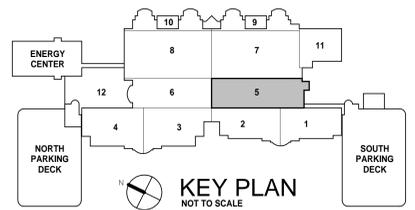
GENERAL NOTES:

- IF COMPLIANCE WITH TWO OR MORE DIFFERING STANDARDS, REQUIREMENTS, DRAWINGS OR SPECIFICATIONS, OR ANY COMBINATION THEREOF, IS SPECIFIED AND THESE ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, COMPLY WITH THE MOST STRINGENT REQUIREMENT. THE MOST STRINGENT REQUIREMENT WILL BE THE BETTER QUALITY OR GREATER QUANTITY OF WORK, AND WILL TYPICALLY BE THE MORE EXPENSIVE OPTION. REFER UNCERTAINTIES AND REQUIREMENTS THAT ARE DIFFERENT, BUT APPARENTLY EQUAL, TO ENGINEER FOR A DECISION BEFORE PROCEEDING.
- THE QUANTITY OR QUALITY LEVEL SHOWN OR SPECIFIED SHALL BE THE MINIMUM PROVIDED OR PERFORMED. THE ACTUAL INSTALLATION MAY COMPLY EXACTLY WITH THE MINIMUM QUANTITY OR QUALITY SPECIFIED, OR IT MAY EXCEED THE MINIMUM WITHIN REASONABLE LIMITS TO COMPLY WITH THESE REQUIREMENTS. INDICATED NUMERIC VALUES ARE MINIMUM OR MAXIMUM, AS APPROPRIATE, FOR THE CONTENT OF REQUIREMENTS. REFER UNCERTAINTIES TO ENGINEER FOR A DECISION BEFORE PROCEEDING.
- DESIGN DOCUMENTS MUST BE REPRODUCED IN THEIR ENTIRETY, INCLUDING ALL PLANS, SPECIFICATIONS, AND FRONT END DOCUMENTS.
- ONLY COMPLETE DOCUMENT SETS ARE TO BE DISTRIBUTED TO SUBCONTRACTORS AND SUPPLIERS OF THE CONTRACTOR DURING BIDDING OR CONSTRUCTION.
- FAILURE TO REVIEW AND COMPLY WITH A FULL SET OF CONTRACT DOCUMENTS WILL NOT BE ACCEPTED AS A VALID REASON FOR FAILURE TO MEET THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.
- ALL MECHANICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH VA HVAC DESIGN MANUAL, LOCAL ORDINANCES, AND LAWS AND SHALL BE OF SIMILAR QUALITY, MATERIAL, AND INSTALLATION METHODOLOGY AS SIMILAR WORK IN EXISTING FACILITY. FOR PURPOSES OF THIS DESIGN, THE CODES FOR THE STATE OF MI WERE USED AS THE BASIS.
- ALL ABOVE CEILING SYSTEMS AND COMPONENTS (INCLUDING BUT NOT LIMITED TO MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, ETC.) SHALL BE COORDINATED SUCH THAT THE SYSTEMS ARE PROPERLY INTEGRATED IN THE SPACE PROVIDED ABOVE CEILING AT THE CEILING HEIGHTS NOTED. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO COORDINATE PATHWAYS WITHIN THE SPACE PROVIDED. CEILING HEIGHTS WILL NOT BE MODIFIED.
- COORDINATE LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL AND ELECTRICAL PRIOR TO ROUGH-IN. ALL CONFLICTS WITH FINISHES, ADJACENT CONSTRUCTION, AND CONSTRUCTION DOCUMENTS ARE TO GENERATE AN RFI FROM THE MECHANICAL CONTRACTOR TO THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING AND COMPLETION OF WORK.
- CEILING CONTRACTOR SHALL FURNISH AND INSTALL HINGED STEEL ACCESS PANELS FOR ALL ABOVE CEILING DAMPERS, VAV BOXES, FILTERS, BALANCING VALVES, AND ISOLATION VALVES IN GYPSUM CEILINGS. PANELS SHALL BE KEPT FOR ACCESS BY MAINTENANCE STAFF ONLY, AND FINISHED WITH WHITE BASED-ON ENAMEL. MECHANICAL CONTRACTOR SHALL CONSOLIDATE ABOVE CEILING ACCESS REQUIREMENTS TO LIMIT PANELS TO NO MORE THAN 25. MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY ACCESS PANELS AS A RESULT FROM PLAN DEVIATION/ALTERATION. COORDINATE QUANTITY AND LOCATION OF ADDITIONAL ACCESS PANELS WITH CEILING CONTRACTOR.
- CONTRACTOR SHALL FURNISH AND INSTALL BEVELED OR TAPERED TAKEOFFS AT ALL CONNECTIONS OF DUCT RUNOUTS TO TRUNKS. ALL FITTINGS SHALL BE IN ACCORDANCE WITH SMACNA.
- CONTRACTOR SHALL FURNISH AND INSTALL MANUAL BALANCING DAMPERS AT ALL SUPPLY, RETURN, AND EXHAUST TRUNK BRANCHES AND RUNOUTS.
- CONTRACTOR SHALL FURNISH AND INSTALL ISOLATION AND BALANCING VALVES AT ALL VAV BOXES, AND BALANCING VALVES AT EACH FLOOR'S DISTRIBUTION LOOP. CONTRACTOR SHALL LOCATE VALVES TO ALLOW FOR ACCESS WITHIN 3' AFTER CONSTRUCTION IS COMPLETE.
- MECHANICAL CONTRACTOR SHALL COORDINATE EQUIPMENT INSTALLATION WITH ROOFING CONTRACTOR OR ROOFING MANUFACTURER TO AVOID DAMAGE TO ROOFING SYSTEM.
- COORDINATE LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL, STRUCTURAL, CIVIL, INTERIORS, AND ELECTRICAL PRIOR TO ROUGH-IN. ALL CONFLICTS WITH FINISHES, ADJACENT CONSTRUCTION AND CONSTRUCTION DOCUMENTS ARE TO GENERATE AN RFI FROM THE MECHANICAL CONTRACTOR TO THE ENGINEER PRIOR TO PROCEEDING AND COMPLETION OF WORK.
- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRESTOPPING ALL NEW MECHANICAL PENETRATIONS THROUGH RATED ASSEMBLIES.
- A TAB IS REQUIRED FOR THE WORK. EQUIPMENT SHOP DRAWINGS WILL NOT BE REVIEWED PRIOR TO RECEIPT OF THE EXISTING SYSTEM TAB.
- MECHANICAL CONTRACTOR SHALL MEASURE SYSTEM FLOWS BEFORE SYSTEM ALTERATIONS AND ADJUST SYSTEM TO ACHIEVE PRE-CONSTRUCTION VALUES. VALUES BEFORE AND AFTER THE WORK SHALL BE RECORDED AND SUPPLIED TO THE OWNER'S REPRESENTATIVE.
- ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH MOTOR START



- GENERAL NOTES:**
SEE SHEET E-500 FOR GENERAL DEMOLITION NOTES.
- DEMOLITION KEY NOTES:**
- 1 DISCONNECT AND REMOVE EXISTING CANOPY LIGHTING. DISCONNECT CONDUIT, CONTROLS AND CIRCUITS BACK TO SOURCE. CANOPY TO BE DEMOLISHED.
 - 2 CORRIDOR LIGHTING IN THIS AREA TO REMAIN AND BE RECONNECTED TO NEW LIGHTING CIRCUIT AND CONTROLS IN NEW LOBBY.
 - 3 DISCONNECT AND REMOVE EXISTING SOUTH LOBBY AND ENTRY FOYER AREA LIGHTING, SWITCHES AND ASSOCIATED CONDUCTORS AND CONDUIT. REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT OF DEMOLITION. EXISTING CIRCUITS SHALL BE REUSED FOR NEW LIGHTING.
 - 4 DISCONNECT AND REMOVE EXISTING LIGHTING IN COVE THAT IS BEING REMOVED. MAINTAIN CIRCUITING AND CONTROLS TO COVE LIGHTS THAT ARE TO REMAIN.
 - 5 DISCONNECT AND REMOVE EXISTING SWITCH AND ASSOCIATED CONDUCTORS AND CONDUIT. PROVIDE TEMPORARY POWER AS REQUIRED TO MAINTAIN EXISTING LIGHTING OPERATION DURING CONSTRUCTION. EXTEND EXISTING SWITCH CIRCUIT TO NEW SWITCH AT LOCATION INDICATED ON SHEET EL-110.
 - 6 DISCONNECT AND REMOVE EXISTING LOBBY SWITCHES AND ASSOCIATED CONDUCTORS AND CONDUIT.

FIRST FLOOR LIGHTING DEMOLITION PLAN
1/8" = 1'-0"



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2		
3		
4		
5		
Revisions:		Date

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File Name

File Location

Drawing Title
FIRST FLOOR LIGHTING DEMOLITION PLAN

Approved: Division Chief

Approved: Service Director

Project Title
RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

Checked
MJJ

Drawn
PBB

Location
4646 JOHN R. STREET DETROIT, MI 48201

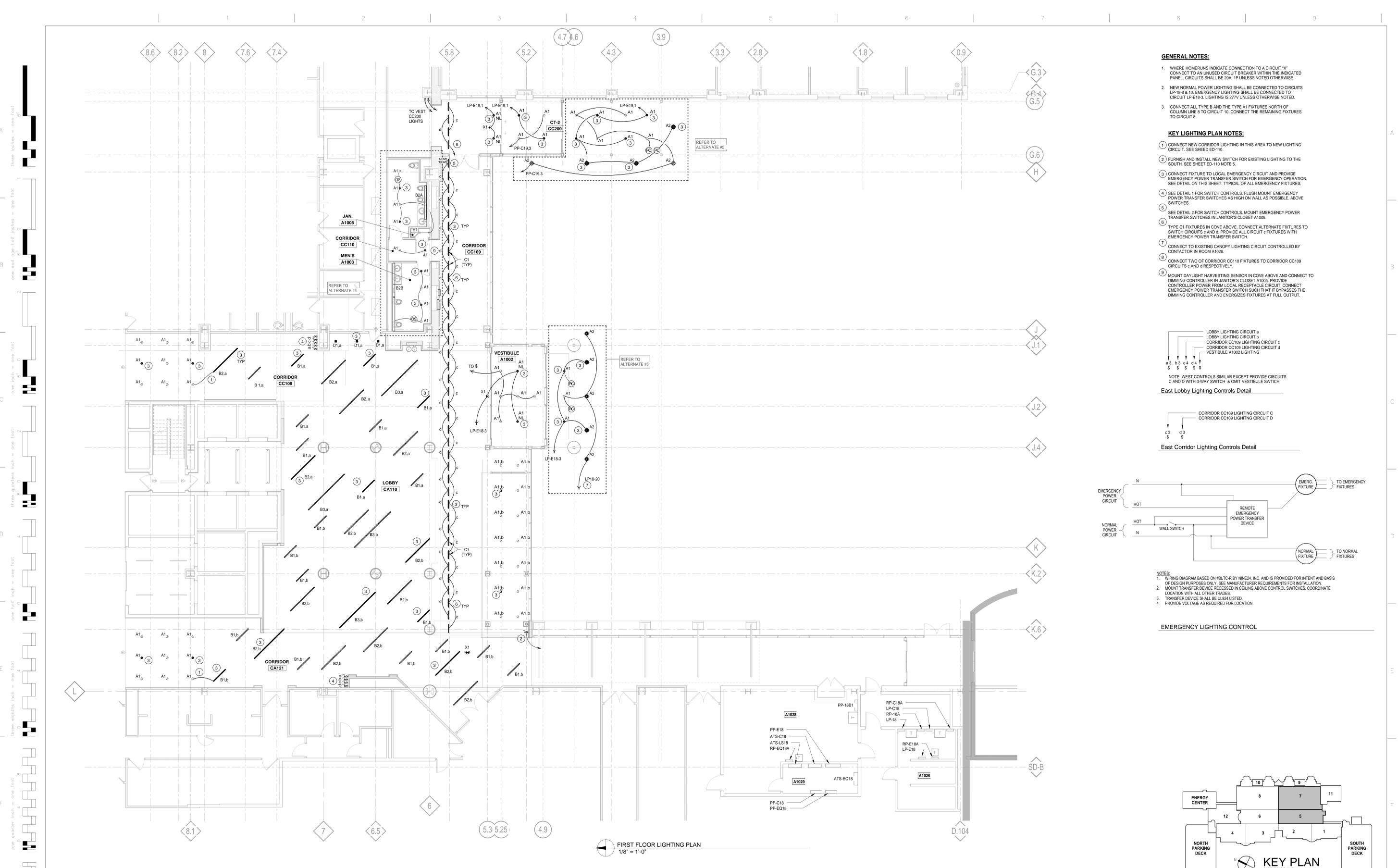
Date
03/01/2016

Project Number
553-304

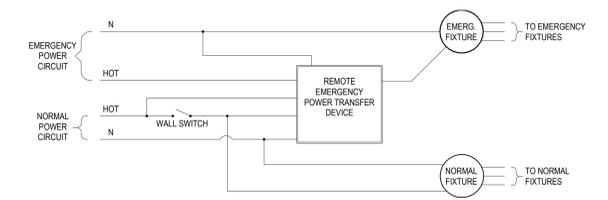
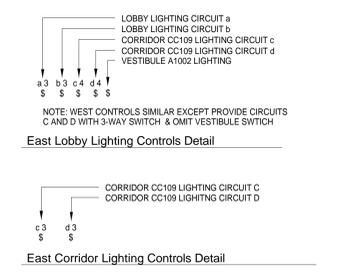
Drawing Number
ED-110

Office of Facilities Management

Department of Veterans Affairs



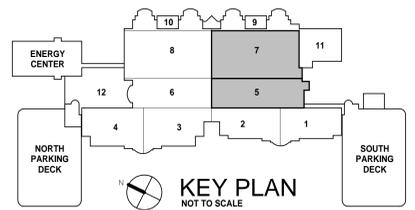
- GENERAL NOTES:**
- WHERE HOMERUNS INDICATE CONNECTION TO A CIRCUIT "X" CONNECT TO AN UNUSED CIRCUIT BREAKER WITHIN THE INDICATED PANEL. CIRCUITS SHALL BE 20A, 1P UNLESS NOTED OTHERWISE.
 - NEW NORMAL POWER LIGHTING SHALL BE CONNECTED TO CIRCUITS LP-18-B & 10. EMERGENCY LIGHTING SHALL BE CONNECTED TO CIRCUIT LP-E18-3. LIGHTING IS 277V UNLESS OTHERWISE NOTED.
 - CONNECT ALL TYPE B AND THE TYPE A1 FIXTURES NORTH OF COLUMN LINE 8 TO CIRCUIT 10. CONNECT THE REMAINING FIXTURES TO CIRCUIT 8.
- KEY LIGHTING PLAN NOTES:**
- CONNECT NEW CORRIDOR LIGHTING IN THIS AREA TO NEW LIGHTING CIRCUIT. SEE SHEET ED-110.
 - FURNISH AND INSTALL NEW SWITCH FOR EXISTING LIGHTING TO THE SOUTH. SEE SHEET ED-110 NOTE 5.
 - CONNECT FIXTURE TO LOCAL EMERGENCY CIRCUIT AND PROVIDE EMERGENCY POWER TRANSFER SWITCH FOR EMERGENCY OPERATION. SEE DETAIL ON THIS SHEET. TYPICAL OF ALL EMERGENCY FIXTURES.
 - SEE DETAIL 1 FOR SWITCH CONTROLS. FLUSH MOUNT EMERGENCY POWER TRANSFER SWITCHES AS HIGH ON WALL AS POSSIBLE. ABOVE SWITCHES.
 - SEE DETAIL 2 FOR SWITCH CONTROLS. MOUNT EMERGENCY POWER TRANSFER SWITCHES IN JANITOR'S CLOSET A1005.
 - TYPE C1 FIXTURES IN COVE ABOVE. CONNECT ALTERNATE FIXTURES TO SWITCH CIRCUITS c AND d. PROVIDE ALL CIRCUIT c FIXTURES WITH EMERGENCY POWER TRANSFER SWITCH.
 - CONNECT TO EXISTING CANOPY LIGHTING CIRCUIT CONTROLLED BY CONTACTOR IN ROOM A1026.
 - CONNECT TWO OF CORRIDOR CC110 FIXTURES TO CORRIDOR CC109 CIRCUITS c AND d RESPECTIVELY.
 - MOUNT DAYLIGHT HARVESTING SENSOR IN COVE ABOVE AND CONNECT TO DIMMING CONTROLLER IN JANITOR'S CLOSET A1005. PROVIDE CONTROLLER POWER FROM LOCAL RECEPTACLE CIRCUIT. CONNECT EMERGENCY POWER TRANSFER SWITCH SUCH THAT IT BYPASSES THE DIMMING CONTROLLER AND ENERGIZES FIXTURES AT FULL OUTPUT.



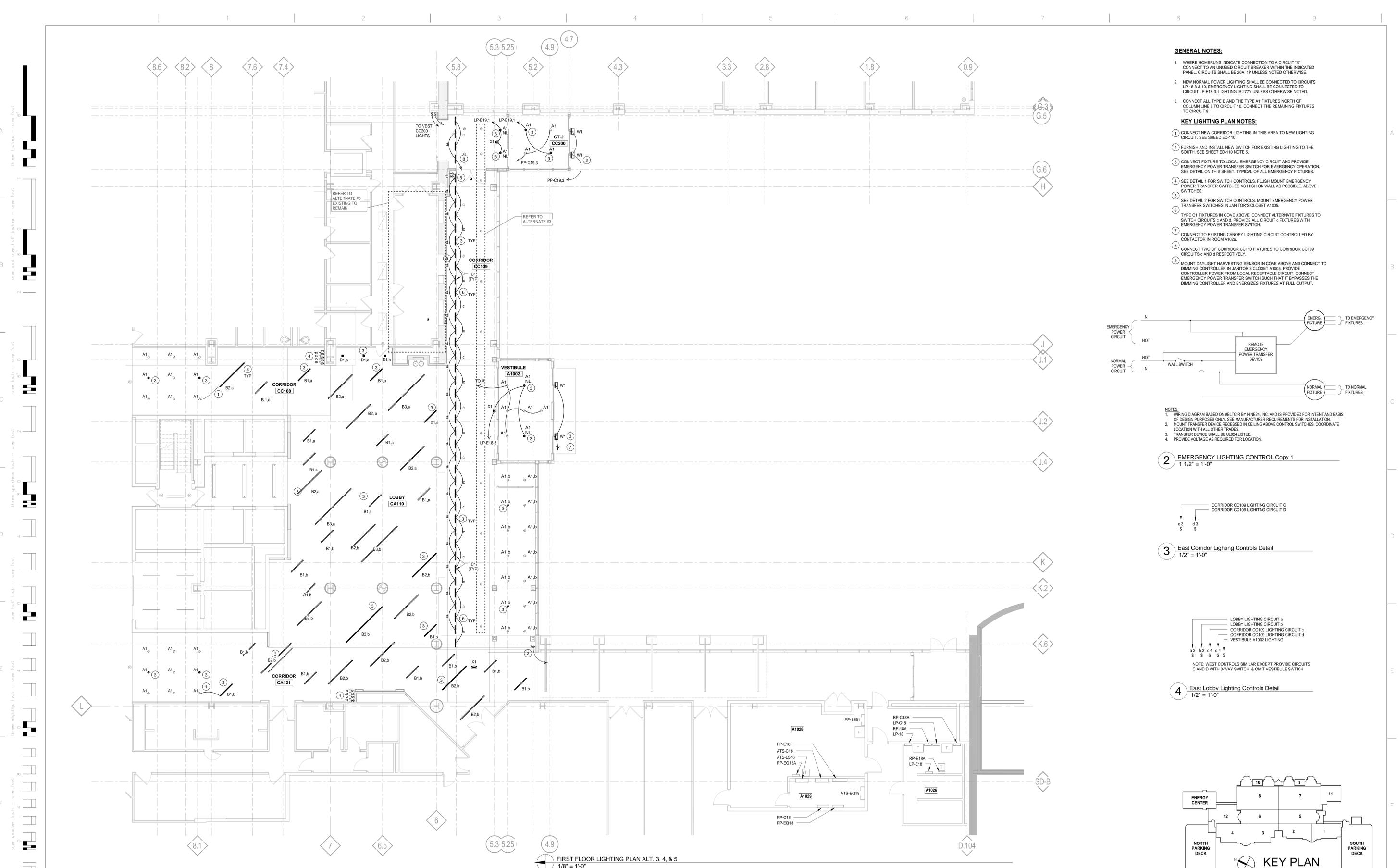
- NOTES:**
- WIRING DIAGRAM BASED ON 96LTC-R BY NINE34, INC. AND IS PROVIDED FOR INTENT AND BASIS OF DESIGN PURPOSES ONLY. SEE MANUFACTURER REQUIREMENTS FOR INSTALLATION.
 - MOUNT TRANSFER DEVICE RECESSED IN CEILING ABOVE CONTROL SWITCHES. COORDINATE LOCATION WITH ALL OTHER TRADES.
 - TRANSFER DEVICE SHALL BE UL924 LISTED.
 - PROVIDE VOLTAGE AS REQUIRED FOR LOCATION.

EMERGENCY LIGHTING CONTROL

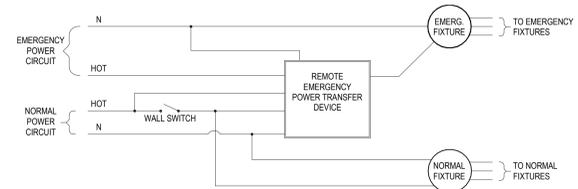
FIRST FLOOR LIGHTING PLAN
1/8" = 1'-0"



1 2 3 4 5 Revisions: _____ Date _____	CONSULTANTS: 725 Prudden Street Lansing, MI 48906 - 517.371.1200  elevating human achievement	 Department of Veterans Affairs John D. Dingell VA Medical Center 4646 John R Street Detroit, MI 48201	Property of the United States Government For Official Use Only <small>Do not remove this notice. Properly Destroy documents when no longer needed.</small>	Drawing Title FIRST FLOOR LIGHTING PLAN	Project Title RENOVATIONS TO THE SOUTH LOBBY ENTRANCE	Date 03/01/2016 Project Number 553-304	Office of Facilities Management  Department of Veterans Affairs
	File Name Approved: Division Chief		Building Number Checked M.J.J.	Drawn P.B.B.	Drawing Number EL-110		
	File Location Approved: Service Director		Location 4646 JOHN R. STREET DETROIT, MI 48201				

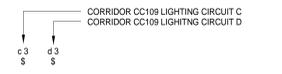


- GENERAL NOTES:**
- WHERE HOMERUNS INDICATE CONNECTION TO A CIRCUIT "X" CONNECT TO AN UNUSED CIRCUIT BREAKER WITHIN THE INDICATED PANEL. CIRCUITS SHALL BE 20A 1P UNLESS NOTED OTHERWISE.
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- KEY LIGHTING PLAN NOTES:**
- CONNECT NEW CORRIDOR LIGHTING IN THIS AREA TO NEW LIGHTING CIRCUIT. SEE SHEET ED-110.
 - FURNISH AND INSTALL NEW SWITCH FOR EXISTING LIGHTING TO THE SOUTH. SEE SHEET ED-110 NOTE 5.
 - CONNECT FIXTURE TO LOCAL EMERGENCY CIRCUIT AND PROVIDE EMERGENCY POWER TRANSFER SWITCH FOR EMERGENCY OPERATION. SEE DETAIL ON THIS SHEET, TYPICAL OF ALL EMERGENCY FIXTURES.
 - SEE DETAIL 1 FOR SWITCH CONTROLS. FLUSH MOUNT EMERGENCY POWER TRANSFER SWITCHES AS HIGH ON WALL AS POSSIBLE ABOVE SWITCHES.
 - SEE DETAIL 2 FOR SWITCH CONTROLS. MOUNT EMERGENCY POWER TRANSFER SWITCHES IN JANITOR'S CLOSET A1005.
 - TYPE C1 FIXTURES IN COVE ABOVE. CONNECT ALTERNATE FIXTURES TO SWITCH CIRCUITS c and d. PROVIDE ALL CIRCUIT c FIXTURES WITH EMERGENCY POWER TRANSFER SWITCH.
 - CONNECT TO EXISTING CANOPY LIGHTING CIRCUIT CONTROLLED BY CONTACTOR IN ROOM A1028.
 - CONNECT TWO OF CORRIDOR CC109 FIXTURES TO CORRIDOR CC109 CIRCUITS c and d RESPECTIVELY.
 - MOUNT DAYLIGHT HARVESTING SENSOR IN COVE ABOVE AND CONNECT TO DIMMING CONTROLLER IN JANITOR'S CLOSET A1005. PROVIDE CONTROLLER POWER FROM LOCAL RECEPTACLE CIRCUIT. CONNECT EMERGENCY POWER TRANSFER SWITCH SUCH THAT IT BYPASSES THE DIMMING CONTROLLER AND ENERGIZES FIXTURES AT FULL OUTPUT.

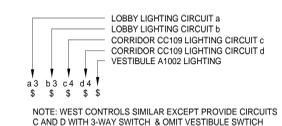


- NOTES:**
- WIRING DIAGRAM BASED ON #BLTC-R BY NINE24, INC. AND IS PROVIDED FOR INTENT AND BASIS OF DESIGN PURPOSES ONLY. SEE MANUFACTURER REQUIREMENTS FOR INSTALLATION.
 - MOUNT TRANSFER DEVICE RECESSED IN CEILING ABOVE CONTROL SWITCHES. COORDINATE LOCATION WITH ALL OTHER TRADES.
 - TRANSFER DEVICE SHALL BE UL324 LISTED.
 - PROVIDE VOLTAGE AS REQUIRED FOR LOCATION.

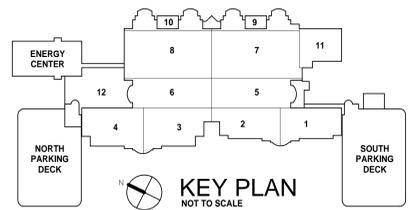
2 EMERGENCY LIGHTING CONTROL Copy 1
1/2" = 1'-0"



3 East Corridor Lighting Controls Detail
1/2" = 1'-0"



4 East Lobby Lighting Controls Detail
1/2" = 1'-0"



FIRST FLOOR LIGHTING PLAN ALT. 3, 4, & 5
1/8" = 1'-0"

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
one eighth inch = one foot

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Revisions:	Date

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Drawing Title
FIRST FLOOR LIGHTING PLAN ALT.

Approved: Division Chief
Approved: Service Director

Project Title
RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number
Checked
Checked

Date
03/01/2016

Project Number
553-304

Drawing Number
EL-110.a

Office of Facilities Management

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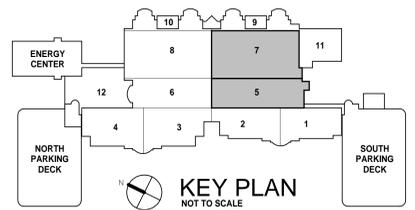
FIRST FLOOR POWER DEMOLITION PLAN - ZONE 5/7
1/8" = 1'-0"

GENERAL NOTES:

1. SEE SHEET E-500 FOR GENERAL DEMOLITION NOTES.
2. EXISTING ELECTRIC LOADS ARE CIRCUITED TO PANELBOARDS LOCATED IN ROOM A1026, A1028 OR A1029 UNLESS NOTED OTHERWISE.

KEYED DEMOLITION POWER PLAN NOTES:

- 1 DISCONNECT AND REMOVE CONDUIT, WIRING AND ASSOCIATED EQUIPMENT TO EXISTING ELECTRIC INFRARED HEATERS.
- 2 DISCONNECT AND REMOVE CONDUIT, WIRING AND ASSOCIATED EQUIPMENT TO EXISTING ELECTRIC UNIT HEATER.
- 3 DISCONNECT AND REMOVE CONDUIT, WIRING AND ASSOCIATED EQUIPMENT TO EXISTING CABINET UNIT HEATER.
- 4 DISCONNECT AND REMOVE EXISTING DEVICE IN WALL TO BE REMOVED AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.
- 5 DISCONNECT AND REMOVE CONDUIT, WIRING AND ASSOCIATED EQUIPMENT TO EXISTING AUTOMATIC DOOR OPERATORS.
- 6 DISCONNECT AND RELOCATE EXISTING CONNECTION TO PARKING DECK PAY-ON-FOOT STATION AND CONDUITS TO CONTROL PANEL. EXTEND ALL ASSOCIATED CONDUIT AND WIRING TO NEW LOCATION, MAINTAIN CIRCUITING.
- 7 DISCONNECT AND REMOVE ALL CONDUIT, WIRING AND ASSOCIATED EQUIPMENT TO EXISTING BUILDING BACK TO SOURCE.
- 8 DISCONNECT AND REMOVE EXISTING DEVICE. MAINTAIN CIRCUITING FOR CONNECTION TO NEW DEVICE.
- 9 DISCONNECT EXISTING AUTOMATIC DOOR POWER AND OPERATORS. EXTEND CONDUIT AND WIRING TO NEW AUTOMATIC DOOR LOCATION. SEE SHEET EP-110.
- 10 DISCONNECT AND REMOVE EXISTING GFI, WP RECEPTACLE AND COVER PLATE. EXTEND EXISTING WIRING TO NEW DEVICE TO BE MOUNTED IN FURRED OUT WALL.



three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 three eighths inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot
 one sixteenth inch = one foot

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Drawing Title

FIRST FLOOR POWER DEMOLITION PLAN

Approved: Division Chief

Approved: Service Director

Project Title

RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

Checked: MJJ

Drawn: PBB

Location
4646 JOHN R. STREET DETROIT, MI 48201

Date
03/01/2016

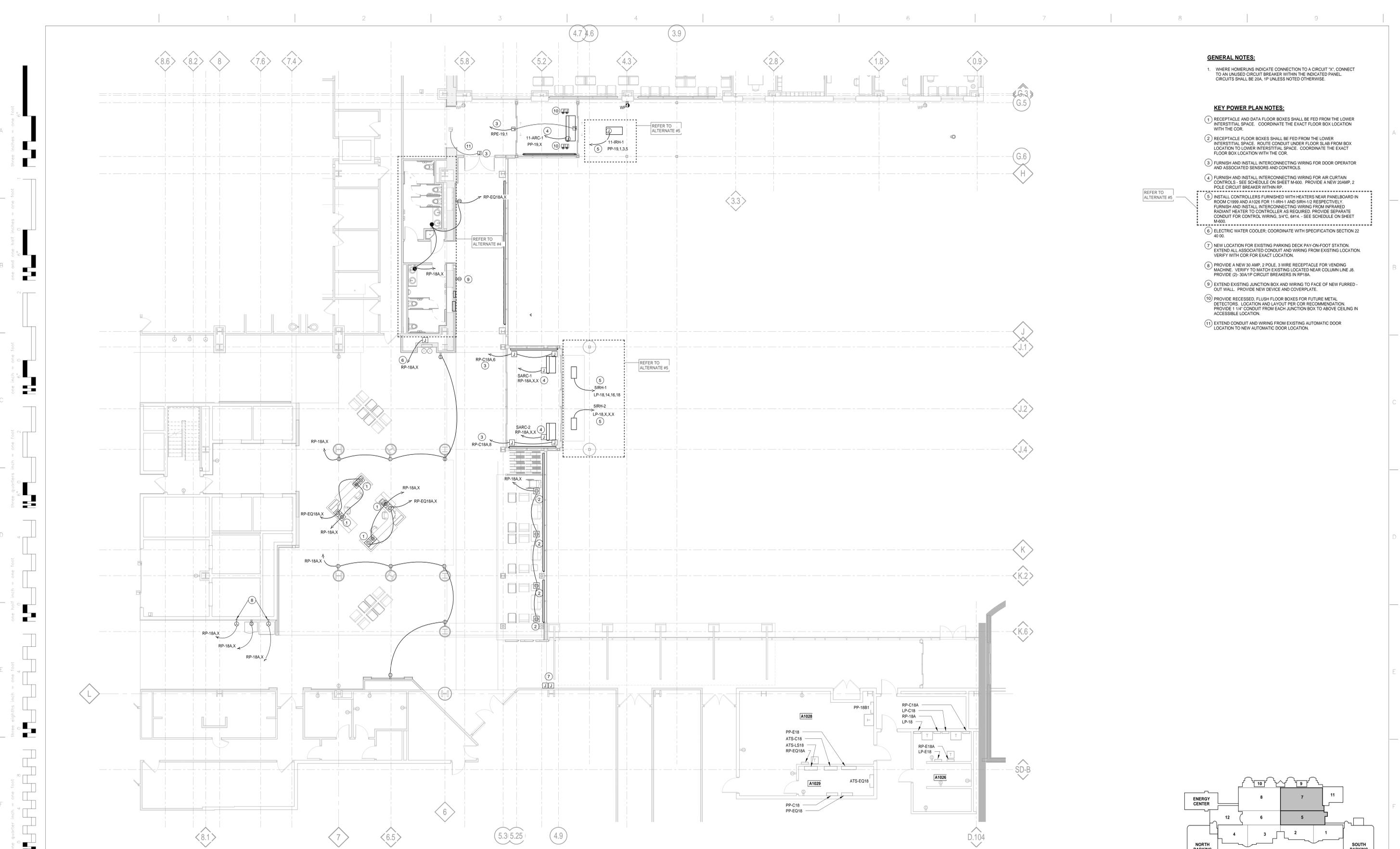
Project Number
553-304

Drawing Number
ED-111

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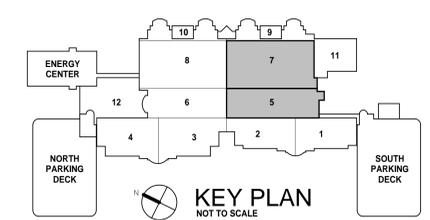


Department of Veterans Affairs



- GENERAL NOTES:**
- WHERE HOMERUNS INDICATE CONNECTION TO A CIRCUIT 'X', CONNECT TO AN UNUSED CIRCUIT BREAKER WITHIN THE INDICATED PANEL. CIRCUITS SHALL BE 20A, 1P UNLESS NOTED OTHERWISE.
- KEY POWER PLAN NOTES:**
- RECEPTACLE AND DATA FLOOR BOXES SHALL BE FED FROM THE LOWER INTERSTITIAL SPACE. COORDINATE THE EXACT FLOOR BOX LOCATION WITH THE COR.
 - RECEPTACLE FLOOR BOXES SHALL BE FED FROM THE LOWER INTERSTITIAL SPACE. ROUTE CONDUIT UNDER FLOOR SLAB FROM BOX LOCATION TO LOWER INTERSTITIAL SPACE. COORDINATE THE EXACT FLOOR BOX LOCATION WITH THE COR.
 - FURNISH AND INSTALL INTERCONNECTING WIRING FOR DOOR OPERATOR AND ASSOCIATED SENSORS AND CONTROLS.
 - FURNISH AND INSTALL INTERCONNECTING WIRING FOR AIR CURTAIN CONTROLS - SEE SCHEDULE ON SHEET M-800. PROVIDE A NEW 20AMP, 2 POLE CIRCUIT BREAKER WITHIN RP.
 - INSTALL CONTROLLERS FURNISHED WITH HEATERS NEAR PANELBOARD IN ROOM C1999 AND A1026 FOR 11-IRH-1 AND 5IRH-1/2 RESPECTIVELY. FURNISH AND INSTALL INTERCONNECTING WIRING FROM INFRARED RADIANT HEATER TO CONTROLLER AS REQUIRED. PROVIDE SEPARATE CONDUIT FOR CONTROL WIRING, 3/4" C, #14 - SEE SCHEDULE ON SHEET M-600.
 - ELECTRIC WATER COOLER; COORDINATE WITH SPECIFICATION SECTION 22 40 00.
 - NEW LOCATION FOR EXISTING PARKING DECK PAY-ON-FOOT STATION. EXTEND ALL ASSOCIATED CONDUIT AND WIRING FROM EXISTING LOCATION. VERIFY WITH COR FOR EXACT LOCATION.
 - PROVIDE A NEW 30 AMP, 2 POLE, 3 WIRE RECEPTACLE FOR VENDING MACHINE. VERIFY TO MATCH EXISTING LOCATED NEAR COLUMN LINE J8. PROVIDE (2) - 30A/1P CIRCUIT BREAKERS IN RP18A.
 - EXTEND EXISTING JUNCTION BOX AND WIRING TO FACE OF NEW FURRED-OUT WALL. PROVIDE NEW DEVICE AND COVERPLATE.
 - PROVIDE RECESSED, FLUSH FLOOR BOXES FOR FUTURE METAL DETECTORS. LOCATION AND LAYOUT PER COR RECOMMENDATION. PROVIDE 1 1/4" CONDUIT FROM EACH JUNCTION BOX TO ABOVE CEILING IN ACCESSIBLE LOCATION.
 - EXTEND CONDUIT AND WIRING FROM EXISTING AUTOMATIC DOOR LOCATION TO NEW AUTOMATIC DOOR LOCATION.

FIRST FLOOR POWER PLAN
1/8" = 1'-0"



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Revisions:	Date

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FIRST FLOOR POWER PLAN

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Approved: Service Director

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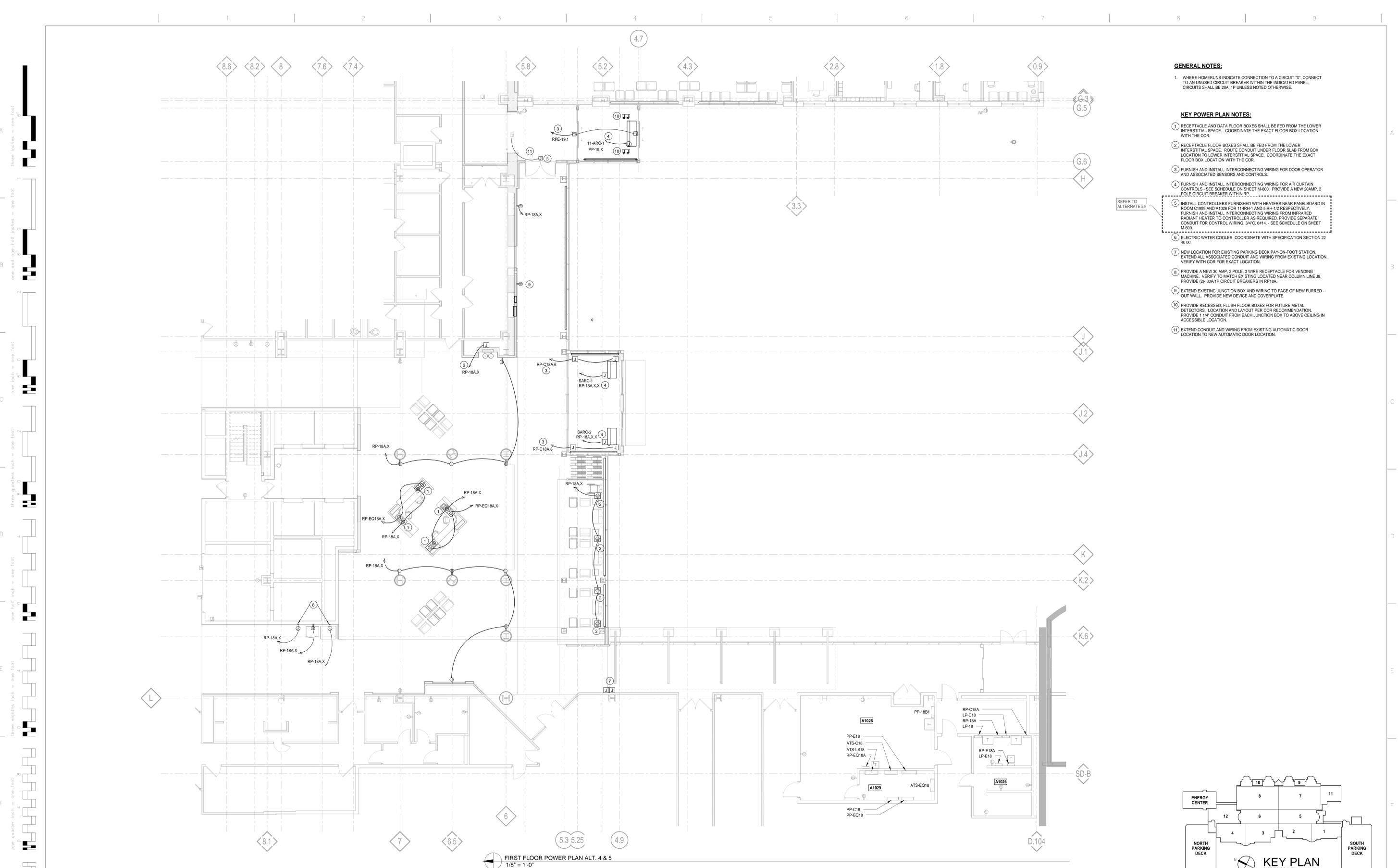
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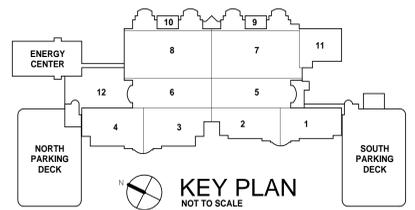
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Drawing Number
EP-110



- GENERAL NOTES:**
- WHERE HOMERUNS INDICATE CONNECTION TO A CIRCUIT 'X', CONNECT TO AN UNUSED CIRCUIT BREAKER WITHIN THE INDICATED PANEL. CIRCUITS SHALL BE 20A, 1P UNLESS NOTED OTHERWISE.
- KEY POWER PLAN NOTES:**
- RECEPTACLE AND DATA FLOOR BOXES SHALL BE FED FROM THE LOWER INTERSTITIAL SPACE. COORDINATE THE EXACT FLOOR BOX LOCATION WITH THE COR.
 - RECEPTACLE FLOOR BOXES SHALL BE FED FROM THE LOWER INTERSTITIAL SPACE. ROUTE CONDUIT UNDER FLOOR SLAB FROM BOX LOCATION TO LOWER INTERSTITIAL SPACE. COORDINATE THE EXACT FLOOR BOX LOCATION WITH THE COR.
 - FURNISH AND INSTALL INTERCONNECTING WIRING FOR DOOR OPERATOR AND ASSOCIATED SENSORS AND CONTROLS.
 - FURNISH AND INSTALL INTERCONNECTING WIRING FOR AIR CURTAIN CONTROLS - SEE SCHEDULE ON SHEET M-600. PROVIDE A NEW 20AMP, 2 POLE CIRCUIT BREAKER WITHIN RP.
 - INSTALL CONTROLLERS FURNISHED WITH HEATERS NEAR PANELBOARD IN ROOM C1999 AND A1028 FOR 11-IRH-1 AND SIRH-1/2 RESPECTIVELY. FURNISH AND INSTALL INTERCONNECTING WIRING FROM INFRARED RADIANT HEATER TO CONTROLLER AS REQUIRED. PROVIDE SEPARATE CONDUIT FOR CONTROL WIRING, 3/4" Ø14. - SEE SCHEDULE ON SHEET M-600.
 - ELECTRIC WATER COOLER; COORDINATE WITH SPECIFICATION SECTION 22 40 00.
 - NEW LOCATION FOR EXISTING PARKING DECK PAY-ON-FOOT STATION. EXTEND ALL ASSOCIATED CONDUIT AND WIRING FROM EXISTING LOCATION. VERIFY WITH COR FOR EXACT LOCATION.
 - PROVIDE A NEW 30 AMP, 2 POLE, 3 WIRE RECEPTACLE FOR VENDING MACHINE. VERIFY TO MATCH EXISTING LOCATED NEAR COLUMN LINE J8. PROVIDE (2)-30A/1P CIRCUIT BREAKERS IN RP18A.
 - EXTEND EXISTING JUNCTION BOX AND WIRING TO FACE OF NEW FURRED-OUT WALL. PROVIDE NEW DEVICE AND COVERPLATE.
 - PROVIDE RECESSED, FLUSH FLOOR BOXES FOR FUTURE METAL DETECTORS. LOCATION AND LAYOUT PER COR RECOMMENDATION. PROVIDE 1 1/4" CONDUIT FROM EACH JUNCTION BOX TO ABOVE CEILING IN ACCESSIBLE LOCATION.
 - EXTEND CONDUIT AND WIRING FROM EXISTING AUTOMATIC DOOR LOCATION TO NEW AUTOMATIC DOOR LOCATION.

FIRST FLOOR POWER PLAN ALT. 4 & 5
1/8" = 1'-0"



1		
2		
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5		
Revisions:		Date

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File Name

File Location

Drawing Title
FIRST FLOOR POWER PLAN ALT.

Date
03/01/2016

Project Number
553-304

Approved: Division Chief

Approved: Service Director

Project Title
RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

Location
4646 JOHN R. STREET DETROIT, MI 48201

Checked
Author

Drawn
Author

Drawing Number
EP-110.a

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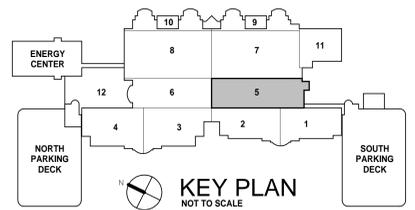
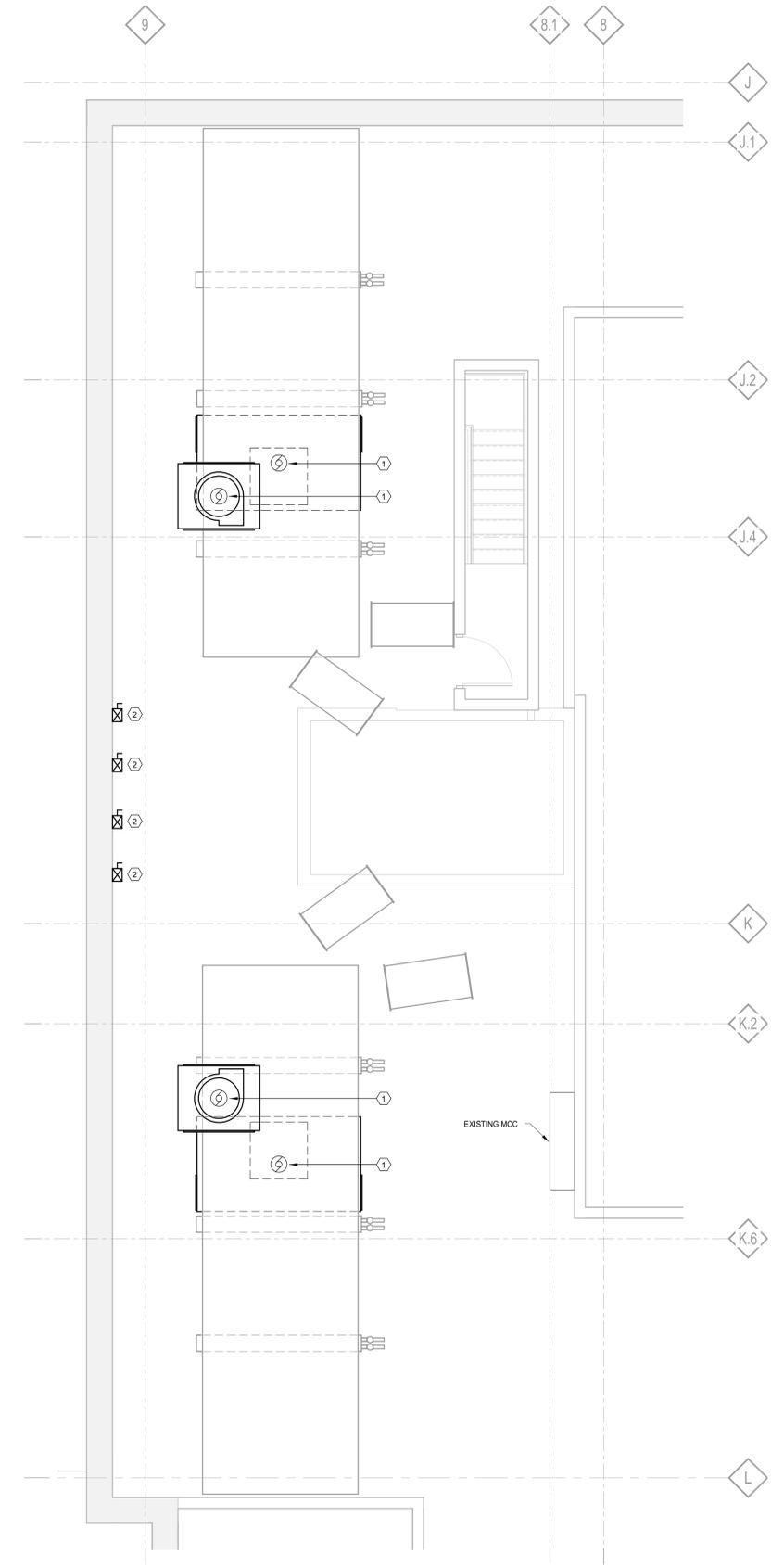
three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

BID DOCUMENTS

A three inches = one foot
 B one and one half inches = one foot
 C one inch = one foot
 D three quarters inch = one foot
 E one half inch = one foot
 F three eighths inch = one foot
 G one quarter inch = one foot
 H one eighth inch = one foot

KEYED PENTHOUSE POWER PLAN NOTES:

- DISCONNECT EXISTING FAN TO ALLOW REPLACEMENT BY OTHERS. CONNECT NEW FANS TO EXISTING CIRCUITS. FAN POWER IS FROM MCC-88.
- DISCONNECT AND REMOVE EXISTING VARIABLE SPEED MOTOR CONTROLLERS (VSMC) AND INSTALL NEW VSMC'S AT THE SAME LOCATION. EXISTING FAN CIRCUIT CONDUIT AND CONDUCTORS MAY BE REUSED WHERE PRACTICAL. FURNISH VSMC'S IN ACCORDANCE WITH SPECIFICATION SECTION 28.25.11.



1 PENTHOUSE POWER PLAN
1/4" = 1'-0"

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PENTHOUSE POWER PLAN

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Project Title

RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

Checked MJJ

Drawn PBB

Location
4646 JOHN R. STREET DETROIT, MI 48201

Date
03/01/2016

Project Number
553-304

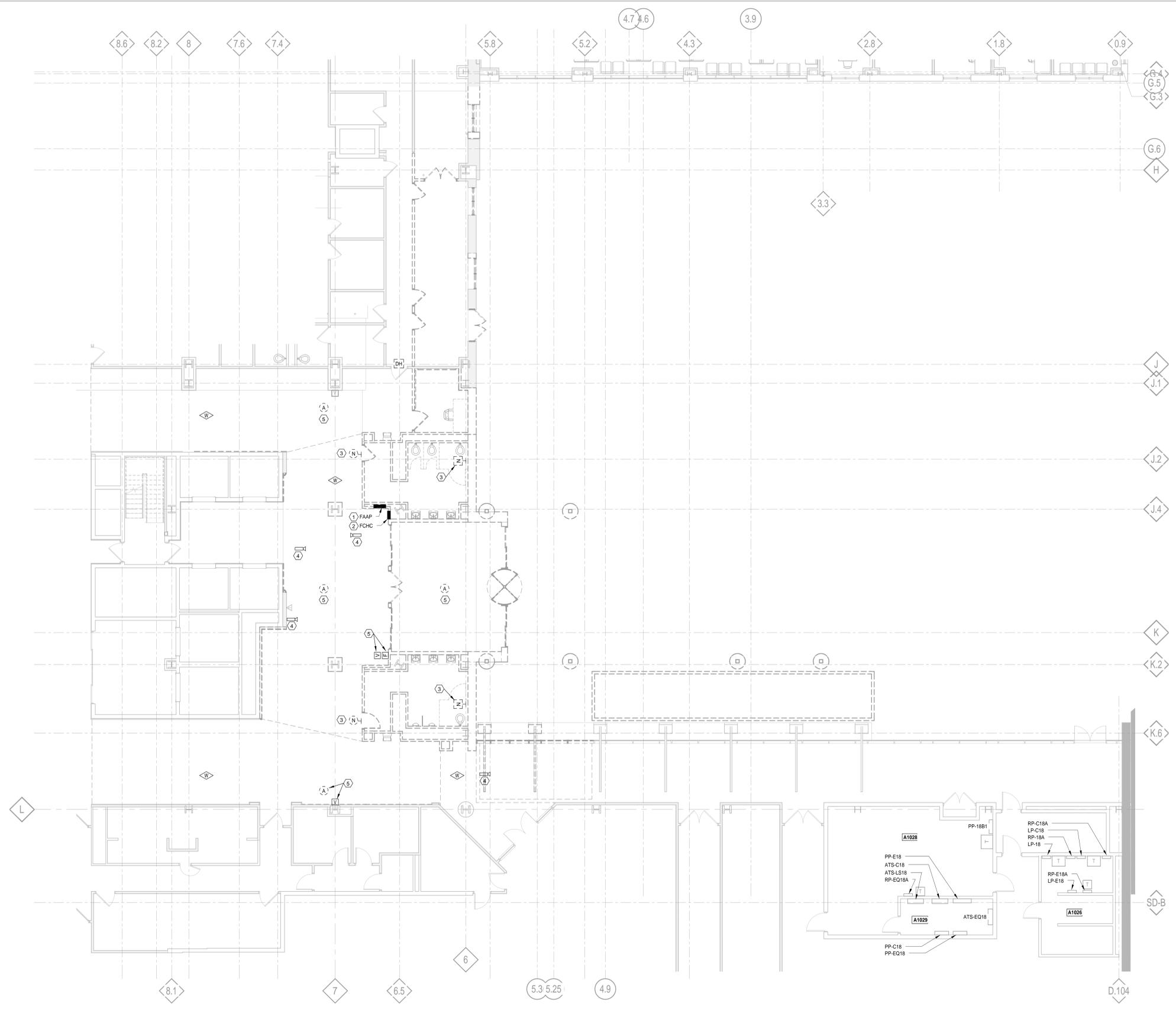
Drawing Number
EP-180

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A three inches = one foot
 B one and one half inches = one foot
 C one inch = one foot
 D three quarters inch = one foot
 E one half inch = one foot
 F three eighths inch = one foot
 G one quarter inch = one foot
 H one eighth inch = one foot
 I one sixteenth inch = one foot



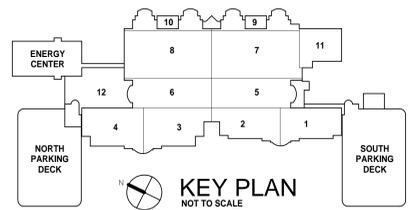
GENERAL NOTES:

- SEE SHEET E-500 FOR GENERAL DEMOLITION NOTES.
- EXISTING SYSTEMS CONNECTIONS ARE CIRCUITED FROM ROOM A1028 UNLESS NOTED OTHERWISE.
- EXISTING FIRE ALARM DEVICES REMOVE MAY BE REINSTALLED AT NEW LOCATIONS AS INDICATED ON SHEET ES-110. WHERE ADDITIONAL DEVICES ARE REQUIRED PROVIDE NEW DEVICES WHICH MATCH EXISTING.
- DISCONNECT AND REMOVE EXISTING INTERNET WIRELESS DEVICES, SPEAKERS, SMOKE DETECTORS, ETC. IN AREA. VERIFY LOCATIONS IN FIELD. COORDINATE WITH COR.

SYSTEMS PLAN DEMOLITION KEYNOTES:

- DISCONNECT AND REMOVE EXISTING FIRE ALARM ANNUNCIATOR PANEL AND REINSTALL AS INDICATED ON SHEET ES-110. EXTEND EXISTING CIRCUITS AS REQUIRED TO NEW LOCATION.
- DISCONNECT AND REMOVE EXISTING FIRE FIGHTERS COMMUNICATIONS HANDSET CABINET AND REINSTALL AS INDICATED ON SHEET ES-110. EXTEND EXISTING CIRCUITS AS REQUIRE TO NEW LOCATION.
- DISCONNECT AND REMOVE EXISTING NURSE CALL SYSTEM DEVICE AND REINSTALL AS INDICATE ON SHEET ES-110. EXISTING SYSTEM WIRING IS LOCATED ABOVE CEILING.
- DISCONNECT AND REMOVE EXISTING CCTV CAMERA. REINSTALL CAMERA AT LOCATION AS SHOWN ON SHEET ES-110. 4 LOCATIONS.
- DISCONNECT AND REMOVE EXISTING FIRE ALARM DEVICE AND REINSTALL AS NOTED IN GENERAL NOTE #3.

FIRST FLOOR SYSTEMS PLAN
 1/8" = 1'-0"



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Revisions:		Date

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File Location	Approved: Service Director

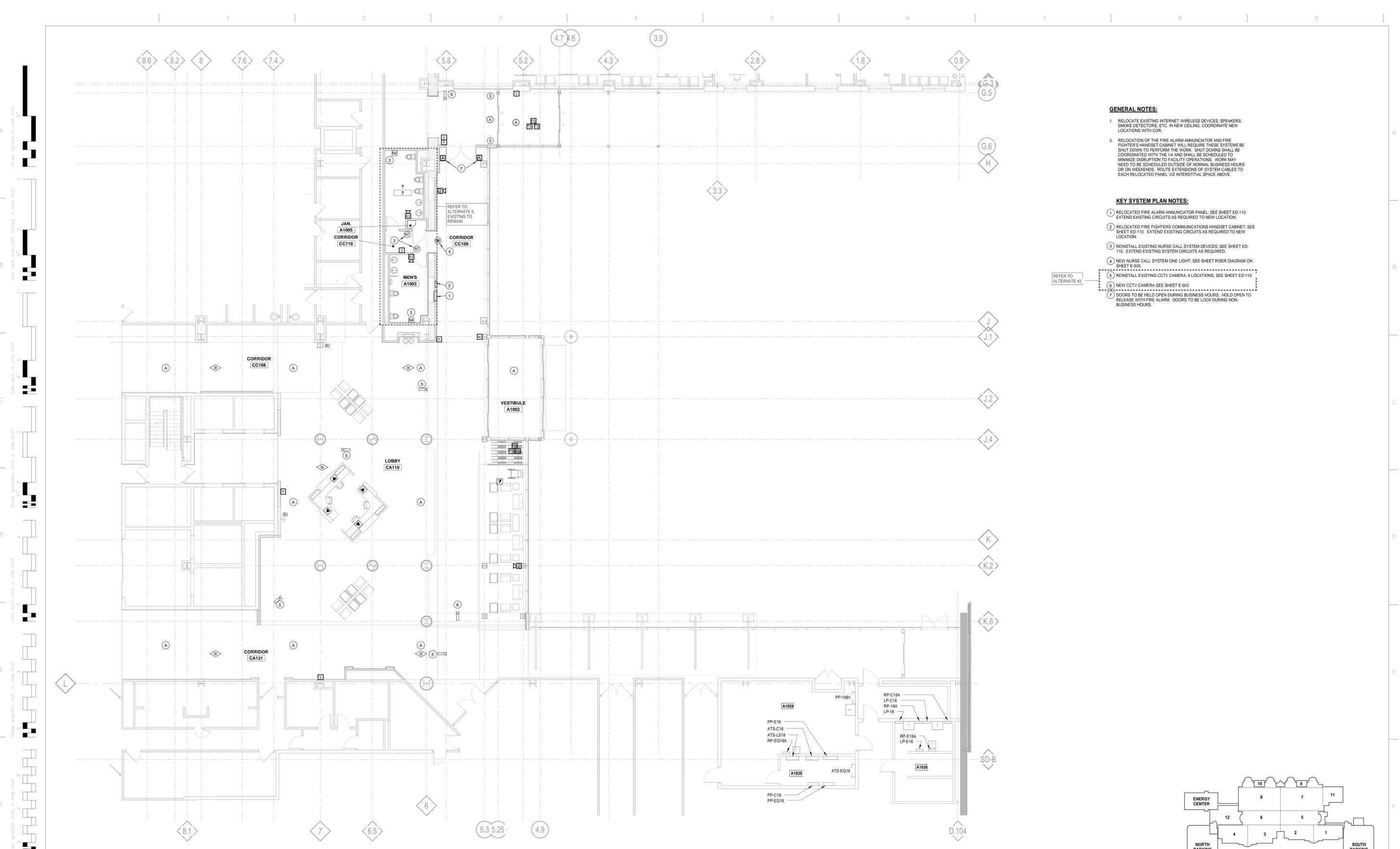
Drawing Title	FIRST FLOOR SYSTEMS DEMOLITION PLAN
Approved: Division Chief	
Approved: Service Director	

Project Title	RENOVATIONS TO THE SOUTH LOBBY ENTRANCE
Date	03/01/2016
Project Number	553-304
Drawing Number	ED-112
Building Number	
Checked	MJJ
Drawn	PBB
Location	4646 JOHN R. STREET DETROIT, MI 48201

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GENERAL NOTES:

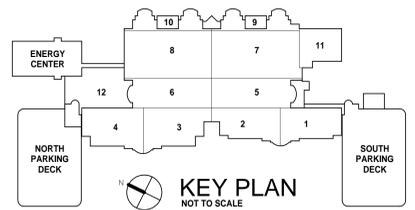
1. RELOCATE EXISTING INTERNET WIRELESS DEVICES, SPEAKERS, SMOKE DETECTORS, ETC. IN NEW CEILING. COORDINATE NEW LOCATIONS WITH COR.
2. RELOCATION OF THE FIRE ALARM ANNUNCIATOR AND FIRE FIGHTER'S HANDSET CABINET WILL REQUIRE THESE SYSTEMS BE SHUT DOWN TO PERFORM THE WORK. SHUT DOWNS SHALL BE COORDINATED WITH THE VA AND SHALL BE SCHEDULED TO MINIMIZE DISRUPTION TO FACILITY OPERATIONS. WORK MAY NEED TO BE SCHEDULED OUTSIDE OF NORMAL BUSINESS HOURS OR ON WEEKENDS. ROUTE EXTENSIONS OF SYSTEM CABLES TO EACH RELOCATED PANEL VIZ INTERSTITIAL SPACE ABOVE.

KEY SYSTEM PLAN NOTES:

- 1 RELOCATED FIRE ALARM ANNUNCIATOR PANEL. SEE SHEET ED-110. EXTEND EXISTING CIRCUITS AS REQUIRED TO NEW LOCATION.
- 2 RELOCATED FIRE FIGHTERS COMMUNICATIONS HANDSET CABINET. SEE SHEET ED-110. EXTEND EXISTING CIRCUITS AS REQUIRED TO NEW LOCATION.
- 3 REINSTALL EXISTING NURSE CALL SYSTEM DEVICES. SEE SHEET ED-110. EXTEND EXISTING SYSTEM CIRCUITS AS REQUIRED.
- 4 NEW NURSE CALL SYSTEM ONE LIGHT. SEE SHEET RISER DIAGRAM ON SHEET E-503.
- 5 REINSTALL EXISTING CCTV CAMERA. 4 LOCATIONS. SEE SHEET ED-110.
- 6 NEW CCTV CAMERA SEE SHEET E-503.
- 7 DOORS TO BE HELD OPEN DURING BUSINESS HOURS. HOLD OPEN TO RELEASE WITH FIRE ALARM. DOORS TO BE LOCK DURING NON-BUSINESS HOURS.

REFER TO ALTERNATE #2

FIRST FLOOR SYSTEMS PLAN
1/8" = 1'-0"



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FIRST FLOOR SYSTEMS PLAN

Approved: Division Chief

Approved: Service Director

Project Title
RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

Location
4646 JOHN R. STREET DETROIT, MI 48201

Date
03/01/2016

Project Number
553-304

Drawing Number
ES-110

Office of Facilities Management

Department of Veterans Affairs

ELECTRICAL ABBREVIATIONS

1PH	SINGLE-PHASE	EWC	ELECTRIC WATER COOLER	NA	NOT APPLICABLE
1P	SINGLE POLE	EW	ELECTRIC WATER HEATER	NEC	NATIONAL ELECTRICAL CODE
2P	TWO POLE	EXIST	EXISTING	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
3PH	THREE PHASE	EXP	EXPLOSION PROOF	N	NEUTRAL
3P	THREE POLE	FA	FIRE ALARM	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
A	AMP	FAAP	FIRE ALARM ANNUNCIATOR PANEL	NIC	NOT IN CONTRACT
AC	AIRCRAFT CABLE	FACP	FIRE ALARM CONTROL PANEL	NL	NIGHT LIGHT
ACU	AIR CONDITIONING UNIT	FIXT	FIXTURE	NO	NORMALLY OPEN
AAP	ALARM ANNUNCIATOR PANEL	FLA	FULL LOAD AMPS	NTS	NOT TO SCALE
AF	AMP FUSE	FLEX	FLEXIBLE METALLIC CONDUIT	OC	ON CENTER
AFC	AVAILABLE FAULT CURRENT	FLUOR	FLUORESCENT	OS	OCCUPANCY SENSOR
AFB	ABOVE FINISHED FLOOR	FP	FIRE PROTECTION	P	POLE, PUMP
AFG	ABOVE FINISHED GRADE	FT	FEET OR FOOT	PA	PUBLIC ADDRESS
AHJ	AUTHORITY HAVING JURISDICTION	FVNR	FULL VOLTAGE NON-REVERSING	PB	PUSHBUTTON
AHU	AIR HANDLING UNIT	FVR	FULL VOLTAGE REVERSING	PBRU	PREFABRICATED BEDSIDE PATIENT UNIT
ASC	AMPS SHORT CIRCUIT	GND	GROUND	PCB	POLYCHLORINATED BIPHENYL
AT	AMPERE TRIP	GC	GENERAL CONTRACTOR	PEC	PHOTOELECTRIC CELL
ATS	AUTOMATIC TRANSFER SWITCH	GEN	GENERATOR	PED	PEDESTAL
AUTO	AUTOMATIC	GFCI	GROUND FAULT INTERRUPTER	PEND	PENDANT
AV	AUDIO VISUAL	HID	HIGH INTENSITY DISCHARGE	PF	POWER FACTOR
BC	BARE COPPER	HDA	HAND-OFF-AUTOMATIC	PH	PHASE
BD	BOARD	HP	HORSE POWER	PNL	PANEL
BFF	BELOW FINISHED FLOOR	HT	HEIGHT	PVC	POLYVINYL CHLORIDE (PLASTIC)
BLDG	BUILDING	HZ	HERTZ	PWR	POWER
BKR	BREAKER	IESNA	ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA	RCP	REFLECTED CEILING PLAN
BYP	BY PASS	IMC	INTERMEDIATE METAL CONDUIT	REC	RECESSED
C	CONDUIT	IR	INFRARED	RECEPT	RECEPTACLE
CCR	CONTROL CONTACT	IS	INSTANT START (BALLAST)	RGS	RIGID GALVANIZED STEEL
OCTV	CLOSED CIRCUIT TELEVISION	IWH	INSTANTANEOUS WATER HEATER	RM	ROOM
CF	CONTRACTOR FURNISHED	JB	JUNCTION BOX	REQD	REQUIRED
CF/CI	CONTRACTOR FURNISHED / CONTRACTOR INSTALLED	KV	KILOVOLT	SCC	SHORT CIRCUIT CAPACITY
CF/OI	CONTRACTOR FURNISHED / OWNER INSTALLED	kVA	KILVOLT AMPERE	SES	SERVICE ENTRANCE SECTION
CKT	CIRCUIT	KW	KILOWATT	SD	SMOKE DETECTOR
CKT BKR	CIRCUIT BREAKER	LED	LIGHT EMITTING DIODE	SF	SQUARE FOOT (FEET)
CLF	CURRENT LIMITING FUSE	LF	LINEAR FEET	SHT	SHEET
CLG	CEILING	LM	LUMEN	SI	INTERNATIONAL SYSTEM OF UNITS
COAX	COAX CABLE	LPS	LOW PRESSURE SODIUM	SPEC	SPECIFICATION
COMM	COMMUNICATION	LRA	LOCKED ROTOR AMPS	SPST	SINGLE POLE, SINGLE THROW
CRI	COLOR RENDERING INDEX	LT	LIGHT	SURF	SURFACE
CT	CURRENT TRANSFORMER	LTG	LIGHTING	SWBD	SWITCHBOARD
CTV	CABLE TV	LTG PNL	LIGHTING PANEL	SWGR	SWITCHGEAR
CU	COPPER	LTNG	LIGHTING	TC	TIME CLOCK
DB	DIRECT BURIAL	LV	LOW VOLTAGE	TEL	TELEPHONE
DCP	DIMMER CONTROL PANEL	LTNG	LIGHTNING	TP	TWISTED PAIR
DEG C	DEGREES CELSIUS	LV	LOW VOLTAGE	TPS	TWISTED PAIR SHIELDED
DEG F	DEGREES FAHRENHEIT	MATV	MASTER ANTENNA TELEVISION SYSTEM	TIB	TELEPHONE TERMINAL BOARD
DEMO	DEMOLITION	MAX	MAXIMUM	TV	TELEVISION
DISC	DISCONNECT	MC	METAL-CLAD, MECHANICAL CONTRACTOR	TYP	TYPICAL
DISTR	DISTRIBUTION	MCA	MINIMUM CIRCUIT AMPS	UFD	UNDERFLOOR DUCT
DISTR PNL	DISTRIBUTION PANEL	MCB	MAIN CIRCUIT BREAKER	UGND	UNDERGROUND
DMR SW	DIMMER SWITCH	MCC	MOTOR CONTROL CENTER	UL	UL
DN	DOWN	MDP	MAIN DISTRIBUTION PANEL	UON	UNLESS OTHERWISE NOTED
DPDT	DOUBLE POLE, DOUBLE THROW	MECH	MECHANICAL	UPS	UNINTERRUPTIBLE POWER SUPPLY
DPST	DOUBLE POLE, SINGLE THROW	MH	MANHOLE	UTL	UTILITY
EC	ELECTRICAL CONTRACTOR	MICRO	MICROWAVE	V	VOLT
EG	EQUIPMENT GROUND	MIN	MINIMUM	VA	VOLT AMPERE
ELEC	ELECTRIC OR ELECTRICAL	MOCP	MAXIMUM OVERCURRENT PROTECTION	VFD	VARIABLE FREQUENCY DRIVE
ELEV	ELEVATOR	MLO	MAIN LUGS ONLY	VOLT	VOLTAGE
EMER	EMERGENCY	MT	MOUNT	W	WATT
EMI	ELECTROMAGNETIC INTERFERENCE	MTD	MOUNTED	WH	WATER HEATER
EMT	ELECTRICAL METALLIC TUBING	MTG	MOUNTING	WP	WEATHERPROOF
ENCL	ENCLOSURE	MTR	MOTOR	XFER	TRANSFER
EPO	EMERGENCY POWER OFF	MTS	MANUAL TRANSFER SWITCH	XFMR	TRANSFORMER
ETR	EXISTING TO REMAIN	MV	MEDIUM VOLTAGE	XP	EXPLOSION PROOF

NOTE: NOT ALL ABBREVIATIONS IN LEGEND ARE USED

ELECTRICAL SYMBOL LEGEND

○	SINGLE RECEPTACLE- 1Ø TYP. UON.	○	LUMINAIRE: SURFACE/ PENDENT/ WALL MOUNTED
○	SINGLE RECEPTACLE- GFI, 1Ø TYP.	○	LUMINAIRE: RECESSED
○	DUPLEX RECEPTACLE- 1Ø TYP.	○	LUMINAIRE: RECESSED DOWNLIGHT, WALL WASH
○	DUPLEX RECEPTACLE- GFI, 1Ø TYP.	○	LUMINAIRE: LIFE SAFETY CIRCUIT
○	DUPLEX RECEPTACLE- MTD 6" ABOVE COUNTERTOP, UON.	○	EXIT SIGN: CEILING/ WALL MOUNTED
○	DUPLEX RECEPTACLE- GFI, MTD 6" ABOVE COUNTERTOP, UON.	○	TV CONNECTION: SEE DETAILS FOR SPECIFIC REQUIREMENTS.
○	QUAD RECEPTACLE- 1Ø TYP.	○	TELEPHONE: 4Ø TYP. UON.
○	QUAD RECEPTACLE- GFI, 1Ø TYP.	○	VOICE DATA OUTLET: 1Ø TYP. UON.
○	QUAD RECEPTACLE- MTD 6" ABOVE COUNTER TOP, UON.	○	VOICE DATA OUTLET: 4Ø TYP. UON.
○	QUAD RECEPTACLE- GFI MTD 6" ABOVE COUNTER TOP, UON.	○	VOICE DATA OUTLET: 72" TYP. UON.
○	RECEPTACLE- 2ØBY SINGLE PHASE	○	VOICE DATA OUTLET: FLOOR. COORDINATE WITH POWER FLOOR BOXES.
○	DUPLEX FLOOR RECEPTACLE	○	VOICE DATA OUTLET: CEILING TYP. UON.
○	DUPLEX FLOOR RECEPTACLE- GFI	○	VOICE DATA OUTLET: CEILING TYP., UON.
○	DUPLEX RECEPTACLE- FLOOR PEDESTAL	○	VOICE DATA OUTLET: CEILING TYP., UON.
○	QUAD FLOOR RECEPTACLE	○	RTLS: WIRELESS STAR DEVICE
○	QUAD FLOOR RECEPTACLE- GFI	○	RTLS: BATTERY OPERATED MONITORING LOCATION, 72" AFF (TYP.) FIELD VERIFY
○	QUAD RECEPTACLE- FLOOR PEDESTAL	○	LETTER = FACEPLATE TYPE. REFERENCE ELECTRICAL DETAILS SHEET E-501
○	DUPLEX RECEPTACLE- CEILING MOUNTED	○	NURSE CALL: SINGLE BED STATION
○	DUPLEX RECEPTACLE- GFI CEILING MOUNTED	○	NURSE CALL: CODE BLUE STATION
○	QUAD RECEPTACLE- CEILING MOUNTED	○	NURSE CALL: SHOWER EMERGENCY STATION
○	QUAD RECEPTACLE- GFI CEILING MOUNTED	○	NURSE CALL: TOILET EMERGENCY STATION
○	SPECIALTY OUTLET- SEE EQUIPMENT AND DRAWINGS FOR REQUIREMENTS	○	NURSE CALL: STAFF STATION
○	JUNCTION BOX	○	NURSE CALL: STAFF DUTY STATION
○	WATER PROOF- MOUNT WP, GFI RECEPTACLES 2" AFG, UON.	○	NURSE CALL: ROOM DOME LIGHT WALL/ CEILING
○	ELECTRIC WATER COOLER- GFI, CONCEAL AND COORDINATE W/ PLUMBING CONTRACTOR	○	NURSE CALL: ZONE DOME LIGHT WALL/ CEILING
○	HAND MOTOR	○	NURSE CALL: MASTER NURSE STATION
○	MOTOR	○	NURSE CALL: ANTI-LIGATURE DOOR CONTACT
○	FUSED SWITCH- POLE AND VOLTAGE AS REQUIRED. DUAL ELEMENT PLUG FUSE	○	CONTROLS: SPEAKER FOR PA SYSTEM.
○	NON-FUSED DISCONNECT	○	CONTROLS: ADA DOOR CONTROL OPENER, COORDINATE WITH DOOR REQUIREMENTS
○	CIRCUIT BREAKER DISCONNECT	○	CONTROLS: DOOR CONTROLS, COORDINATE WITH SECURITY, AUTO AND MANUAL CONTROLS
○	COMBINATION MOTOR STARTER/ DISCONNECT	○	SECURITY: PAN-TILT-ZOOM CAMERA
○	FUSED DISCONNECT	○	SECURITY: DOOR BUZZER/ PUSHBUTTON SYSTEM
○	MANUAL MOTOR STARTER	○	SECURITY: CARD READER, COORDINATE WITH ADJACENT DOOR
○	MOTOR STARTER	○	FIRE: MANUAL PULL STATION
○	SURFACE MOUNTED PANEL	○	FIRE: AUDIBLE AND VISUAL ANNUNCIATION COVERAGE IN AREA PER CODE. WALL MOUNTED
○	RECESSED PANEL	○	FIRE: VISUAL ANNUNCIATION COVERAGE IN AREA PER CODE. WALL MOUNTED
○	SWITCH: SINGLE POLE, 4Ø TYPICAL UON.	○	FIRE: AUDIBLE ANNUNCIATION COVERAGE IN AREA PER CODE. WALL MOUNTED
○	SWITCH: 3-POLE, 4Ø TYPICAL UON.	○	FIRE: AUDIBLE AND VISUAL ANNUNCIATION COVERAGE IN AREA PER CODE. CEILING MOUNTED
○	SWITCH: 4-POLE, 4Ø TYPICAL UON.	○	FIRE: VISUAL ANNUNCIATION COVERAGE IN AREA PER CODE. CEILING MOUNTED
○	SWITCH: WALL BOX DIMMER, 4Ø TYPICAL UON.	○	FIRE: AUDIBLE ANNUNCIATION COVERAGE IN AREA PER CODE. CEILING MOUNTED
○	SWITCH: KEYPAD, 4Ø TYPICAL UON.	○	FIRE: SMOKE DETECTOR COVERAGE IN AREA PER CODE. CEILING
○	SWITCH: MULTI-TECH OCCUPANCY SENSOR, 4Ø TYPICAL UON.	○	FIRE: HEAT DETECTOR IN AREA PER CODE. CEILING
○	SWITCH: PILOT LIGHT, 4Ø TYPICAL UON.	○	FIRE: DUCT SMOKE DETECTION PER CODE. SEE NOTE 1.
○	SWITCH: TIMER, 4Ø TYPICAL UON.	○	FIRE: TAMPER SWITCH. PROVIDE AS REQUIRED. COORDINATE WITH FP CONTRACTOR.
○	SWITCH: LOW VOLTAGE AND NUMBER. SEE TABLE FOR BUTTON QTY AND PROGRAMMING.	○	FIRE: FLOW SWITCH. PROVIDE AS REQUIRED. COORDINATE WITH FP CONTRACTOR.
○	SWITCH: MULTI-TECH. OCCUPANCY SENSOR, CEILING	○	FIRE: DOOR HOLD. PROVIDE AS REQUIRED PER CODE. SEE NOTE 2.
○	SWITCH: MULTI-TECH. DIRECTIONAL OCCUPANCY SENSOR, CEILING	○	FIRE: DOOR RELEASE. PROVIDE AS REQUIRED PER CODE. SEE NOTE 2.
○	SWITCH: MULTI-TECH. OCCUPANCY SENSOR, WALL	○	FIRE: FIRE AND/OR SMOKE DAMPER. PROVIDE AS REQUIRED PER CODE. SEE NOTE 3.
○	SWITCH: EXTERIOR PHOTOCELL, CEILING	○	FIRE: EXTINGUISHER MONITOR

- NOTE:
- PROVIDED/INSTALLED BY EC. MOUNTED BY MC. UON.
 - COORDINATE ALL LOCATIONS WITH DOOR HARDWARE SCHEDULES.
 - MONITOR AND COORDINATE ALL LOCATIONS WITH MECHANICAL PLANS.
 - NOT ALL DEVICES IN LEGEND ARE USED.
 - MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTER OF BOX, UON.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	MANUFACTURER	MODEL NO	LAMP				COMMENTS
					QTY	WATT	TYPE	VOLTAGE	
A1	6" ROUND ARCH DOWNLIGHT, CLEAR TRIM, SEMI SPECULAR FINISH, 45 DEGREE CUTOFF, 4100K LED'S, 1000 NOMINAL LUMENS	RECESSED	GOTHAM	EVO-41/10-6AR-WD-MVOLT	1	18	LED	UNV	
A2	8" CYLINDER DOWNLIGHT, CLEAR TRIM, SEMI SPECULAR FINISH, WIDE DISTRIBUTION, 4000K LED'S, 1500 NOMINAL LUMENS	SURFACE	GOTHAM	EVO-CYL-40/15-6AR-WD-LSS-MVOLT-FCM-*	1	19	LED	UNV	* FINISH COLOR TO BE SELECTED BY ARCHITECT; FIXTURE HEIGHT NOT TO EXCEED 13"
B1	4" LINEAR; 3" APERTURE, EXTRUCED AL HOUSING, MEDIUM DIFFUSE ACRYLIC SATIN LENS, FOR HUNTER DOUGLAS CEILING MOUNTING, 4000K LED'S	RECESSED	GAMMALUX	GB348X4-HOLED40-UNV-DVR-4N-REC/(XXX)-ASLMD-COT	1	42	LED	UNV	680 LUMEN/FOOT (MIN); COORDINATE REQUIRED MOUNTING WITH LINEAR CEILING SUPPLIED OR WITH HARD OR ACOUSTICAL CEILING. PROVIDE (XXX) MOUNTING TO SUIT CEILING; BX4, GFR, T1W AS REQUIRED
B2	8' LINEAR; SAME AS B1 EXCEPT 8'	RECESSED	GAMMALUX	GB348X4-HOLED40-UNV-DVR-8N-REC/(XXX)-ASLMD-COT	1	84	LED	UNV	SAME AS B1 EXCEPT 8' LENGTH
B3	12' LINEAR; SAME AS B1 EXCEPT 12'	RECESSED	GAMMALUX	GB348X4-HOLED40-UNV-DVR-12N-REC/(XXX)-ASLMD-COT	1	126	LED	UNV	SAME AS B1 EXCEPT 12' LENGTH
B2A	8' LINEAR; SIMILAR TO B1 EXCEPT WITH STANDARD OUTPUT, HEAVY DIFFUSE LENS AND T BAR MOUNTING	RECESSED	GAMMALUX	GB34RC2-1SOLED40-UNV-DVR-4-REC/(XXX)-ASLHD-WSG	1	60	LED	UNV	500 LUMEN/FOOT; VERIFY T BAR TYPE
B2B	16' LINEAR; SIMILAR TO B2A EXCEPT 16'	RECESSED	GAMMALUX	GB34RC2-1SOLED40-UNV-DVR-8-REC/(XXX)-ASLHD-WSG	1	120	LED	UNV	500 LUMEN/FOOT; VERIFY T BAR TYPE
C1	2' COVE; 2.74"W X 2.43" H, AL HOUSING, CLEAR ACRYLIC LENS, ADJ ROTATION BRACKETS, W/INTEGRAL CONNECTORS AND JUMPERS TO CONNECT ADJACENT FIXTURES, DIMMABLE, 4000K LED'S	SURFACE	COOPER AMETRIX	LC-2-40K-1-D10-UNV-24-30-JX	1	38	LED	UNV	ADJ AIM - SET AT 30 DEG; PROVIDE WITH JUMPER CABLES FOR CIRCUITING INDICATED; PROVIDE DAYLIGHT HARVESTING/DIMMING CONTROLS
W1	EXTERIOR WALL MOUNT	SURFACE	LITHONIA	OLW14	1	18	LED	UNV	1400 LUMENS, WITH INTEGRAL PHOTOCELL
X1	EXIT SIGN; TOP MOUNT, RED LETTERS, NO CHEVRON, SINGLE FACE, BRUSHED ALUMINUM AND HIGH POLISH ACRYLIC PANEL	RECESSED	LITHONIA	LRP RC 120/277	1	2	LED	UNV	EDGE LIT WITH ETCHED LETTERING

GENERAL NOTES:

- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ACCEPTED EDITION OF THE NATIONAL ELECTRICAL CODE, NEC, AND ALL STATE AND LOCAL CODES.
- COORDINATE THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT AND CONNECTIONS WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL AND EQUIPMENT DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL POWER, CONDUITS, CABLETRAY, AND OTHER COMPONENTS AS SHOWN ON THE EQUIPMENT PROVIDER DRAWINGS FOR INSTALLATION OF SYSTEM.
- "BACK TO BACK" OR THROUGH THE WALL BOXES SHALL NOT BE USED.
- INSTALL HANDLE LOCK-ON ON ALL CIRCUIT BREAKERS CONTROLLING NIGHT LIGHT, EMERGENCY LIGHT AND EXIT LIGHT CIRCUITS.
- ALL RECEPTACLES SHALL BE HOSPITAL GRADE CONSTRUCTION.
- PROVIDE HOSPITAL GRADE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY APPLICABLE CODES.
- RECEPTACLES INDICATED AS GROUND FAULT CIRCUIT INTERRUPTER TYPE SHALL BE HOSPITAL GRADE DUPLEX RECEPTACLES WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.
- ALL CONDUCTORS SHALL BE COPPER. ALUMINUM WIRES SHALL NOT BE USED.
- MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR POWER FEEDS AND 1-1/4" FOR DATA FEEDS.
- MOTOR LOADS WHICH ARE LESS THAN 6.0 AMPS SHALL BE PROTECTED BY A 15 AMP CIRCUIT BREAKER.
- FINAL CONNECTION TO ITEMS SUBJECT TO VIBRATION SHALL BE MADE WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT.
- LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT WILL NOT BE APPROVED FOR USE AS A GROUNDING CONDUCTOR. A SEPARATE GREEN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED.
- 120/240VAC CIRCUIT WIRING FOR ANY ROOM OR AREA MAY BE GROUPED INTO RACEWAYS UNLESS SEPARATE RACEWAYS ARE REQUIRED BY THE NEC. COMPLY WITH NEC REQUIREMENTS FOR CONDUCTOR DERATING.
- PROVIDE EQUIPMENT GROUNDING CONDUCTORS FOR ALL POWER AND LIGHTING CIRCUITS.
- ALL LIGHTING AND POWER CONDUCTORS SHALL BE 12 AWG MINIMUM. ALL CONTROL CONDUCTORS SHALL BE 14 AWG MINIMUM OR AS SPECIFIED BY MANUFACTURER.
- DEDICATED NEUTRAL SHALL BE PROVIDED FOR ALL CIRCUITS. SHARED NEUTRALS ARE NOT ALLOWED.
- CIRCUITS SHOWN FOR EXISTING PANEL ARE FOR GENERAL REFERENCE ONLY. FIELD VERIFY LOCATION IN PANEL, AND PROVIDE NEW CIRCUIT BREAKERS IN EXISTING PANELS.
- ALL CONDUCTORS SHALL BE ROUTED THROUGH INTERSTITIAL WIREWAY SYSTEMS.

GENERAL DEMOLITION NOTES:

- DEMOLITION NOTES ARE BASED UPON FIELD OBSERVATION AND EXISTING RECORD DOCUMENTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY EXACT CONDITIONS AT THE SITE AND REPORT DISCREPANCIES TO THE ARCHITECT/ENGINEER BEFORE DISTURBING THE INSTALLATION.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE BLANK COVERS ON ALL JUNCTION AND DEVICE BOXES WHERE DEVICE HAS BEEN REMOVED AND BOX IS TO REMAIN FOR FUTURE USE.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL LAMPS AS REQUIRED AND DIRECTED IN THE LATEST STATE AND FEDERAL GUIDELINES.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL MATERIALS AND EQUIPMENT REMOVED THAT ARE NOT TO BE TURNED OVER TO THE OWNER.
- ALL DISRUPTIONS OF SERVICE SHALL BE COORDINATED AND APPROVED BY THE OWNER.
- THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL CONDUIT, CONDUCTORS, CABLES, JUNCTION BOXES, HANGERS AND ALL OTHER ASSOCIATED SPECIFICATION DIVISION 26, 27 AND 28 DEVICES LOCATED IN THE SCOPE OF THE WORK AREA. REMOVE BACK TO SOURCE PANEL, TERMINATION OR SPLICE LOCATED OUTSIDE OF PROJECT SCOPE OF WORK AREA, EXCEPT WHERE NOTED OTHERWISE.
- THE ELECTRICAL CONTRACTOR SHALL TRACE ALL EXISTING CONDUCTORS AND CABLES RUNNING THROUGH PROJECT SCOPE OF WORK AREA THAT DO NOT CONNECT TO COMPONENTS INSIDE THE SCOPE OF WORK. REMOVE COMPONENTS THAT HAVE BEEN ABANDONED.
- THE SCOPE OF THE REQUIRED DEMOLITION IS NOT LIMITED TO THE ITEMS OR WORK INDICATED ON THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR SHALL DETERMINE THE NATURE AND EXTENT OF WORK REQUIRED. THE CONTRACTOR ACCEPTS EXISTING SITE CONDITIONS AT THE START OF DEMOLITION.
- WHERE ELECTRICAL COMPONENTS ARE SHOWN TO BE REMOVED, THE ELECTRICAL CONTRACTOR SHALL RECONNECT REMAINING COMPONENTS TO EXISTING CIRCUITS(S) AND PROVIDE TEMPORARY CIRCUITS DURING CONSTRUCTION AS REQUIRED.
- WHERE THE DRAWINGS SHOW DEVICES OR EQUIPMENT TO BE PERMANENTLY REMOVED, THE ELECTRICAL CONTRACTOR SHALL REMOVE CONDUCTORS BACK TO SOURCE, TURN CIRCUIT BREAKER OFF AND LABEL THE CIRCUIT BREAKER AS A SPARE ON A NEWLY PRINTED PANELBOARD DIRECTORY.
- THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL ABANDONED CONDUIT. THE ELECTRICAL CONTRACTOR SHALL CUT CONDUIT FLUSH WITH WALLS AND FLOORS UNLESS OTHERWISE NOTED. PATCH ALL SURFACES AND PROVIDE FIRESTOPPING WHERE REQUIRED.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF DAMAGE TO ALL ADJACENT CONSTRUCTION AND FINISHES. REPAIRS SHALL BE MADE TO RETURN SPACE TO ORIGINAL CONDITION OF THE PROJECT.
- EQUIPMENT AND DEVICES SHOWN AS DASHED ON THE DRAWINGS ARE TO BE REMOVED. LIGHTING FIXTURES SHALL BE DISPOSED OF ACCORDING TO STATE AND FEDERAL GUIDELINES. LIGHTING FIXTURES, WHERE NOTED, SHALL BE TURNED OVER TO THE OWNER.
- THE CONTRACTOR SHALL DISCONNECT ALL ELECTRICAL SYSTEMS INCLUDING SPECIAL SYSTEMS, IN WALLS, FLOORS AND CEILINGS SCHEDULED FOR REMOVAL.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN OPERATION OF EXISTING SYSTEMS DURING CONSTRUCTION. CONDITIONS SHALL BE RETURNED TO NORMAL AT THE CLOSE OF THE PROJECT.

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4646 John R Street
Detroit, MI 48201

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File Name

File Location

LEGEND & ABBREVIATIONS

Approved: Division Chief

Approved: Service Director

Project Title
RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

Location
4646 JOHN R. STREET DETROIT, MI 48201

Date
03/01/2016

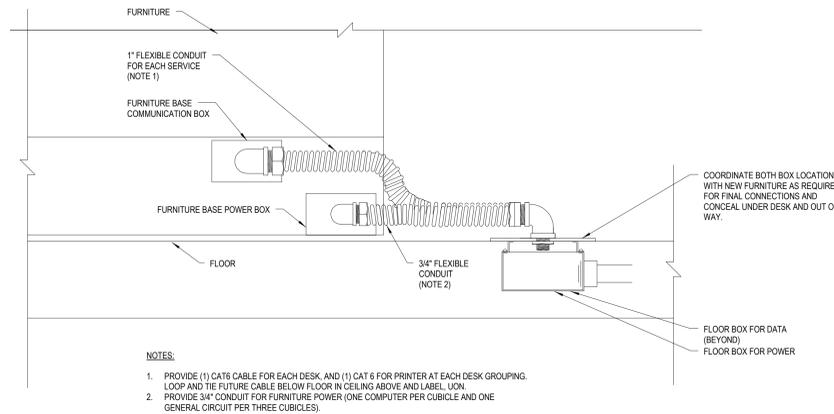
Checked
MJJ

Drawn
PBB

Drawing Number
E-500

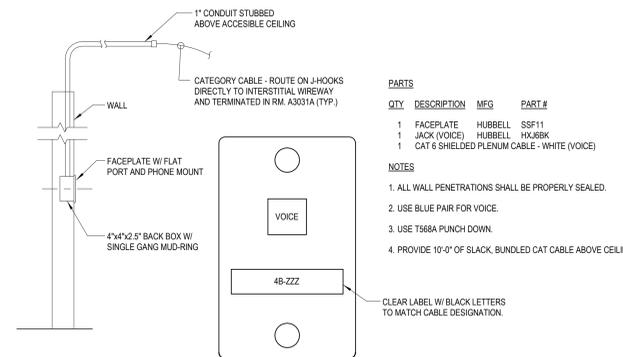
Office of Facilities Management





- NOTES:**
1. PROVIDE (1) CAT6 CABLE FOR EACH DESK, AND (1) CAT 6 FOR PRINTER AT EACH DESK GROUPING. LOOP AND TIE FUTURE CABLE BELOW FLOOR IN CEILING ABOVE AND LABEL. UON.
 2. PROVIDE 3/4" CONDUIT FOR FURNITURE POWER (ONE COMPUTER PER CUBICLE AND ONE GENERAL CIRCUIT PER THREE CUBICLES).

4 TYPICAL THRU FLOOR FURNITURE CONNECTION (TYP.)
1/2" = 1'-0"

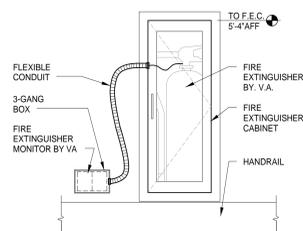


PARTS

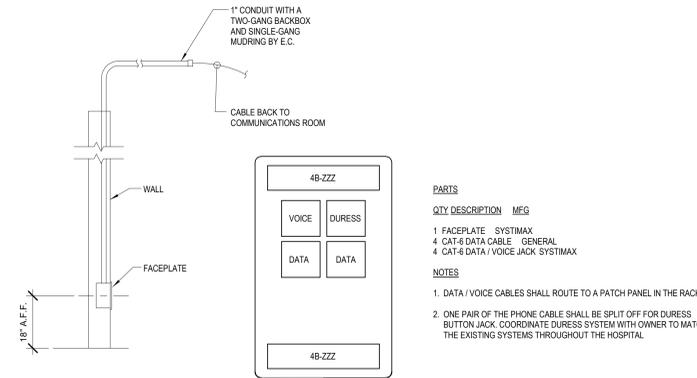
QTY	DESCRIPTION	MFG	PART #
1	FACEPLATE	HUBBELL	SSF11
1	JACK (VOICE)	HUBBELL	HX48BK
1	CAT 6 SHIELDED PLENUM CABLE - WHITE (VOICE)		

- NOTES**
1. ALL WALL PENETRATIONS SHALL BE PROPERLY SEALED.
 2. USE BLUE PAIR FOR VOICE.
 3. USE T568A PUNCH DOWN.
 4. PROVIDE 10'-0" OF SLACK, BUNDLED CAT CABLE ABOVE CEILING

1 TYPE 1 VOICE DROP (WALL - MOUNT PHONE)
1/2" = 1'-0"



5 FIRE EXTINGUISHER MONITOR DETAIL
1" = 1'-0"

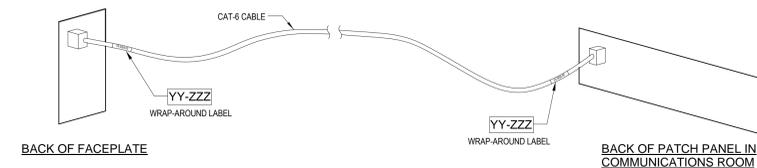


PARTS

QTY	DESCRIPTION	MFG
1	FACEPLATE	SYSTEMAX
4	CAT-6 DATA CABLE	GENERAL
4	CAT-6 DATA / VOICE JACK	SYSTEMAX

- NOTES**
1. DATA / VOICE CABLES SHALL ROUTE TO A PATCH PANEL IN THE RACK.
 2. ONE PAIR OF THE PHONE CABLE SHALL BE SPLIT OFF FOR DURESS BUTTON JACK. COORDINATE DURESS SYSTEM WITH OWNER TO MATCH THE EXISTING SYSTEMS THROUGHOUT THE HOSPITAL.

2 TYPE 3 VOICE / DATA DROP
1/2" = 1'-0"



- NOTES:**
1. INSTALL A WRAP-AROUND LABEL AT EACH END OF EACH CABLE.
 2. WRAP-AROUND LABELS SHALL BE LASER-PRINTED AND SHALL BE SELF-LAMINATING.
 - YY = COMMUNICATIONS ROOM WHERE CABLES TERMINATE
 - ZZZ = CABLE NUMBER ON THAT FLOOR, 001 - 999
 3. VERIFY LABELING WITH OWNER PRIOR TO INSTALLATION OF LABELS.

3 CABLE LABELING DETAIL
1/2" = 1'-0"

GENERAL CONNECTIVITY NOTES:

1. ROUTE ALL USER CABLES FROM THE RACK OR CABINET, THROUGH THE CABLE TRAY IF SO PROVIDED. IF NO CABLE TRAY IS SHOWN INSTALL CABLES THROUGH "J" HOOKS. PROVIDE ALL "J" HOOKS.
2. CABLES SHALL BE SUPPORTED NO LESS THAN EVERY 5 FEET.
3. PROVIDE A SMALL LOOP OF CABLE ABOVE THE CEILING PRIOR TO INSTALLING THE CABLE IN THE USER CONDUIT OR RACEWAY.
4. ROUTE THE CABLE THROUGH THE CONDUIT OR RACEWAY AND TO THE WALLBOX OR FLOORBOX. PROVIDE ENOUGH EXTRA CABLE FOR TERMINATION AND MAINTENANCE.
5. TERMINATE ALL CABLES WITH CONNECTORS APPROVED FOR USE.
6. ALL CONNECTORS SHALL BE INSERTED INTO THE KEYSTONE PLATES AND THEN THE KEYSTONE PLATES SHALL BE INSTALLED INTO THE FACEPLATES.
7. INSTALL FACEPLATES TO THE BOXES OR DIRECTLY TO THE WALL OR FURNITURE IN THE CASE OF SURFACE MOUNT BOXES.
8. EACH CABLE SHALL HAVE A LASER-PRINTED, SELF-LAMINATING WRAP-AROUND LABEL AT EACH END. SEE DETAIL ON THIS DRAWING.
9. OUTLETS SHALL BE AT 18" A.F.F. UNLESS NOTED ON THE DETAILS OR PLAN DRAWINGS.
10. LABEL EACH FACEPLATE WITH A LASER-PRINTED ADHESIVE LABEL, UNLESS NOTED OTHERWISE.
11. AFTER INSTALLATION, ALL CABLES SHALL BE TESTED. SEE SPECIFICATIONS FOR TESTING REQUIREMENTS.
12. FOR AUDIO AND VIDEO CONNECTIONS, THE CONTRACTOR SHALL ROUTE SIGNALS ACROSS THE CABLES FOR TESTING.
13. COAX CABLE TO BE PLENUM RATED, RG-6 BELDEN CABLE #9116P OR EQUAL.
14. FIBER OPTIC CABLE TO BE 24 STRAND MULTIMODE, 50 MICRON, PLENUM RATED, FIBER OCC #DX4-075K-AL1000-DRIP OR EQUAL.
15. INNERDUCT TO BE 1-1/4" PLENUM RATED WITH PULLSTRING, CARLON #CG41C OR EQUAL.
16. CONTRACTOR SHALL COORDINATE ALL WORK WITH VA IF PRIOR TO INSTALLATION.
17. CONTRACTOR SHALL PROVIDE A COMPLETE AND WORKING IT INFRASTRUCTURE SYSTEM THAT IS FULLY INTEGRATED WITH EXISTING SYSTEM.

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
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ninety three inches = one foot
ninety four inches = one foot
ninety five inches = one foot
ninety six inches = one foot
ninety seven inches = one foot
ninety eight inches = one foot
ninety nine inches = one foot
one hundred inches = one foot

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Revisions:		Date

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Approved: Division Chief

Approved: Service Director

Project Title

RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

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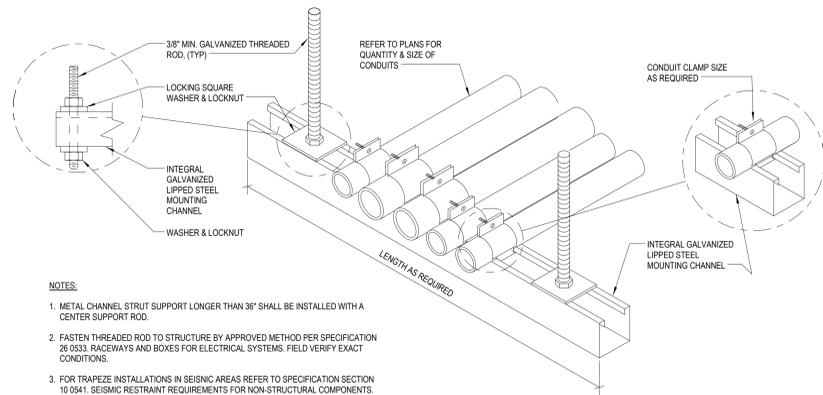
Project Number
553-304

Drawing Number
E-501

Office of Facilities Management

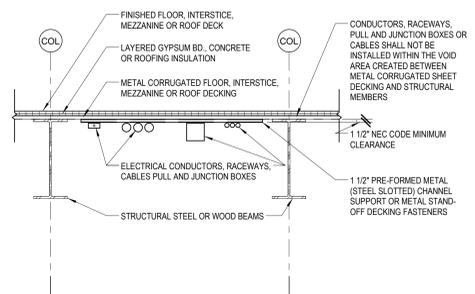
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BID DOCUMENTS

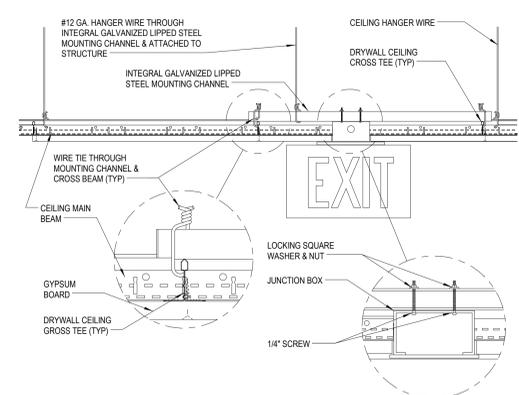


8 CONDUIT TRAPEZE MOUNTING DETAIL
1/2" = 1'-0"

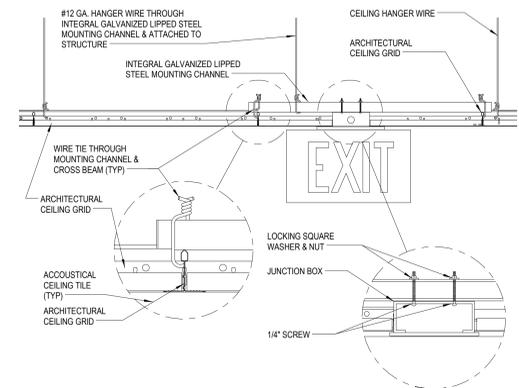
- NOTES:**
- METAL CHANNEL STRUT SUPPORT LONGER THAN 36" SHALL BE INSTALLED WITH A CENTER SUPPORT ROD.
 - FASTEN THREADED ROD TO STRUCTURE BY APPROVED METHOD PER SPECIFICATION 26 053. RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS. FIELD VERIFY EXACT CONDITIONS.
 - FOR TRAPEZE INSTALLATIONS IN SEISMIC AREAS REFER TO SPECIFICATION SECTION 10 0541. SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS.



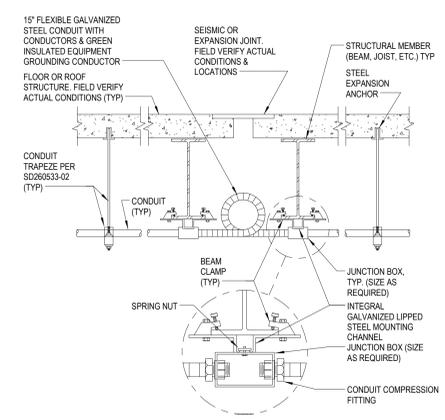
9 CONDUIT AND WIREWAY MOUNTING DETAIL
3/8" = 1'-0"



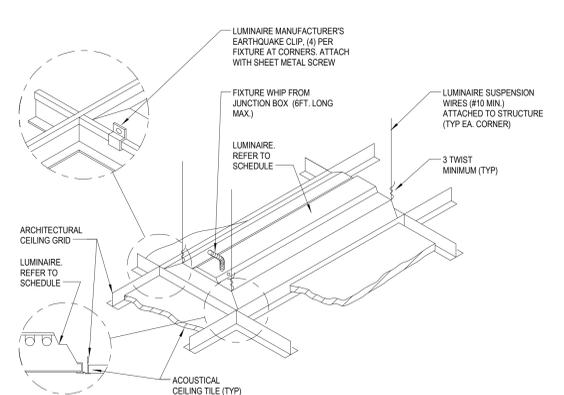
5 EXIT SIGN MOUNTING - GYPBOARD CEILING
1/2" = 1'-0"



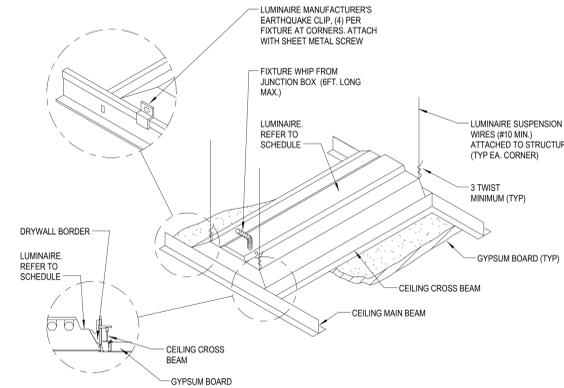
6 EXIT SIGN MOUNTING - GYPBOARD CEILING
1/2" = 1'-0"



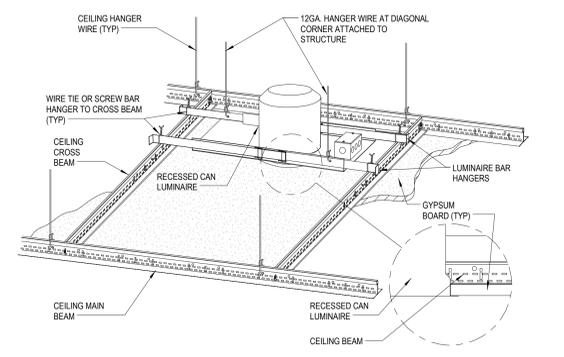
7 CONDUIT JOINT CROSSING DETAIL
3/8" = 1'-0"



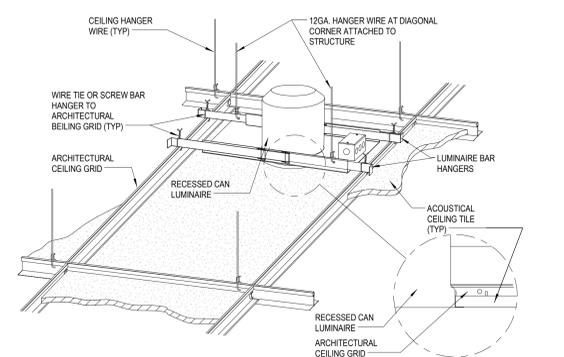
1 LUMINAIRE MOUNTING - LAY-IN CEILING
1/2" = 1'-0"



2 LUMINAIRE MOUNTING - GYPBOARD CEILING
1/2" = 1'-0"



3 DOWN LIGHT MOUNTING - GYPBOARD CEILING
1 1/2" = 1'-0"



4 DOWN LIGHT MOUNTING - LAY-IN CEILING
1 1/2" = 1'-0"

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553-304

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Checked: MJJ
Drawn: PBB

Location
4646 JOHN R. STREET DETROIT, MI 48201

Drawing Number
E-502

Office of Facilities Management

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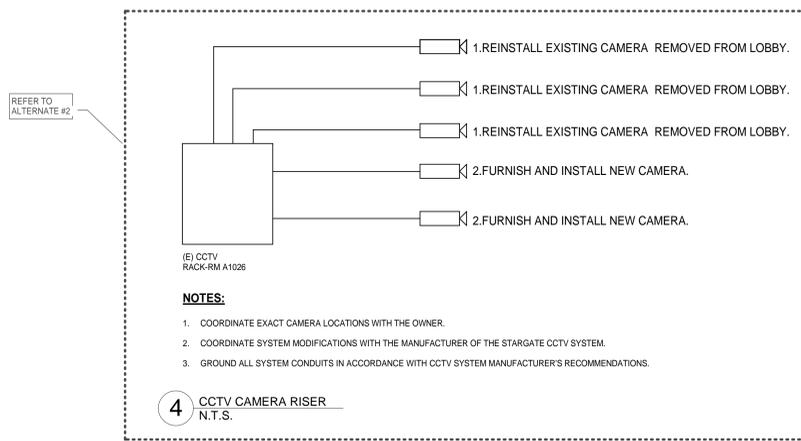
three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

FIRE EXTINGUISHER MONITORING SYSTEM
 SOLE SOURCE: ENGAUGE
SOLE SOURCE SUPPLIER CONTACT INFORMATION:
 SIMPLEX GRINNELL AND VANGUARD APPROVED PROVIDERS
NOTE:
 CONTRACTOR SHALL HAVE ENGAUGE REPRESENTATIVE MODIFY PROGRAMMING FOR ALL NEW COMPONENTS.

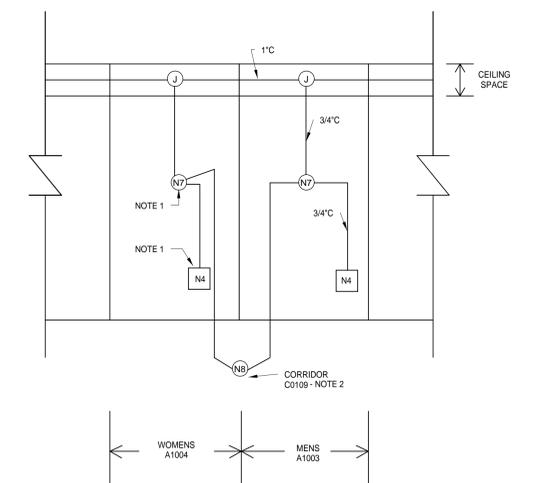
EXISTING WIRELESS COMMUNICATION LOCATED IN INTERSTITIAL SPACES. WIRELESS DEVICES TO REMAIN AS-IS. (TYP.)

BATTERY OPERATED WIRELESS MONITORING DEVICE LOCATION. CONTRACTOR TO PROVIDE AND INSTALL NEW AND RELOCATED DEVICES. PROVIDE THREE GANG BOX AND COORDINATE LOCATION WITH ENGAUGE AND FIRE EXTINGUISHER CABINET MANUFACTURER. (TYP.)

3 FIRE EXTINGUISHER VISUAL MONITORING
 N.T.S.

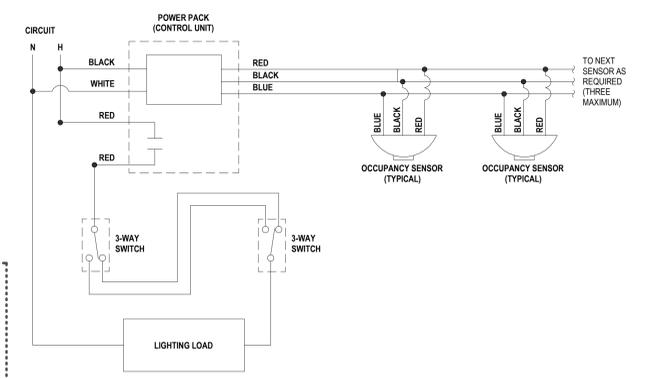


4 CCTV CAMERA RISER
 N.T.S.

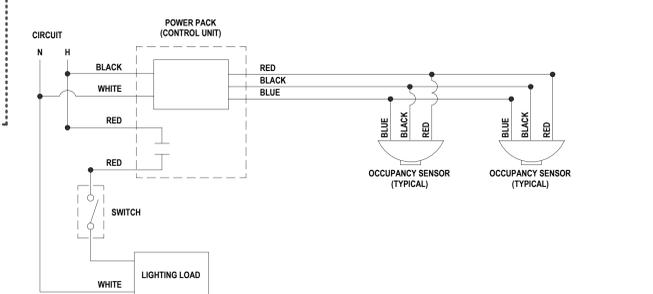


- REINSTALL EXISTING DEVICES REMOVED FROM WOMEN'S AND MEN'S PUBLIC TOILETS A1000 AND A1001 RESPECTIVELY.
- FURNISH AND INSTALL NEW DEVICE. CONFIGURE TO BE ACTIVATED WHEN EITHER TOILET STATION IS ACTIVATED.
- EXTEND EXISTING NURSE CALL SYSTEM CABLING AS REQUIRED TO SERVE NEW LOCATIONS.
- VERIFY EXACT LOCATIONS OF SYSTEM OUTLETS WITH THE OWNER AND ARCHITECT.
- ALL WIRING, DEVICES AND FINAL CONNECTIONS SHALL BE PROVIDED BY THE OWNER'S APPROVED NURSE CALL SYSTEM CONTRACTOR.
- ALL CONDUIT AND BACK BOXES SHALL BE APPROVED BY THE NURSE CALL SYSTEM VENDOR.
- COORDINATE SYSTEM MODIFICATIONS WITH THE MANUFACTURER OF THE NURSE CALL SYSTEM, RAULAND-80RG, RESPONDER 5 SYSTEM.
- GROUND ALL NURSE CALL SYSTEM CONDUITS IN ACCORDANCE WITH NURSE CALL SYSTEM MANUFACTURER'S RECOMMENDATIONS.
- INSTALL ALL NURSE CALL SYSTEM CABLING IN RACEWAY.

5 NURSE CALL SYSTEM PARTIAL RISER DIAGRAM
 N.T.S.

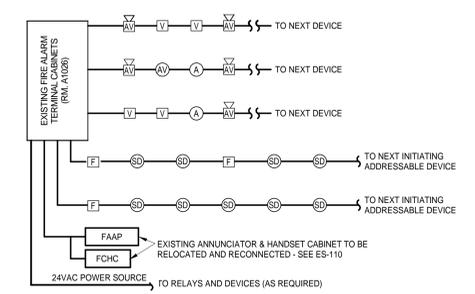


SINGLE CIRCUIT - ONE TO THREE OCCUPANCY SENSORS WITH 3-WAY OVERRIDE 'OFF'



SINGLE CIRCUIT - ONE OR TWO OCCUPANCY SENSORS WITH OVERRIDE 'OFF'

1 LIGHTING CONTROL - OCCUPANCY SENSORS (TYP.)
 N.T.S.



- NOTES:**
 1. CONTRACTOR TO TURN OVER ALL DEMOLISHED FIRE ALARM EQUIPMENT TO OWNER. MODIFY AND EXPAND EXISTING SYSTEM AS REQUIRED FOR REMODEL OF SPACE AS SHOWN ON PLANS.
 2. FIRE ALARM PROVIDER TO PROVIDE COMPLETE AND FUNCTIONAL CODE COMPLIANT SYSTEM AS DESCRIBED IN PROJECT SPECIFICATION SECTION 28 31 00. QUANTITIES, LOCATIONS AND TYPES OF DEVICES SHALL BE AS REQUIRED TO MEET ALL APPLICABLE CODES.
 3. CONTRACTOR TO UTILIZE EXISTING INTERSTITIAL WIREWAYS FOR DISTRIBUTION OF FIRE ALARM CABLES. REUSE EXISTING PENETRATIONS.

FIRE ALARM SYSTEM SUPPLIER CONTACT INFORMATION:
 SIMPLEX GRINNELL - (248) 427-5050 ext.5130
 TOM MARTIN

2 FIRE ALARM PARTIAL SYSTEM RISER DIAGRAM
 N.T.S.

1		
2		
3		
4		
5		
Revisions:		Date

CONSULTANTS:

725 Prudden Street
 Lansing, MI 48906 - 517.371.1200

123 West Main Street, Suite 200
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Drawing Title
ELECTRICAL DETAILS

Approved: Division Chief

Approved: Service Director

Project Title
RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Date
 03/01/2016

Project Number
 553-304

Building Number

Checked
 MJJ

Drawn
 PBB

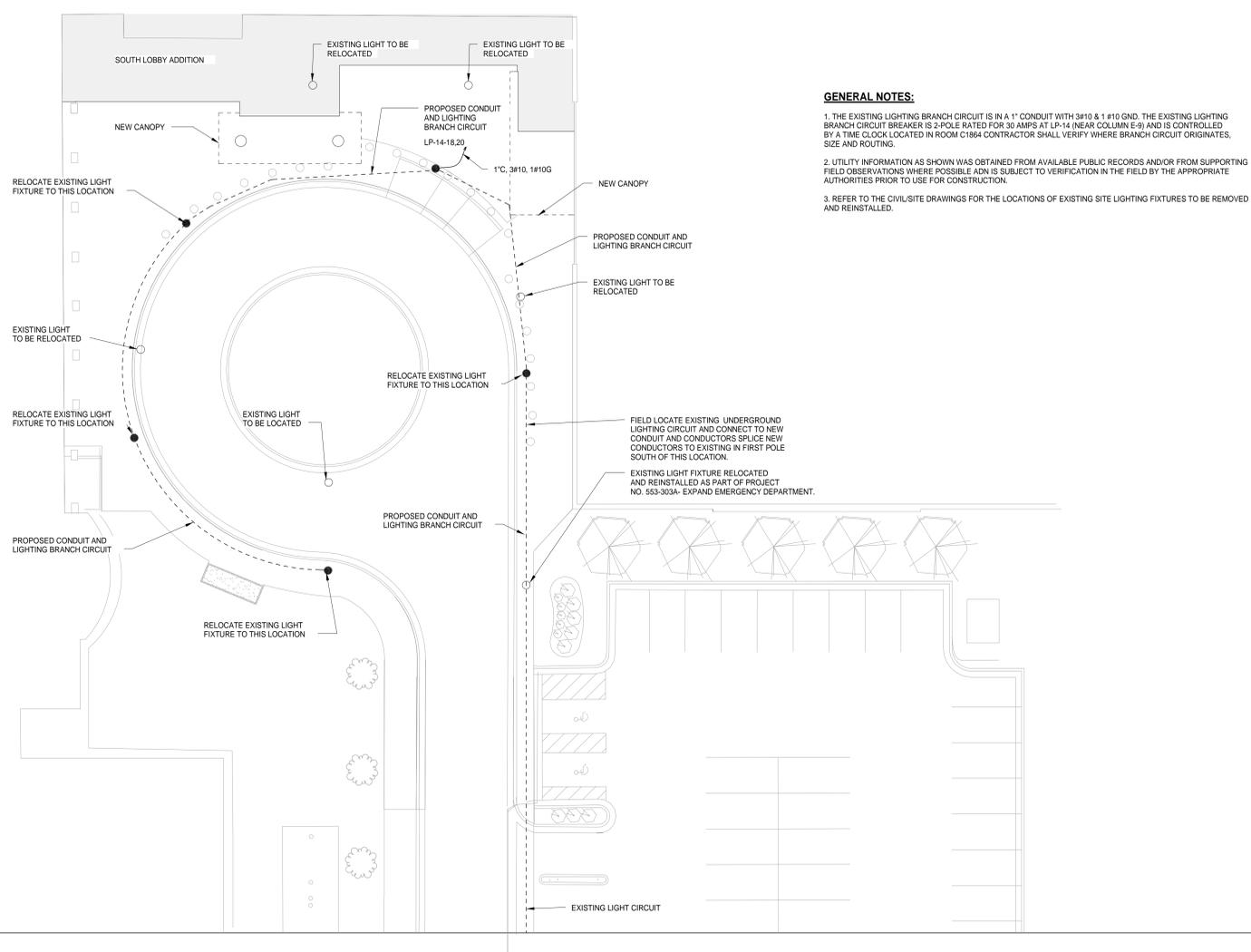
Drawing Number
E-503

Office of Facilities Management

Department of Veterans Affairs

BID DOCUMENTS

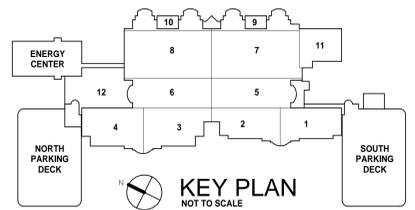
A
three inches = one foot
B
one and one half inches = one foot
C
one inch = one foot
D
three quarters inch = one foot
E
one half inch = one foot
F
three eighths inch = one foot
G
one quarter inch = one foot
H
one eighth inch = one foot
I
one eighth inch = one foot



GENERAL NOTES:

1. THE EXISTING LIGHTING BRANCH CIRCUIT IS IN A 1" CONDUIT WITH 3#10 & 1 #10 GND. THE EXISTING LIGHTING BRANCH CIRCUIT BREAKER IS 2-POLE RATED FOR 30 AMPS AT LP-14 (NEAR COLUMN E-9) AND IS CONTROLLED BY A TIME CLOCK LOCATED IN ROOM C1864 CONTRACTOR SHALL VERIFY WHERE BRANCH CIRCUIT ORIGINATES, SIZE AND ROUTING.
2. UTILITY INFORMATION AS SHOWN WAS OBTAINED FROM AVAILABLE PUBLIC RECORDS AND/OR FROM SUPPORTING FIELD OBSERVATIONS WHERE POSSIBLE ADN IS SUBJECT TO VERIFICATION IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO USE FOR CONSTRUCTION.
3. REFER TO THE CIVIL/SITE DRAWINGS FOR THE LOCATIONS OF EXISTING SITE LIGHTING FIXTURES TO BE REMOVED AND REINSTALLED.

Proposed Electrical Site Plan
1/16" = 1'-0"



1		
2		
3		
4		
5		
Revisions:		Date

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Drawing Title
PROPOSED ELECTRICAL SITE PLAN

Approved: Division Chief

File Name

Approved: Service Director

Project Title
RENOVATIONS TO THE SOUTH LOBBY ENTRANCE

Building Number

Checked

Location
4646 JOHN R. STREET DETROIT, MI 48201

Date
03/01/2016

Project Number
553-304

Drawing Number
EC-101

Office of Facilities Management

Department of Veterans Affairs