University of Colorado Denver Anschutz Medical Campus

Fitzsimons Building CRIO Renovation

13001 E. 17th PLACE AURORA, CO 80045

006734.00 CONSTRUCTION DOCUMENTS 03/22/2022

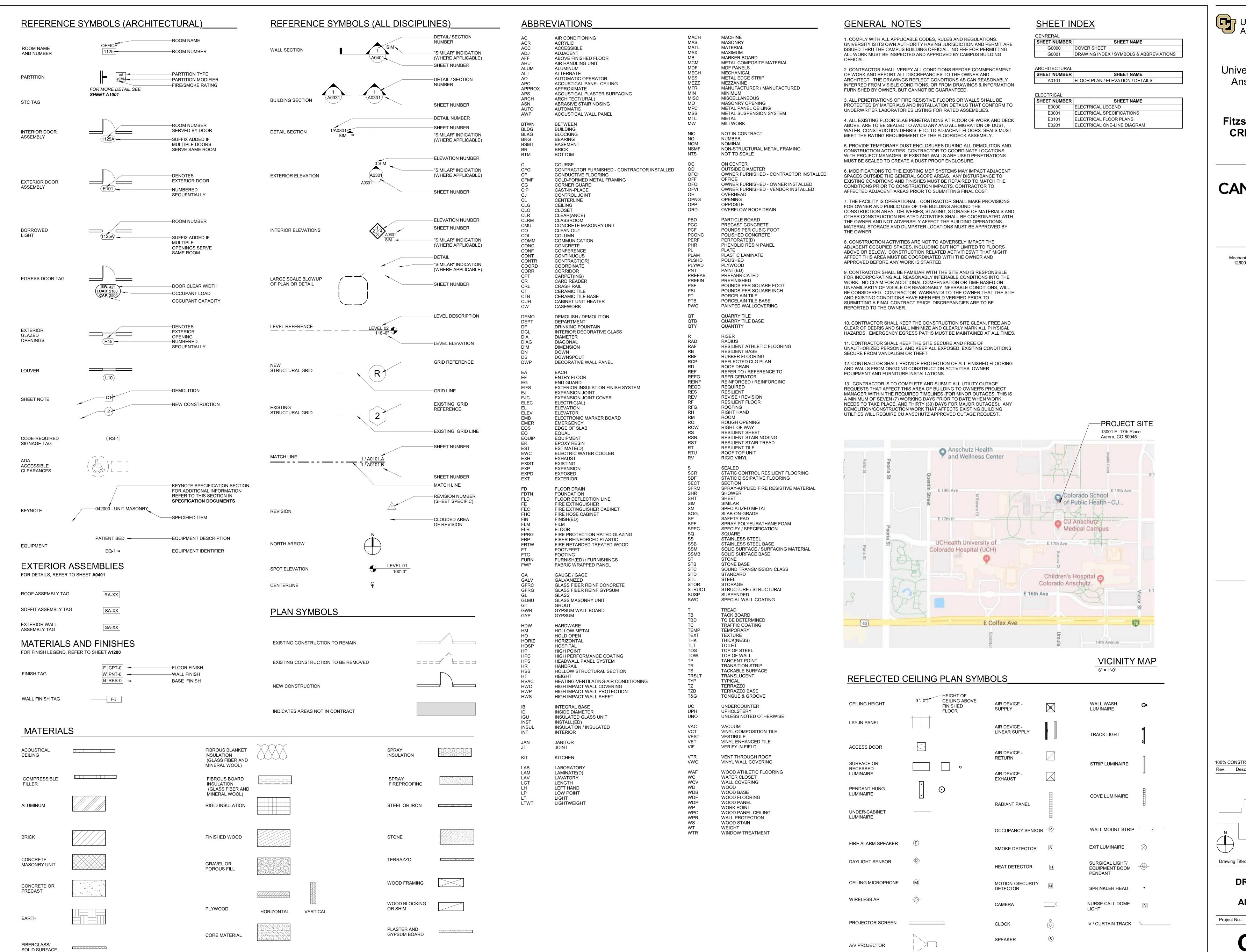
CANNONDESIGN

2800 Walnut Street, Suite 300 Denver, CO 80205 P: 303.893.1990

BOSTON NEW YORK BALTIMORE WASHINGTON DC BUFFALO TORONTO COLUMBUS PITTSBURGH DALLAS CHICAGO ST. LOUIS IRVINE DENVER HOUSTON LOS ANGELES MUMBAI

Consultants:

RMH Group, Inc.
Mechanical / electrical & Plumbing Engineers
12600 West Colfax Avenue, Suite A-400
Lakewood, Colorado 80215
303.239.0909



MATERIAL

University of Colorado
Anschutz Medical Campus

University of Colorado **Anschutz Medical** Campus

Fitzsimons Building **CRIO** Renovation

Denver, CO 80205

P: 303.893.1990

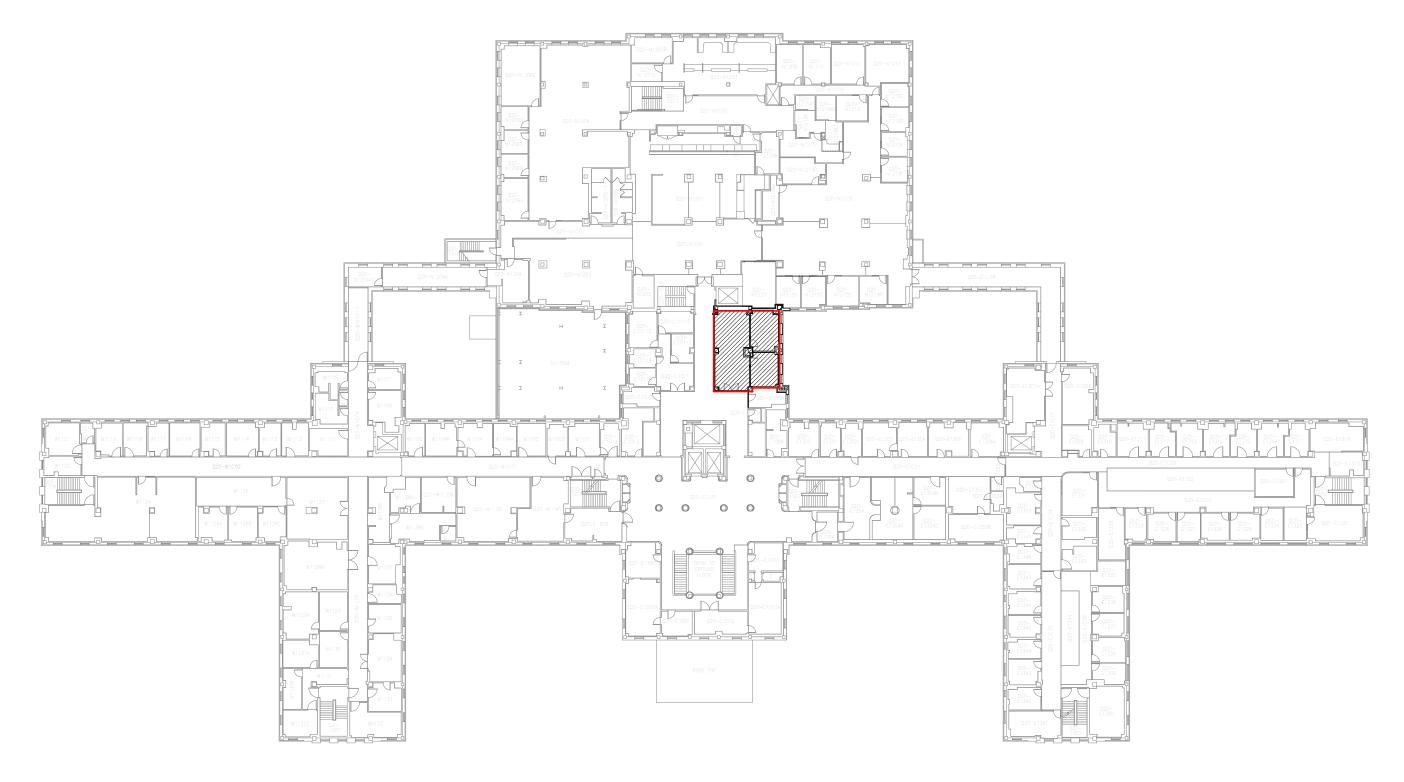
www.cannondesign.com RMH Group, Inc. Mechanical / electrical & Plumbing Engineers 12600 West Colfax Avenue, Suite A-400 Lakewood, Colorado 80215

303.239.0909

100% CONSTRUCTION DOCUMENT Rev. Description

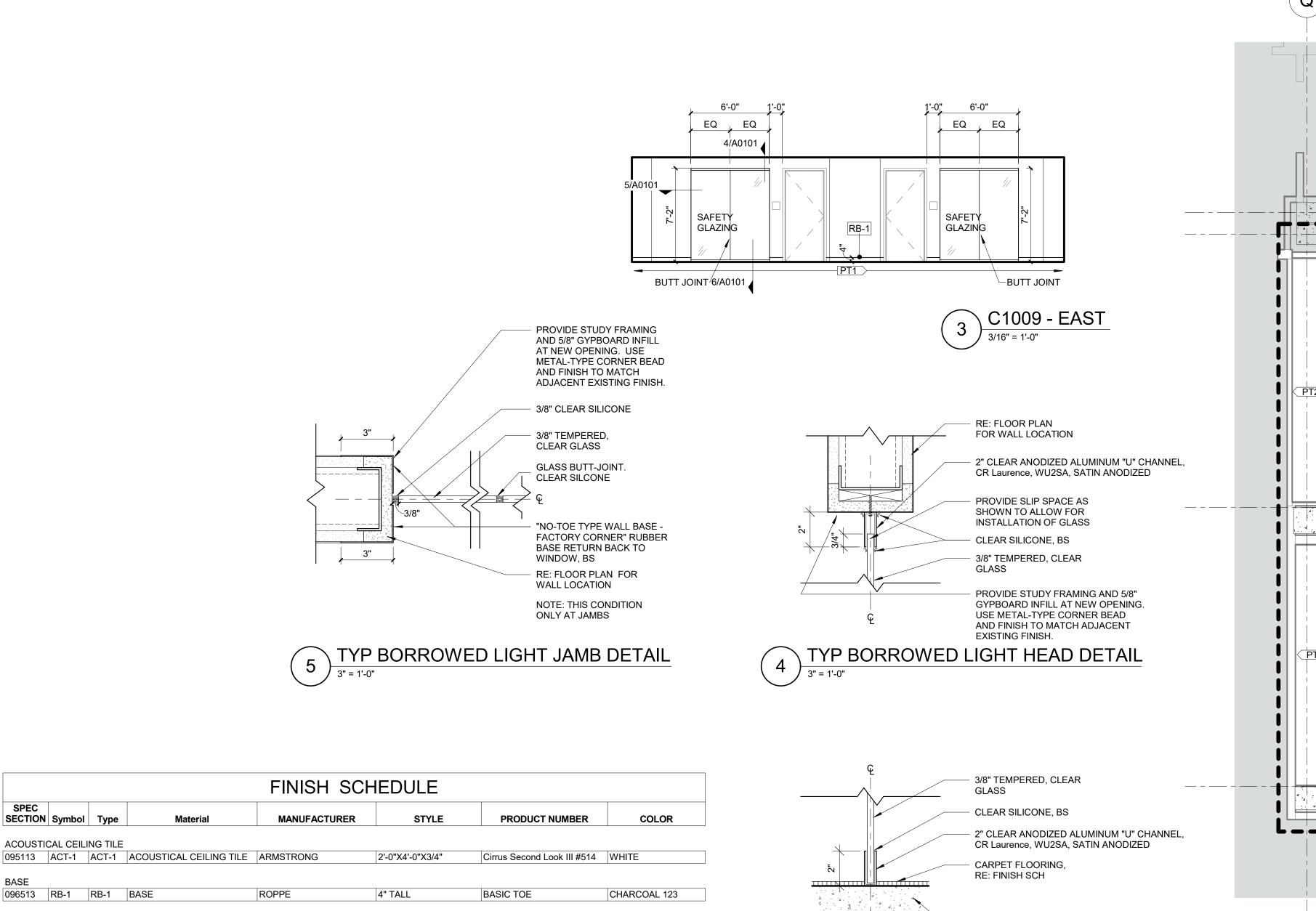
DRAWING INDEX SYMBOLS & ABBREVIATIONS

Project No.: 006734.00 Checked by: Checker



BUILDING 500 LEVEL 1 - KEY PLAN

S



(E) CONC FLOOR

TYP BORROWED LIGHT SILL DETAIL

GROUND LEVEL

NOTES:

| SECTION | Symbol | Type

ACOUSTICAL CEILING TILE

096513 RB-1 RB-1 BASE

096816 CPT-1 CPT-1 CARPET

099123 PNT-1 PNT-1 PAINT

099123 PNT-2 PNT-2 PAINT

099123 PNT-3 PNT-3 PAINT

1. ALL FINISH MATERIALS ARE PROVIDED & INSTALLED BY GC, RE: SPECIFICATIONS.

2. PAINTED ACCENT WALL "PT2" & PAINTED (E) WINDOW "PT3" AS INDICATED ON FLOOR PLAN, ALL OTHER WALLS ARE "PT1" TYPICAL

SHERWIN WILLIAMS

SHERWIN WILLIAMS

SHERWIN WILLIAMS

SW 6678

SW 7028

Sunflower

Incredible White

Room Q20-N1220 Room Q20-N1219U Q20-C1009B OPEN OFFICE Q20-C1009 <u> —</u> В || С |– $\left(4\right)\left(5\right)$ CPT1 Q20-C1008 2 LEVEL 01 FLOOR PLAN

DEMOLITION WORK

- 1. PROVIDE AND MAINTAIN DUST PROOF ENCLOSURE AROUND AREA OF DEMOLITION AND CONSTRUCTION TO PREVENT SPREAD OF DUST, FUMES, AND SMOKE TO OTHER PORTIONS OF BUILDING.
- 2. COMPLETELY REMOVE ALL EXISTING ACT CEILING TILES THROUGHOUT THE WORK AREA
- 3. EXISTING GRID TO REMAIN THROUGHOUT THE WORK AREA
- 3. COMPLETELY REMOVE ALL EXISTING FLOOR FINISHES AND WALL BASE THROUGHOUT THE WORK AREA.

4. NO DISTRURBANCE OF LEAD PAINT ON EXISTING EXTERIOR WINDOWS. ANY LEAD ABATEMENT WILL BE IDENTIFIED AND HANDELED AT A LATER

GENERAL NOTES - DEMOLITION

1. DEMOLITION ACTIVITIES ARE NOT TO ADVERSELY IMPACT THE ADJACENT OCCUPIED SPACES, INCLUDING BUT NOT LIMITED TO FLOORS ABOVE OR BELOW. CONSTRUCTION RELATED ACTIVITIES THAT MIGHT AFFECT THIS AREA ARE TO BE COORDINATED WITH THE OWNER AND APPROVED BEFORE ANY WORK IS STARTED.

2. ALL EXISTING ITEMS TO REMAIN - WALLS, DOORS, ETC. - SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF DAMAGE IN A MANNER SUITABLE TO OWNER. CONTRACTOR TO THOROUGHLY PHOTOGRAPH, FOR THE OWNER, THE EXISTING CONDITIONS BEFORE CONSTRUCTION

3. ALL EXISTING FIREPROOFING/FIRE PROTECTION SYSTEMS SERVING OCCUPIED AREAS ARE TO BE PROTECTED DURING DEMOLITION, UON.

4. DRAWINGS ATTEMPT TO SHOW ALL FIXTURES, FURNISHINGS, AND EQUIPMENT TO BE REMOVED. HOWEVER, EXACT CONDITIONS MUST BE FIELD VERIFIED BY CONTRACTOR.

COMMENCES.

5. OWNER SHALL REMOVE ALL DESIRED FURNISHINGS, EQUIPMENT AND ACCESSORIES IN THE CONSTRUCTION AREA PRIOR TO DEMOLITION. UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DOCUMENTS, ALL REMAINING FURNISHINGS, EQUIPMENT ACCESSORY ITEMS AND DEBRIS LEFT IN THE CONSTRUCTION AREA AT THE START OF DEMOLITION ACTIVITIES SHALL BE REMOVED AND PROPERLY DISPOSED OR SALVAGE FOR REUSE BY THE CONTRACTOR (SEE DEMOLITION SCOPE BELOW). THE GENERAL CONTRACTOR TO COORDINATE WITH OWNER THE START OF DEMOLITION ACTIVITIES SO THAT OWNER MAY COORDINATE INTERNALLY TO SALVAGE ALL DESIRED ITEMS.

6. CONTRACTOR SHALL PROTECT EXISTING TERRAZZO FLOORING, WALL SURFACES AND FREIGHT ELEVATOR DOORS, TRACK AND CAB SURFACES IN MAIN PUBLIC ELEVATOR LOBBY DURING ENTIRETY OF DEMOLITION AND MATERIAL REMOVAL ACTIVITIES (BOTH ON 1ST FLOOR AND GROUND FLOOR). FLOORING PROTECTION ALSO NEEDS TO BE INSTALLED FROM FREIGHT ELEVATOR TO CRIO PROJECT AREA, AND FROM FREIGHT ELEVATOR TO EXTERIOR DOOR ACCESS ON GROUND FLOOR WHERE DEMOLITION/WASTE MATERIALS ARE REMOVED.

7. COORDINATE W/ OWNER TO SALVAGE EXISTING, SECURITY & OIT EQUIPMENT BEFORE STARTING DEMOLITION.

8. ALL THE DEMO WASTE AND NEW FLOORING MATERIALS WILL USE THE TRAFFIC PATH OF GROUND FLOOR PLAN IN AND OUT OF THE BUILDING. THE GROUND FLOOR PLAN SHOWS THE AREA IN DASH LINE INDICATED THE SHORT-TERM (<30 MINUTE) PARKING FOR LOADING AND UNLOADING.

9. REMOVAL AND INSTALLATION OF CEILING TILES MUST BE COORDINATED TO MAINTAIN A COMPLIANT CEILING ASSEMBLY INCLUDING FIRE PROTECTION SYSTEMS DURING CONSTRUCTION.

DEMOLITION KEYED NOTES:

EXTENT AND ADDITIONAL INFORMATION.

- DESCRIPTION REMOVE PORTIONS OF WALLS REQUIRED TO INSTALL FULL-HEIGHT GLASS SIDE LITE AND ITS NEW HEADER. PATCH ALL DISTURBED CONSTRUCTION TO MATCH ADJACENT EXISTING AND PAINT ALL WALLS AS INDICATED IN
- THE ROOM FINISH SCHEDULE. COMPLETELY REMOVE CARPET FLOORING INCLUDING SETTING BED. MASTIC, ETC. PATCH/ REPAIR FLOOR/ WALL TO MATCH EXISTING SURFACES OR PREPARE TO RECEIVE NEW FINISH AS INDICATED IN THE ROOM FINISH SCHEDULE.
- COMPLETELY REMOVE EXISTING RUBBER BASE TYPICAL WHERE CARPET REPLACEMENT OCCUR INCLUDING SETTING BED, EXPANSION JOINTS, ETC. PATCH/ REPAIR WALL TO MATCH EXISTING SURFACES AS INDICATED IN THE ROOM FINISH SCHEDULE.

XX

- EXISTING CEILING ASSEMBLY INCLUDING ALL HANGERS AND SUPPORTS, CEILING GRID, GWB SOFFIT, GRILLES, SPEAKERS, SMOKE DETECTORS, DIFFUSER, LIGHT FIXTURE AND SPRINKLER HEAD, ETC TO REMAIN IN
- REMOVE PORTION OF EXISTING DRYWALL FOR ACCESS TO NEW ELECTRICAL OUTLET OR SWITCH. REFER TO ELECTRICAL DRAWINGS FOR

GENERAL NOTES - NEW CONSTRUCTION

1. CONDITIONS AND LOCATION OF EXISTING WALLS TO REMAIN MAY VARY DUE TO FIELD CONDITIONS. THE DRAWINGS REPRESENT THE DESIGN INTENT. ANY VARIATION TO THE DRAWINGS, DUE TO EXISTING CONDITIONS, MUST BE RESOLVED WITH THE ARCHITECT PRIOR TO PROCEEDING WITH CONSTRUCTION OF THE QUESTIONED AREA.

2. WHERE NEW WALL CONSTRUCTION ABUTS EXISTING, WALLS SHALL ALIGN ON BOTH SIDES.

3. PATCH ALL SURFACES TO MATCH EXISTING ADJACENT SURFACE WHERE DISTURBED BY NEW CONSTRUCTION, UNLESS OTHERWISE NOTED.

4. FLATTEN FLOOR THROUGHOUT EXISTING CONCRETE SLAB TO

TOLERANCES REQUIRED FOR FINISH FLOOR INSTALLATION. 5. EXTENTS OF WORK BOUNDARY SHOWN THUS: •••••

6. TYPICAL PAINT @ PERIMETER WALL ARE "PT1" UON. ACCENT PAINT COLOR FOR DRYWALL ARE "PT2" INDICATED ON PLAN.

7. PAINT - PROVIDE ACRYLIC LOW VOC PAINT BY SHERWIN-WILLIAMS WITH 20G/L FOR UNTINTED PAINT. PROVIDE ONE PRIMER COAT AND

CONSTRUCTION KEYED NOTES

TWO FINISH COATS, MINIMUM, AND COMPLETE COVERAGE.

- EXISTING DOOR & HARDWARE TO REMAIN REMOVE PORTION OF EXISTING WALL, PROVIDE NEW HEADER FOR
- FULL-HEIGHT GLASS SIDE LITE
- EXISTING ROOM SIGNAGE TO REMAIN INSTALL NEW CARPET AND PROVIDE 4" RUBBER BASE
- PATCH AND PAINT ALL EXISTING WALLS PER COLORS INDICATED EXISTING GRID, MECHANICAL DIFFUSER, SPRINKLER, AND LIGHT FIXTURES TO REMAIN, REPLACE ACOUSTICAL TILE (ACT-1)

DEMOLITION LEGEND

____ EXISTING TO BE DEMOLISHED

EXISTING WALL TO REMAIN

University of Colorado Anschutz Medical Campus

University of Colorado **Anschutz Medical** Campus

Fitzsimons Building **CRIO** Renovation

CANVONDESIGN

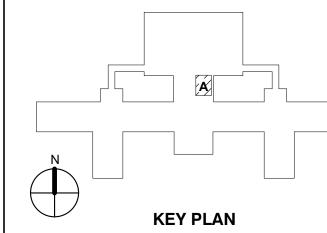
Denver, CO 80205 P: 303.893.1990

www.cannondesign.com

RMH Group, Inc. Mechanical / electrical & Plumbing Engineers 12600 West Colfax Avenue, Suite A-400 Lakewood, Colorado 80215 303.239.0909

Rev. Description

100% CONSTRUCTION DOCUMENT



FLOOR PLAN / **ELEVATION / DETAILS**

Drawing Title:

Project No.: 006734.00 Checked by: Checker

REMOTE LOCATOR

PATIENT MONITOR

PULL STATION/TELEPHONE JACK

DELUGE VALVE

COPYRIGHT, THE RMH GROUP, INC. 202

REV: 06/29/2020

WIRE GUARD

WP WEATHERPROOF
XFMR TRANSFORMER
XP EXPLOSION PROOF



University of Colorado Anschutz Medical Campus

Fitzsimons Building CRIO Renovation

CANVONDESIGN

2800 Walnut Street, Suite 300

Denver, CO 80205

P: 303.893.1990

www.cannondesign.com

RMH Group, Inc.

Mechanical / electrical & Plumbing Engineers

12600 West Colfax Avenue, Suite A-400

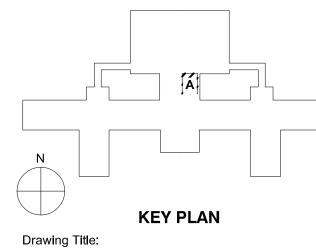
Lakewood, Colorado 80215

303.239.0909

03/22/2022-

100% CONSTRUCTION DOCUMENTS __ 22 MAR 2022

Rev. Description __ Date



ELECTRICAL LEGEND

Project No.: 006734.00 Checked by:

E0000

© 2019 The Cannon Corporation
All rights reserved. No part of this document may
be reproduced or utilized in any form, without prior
written authorization by The Cannon Corporation.

DIVISION 26 SECTION 26 00 10S COMMON WORK RESULTS FOR ELECTRICAL ELECTRICAL

- 1.1 IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE AND WORKABLE ELECTRICAL INSTALLATION IS PROVIDED FOR ALL THE ELECTRICAL PRODUCTS DESCRIBED, OR SHOWN AS BEING PART OF THIS CONTRACT. PROVIDE ALL MATERIALS AND LABOR TO FURNISH AND INSTALL ALL APPARATUS, MATERIALS, EQUIPMENT AND APPURTENANCES, IN A FASHION COMPLYING WITH ALL APPLICABLE CODES, INCLUDING ITEMS REQUIRED BUT NOT NORMALLY SHOWN, SUCH AS LAMPS, COUPLINGS, HANGERS, BRACKETS, CLAMPS, BOXES, CONNECTORS, HARDWARE, MISCELLANEOUS IRON AND STEEL, WELDING, COMMISSIONING AND TESTING. APPLY FOR AND PAY FOR ALL PERMITS, FEES, LICENSES AND INSPECTIONS FOR THIS DIVISION OF WORK.
- 1.2 PROVIDE ALL ELECTRICAL EQUIPMENT AND MATERIAL IN ACCORDANCE WITH REQUIREMENTS OF LOCAL BUILDING CODES. GOVERNING AUTHORITIES, AND AS SPECIFIED, WHERE A CONFLICT EXISTS BETWEEN ANY CODES AND THE WORK SHOWN WITHIN THESE DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- 1.3 COMPLY WITH THE REQUIREMENTS OF THE GENERAL CONDITIONS, SUPPLEMENTAL GENERAL CONDITIONS OF THE PROJECT SPECIFICATIONS, ALL CONTRACT DOCUMENTS, AND ANY BASE BUILDING SPECIFICATIONS AND BUILDING CRITERIA INCLUDED IN THIS PROJECT.
- A. INSTRUCTIONS SUCH AS "PROVIDE" SHALL MEAN THE SAME AS THOUGH THE WORDS "THE CONTRACTOR SHALL" PRECEDE EACH SUCH
- B. "PROVIDE" SHALL MEAN "FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."
- 1.5 COORDINATE AND SCHEDULE THE PROGRESS OF ELECTRICAL WORK TO CONFORM TO THE OWNER'S SCHEDULE AND THE PROGRESS OF THE WORK OF OTHER TRADES. FOR CONNECTIONS TO MECHANICAL EQUIPMENT AND THE ASSOCIATED CONDUIT AND WIRE REQUIRED BUT NOT SHOWN ON THESE DOCUMENTS, REFER TO THE MECHANICAL AND PLUMBING DOCUMENTS. COORDINATE ALL SUCH CONNECTIONS WITH THE AFFECTED TRADES.
- 1.6 PROVIDE A ONE YEAR WARRANTY ON ALL MATERIAL, EQUIPMENT, APPURTENANCES, AND INSTALLATION, FROM THE DATE OF ACCEPTANCE. IF, AFTER HAVING RECEIVED NOTICE FROM THE OWNER, DEFECTS ARE NOT CORRECTED WITHIN A REASONABLE TIME, THE OWNER WILL HAVE THE RIGHT TO SECURE THE NECESSARY WORK FROM ANOTHER PARTY AND TO BILL THE CONTRACTOR FOR THE COST OF SUCH WORK.
- 1.7 PROVIDE TEMPORARY LIGHTING AND POWER AS REQUIRED.
- 1.8 PERFORM THE WORK IN COOPERATION WITH THE AREA OCCUPANTS TO MINIMIZE INTERFERENCE WITH THEIR ACTIVITIES. WORK CAN BE PERFORMED DURING NORMAL WORKING HOURS. WHEN REQUIRED BY THE OWNER, PERFORM THE WORK DURING AFTERHOURS. SCHEDULE WORK A MINIMUM OF ONE WEEK IN ADVANCE.
- 1.9 VISIT THE PROJECT SITE BEFORE SUBMITTING A BID: NO EXTRAS WILL BE ALLOWED FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS. THESE DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. DATA PRESENTED ON THIS DRAWING IS AS ACCURATE AS CAN BE DETERMINED, BUT ACCURACY IS NOT GUARANTEED. THE ENGINEER IS NEITHER RESPONSIBLE FOR ACCURACY NOR ERRORS NOR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO THESE DOCUMENTS. FIELD VERIFICATION OF ALL AFFECTED COMPONENTS
- 1.10 THESE DRAWINGS ARE DIAGRAMMATIC IN CHARACTER AND DO NOT SHOW MATERIALS FOR A COMPLETE INSTALLATION. THESE DOCUMENTS INDICATE DESIRED LOCATIONS AND ARRANGEMENT OF ELECTRICAL COMPONENTS, CONDUIT RUNS, OUTLETS, AND EQUIPMENT; FOLLOW LOCATIONS AS CLOSELY AS POSSIBLE. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS, AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. PROPER JUDGEMENT MUST BE EXERCISED IN EXECUTING WORK TO SECURE THE BEST POSSIBLE INSTALLATION IN THE AVAILABLE SPACE AND TO OVERCOME LOCAL DIFFICULTIES DUE TO SPACE LIMITATIONS OR INTERFERENCE WITH STRUCTURAL OR ARCHITECTURAL CONDITIONS. PROVIDE ALL DEVIATIONS FROM THESE DOCUMENTS REQUIRED TO CONFORM TO THE STRUCTURE OR TO FIT THE INSTALLED WORK OF OTHER TRADES AND CONTRACTORS WITHOUT ADDITIONAL COST TO THE OWNER.
- A. SUBMIT SHOP DRAWINGS FOR ACCEPTANCE FOR LUMINAIRES, SWITCHBOARDS, PANELBOARDS, LIGHTING CONTROLS, DEVICES, AND ETC. AT COMPLETION OF WORK, DELIVER TO ARCHITECT/OWNER COMPLETED PROJECT RECORD DOCUMENTS MARKED WITH FIELD CHANGES; SUBMIT ALL MANUFACTURER'S DATA, HANDBOOKS, SCHEMATICS, ORDERING INFORMATION FOR ALL COMPONENTS.
- B. REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. NOTE CORRECTIONS AND FIELD DIMENSIONS. MARK WITH APPROVAL STAMP BEFORE SUBMITTING TO THE ARCHITECT
- AND CONSTRUCTION MANAGER. C. STAMP EACH SUBMITTAL WITH A UNIFORM, APPROVAL STAMP. INCLUDE PROJECT NAME AND LOCATION, SUBMITTAL NUMBER, SPECIFICATION SECTION TITLE AND NUMBER, NAME OF REVIEWER, DATE OF CONTRACTOR'S APPROVAL, AND STATEMENT CERTIFYING THAT SUBMITTAL HAS BEEN REVIEWED, CHECKED, AND APPROVED FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- D. COORDINATE PREPARATION AND PROCESSING OF SUBMITTALS WITH PERFORMANCE OF CONSTRUCTION ACTIVITIES. COORDINATE EACH SUBMITTAL WITH FABRICATION, PURCHASING, TESTING, DELIVERY, OTHER SUBMITTALS, AND RELATED ACTIVITIES THAT REQUIRE SEQUENTIAL ACTIVITY. COORDINATE TRANSMITTAL OF DIFFERENT TYPES OF SUBMITTALS FOR RELATED PARTS OF THE WORK SO PROCESSING WILL NOT BE DELAYED BECAUSE OF NEED TO REVIEW SUBMITTALS CONCURRENTLY FOR COORDINATION. ARCHITECT AND CONSTRUCTION MANAGER RESERVE THE RIGHT TO WITHHOLD ACTION ON A SUBMITTAL REQUIRING COORDINATION WITH OTHER SUBMITTALS UNTIL RELATED SUBMITTALS ARE RECEIVED.

1.13 RECORD DOCUMENTS

- A. MAKE CAREFUL REVIEW AND INVESTIGATION TO DOCUMENT THE EXISTING BRANCH CIRCUIT LAYOUT AND OUTLET LOCATIONS FOR THE FOLLOWING SYSTEMS: LIGHTING, RECEPTACLES, MOTORS, EMERGENCY SYSTEMS, ACCESS CONTROLS (POWER ONLY), SECURITY SURVEILLANCE SYSTEMS (POWER ONLY), AND THE BRANCH CIRCUITS PROVIDING POWER TO ANY OTHER COMPONENTS IN THE REQUIRED
- B. INCLUDE DOCUMENTATION OF OUTLET LOCATION AND TYPE, BRANCH CIRCUIT, CONDUCTOR AND RACEWAY SIZE. EXECUTE DOCUMENTATION UPON DOCUMENTS PROVIDED BY THE ENGINEER, WHICH WILL INDICATE THE BEST KNOWN "AS-BUILT" CONDITIONS OF THE LIMITS OF WORK. MAKE DOCUMENTATION LEGIBLE, COMPLETE, WITH A DATE AND SIGNATURE OF THE RESPONSIBLE INDIVIDUAL DESIGNATED BY THE
- C. PERFORM THE WORK USING CIRCUIT TRACING DEVICES THAT DO NOT REQUIRE ANY INTERRUPTIONS OR INTERFERENCE WITH THE POWER ON THE SYSTEM.
- D. DOCUMENT ALL PANEL SCHEDULES ON AN APPROVED FORM. AFTER REVIEW AND AUTHORIZATION BY THE ENGINEER, PROVIDE TYPEWRITTEN PANEL DIRECTORIES FOR ALL PANELBOARDS ON THE INDICATED FLOORS. FOR EACH PANELBOARD SCHEDULE INDICATE THE FOLLOWING: FEEDER SIZE. MATERIAL, ORIGIN AND CONDUIT SIZE; BUS SIZE AND MATERIAL; MAIN BREAKER SIZE; PANEL TYPE; BOLT-ON OR PLUG-IN TYPE BREAKERS; SHORT CIRCUIT RATING; BREAKER SIZES AND POLE DESIGNATION; QUANTITY OF BREAKER SPACE.

- 2.1 MATERIALS SHALL BE NEW AND IN PERFECT CONDITION; ALL MATERIALS FOR SIMILAR USES SHALL BE OF THE SAME TYPE, MATERIAL, AND MANUFACTURER. MATERIALS SHALL BE LISTED BY A RECOGNIZED NRTL OR BEAR A UL LABEL WHERE SUBJECT TO SUCH APPROVAL AND COMPLY WITH ANSI, IEEE AND NEMA STANDARDS. MAKE PROVISIONS FOR SAFE DELIVERY AND SECURE STORAGE OF ALL MATERIALS.
- 2.2 CONNECTORS AND FITTINGS SHALL BE MANUFACTURED BY APPLETON, STEEL CITY, T & B, TOMIC, RACO, OR O.Z./GEDNEY.
- 2.3 CONDUITS SHALL BE RIGID STEEL. INTERMEDIATE METAL CONDUIT. ELECTRICAL METALLIC TUBING. FLEXIBLE METALLIC CONDUIT. LIQUID TIGHT FLEXIBLE CONDUIT, NON-METALLIC, REINFORCED THERMOSETTING RESIN CONDUIT, AND RIGID PVC SCHEDULE 40. UNLESS SPECIFICALLY SHOWN TO BE LARGER, ALL CONDUITS SHALL BE SIZED PER THE NEC.
- 2.4 SURFACE RACEWAYS SHALL BE WIREMOLD OR APPROVED EQUAL. ALL WIREMOLD G-3000, G-4000, G-6000, RACEWAYS TO INCLUDE DIVIDER TO SEPARATE POWER FROM TELECOM AND DATA. PROVIDE EXPANSION JOINTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. 2.5 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
- A. CONDUCTORS SHALL BE MANUFACTURED BY ALPHA, CAROL BRAND, COLONIAL, TRIANGLE, ENCORE, GENERAL CABLE, OKONITE, SENATOR, OR
- B. CONDUCTORS SHALL BE COPPER, 600 V, TYPE THW, THWN, OR THHN. CONDUCTORS #10 AND SMALLER SHALL BE SOLID; #8 GAUGE AND LARGER SHALL BE STRANDED. MINIMUM WIRE SIZE SHALL BE #12; EXCEPT USE #14 FOR CONTROL WIRING. CONDUCTORS #1/O AND LARGER SHALL BE THW, THWN, XHHW, OR RHW-USE. THE USE OF ALUMINUM CONDUCTORS IS PROHIBITED.
- C. CONDUCTORS #1 AND SMALLER SHALL HAVE A MINIMUM 60°C RATING. FOR WET LOCATIONS, AND WHERE DERATED DUE TO HIGH AMBIENT TEMPERATURE, PROVIDE CONDUCTORS SUITABLE FOR WET LOCATIONS WITH MINIMUM 90°C RATING. D. SIZE AND INSTALL ALL CONDUCTORS PER THE NEC.
- E. INCREASE CONDUCTOR SIZE AS NECESSARY TO LIMIT BRANCH CIRCUIT VOLTAGE DROP TO 3%; AND SERVICE/FEEDER VOLTAGE DROP TO

F. WIRE CONNECTIONS:

- 1. PROVIDE CONNECTORS, LUGS, AND DEVICES RATED FOR 75°C.
- 2. MAKE CONNECTIONS FOR WIRE #8 AWG AND SMALLER WITH TWIST—ON WIRE CONNECTORS. 3. MAKE CONNECTIONS FOR WIRE #6 AWG AND LARGER WITH PROPERLY SIZED SOLDERLESS LUGS OR CONNECTORS.

2.6 GROUNDING AND BONDING

- G. GROUNDING CONDUCTOR MATERIAL: COPPER.
- H. EQUIPMENT GROUNDING CONDUCTORS: INSULATED WITH GREEN-COLORED INSULATION PER COLOR CODING OF PHASE CONDUCTORS
- I. GROUNDING ELECTRODE CONDUCTORS: STRANDED CABLE. J. UNDERGROUND CONDUCTORS: BARE, TINNED, STRANDED, UNLESS OTHERWISE INDICATED.

2.7 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

- A. MANUFACTURERS: BOXES SHALL BE MANUFACTURED BY APPLETON, RACO, STEEL CITY, OR THOMAS & BETTS CO.
- 1. FLUSH-MOUNTED OUTLET BOXES SHALL BE GALVANIZED OR ZINC COATED, PRESSED STEEL OUTLET BOXES. BOXES SHALL BE MINIMUM 4-INCHES SQUARE AND OF DEPTH REQUIRED; 1-1/2 INCHES MINIMUM BOX DEPTH. PROVIDE OUTLET BOXES OF PROPER TYPE AND DESIGN FOR THE PARTICULAR LUMINAIRE OR DEVICE TO BE INSTALLED.
- 2. PROVIDE SINGLE OR DOUBLE GANG MUD RING, AS REQUIRED BY THE DEVICE. 3. PROVIDE 3/8-INCHES NO-BOLT LUMINAIRE STUDS.
- C. SURFACE—MOUNTED BOXES SHALL BE CAST METAL, MULTI—GANG AND OF DEPTH REQUIRED.
- D. ALL PULL BOXES SHALL BE CODE GAUGE METAL, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- E. DATA/NETWORK: EMPTY CONDUIT SYSTEM WITH PULL WIRE AND BACK BOXES. BACK BOXES SHALL BE 4-INCH SQUARE GALVANIZED PRESSED STEEL WITH PLASTER RING, MINIMUM 2-1/8 INCHES DEEP. MATCH FINISH OF OTHER PLATES. 2.8 IDENTIFICATION

A. PROVIDE ALL LABELS REQUIRED BY THE NEC.

- B. COLOR CODING OF PHASE CONDUCTORS:
- 1. CONDUCTORS #2 AND SMALLER SHALL BE FACTORY COLOR CODED. CONDUCTORS #1 AND LARGER MAY BE COLOR CODED BY FIELD PAINTING OR COLOR TAPING A 6-INCH LENGTH OF EXPOSED END.
- 2. PROVIDE THE FOLLOWING COLOR CODING FOR THE A-B-C-N-G-IG PHASE SEQUENCE:
- a. 120/240V, 1-PHASE BLACK, RED, WHITE, GREEN b. 120/208V, 3-PHASE BLACK, RED, BLUE, WHITE, GREEN, GREEN/WHITE
- c. 277/480V, 3-PHASE BROWN, ORANGE, YELLOW, GRAY, GREEN/GRAY, GREEN/YELLOW d. SWITCH TRAVELERS PINK, PURPLE, AND TURQUOISE
- 3. WIRING FOR CONTROL SYSTEMS SHALL BE COLOR CODED IN ACCORDANCE WITH THE WIRING DIAGRAMS FURNISHED WITH THE EQUIPMENT.
- C. PROVIDE 3/8-INCHES TAPE LABELS ON ALL RECEPTACLES AND SWITCHES THAT INDICATES PANELBOARD AND CIRCUIT NUMBER. LABELS
- SHALL BE: 1. NORMAL BRANCH BLACK BACKGROUND WITH WHITE LETTERING
- 2. EQUIPMENT BRANCH ORANGE BACKGROUND WITH BLACK LETTERING
- 3. LIFE SAFETY RED BACKGROUND WITH BLACK LETTERING 4. STANDBY YELLOW BACKGROUND WITH BLACK LETTERING
- D. PROVIDE UPDATED PANEL DIRECTORIES FOR ALL PANELBOARDS AFFECTED BY CONSTRUCTION. TYPE PANEL DIRECTORIES IN ACCORDANCE WITH THE DRAWING PANEL SCHEDULES, INCORPORATE CHANGES THAT WERE MADE IN THE FIELD. LIST WHERE PANEL IS FED FROM; I.E.,
- E. PROVIDE LABELING FOR RACEWAYS AND CABLES.
- 1. POWER-CIRCUIT IDENTIFICATION: METAL TAGS OR ALUMINUM, WRAPAROUND MARKER BANDS FOR CABLES, FEEDERS, AND POWER CIRCUITS IN VAULTS, PULL AND JUNCTION BOXES, MANHOLES, AND SWITCHBOARD ROOMS. 2. CONDUCTORS: INDICATE SOURCE AND CIRCUIT NUMBERS.
- F. MULTIPLE POWER OR LIGHTING CIRCUITS IN SAME ENCLOSURE: IDENTIFY EACH CONDUCTOR WITH SOURCE, VOLTAGE, CIRCUIT NUMBER, AND PHASE. USE COLOR-CODING TO IDENTIFY CIRCUITS' VOLTAGE AND PHASE.

- C. DEVICE PLATES SHALL BE, SCREW-ON, BRUSHED STAINLESS STEEL. EMERGENCY POWER DEVICES SHALL BE RED COLOR. ISOLATED GROUND DEVICES SHALL BE ORANGE COLOR.
- D. WALL PLATES IN UNFINISHED SPACES SHALL BE BRUSHED STAINLESS STEEL.
- E. DEVICES SHALL BE AS SPECIFIED OR APPROVED EQUAL BY ARROW HART, BRYANT, GENERAL ELECTRIC, HUBBELL, LEVITON, PASS &
- SEYMOUR, OR SQUARE-D. 1. A-C QUIET OPERATING TYPE SWITCHES, THAT ARE NOT INTEGRAL TO LIGHTING CONTROL SYSTEM, SHALL BE: 120/277V, 20A HUBBELL
- HBL1221 SERIES, OR APPROVED EQUAL. 2. MOMENTARY-CONTACT LIGHT SWITCHES, THAT ARE NOT INTEGRAL TO LIGHTING CONTROL SYSTEM, SHALL BE 120/277V, 20 AMP, SPDT,
- NORMALLY-OPEN, CENTER-OFF, THREE-POSITION, HUBBELL CATALOG NO. HBL1557. 3. SPECIFICATION GRADE RECEPTACLES: 20A HUBBELL HBL5362 SERIES. WHERE A SINGLE DEVICE IS INSTALLED ON A BRANCH CIRCUIT THE
- DEVICE RATING SHALL MATCH THE CIRCUIT BREAKER RATING. 4. SPECIAL PURPOSE RECEPTACLES SHALL BE SPECIFICATION GRADE, STANDARD COLOR, AND OF THE APPROPRIATE CODE AND NEMA
- CONFIGURATION TO MATCH THE SUPPLY CIRCUIT AND LOAD INVOLVED.
- 5. HOSPITAL GRADE RECEPTACLES: 20A HUBBELL HBL8300 SERIES, OR APPROVED EQUAL. 6. GFCI RECEPTACLES: 20A HUBBELL GF20 SERIES.
- PART 3 INSTALLATION

3.1 GENERAL

- A. PROVIDE ALL CORE DRILLING, CHANNELING, CUTTING, PATCHING, AND SLEEVES REQUIRED FOR INSTALLATION OF ELECTRICAL EQUIPMENT. SEAL HOLES, FIREPROOF WHERE NECESSARY, AND REFINISH ALL WORK TO ORIGINAL CONDITION WHERE DAMAGED BY ELECTRICAL WORK.
- B. PROVIDE HANGERS AND SUPPORTS FOR EQUIPMENT, RACEWAYS, AND CABLES, INCLUDING WEIGHT OF WIRE IN RACEWAYS.
- C. USE STEEL MATERIAL FOR DRY LOCATIONS.
- D. PAINT ALL EXPOSED CONDUIT, SUPPORTS, BOXES, ETC., TO MATCH SURROUNDING CEILING AND WALLS.
- E. CLEAN THE AREA AFTER WORK IS COMPLETED, AND AT THE END OF EACH WORK DAY.
- F. DO NOT USE CEILING GRID SUPPORT WIRES TO SUPPORT CONDUIT. G. PRESERVE AND PROTECT USABLE CONDITION OF ALL EQUIPMENT TO BE REMOVED AND REINSTALLED. REPLACE ANY EQUIPMENT DAMAGED
- AS A PART OF THIS WORK. H. PROVIDE ALL CUTTING AND PATCHING NECESSARY FOR THE WORK. PATCH AND PAINT DAMAGED SURFACES TO MATCH EXISTING CONDITIONS DUE TO DEMOLITION AND DAMAGE CAUSED DURING WORK.

3.2 CONDUIT LOCATIONS:

- A. PROVIDE ELECTRICAL METALLIC TUBING (EMT) FOR ALL DRY, ABOVE GRADE OR ABOVE FLOOR APPLICATIONS IN ACCORDANCE WITH THE
- B. PROVIDE FLEXIBLE METAL CONDUIT FOR CONNECTIONS TO LAY-IN TYPE LUMINAIRES, MOTOR AND EQUIPMENT CONNECTIONS IN DRY CONDITIONS, AND IN ENVIRONMENTAL AIR PLENUMS.

- A. ROUTE ALL CONDUIT PARALLEL OR PERPENDICULAR WITH THE BUILDING WALLS. SUPPORT CONDUIT AS REQUIRED BY THE NEC. INSTALL GROUPED CONDUIT USING SWEEPS STRUCK FROM THE SAME RADIUS. PERFORM WORK BY SKILLED TRADESMEN USING THE BEST STANDARD PRACTICES OF THE TRADE.
- B. CONCEAL ALL CONDUITS IN FINISHED AREAS. MINIMUM CONDUIT SIZE 3/4 INCHES.
- C. UNLESS INDICATED OTHERWISE, ENCLOSE ALL CONDUCTORS IN CONDUIT SIZED IN ACCORDANCE WITH THE NEC.
- D. PROVIDE SUPPORTS AND HANGARS FOR A GOOD AND SUBSTANTIAL INSTALLATION. SUPPORT CONDUIT AND RACEWAY IN ACCORDANCE WITH THE NEC. SUPPORT RACEWAYS, LUMINAIRES, CABINETS, BOXES, ETC., ON APPROVED TYPES OF TRAPEZE HANGERS OR WALL BRACKETS. PROVIDE MINIMUM 3/8-INCH STEEL HANGER RODS SECURELY FASTENED TO THE BUILDING STRUCTURE FOR ALL TRAPEZES. PROVIDE FASTENERS SUCH AS "CADDY CLIPS" OR SIMILAR TYPE OF OTHER MANUFACTURER. DO NOT SUSPEND FROM MECHANICAL PIPING OR DUCTWORK OR FROM CEILING SUSPENSION WIRE. PERFORATED PLUMBER'S STRAPS OR WIRE ARE NOT PERMITTED.
- E. MAKE ALL BENDS USING AN APPROVED BENDING TOOL AND REAM ALL CUTS TO REMOVE BURRS. CLEAN AND DRY ALL CONDUITS PRIOR TO PULLING CONDUCTORS.
- F. SEAL ALL FIREWALL AND FLOOR PENETRATIONS WITH APPROPRIATE SEALANT AT BOTH SIDES AFTER INSTALLATION OF CONDUITS.
- G. USE STEEL COMPRESSION FITTINGS THROUGHOUT; DIE CAST ZINC FITTINGS ARE PROHIBITED. H. IN EACH CONDUIT WITHOUT CONDUCTORS, PROVIDE A NYLON PULLING CORD WITH A TAG IDENTIFYING THE LOCATION OF THE OPPOSITE
- I. PAINT ALL EXPOSED CONDUIT, SUPPORTS, BOXES, ETC. TO MATCH SURROUNDING CEILING AND WALLS.
- J. PROVIDE EXPANSION TYPE FITTINGS FOR ALL CONDUITS WHICH CROSS EXPANSION JOINTS.
- K. PROVIDE BUSHING ON ALL CONDUITS STUBBED ABOVE THE CEILING. L. PROVIDE ALL REQUIRED PULL BOXES AND JUNCTION BOXES. SIZE BOXES IN ACCORDANCE WITH THE NEC.
- M. AVOID PROXIMITY OF CONDUIT TO SOURCES OF HEAT SUCH AS FLUES AND HOT WATER LINES.

3.4 CONDUCTORS

- A. ROUTE ALL CONDUCTORS THROUGH RACEWAY REGARDLESS OF VOLTAGE APPLICATION, UNLESS SPECIFIED OTHERWISE.
- B. UNLESS OTHERWISE INDICATED, ALL WIRING FOR BRANCH CIRCUITS SHALL BE #12 AWG PROTECTED BY 20A CIRCUIT BREAKERS. TO ACCOUNT FOR VOLTAGE DROP, INCREASE CONDUCTOR SIZE FOR ALL 120V CIRCUITS OVER 75 FEET, AND ALL 277V CIRCUITS OVER 150 FEET. PROVIDE UNIFORM CONDUCTOR SIZE FOR THE ENTIRE LENGTH OF THE CIRCUIT UNLESS NOTED OTHERWISE. HOMERUNS THAT INDICATE UPGRADING CIRCUIT CONDUCTORS FOR VOLTAGE DROP, E.G., #10 AWG WIRE ON 20A CIRCUIT, SHALL HAVE THE INDICATED CONDUCTOR SIZE CARRIED THROUGHOUT THE CIRCUIT TO ALL JUNCTION BOXES UP TO AND INCLUDING THE J-BOX NEAREST THE LAST
- C. DO NOT SPLICE FEEDERS OR DEDICATED BRANCH CIRCUITS UNLESS OTHERWISE INDICATED. INSTALL ALL WIRE CONTINUOUS FROM OUTLET TO OUTLET AND TERMINAL TO TERMINAL. PROVIDE SPLICES IN CABLES WHEN REQUIRED UTILIZING SOLDERLESS CONNECTORS IN HANDHOLES, PULL BOXES, OR JUNCTION BOXES. MAKE UP SPLICES IN OUTLET BOXES WITH 8 INCHES OF CORRECTLY COLOR-CODED TAILS LEFT IN BOX. MAKE SPLICES IN WIRES SIZE #8 AWG AND SMALLER WITH INSULATED SPRING TYPE WIRE CONNECTORS, "SCOTCHLOK." MAKE SPLICES IN LARGER WIRE AND CABLES WITH INDENT CONNECTORS. ALL INSULATING TAPE USED ON CIRCUITS OF
- D. MAKE CONNECTIONS, SPLICES, TAPS AND JOINTS WITH SOLDERLESS DEVICES, MECHANICALLY AND ELECTRICALLY SECURE. PROVIDE ONLY APPROVED CONNECTORS IN WET OR DAMP AREAS.
- E. INSTALL COMPRESSION CONNECTORS WITH HYDRAULIC DIE, EMBOSSING DIE CODE INTO CONNECTOR. CONNECT TO BUS WITH BELLEVILLE TYPE WASHERS FOR POSITIVE PRESSURE OVER COMPLETE CONTACT AREA. INSULATE WITH 600V HEAT SHRINK HEAVY-WALL CABLE
- F. INSTALL WIRING FOR CONTROL SYSTEMS IN CONJUNCTION WITH MECHANICAL AND MISCELLANEOUS EQUIPMENT.

600V AND LESS SHALL BE 3-M #88 OR PLYMOUTH SLIPKNOT GREY.

- G. MAKE ALL GROUND, NEUTRAL, AND LINE CONNECTIONS TO RECEPTACLE AND WIRING DEVICE TERMINALS BY MEANS OF THE SIDE TERMINAL SCREW CONNECTIONS. DO NOT TERMINATE BRANCH CONDUCTORS TO THE DEVICE WITH BACKSIDE "PUSH-IN" CONNECTORS. PROVIDE GROUND JUMPER FROM OUTLET BOX TO GROUND TERMINAL OF RECEPTACLE. 3.5 GROUNDING
- A. PROVIDE ALL BONDING JUMPERS AND WIRE, GROUNDING BUSHINGS, CLAMPS, FOR COMPLETE GROUNDING. INSTALL COMPLETE GROUNDING SYSTEM IN ACCORDANCE WITH NEC AND AS INDICATED.
- B. BOND CONDUIT SYSTEMS, SUPPORTS, CABINETS, EQUIPMENT, METALLIC CABLE TRAYS, INTERIOR METAL PIPING SYSTEMS, VENT STACKS, AND METAL AIR DUCTS TO EQUIPMENT GROUNDING CONDUCTORS OF ASSOCIATED PUMPS, FANS, BLOWERS, ELECTRIC HEATERS, AND AIR CLEANERS. BOND ALL HEATING AND VENTILATION DUCT RUNS CONTAINING FLEXIBLE JOINTS IN A MINIMUM OF TWO PLACES WITH BRAIDED-TYPE BONDING STRAPS AND GROUNDING LUGS. PROVIDE CONNECTIONS WITH A MACHINE SCREW, HEX NUT, AND LOCK
- C. GROUND CONNECTIONS SHALL HAVE CLEAN CONTACT SURFACES, TINNED AND SWEATED WHILE BOLTING.
- D. INSTALL ALL GROUND CONDUCTORS IN CONDUIT. PROVIDE A SEPARATE INSULATED GROUND CONDUCTOR IN ALL FEEDERS AND BRANCH
- E. PROVIDE A GROUND BUS IN ALL DISTRIBUTION EQUIPMENT, AND BRANCH-CIRCUIT PANELBOARDS.
- F. PROVIDE EXOTHERMIC WELDS, IF REQUIRED, BY CADWELD, OR THERMOWELD[, OR] APPROVED EQUAL).
- G. ROUTE GROUNDING CONDUCTORS TO PERMIT, AS FAR AS PRACTICABLE, THE SHORTEST AND MOST DIRECT PATH TO THE GROUND GRID
- H. PROVIDE ALL GROUND CONNECTIONS TO EQUIPMENT OR STRUCTURE WITH SOLDERLESS CONNECTORS BOLTED TO THE EQUIPMENT OR STRUCTURE. UNLESS INDICATED OTHERWISE, EXOTHERMICALLY WELD ALL GROUNDING TAPS AND CONNECTIONS TO COLUMNS AND REINFORCING STEEL. BRAZE CONNECTIONS TO WIRE MESH, AND METAL DUCTS.
- I. IN ADDITION TO THE EQUIPMENT GROUND CONDUCTOR, GROUND ALL MOTOR FEEDERS AND MAIN FEEDERS THROUGH THE CONDUIT SYSTEM WITH A GROUNDING BUSHING AT EACH END. DIRECTLY BOND THE FRAMES OF STATIONARY MOTORS TO LOCAL STEEL OR THE LOCAL

GROUND GRID.

- A. LOCATE OUTLET BOXES SO THAT TRANSMISSION OF SOUND THROUGH COMMON WALLS WILL NOT OCCUR.
- B. EXCEPT WHERE INDICATED OTHERWISE, MOUNT DEVICES IN ACCORDANCE WITH THE FOLLOWING:
- 1. CONVENIENCE RECEPTACLES: LONG AXIS VERTICALLY 18-INCHES AFF
- 2. LIGHT SWITCHES: 44-INCHES AFF 3. STANDARD VOICE/DATA: LONG AXIS VERTICALLY 18-INCHES AFF
- 4. VOICE/DATA OUTLET MARKED AS WALL: 44-INCHES AFF
- C. PROVIDE A GANG TYPE BOX WITH A GANG TYPE COVER WHERE TWO OR MORE SIMILAR TYPE DEVICES OCCUR ADJACENT TO EACH OTHER. WHERE DIFFERENT TYPE DEVICES OCCUR ADJACENT TO EACH OTHER, SPACE OUTLET BOXES SO THAT FINISH PLATES WILL BE SPACED
- D. MOUNT TELEPHONE OUTLETS AT THE SAME HEIGHT AS ADJACENT RECEPTACLE OUTLETS, UNLESS NOTED OTHERWISE. E. DO NOT USE "BACK-TO-BACK" OUTLETS IN THE SAME WALL, OR "THRU-WALL" TYPE BOXES. PROVIDE (MINIMUM) 12-INCH-LONG NIPPLE
- TO OFFSET ALL OUTLETS SHOWN ON OPPOSITE SIDES OF A COMMON WALL TO MINIMIZE SOUND TRANSMISSION. F. PROVIDE SUITABLE BARRIERS TO SEPARATE SWITCH TERMINALS EXCEEDING 300V.
- G. PROVIDE PULL BOXES IN RACEWAY RUNS IN ACCESSIBLE LOCATIONS, AS REQUIRED BY NEC AND JOB CONDITIONS.
- H. RIGIDLY INSTALL PULL BOXES TO PROPERLY COMPLETE THE SYSTEMS, AND IN THE LOCATIONS AS SHOWN ON THE DRAWINGS. IF REQUIRED BY THE OWNER, AHJ, OR ENGINEER, OPEN BOX COVERS FOR INSPECTION.
- END OF SECTION 26 00 10S

University of Colorado Anschutz Medical Campus

University of Colorado **Anschutz Medica**

Fitzsimons Building **CRIO** Renovation



www.cannondesign.com

RMH Group, Inc. Mechanical / electrical & Plumbing Engineers 12600 West Colfax Avenue, Suite A-400 Lakewood, Colorado 80215 303.239.0909

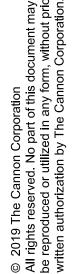


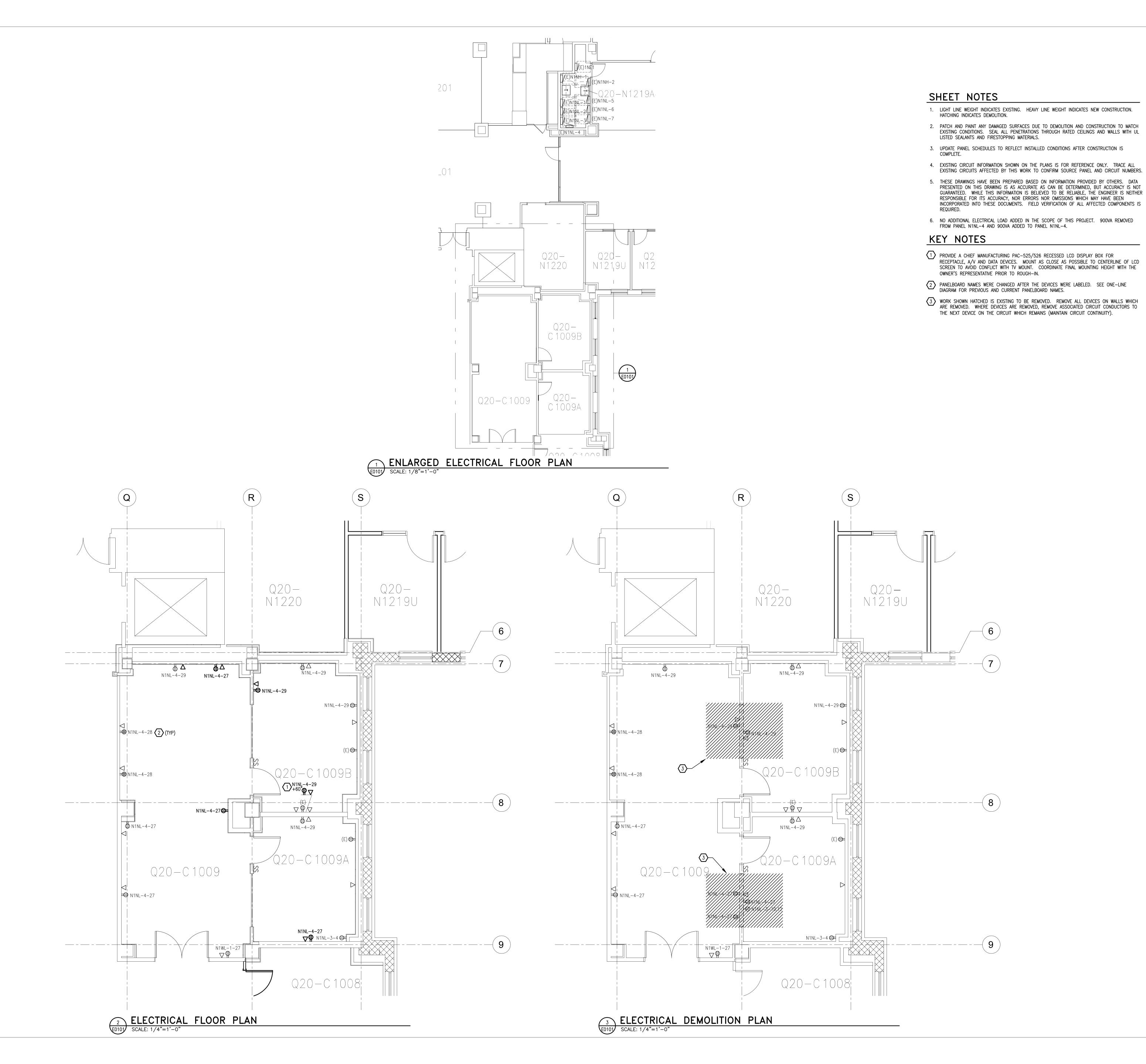
100% CONSTRUCTION DOCUMENTS 22 MAR 2022

ELECTRICAL SPECIFICATIONS

Project No.: 006734.00 Checked by: Checker

Drawing Title:





© 2019 The Cannon Corporation
All rights reserved. No part of this document may
be reproduced or utilized in any form, without prior
written authorization by The Cannon Corporation.
11/15/2021 10:25:27 AM



University of Colorado Anschutz Medical Campus

Fitzsimons Building CRIO Renovation

CANVONDESIGN
2800 Walnut Street, Suite 300
Denver, CO 80205

P: 303.893.1990

RMH Group, Inc.

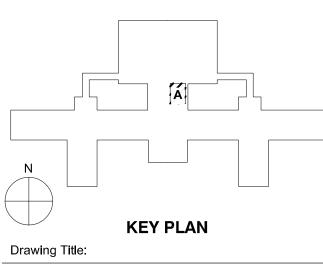
Mechanical / electrical & Plumbing Engineers
12600 West Colfax Avenue, Suite A-400
Lakewood, Colorado 80215

303.239.0909



100% CONSTRUCTION DOCUMENTS __ 22 MAR 2022

Rev. Description Date



ELECTRICAL FLOOR PLANS

Project No.: 006734.00

E0101

SHEET NOTES

1. ONE-LINE DIAGRAM SHOWN FOR REFERENCE ONLY. NO NEW WORK IS SHOWN ON THIS SHEET.

University of Colorado Anschutz Medical Campus

Fitzsimons Building **CRIO** Renovation

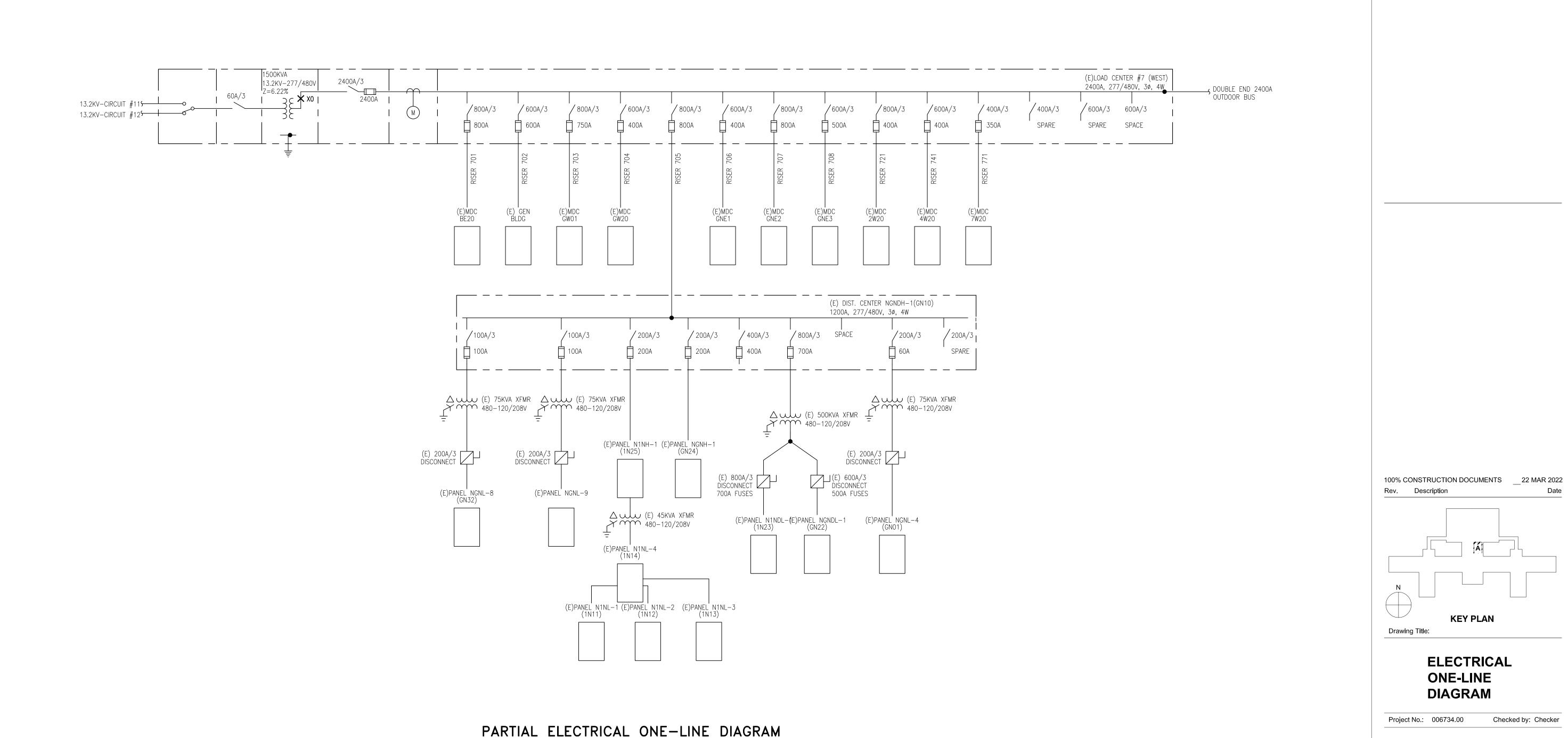
CANNONDESIGN Denver, CO 80205

P: 303.893.1990

www.cannondesign.com

RMH Group, Inc. Mechanical / electrical & Plumbing Engineers 12600 West Colfax Avenue, Suite A-400 Lakewood, Colorado 80215 303.239.0909





© 2019 The Cannon Corporation
All rights reserved. No part of this document may
be reproduced or utilized in any form, without prior
written authorization by The Cannon Corporation.
11/15/2021 10:25:27 AM

PANEL: N1NL-4

FED FROM: N1NH-1

NOTE DESCRIPTION

1 CCTV DINNING

1 HALLWAY HEATERS

1 HALLWAY HEATERS

SPACE
SPACE
SPACE
SPACE
SPACE
SPACE
1 RECEPT
1 COPY MACHINE
1 COPY MACHINE
1 RECEPT
1 RECEPT

125 AMP MAIN RATED AT 80%

10000 SYMMETRICAL RMS AMPS

PANEL SHORT CIRCUIT RATING

N/A AMP MAIN LUGS

125 AMP BUS

MIN PANEL AMPACITY 69 AMPERES

COPPER BUSING

VOLTAGE: 120/208 V. TYPE: PANELBOARD 3 PH 4 W. 60 HZ MOUNTING: SURFACE

 VA
 AMF / P CTPH CC AMF / P
 VA
 DESCI

 180
 20 / 1
 1 A 2
 20 / 1
 0 SPARE

 1000
 20 / 1
 3 B 4
 20 / 1
 0 SPARE

 1000
 20 / 1
 5 C 6
 20 / 1
 0 SPARE

 0
 20 / 1
 7 A 8
 20 / 1
 0 SPARE

 0
 / 1
 9 B 10
 / 1
 0 SPACE

 0
 / 1
 11 C 12
 / 1
 0 SPACE

 0
 / 1
 13 A 14
 / 1
 0 SPACE

 0
 / 1
 15 B 16
 / 1
 0 SPACE

 0
 / 1
 17 C 18
 / 1
 0 SPACE

 0
 / 1
 17 C 18
 / 1
 0 SPACE

 720
 20 / 1
 19 A 20
 / 1
 0 SPACE

 540
 20 / 1
 21 B 22
 / 1
 0 SPACE

 1500
 20 / 1
 23 C 24
 / 1
 0 SPACE

 1500
 20 / 1
 25 A 26
 20 / 1
 0 SPACE

 1500
 20 / 1</td

1080 20 / 1 29 C 30 20 / 1 0 SPARE

4320 50 / -- 31 A 32 20 / 1 0 SPARE

2700 -- / -- 33 B 34 20 / 1 360 RECEPT

2340 -- / 3 35 C 36 20 / 1 360 RECEPT

540 50 / -- 37 A 38 90 / -- 900 N1NL-1

540 -- / -- 39 B 40 -- / -- 1260 "

720 -- / 3 41 C 42 -- / 3 1800 "

PANEL COVER: SURFACE

GROUND BUS: YES ISOLATED GND: NO

0 % SPAR | 0.0 @ 90% = 0.0 @ 100% = 0.0 kVA

TOTAL ### kW ### kVA 24.7 kVA

Version 0816a

2. NEW LOAD, NEW CIRCUIT BREAKER

NOTE: 1. EXISTING LOAD

NEUTRAL BUS: YES

CCT BREAKER BREAKER CCT
VA AMF / PCTPH CC AMF / P VA DESCRIPTION

ELECTRICAL ONE-LINE DIAGRAM