DEMOLITION LEGEND

1 DEMO GENERATOR COMPLETE. PATCH CONC. SLAB AS REQUIRED.
2 DEMO ELEVATOR CONTROLLER COMPLETE. PATCH CONC. SLAB AS REQUIRED.
3 DEMO ELEVATOR GOVERNOR COMPLETE. PATCH CONC. SLAB AS REQUIRED, PREP AREA FOR NEW GOVERNOR.
4 DEMO ELEVATOR MACHINE COMPLETE. PATCH CONC. SLAB AND PREP AREA FOR NEW ELEVATOR MACHINE.
5 DEMO EXISTING ELECTRICAL DISCONNECT. SEE ELEC. DRAWINGS.
6 PREP ENTIRE FLOOR TO BE PAINTED UPON COMPLETION OF ELEVATOR WORK.
7 DEMO EXISTING DOOR.

NOTE:
ONE ELEVATOR NEEDS TO REMAIN IN SERVICE AT ALL TIMES DURING THE PROJECT.

11TH FLR. STAGING PLAN

AVAILABLE PROJECT STAGING AREAS (COORDINATE WITH OWNER)

SOUTH HEDGES ROOF

ELEVATOR PENTHOUSE DEMOLITION PLAN

SCALE: 1" = 1'-0"
EXISTING CONDITION PHOTOS

TYPICAL ELEVATOR LOBBY

11TH FLOOR LOBBY CEILING

INSTALL NEW 1-HOUR RATED FIREPROOFING ON ALL STRUCTURAL STEEL AND ROOF DECK. (TYPICAL)

ELEVATOR PENTHOUSE

ELEVATOR PENTHOUSE
WALL TYPES LEGEND

- 5/8" TYPE "X" Gypsum Board (Both Sides) Extend to Structure
- 3-5/8" Steel Studs @ 16" O.C. Extend to Structure
- R-11 Bat Insulation
- PEP (Both Sides)
- Rubber Base (Both Sides)

NOTES THIS SHEET:
1. EXISTING FIREPROOFING REMOVED PRIOR TO CONTRACT. INSTALL NEW 1-HOUR RATED FIREPROOFING TO ALL STRUCTURAL STEEL AND STEEL ROOF DECK IN ELEVATOR PENTHOUSE AREA.

ELEV. PENTHOUSE REMODEL PLAN
SCALE: 1/4"=1'-0"

11TH FLOOR REMODEL PLAN
SCALE: 1/4"=1'-0"
DOOR SCHEDULE

<table>
<thead>
<tr>
<th>ROOM DESCRIPTION</th>
<th>ROOM NO</th>
<th>DOOR NO</th>
<th>FIRE RATING</th>
<th>DOOR</th>
<th>FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEV. PENTHOUSE</td>
<td>100</td>
<td>100A</td>
<td></td>
<td>3'-0&quot;</td>
<td>7'-0&quot;</td>
</tr>
</tbody>
</table>

**HARDWARE GROUP #1**

3 EA. (MK) HINGES TA2714 4-1/2" X 4-1/2" NRP US26D
1 EA. (BE) LOCKSET 93K7D15-D-S3-STRIKE US28
1 EA. (TR) WALL STOP 63G
1 EA. (PE) SMOKE SEAL S88BL-170" BLACK

DOOR AND FRAME TYPES

SCALE: 1/4"=1'-0"
1. **Main Floor Elev. Lobby**
   - Scale: 1/4" = 1'-0"
   - New hall position indicators per spec.
   - New hall call push buttons per spec. (comply with ADA)

2. **Typ. Elev. Interior - Front**
   - Scale: 1/4" = 1'-0"
   - New stainless panel over existing position indicator panel.
   - New car operating panel per spec. (typ.) (comply with ADA)
   - Existing elev. doors (paint @ all floors—both sides of doors)

3. **2-11 Floor Elev. Lobby**
   - Scale: 1/4" = 1'-0"
   - Refinish exist’g solid surface panels (back and sides of elevator cabs)
   - New stainless ceiling per spec.
   - New handrail per spec.

4. **Typ. Elev. Interior - Rear**
   - Scale: 1/4" = 1'-0"
   - Refinish exist’g solid surface panels (back and sides of elevator cabs)

5. **Typ. Elev. Interior - Side**
   - Scale: 1/4" = 1'-0"
   - New stainless ceiling per spec.
   - New handrail per spec.

Note: Remove all existing hall position indicators, operating panels, and push buttons. Patch and repair surrounding surfaces as required.
GENERAL NOTES

A. LOCATIONS AND DIMENSIONS OF EXISTING FACILITIES IDENTIFIED ON THIS DRAWING ARE APPROXIMATE AND REPRESENT THE BEST AVAILABLE INFORMATION BASED ON A COMBINATION OF FIELD INVESTIGATIONS AND VARIOUS DESIGN AND RECORD DRAWINGS AVAILABLE AT THE TIME OF THE DESIGN. FIELD VERIFY LOCATIONS AND DIMENSIONS PRIOR TO AND DURING PERFORMANCE OF THE WORK AND NOTIFY THE ARCHITECT/ENGINEER OF ANY MAJOR DISCREPANCIES.

B. ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING SHOWN AS DARK AND DASHED SHALL BE DEMOLISHED. EXISTING MECHANICAL EQUIPMENT SHOWN LIGHT WITH SOLID LINES IS TO REMAIN.

C. THE MECHANICAL CONTRACTOR SHALL COORDINATE SALVAGE OF ALL REMOVED EQUIPMENT IN GOOD CONDITION WITH THE OWNER. THE MECHANICAL CONTRACTOR SHALL DISPOSE OF ALL UNWANTED EQUIPMENT.

D. COORDINATE ANY ROOF, WALL, CEILING AND FLOOR PATCH AND REPAIR WORK REQUIRED BY THE DEMOLITION OF MECHANICAL SYSTEMS WITH THE CONSTRUCTION MANAGER.

KEY NOTES

1. DEMOLISH EXISTING LOUVER AND ALL ASSOCIATED ACCESSORIES. COORDINATE WALL Patching and repair with architect

2. DEMOLISH EXISTING SUPPLY FAN, DUCTWORK, HANGERS AND ASSOCIATED ACCESSORIES.

3. DEMOLISH EXISTING DUCTWORK, GRILLES, HANGERS, AND ALL ASSOCIATED ACCESSORIES.

4. EXHAUST FAN TO REMAIN.
PROJECT SPECIFICATIONS

GENERAL
1. THE CONTRACTOR SHALL INCLUDE ALL ITEMS, ARTICLES, MATERIALS, OPERATIONS AND METHODS LISTED, MENTIONED, OR SCHEDULED IN THESE SPECIFICATIONS AND THE ACCOMPANYING DRAWINGS. ALL MATERIAL, EQUIPMENT, AND LABOR SHALL BE FURNISHED TOGETHER WITH ALL INCIDENTAL ITEMS REQUIRED BY GOOD PRACTICE TO PROVIDE THE COMPLETE SYSTEMS DESCRIBED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMITS REQUIRED FOR WORK UNDER THEIR CONTRACT AND UNDER THEIR SUPERVISION BY SUBCONTRACT.
5. TOBACCO SHALL NOT BE PERMITTED ANYWHERE IN THIS FACILITY.

MATERIALS AND EQUIPMENT
1. MANUFACTURER'S TRADE NAMES AND CATALOG NUMBERS ARE LISTED TO INDICATE SPECIAL CONDITIONS AND QUALITY OF MATERIALS OR EQUIPMENT TO BE SUPPLIED AND INSTALLED. ALTERNATIVE EQUIPMENT OR MATERIALS MAY BE SUBMITTED FOR REVIEW FOR APPROVAL PRIOR TO ANY BIDDING. NO SUBSTITUTIONS SHALL BE ALLOWED AFTER BIDDING. WRITTEN PRIOR APPROVAL FOR SUBSTITUTIONS MUST BE SUBMITTED TO AND RECEIVED BY THE ARCHITECT/ENGINEER TEN (10) DAYS PRIOR TO BID OPENING. REQUESTS FOR SUBSTITUTION ARE TO BE SUBMITTED BY THE CONTRACTOR, AS NOTED IN THE DRAWING. TO GIVE ADEQUATE TIME FOR EXAMINATION, PRIOR APPROVAL REQUEST FOR SUBSTITUTION MUST INDICATE THE SPECIFIC ITEM OR ITEMS TO BE FURNISHED IN LIEU OF THOSE SCHEDULED, TOGETHER WITH COMPLETE TECHNICAL AND COMPARATIVE DATA ON SCHEDULED ITEMS AND ITEMS PROPOSED FOR SUBSTITUTION.
2. STORE MATERIALS AND EQUIPMENT INDOORS AT THE JOB SITE OR, IF THIS IS NOT POSSIBLE, STORE ORRAISED PLATFORMS AND PROTECT FROM THE WEATHER BY MEANS OF WATERPROOF COVERS. COVERINGS SHALL BE PERMITTED WHERE ENVIRONMENTAL CONDITIONS REQUIRE PROTECTION FROM CONDENSATION OF MOISTURE, SCREEN OR CAP OPENINGS IN EQUIPMENT TO PREVENT THE ENTRY OF EIRMIN.
3. ALL NEW PIPING SHALL BE IDENTIFIED WITH SETON SETMARK PIPE MARKERS, LETTERED TO MATCH EXISTING AND MARKED AT MAXIMUM OF EVERY 25 FT. ALSO, ALL NEW VALVES SHALL BE IDENTIFIED WITH BRASS OR ALUMINUM VALVE TAGS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE-CAULKING ALL FIRE-RATED OR SMOKE-RATED WALL PENETRATIONS OF PIPING, ETC.

INTENT OF DRAWINGS
1. THE DRAWINGS ARE PARTLY Diagramatic AND DO NOT NECESSARILY SHOW EXACT LOCATION OF PIPING UNLESS SPECIFICALLY DIMENSIONED. RISER AND OTHER DIAGRAMS ARE ABSTRACT AND DO NOT NECESSARILY SHOW THE PHYSICAL ARRANGEMENT OF THE EQUIPMENT. THEY SHALL NOT BE USED FOR OBTAINING LINEER RUNS OF PIPING, NOR SHALL THEY BE USED FOR SHOP DRAWINGS, CORRECTION OR ORDERING. DISCREPANCIES SHOWN ON DIFFERENT PLANS, OR BETWEEN PLANS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR RESOLUTION.

RESPONSIBILITY
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF A SATISFACTORY AND COMPLETE SYSTEM IN ACCORDANCE WITH THE INTENT OF THE DRAWING AND SPECIFICATIONS, PROVIDE, AT NO EXTRA COST, ALL INCIDENTAL ITEMS, MATERIALS, ACCESSORIES AND LABOR REQUIRED FOR COMPLETION OF THE WORK EVEN THOUGH THEY ARE NOT SPECIFICALLY MENTIONED OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
2. THE DRAWINGS DO NOT ATTEMPT TO SHOW COMPLETE DETAILS OF THE BUILDING CONSTRUCTION WHICH AFFECT THE MECHANICAL INSTALLATION AND REFERENCE IS THEREFORE REQUIRED TO THE APPROPRIATE ARCHITECTURAL, ELECTRICAL DRAWINGS AND SPECIFICATIONS AND TO SHOP DRAWINGS OF ALL TRADES FOR ADDITIONAL DETAILS WHICH AFFECT THE INSTALLATION OF THE WORK COVERED UNDER THIS DIVISION OF THE CONTRACT.
3. LOCATION OF MECHANICAL SYSTEM COMPONENTS SHALL BE CHECKED FOR CONFLICTS WITH OPENINGS, STRUCTURAL MEMBERS AND OTHER SYSTEMS HAVING FIXED LOCATIONS. IN THE EVENT OF ANY CONFLICTS, THE ARCHITECT/ENGINEER SHALL BE CONSULTED AND HIS DECISION SHALL GOVERN. NECESSARY CHANGES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE.
4. TAKE EXTREME CAUTION TO PROTECT THE WORK FROM DAMAGE DURING THE INSTALLATION PERIOD. IF NEEDED, THE CONTRACTOR SHALL PROTECT THE WORK WITH SPECIAL PROTECTOR OR TOWELING.

REVIEW & SITE INSPECTIONS
1. ALL WORK AND MATERIAL IS SUBJECT TO REVIEW AT ANY TIME BY THE ARCHITECT/ENGINEER OR HIS REPRESENTATIVE. IF THE ARCHITECT/ENGINEER OR HIS REPRESENTATIVE FINDS MATERIAL THAT DOES NOT MEET THE REQUIREMENTS, OR THAT IS NOT PROPERLY INSTALLED, CORRECT THE DEFICIENCIES IN A MANNER SATISFACTORY TO THE ARCHITECT/ENGINEER AT THE CONTRACTOR'S EXPENSE.

SHOP DRAWINGS AND SUBMITTALS
1. WITHIN THIRTY DAYS AFTER AWARDING OF THE MECHANICAL CONTRACT, THE MECHANICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SUBMITTALS FOR THE FOLLOWING PRODUCTS: VRF CONDENSING UNITS, FANCOILS, THERMOSTATS, ALL SHOP DRAWINGS AND SUBMITTALS SHALL BE IN THE FORM OF ELECTRONICALLY TRANSMITTED PDF. SHOP DRAWINGS AND SUBMITTALS SHALL INCLUDE SHOP DRAWINGS AND LITERATURE SHOWING ITEM TO BE USED, SIZE, DIMENSIONS, CAPACITY, ROUGH-IN, ETC., AS REQUIRED FOR COMPLETE CHECK AND INSTALLATION. MANUFACTURER'S LITERATURE SHOWING MORE THAN ONE ITEM SHALL BE CLEARLY MARKED AS TO WHICH ITEM IS BEING FURNISHED OR IT WILL BE RETURNED WITHOUT REVIEW.
2. EACH ITEM SUBMITTED SHALL BE CLEARLY MARKED AS COMPLETE FOR PURPOSES OF IDENTIFICATION AND RECORD. SUBMITTALS NOT MARKED (TYPE WRITTEN ONLY) AS DESCRIBED BELOW WILL BE REJECTED AND RETURNED WITHOUT REVIEW. DATE, NAME OF PROJECT, BRANCH OF WORK, SUBMITTED BY, SPECIFICATION OR PLAN REFERENCE.
3. PRIOR TO THEIR SUBMISSION, EACH SUBMITTAL SHALL BE THOROUGHLY CHECKED BY THE CONTRACTOR. COMPLIANCE WITH THE CONTRACT DOCUMENT REQUIREMENTS, EACH SUBMITTAL SHALL THEN BEAR A STAMP EVIDENCING SUCH CHECKING AND SHALL SHOW CORRECTIONS MADE, IF ANY. SUBMITTALS REQUIRING EXTENSIVE CORRECTIONS SHALL BE REVISED BEFORE SUBMISSION TO THE ENGINEER. EACH SUBMITTAL NOT STAMPED AND SIGNED BY THE CONTRACTOR EVIDENCING SUCH CHECKING WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
4. REVIEW OF THE SHOP DRAWINGS AND LITERATURE BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN THE SHOP DRAWINGS OR LITERATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE MATERIALS AND EQUIPMENT WHICH MEET THE SPECIFICATIONS AND JOB REQUIREMENTS.
### SPLIT SYSTEM FANCOIL SCHEDULE (R-410a)

<table>
<thead>
<tr>
<th>MARK</th>
<th>MFGR</th>
<th>MODEL #</th>
<th>CONDENSING UNIT</th>
<th>SUPPLY AIR (CFM)</th>
<th>NOMINAL COOLING CAPACITY (BTU/HR)</th>
<th>SENSIBLE COOLING CAPACITY (BTU/HR)</th>
<th>ELECTRICAL DATA</th>
<th>REMARKS</th>
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</thead>
<tbody>
<tr>
<td>FC-1</td>
<td>DAIKIN</td>
<td>FTX36LVJU</td>
<td>CU-1</td>
<td>808</td>
<td>36,000</td>
<td>22,880</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FC-2</td>
<td>DAIKIN</td>
<td>FTX36LVJU</td>
<td>CU-2</td>
<td>808</td>
<td>36,000</td>
<td>22,880</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

Notes: Cooling capacity is based on 80°F DB / 67°F WB indoor and 95°F DB / 75°F WB outdoor. Provide unit with low ambient kit for cooling operation to -20°F. Provide a single wireless thermostat/controller to control both units simultaneously. Indoor unit to be powered by outdoor condensing unit. Install per manufacturer's recommendations.

### SPLIT SYSTEM CONDENSING UNIT SCHEDULE (R-410a)

<table>
<thead>
<tr>
<th>MARK</th>
<th>MFGR</th>
<th>MODEL #</th>
<th>TYPE</th>
<th>DESCRIPTION</th>
<th>COOLING DATA</th>
<th>ELECTRICAL DATA</th>
<th>REMARKS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AIR COOLED</td>
<td>TOTAL CAPACITY</td>
<td>SEER</td>
<td>VOLTAGE</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CONDENSING UNIT</td>
<td>(BTU/HR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3-TON SPLIT SYSTEM UNIT</td>
<td>36,000</td>
<td>17.9</td>
<td>208/230</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AIR COOLED CONDENSING UNIT</td>
<td>36,000</td>
<td>17.9</td>
<td>208/230</td>
</tr>
</tbody>
</table>

Notes: Cooling capacity is based on 80°F DB / 67°F WB indoor and 95°F DB / 75°F WB outdoor. Disconnect provided and installed by EC.

### PIPING MATERIAL SCHEDULE

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<thead>
<tr>
<th>SYSTEM</th>
<th>INSTALLATION LOCATION</th>
<th>SIZE RANGE</th>
<th>MATERIAL</th>
<th>FITTING TYPE</th>
<th>INSULATION R-VALUE</th>
<th>JACKETING</th>
<th>REMARKS</th>
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</thead>
<tbody>
<tr>
<td>REFRIGERANT</td>
<td>OUTDOOR EXPOSED</td>
<td>3/8-1&quot;</td>
<td>TYPE ACR COPPER</td>
<td>BRAZED</td>
<td>2&quot; THICK ELASTOMERIC</td>
<td>ALUMINUM</td>
<td>SEE NOTES</td>
</tr>
<tr>
<td>REFRIGERANT</td>
<td>INDOOR EXPOSED</td>
<td>3/8-1&quot;</td>
<td>TYPE ACR COPPER</td>
<td>BRAZED</td>
<td>2&quot; THICK ELASTOMERIC</td>
<td>NONE</td>
<td>SEE NOTES</td>
</tr>
<tr>
<td>DRAIN</td>
<td>INDOOR EXPOSED</td>
<td>3/8-2&quot;</td>
<td>TYPE M COPPER</td>
<td>SOLDER</td>
<td>NONE</td>
<td>NONE</td>
<td>SEE NOTES</td>
</tr>
</tbody>
</table>

Notes: Install and support all piping per manufacturers instructions. Insulate all piping in accordance with the International Energy Conservation Code.
GENERAL NOTES

A. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FIELD COORDINATE THE ROUTING OF ALL DUCTWORK AND PIPING WITH ALL OTHER TRADES.

B. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO REVIEW DRAWINGS FOR ALL DISCIPLINES AND PROVIDE ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.

C. VERIFY THE LOCATION OF ALL THERMOSTATS AND SENSORS WITH THE ENGINEER AND ARCHITECT PRIOR TO INSTALLATION. INSTALL THERMOSTATS 48" ABOVE FINISHED FLOOR PER ADA REQUIREMENTS.

D. PROVIDE AND INSTALL SEISMIC BRACING FOR ALL EQUIPMENT, DUCTWORK AND PIPING PER THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.

E. SEAL PIPE PENETRATIONS THROUGH FIRE RATED ASSEMBLIES WITH A UL APPROVED FIRE STOP SYSTEM.

F. ROUTING OF REFRIGERANT PIPING FROM OUTDOOR UNITS TO FANCOILS SHALL BE FIELD COORDINATED BY THE MECHANICAL CONTRACTOR WITH ALL OTHER TRADES.

KEY NOTES

1. INSTALL CONDENSING UNIT ON MODULAR STEEL FRAME WITH RUBBER ROOF SUPPORTS (COOPER B-LINE OR EQUAL) ON ROOF. FIELD VERIFY INSTALLATION LOCATION. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

2. INSTALL FAN COIL, 84" ABOVE FINISHED FLOOR. FIELD VERIFY INSTALLATION LOCATION AND REFRIGERANT PIPE ROUTING. SURFACE MOUNT 3/4" CONDENSATE DRAIN ON WALL AND ROUTE TO EXISTING FLOOR DRAIN.

ELEVATOR PENTHOUSE MECHANICAL REMODEL PLAN

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

1. PRIOR TO BID CONTRACTOR SHALL VISIT THE SITE, NOT ALL WORK REQUIRED TO COMPLETE THE PROJECT IS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH ALL THE WORK REQUIRED TO COMPLETE THE PROJECT IN ADDITION TO THE LOCAL CONDITIONS AND INCLUDE SOME WORK IN THE BID.

2. GENERAL WORK PRACTICES FOR ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NECA 1. "STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING." THIS PUBLICATION IS AVAILABLE FROM NECA BY TELEPHONE AT 301-251-4000 OR ON-LINE AT WWW.NECA.NET.

3. CONDUCTORS ARE SIZED PER THE 75 DEGREE C RATING COLUMN OF NEC TABLE 310.15. IF THE TERMINAL IS FOR A TERMINATION OF A PARTICULAR CONDUCTOR IS NOT MARKED, OR THE TERMINAL IS MARKED FOR 60 DEGREES C CONDUCTORS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE APPROPRIATE TERMINAL SIZE IS USED.

4. FOR CIRCUIT RUNS EXCEEDING 300 LINEAR FEET, CONDUCTOR SIZE SHALL BE A MINIMUM OF #10 CU.

ELECTRICAL SYMBOL LEGEND

SYMBOL | DESCRIPTIONS | MOUNTING HEIGHT, IN
----- | ------------ | -------------

P, 1 | DEVICE | 46

C | METER | 46

D | LINE BREAK | 20

F | KEY NOTE, REFER TO SPECIFIC NOTE ON SAME SHEET | 20

G | SURFACE FLUORESCENT TO SCALE, STEM INDICATES WALL MOUNTED | 20

H | SWITCH | 46

I | SINGLE POLE | 46

J | MOTION DETECTOR, WATT STOPPER DLM-100 DUAL TECHNOLOGY CEILING MOUNT OR WALL | 46

K | WALL MOTION DETECTOR, WATT STOPPER DLM-100 DUAL TECHNOLOGY, WALL MOUNT OR EQU | 46

L | PHOTOCELL, WATT STOPPER DLM-120SL-D1400 CEILING OR WALL MOUNT | 46

M | DUPLEX RECEPTACLE | 18

N | APLEX RECEPTACLE | 18

P | JUNCTION BOX | 20

Q | FUSED DISCONNECT SWITCH | 20

R | COMBINATION MOTOR STARTER | 20

S, T, U, V, W, X, Y, Z | BRANCH CIRCUIT PANEL BOARD | 20

AA | BRACKET | 20

AB | GROUNDING BUS | 54

AC | PUSHBUTTON | 46

AD | FIRE ALARM MANUAL STATION | 46

AE | HORSESHOE | 54

AF | STROKE | 54

AG | DOOR HOLDER | 20

AH | RATE-O-RBS HEAT DETECTOR | 20

AI | SMOKE DETECTOR | 18

AJ | SMOKE DETECTOR (O) INDICATES DUCT DETECTOR, DUCT DETECTOR FURNISHED BY ELEC. INSTALLED BY MCH. AND WIRED BY ELEC. | 18

AK | ANALOG TELEPHONE OUTLET WITH TWO ANALOG CABLE DROPS UNL, REFER TO SPC FOR CABLING REG. (1) | 18

AL | TELEPHONE DATA OUTLET WITH TWO DATA AND ONE VOICE CABLE DROPS, UNL, REFER TO SPECS FOR CABLINGelijk (1) | 18

NOTE (1): FOR EACH TELEPHONE AND/OR COMPUTER OUTLET, CABLE TELEVISION OUTLET, INSTALL REQUIRE BASIC, CONDUIT (1) MINIMUM RINSWELLED THROAT BUSHING AND PULL CORD, TO ACCESSIBLE SPACE ABOVE CEILING, UNLESS NOTED OTHERWISE. NOlez (1), THESE SYMBOLS COMPARE A STANDARD LIST, NOT ALL SYMBOLS APPEAR ON THIS PROJECT, 1. ALL MOUNTING HEIGHTS ARE TO CENTER OF DEVICE ABOVE FINISHED FLOOR MOUNTING HEIGHTS INDICATED ON ARCHITECTURAL, WALL ELEVATIONS OR AS NOTED SPECIFICALLY ON THE DRAWINGS OR IN THE SPECIFICATIONS SHALL TAKE PRECEDENCE OVER MOUNTING HEIGHTS LISTED.

ELECTRICAL ABBREVIATIONS

A, AMP | AMPERES
AF | AMP FUSE
AS | AMP SWITCH
C | CONDUIT / RACEWAY
CD | CIRCUIT
CU | COPPER
EX | EXTERIOR
FA | FIRE ALARM
GFI | GROUND FAULT INTERRUPTER
GND | GROUND
J | JUNCTION BOX
RAK | THOUSAND AMP INTERRUPTING CURRENT
S | SINGLE | MARK AS SINGLE
P | POLE
PH | PHASE
REC | RECEPTACLE
TTL | TELEPHONE TERMINAL BOARD
U | VOLTS
W | WATTS
WP | WEATHERPROOF

RACEWAY:
- MINIMUM RACEWAY SIZE: 3/4-INCH TRADE SIZE, OUTDOORS
- EXPOSED CONDUCT: RIGID STEEL CONDUCT
- EXPOSED CONDUCT: GALVANIZED, 30-OUNCE GROUND, EMT
- CONNECTION TO VIBRATING EQUIPMENT, INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC, SOLENOID, OR MOTOR-DRIVEN EQUIPMENT:
- LFMC
- BOXES AND ENCLOSURES, ABOVE GROUND: NEMA 250, TYPE 3R
- RIGID SHEET CONDUCT
- EXPOSED, NOT SUBJECT TO PHYSICAL DAMAGE: EMT, RIGID STEEL CONDUCT
- EXPOSED AND SUBJECT TO SEVERE PHYSICAL DAMAGE: RIGID STEEL, CONDUCT
- CONCEALED IN NEW CEILINGS AND INTERIOR WALLS AND PARTITIONS, EMT
- CONNECTION TO VIBRATING EQUIPMENT, INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC, SOLENOID, OR MOTOR-DRIVEN EQUIPMENT:
- LFMC, EXCEPT USE LFMC IN DAMP OR WET LOCATIONS.
- DAMP OR WET LOCATIONS: RIGID STEEL CONDUCT.
- BOXES AND ENCLOSURES: NEMA 250, TYPE 1, EXCEPT USE NEMA 250, TYPE 3R, NONMETALLIC IN DAMP OR WET LOCATIONS.
- RACEWAY FITTINGS: COMPATIBLE WITH RACEWAYS AND SIZED FOR USE AND LOCATION.
- RIGID AND INTERMEDIATE STEEL, CONDUCT: USE TWISTED RIGID STEEL CONDUCT FITTINGS, UNLESS NOTED OTHERWISE.

CONDUCTORS:
- ALL CONDUCTORS IN RACEWAY: TYPE THHN-THWN, SINGLE CONDUCTORS.
- COPPER, SOLID NO. 10 AWG AND SMALLER, STRANDED FOR NO. 8 AWG AND LARGER.
- CONCEALED IN NEW CEILINGS AND WALLS: TYPE THHN-THWN, SINGLE CONDUCTORS.

PANELBOARDS:
- ALL PANELBOARDS SHALL BE FULLY RATED.
- ALL PANELBOARDS AND CONNECTORS TO BE HARD-LABELED (HARD PLASTIC ENGRAVED).

DISCONNECTS:
- ALL DISCONNECTS SHALL BE HEAVY DUTY RATED.

WIRING DEVICES:
- GFCI RECEPACITIES
- GENERAL DESCRIPTION: STRAIGHT BLADE, NON-REVERSIBLE TYPE, COMPARE WITH NEMA WD 1.
- NEMA WD 6, LL 49H, UL 943, CLASS A, AND INCLUDE INDICATOR LIGHT THAT IS LIGHTED WHEN DEVICE IS TRIPPED.
- DUPLEX GFCI CONVENIENCE RECEPTACLES: 125 V, 20 A.
- COOPER: 820.
- UNFINISHED SPACES: PROVIDE GRAY DEVICE IN 4-SQUARE BOX WITH GALVANIZED STEEL COVERS.
- FINISHED SPACES: PROVIDE WHITE DEVICE IN 4-SQUARE BOX WITH WHITE NYLON COVERS.

SWITCHES:
- 12027729: COMPLY WITH NEMA WD 1 AND UL 20.
- COOPER: 9221 (SINGLE POLE)
- HUBBELL: CS1221 (SINGLE POLE)
- LEVITON: 1221-2 (SINGLE POLE)
### New Penthouse Panel PP1

**Panel Schedule**

<table>
<thead>
<tr>
<th>Ckt. No.</th>
<th>Description / Location</th>
<th>Load (VA)</th>
<th>Load Type</th>
<th>C.B. Pole</th>
<th>C.B. Phase</th>
<th>Load (VA)</th>
<th>C.B. Pole</th>
<th>Load Type</th>
<th>Description / Location</th>
<th>Ckt. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CU-1</td>
<td>1622</td>
<td>M</td>
<td>20</td>
<td>2</td>
<td>20</td>
<td>2</td>
<td>M</td>
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<tr>
<td>3</td>
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**Total Connected Load:**
- Ph A: 4,424 VA 36.9 A
- Ph B: 4,244 VA 35.4 A

**Total Connected Load (2 X Maximum):** 8.9 KVA 36.9 AMPS

**Total Demand Load:** 8.9 KVA 36.9 AMPS
1. DEMO EXISTING ELEVATOR GENERATOR.
2. DEMO EXISTING ELEVATOR CONTROLS.
3. DEMO EXISTING ELEVATOR GOVERNOR.
4. DEMO EXISTING ELEVATOR MOTORS.
5. DEMO EXISTING ELECTRICAL DISCONNECT, KEEP EXISTING FEEDER FROM THIS LOCATION BACK TO 480V PANEL. PROVIDE NEW J-BOX AT THIS LOCATION FOR EXTENDING FEEDER TO NEW DISCONNECT.
6. DEMO PORCELAIN BASE LIGHT FIXTURE.
7. DEMO LIGHT SWITCH & RECEPTACLE: REPLACE / RELOCATE PER SHEET E1-5. EXTEND WIRING TO NEW LOCATION(S).
GENERAL NOTES

A. ALL ELECTRICAL CONNECTIONS FROM THE ELEVATOR CONTROLLER LOAD SIDE ARE TO BE MADE BY THE ELEVATOR CONTRACTOR.
B. CONNECT EXISTING FIRE ALARM DEVICES TO NEW ELEVATOR CONTROLLER. ENSURE FIRE ALARM MAINTAINS FULL FUNCTIONALITY. EXISTING DEVICES INCLUDE, BUT ARE NOT LIMITED TO: THE SMOKE DETECTORS IN THE LOBBIES OF EACH FLOOR.
C. COORDINATE WITH RESNET TO ENSURE PATHWAY REMAINS INTACT TO EXISTING ELEVATOR CAMERA.

KEY NOTES

1. PROVIDE NEW FUSED DISCONNECT: 100A6/60A FOR ELEVATOR CONTROLLER, EXTEND EXISTING FEEDER FROM OLD DISCONNECT LOCATION TO NEW LOCATION. PROVIDE 1 3/4"C, (4) #6, #8 GND.
2. LOCKABLE CIRCUIT BREAKER FOR CAR 1 LIGHTS.
3. LOCKABLE CIRCUIT BREAKER FOR CAR 2 LIGHTS.
4. PROVIDE 1 CONDUIT ONLY W/ PULL STRING TO TTB LOCATED ON MAIN FLOOR. COORDINATE W/ MSU RES-NET TO PROVIDE THE REQUIRED PHONE SERVICE.
5. PROVISE (4) #4 AND #6 GND IN 1 1/4"C, FROM FUSED DISCONNECT TO CONTROLLER.
6. REPLACE EXISTING 120V DUPLEX RECEPTACLE WITH NEW 120V 20A GFI DUPLEX RECEPTACLE. RELOCATE ONTO NEW WALL AS SHOWN.
7. PROVIDE NEW 120V 20A GFI DUPLEX RECEPTACLE. CIRCUIT WITH EXISTING PENTHOUSE RECEPTACLE & LIGHTING CIRCUIT.
8. REPLACE (4) EXISTING DUCT DETECTORS (LOCATED IN ADJACENT MECHANICAL ROOM) AND (1) SMOKE DETECTOR WHICH ARE ON A CONVENTIONAL ZONE. INSTALL (5) NEW INTELIGENT RELAYS FOR ELEVATOR CONTROLS.
9. REPLACE (6) EXISTING STRIP FIXTURES IN PENTHOUSE. PROVIDE NEW LED LUMINARIES COOPER METALUX 45LSTP4D0000-JNN, OR APPROVED EQUAL. RELOCATE LIGHT SWITCH AS SHOWN.
10. POWER CONNECTION TO NEW EXTERIOR ROOF-MOUNTED CONDENSING UNIT. PROVIDE FUSED DISCONNECT: 30A5, 20A5, NEMA 3R.
11. PROVIDE FEEDER BETWEEN CU-1 & FG-1: 3/4"C, (2) #12, #12 GND.
12. PROVIDE FEEDER BETWEEN CU-2 & FC-2: 3/4"C, (2) #12, #12 GND.
13. PROVIDE NEW 60A 120/240V 1PH 3W MLO LOAD CENTER. CIRCUIT FROM EXISTING 10TH FLOOR 120/208V 3PH PANEL; PROVIDE NEW 60A 2P BREAKER IN EXISTING PANEL. PROVIDE 1"C, (3) #6, #10 GND AND ROUTE FEEDER UP FROM 10TH TO 11TH FLOOR, THEN FOLLOW ROUTE ALONG EXISTING 480V ELEVATOR FEEDER IN 11TH FLOOR CEILING SPACE UP TO PENTHOUSE.