RESEARCH 1 - ABSL SUITE RENOVATION

AndersonMasonDale Architects

100% CONSTRUCTION DOCUMENTS

21-717
Anschutz Research 1 - ABSL-3 Suite Renovation
12950 E. Montview Blvd.
Aurora, CO 80045
April 29, 2022

ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS AND SYMBOLS ARE USED ON DRAWINGS CONTAINED IN THE SET. SYMBOLS AND ABBREVIATIONS ON THIS SHEET APPLY ONLY TO ARCHITECTURAL DRAWINGS

A/C	AIR CONDITIONING
ACF	ACCESS FLOORING
ACR	ACRYLIC
ACST	ACOUSTIC
AD	AREA DRAIN
ADD	ADDENDUM
ADH	ADHESIVE
ADJ	ADJACENT
ADJST	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL, ALUM	ALUMINUM
ALT	ALTERNATE
ANOD	ANODIZED
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATE (LY)
ARCH	ARCHITECT(URAL)
ARGB	ABUSE RESISTANT GYPSUM BOARD
ASPH	ASPHALT
AUTO	AUTOMATIC
AW	ALUMINUM WINDOW
BD	BOARD
BLDG	BUILDING
BLK(G)	BLOCK (ING)
BM	BEAM
BO	BY OTHERS
BOT	BOTTOM
BR	BACKER ROD
BRG	BEARING
BRK	BRICK
BS	BOTH SIDES
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT UP ROOFING
BZD	BRONZE DOOR
BZF	BRONZE FRAME
CAB	CABINET
CFM	CUBIC FEET/MINUTE
CG	CORNER GUARD
CIPC	CAST-IN-PLACE CONCRETE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR (ANCE)
CMU	CONCRETE MASONRY UNIT
CNC	CONCRETE COUNTERTOP
CO	CLEANOUT
COL	COLUMN
COMP	COMPRESSED (ED, ION, IBLE, OR)
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS OR CONTINUE
CONTR	CONTRACT (OR)
COORD	COORDINATE
CORR	CORRIDOR
CORRUG	CORRUGATED
CP	CEMENT PLASTER (STUCCO)
CPT	CARPET (ED)
CS	CAST STONE
CSNK	COUNTERSINK/COUNTERSUNK
CT	CERAMIC TILE
CTR	CENTERLINE
CW	CURTAIN WALL
DBL	DOUBLE
DEMO	DEMOLISH, DEMOLITION
DF	DRINKING FOUNTAIN
DG	DECORATIVE GLAZING
DIAM	DIAMETER
DIM	DIMENSION
DISP	DISPOSAL
DM	DECORATIVE METAL
DN	DOWN
DP	DEMOUNTABLE PARTITION
DPF	DAMP PROOFING
DR	DOOR
DRY	DRYER
DS	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
EA	EACH
EC	EXPANSION CONTROL
EF	ENTRANCE FLOORING (GRILLES OR MATTS)
EFC	ENTRANCE FLOOR CARPETING
EJ	EXPANSION JOINT
EL	ELEVATOR
ELEC	ELECTRIC (AL)
ELEV	ELEVATION
ENC	ENCLOSE (URE)
ENT	ENTRANCE
EPNT	EPOXY PAINT
EQ	EQUAL
EQP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST, EX	EXISTING
EXP	EXPOSED
EXPN	EXPANSION
EXT	EXTERIOR

FBO	FURNISHED BY OWNER
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
FEX	FIRE EXTINGUISHER
FIN	FINISH (ED)
FLR(G)	FLOOR (ING)
FND	FOUNDATION
FOS	FACE OF STUD
FR	FIRE RESISTIVE
FT	FOOT, FEET
FTG	FOOTING
FUT	FUTURE
GA	GAUGE, GAGE
GALV	GALVANIZED
GB	GYPSUM BOARD
GBAR	GRAB BAR
GC	GENERAL CONTRACT (OR)
GL	GLASS, GLAZING
GR	GRILLE
HB	HOSE BIB
HC	HOLLOW CORE
HDW	HARDWARE
HM	HOLLOW METAL
HOR	HORIZONTAL
HPT	HIGH POINT
HR	HOUR
HT	HEIGHT
HTR	HEATER
HVAC	HEATING/VENTILATION/AC
HW	HOT WATER
HWH	HOT WATER HEATER
ID	INSIDE DIAMETER
IN	INCH (ES)
INCAN	INCANDESCENT
INCL	INCLUDE (D, ING)
INFO	INFORMATION
INS	INSULATE (D, ION)
INT	INTERIOR
INV	INVERT
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE (D)
LAV	LAVATORY
LB	POUND (S)
LIB	LIBRARY
LIN	LINEAL
LKR	LOCKER
LT	LIGHT
MAINT	MAINTAIN (ENANCE)
MAS	MASONRY
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANIC (AL)
MET	METAL
MFR	MANUFACTURE (ER)
MH	MANHOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MT	MOUNT (ED, ING)
MTL	MATERIAL (S)
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NR	NONE REQUIRED
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL
OB	OBSCURE
OC	ON CENTER (S)
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OH	OVERHEAD
OPG	OPENING
OPH	OPPOSITE HAND
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
OZ	OUNCE
PAR	PARALLEL
PC	PRECAST CONCRETE
PERP	PERPENDICULAR
PL	PLATE
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PNT	PAINT (ED)
PRN	PORCELAIN
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWD	PLYWOOD

QTY	QUANTITY
R	RESISTANCE, THERMAL, RISER
RAD	RADIUS
RB	RESILIENT BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RE	REFERENCE, REFER TO
REINF	REINFORCING
REM	REMOVE
REQ	REQUIRED (D)
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RR	RESTROOM
SBLK	SPLASH BLOCK
SC	SOLID CORE
SCH	SCHEDULE
SD	STORM DRAIN
SEC	SECTION
SF	STOREFRONT
SHT	SHEET
SHTH	SHEATHING
SIM	SIMILAR
SOG	SLAB ON GRADE
SPEC	SPECIFICATION (S)
SPL	SPECIAL
SQ	SQUARE
SST	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STO	STORAGE
STRUC	STRUCTURAL
SUS	SUSPENDED
SYM	SYMMETRICAL
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEL	TELEPHONE
TEMP	TEMPERATURE
THK	THICK (NESS)
THR	THRESHOLD
THRU	THROUGH
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CURB
TOI	TOP OF INSULATION
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TOSTL	TOP OF STEEL
TOW	TOP OF WALL
TPART	TOILET PARTITION
TPD	TOILET PAPER DISPENSER
TR	TRANSOM
TS	TUBE STEEL
TV	TELEVISION
TYP	TYPICAL
TZ	TERRAZZO
UL	UNDERWRITERS LABORATORY
UNFIN	UNFINISHED
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VAR	VARIABLE (VARIES)
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WIDE OR WIDTH
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WP (G)	WATERPROOF (ING)
WR	WATER RESISTANT
WWF	WELDED WIRE FABRIC

SYMBOLS LEGEND

GRAPHIC SYMBOLS

BUILDING SECTION SYMBOL:
UPPER=THE SECTION NUMBER
LOWER=THE SHEET WHERE DRAWN

WALL SECTION SYMBOL:
UPPER=THE SECTION NUMBER
LOWER=THE SHEET WHERE DRAWN

DETAIL SYMBOL:
UPPER=THE SECTION NUMBER
LOWER=THE SHEET WHERE DRAWN

EXTERIOR ELEVATION SYMBOL:
UPPER=THE ELEVATION NUMBER
LOWER=THE SHEET WHERE DRAWN

INTERIOR ELEVATION SYMBOL: THE DARKENED CORNERS INDICATE DRAWN WALLS. ELEVATION DRAWINGS ARE ARRANGED NUMERICALLY BY ROOM NUMBER ON THE INTERIOR ELEVATION SHEETS.

CABINET TYPE SYMBOL:
UPPER=CABINET STYLE
LOWER=CABINET SIZE IN INCHES

EQUIPMENT TYPE INDICATOR:
LETTER= GROUP FUNCTION
NUMBER= ITEM NUMBER

TOILET ACCESSORY INDICATOR:
TA= TOILET ACCESSORY
NUMBER= ITEM NUMBER

FINISH TYPE INDICATOR:
REFER TO FINISH SCHEDULE FOR LEGEND

STRUCTURAL GRIDLINE IDENTIFIER

HEIGHT INDICATOR

MATCHLINE FLAG

PLAN AND TRUE NORTH INDICATOR: THE HEAVY LINE REPRESENTS PLAN NORTH (USUALLY TOWARD THE TOP OF THE SHEET) THE SMALL ARROW INDICATES TRUE NORTH (IF DIFFERENT FROM PLAN NORTH).

PARTITION TYPE INDICATOR

EXTERIOR ASSEMBLY TYPE INDICATOR

WINDOW OR LOUVER TYPE INDICATOR:

WORK NOTE INDICATOR

DETAIL IDENTIFICATION: DASHED LINE INDICATES EXTENT OF ENLARGED PLAN OR DETAIL

ROOM NAME 2308 — ROOM IDENTIFICATION:

2308A — DOOR IDENTIFICATION:
DOOR NUMBER=NUMBER OF ROOM ACCESSED

ADD-01 — REVISION MARKER: CLOUD INDICATES AREA OF REVISION

TEXT SYMBOLS

&	AND
@	AT
X OR x	BY
#	POUND OR NUMBER
/ OR :	PER
X'	(X) FEET
X"	(X) INCHES

DISCIPLINE INDEX

G	GENERAL INFORMATION
A	ARCHITECTURAL DRAWINGS
M	MECHANICAL DRAWINGS
P	PLUMBING DRAWINGS

SHEET NUMBERING

A-401
- DISCIPLINE ABBREVIATION
- DRAWING CONTENT CATEGORY
- SHEET NUMBER

KEYNOTES

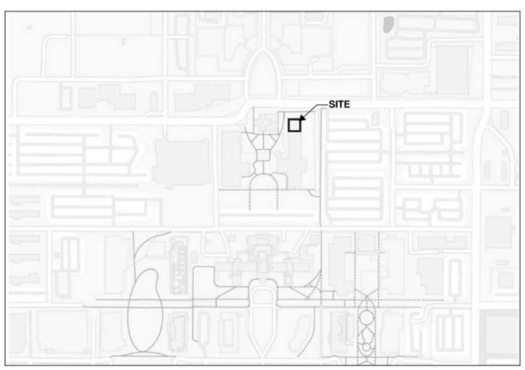
08 71 11 A01
- INTERNAL IDENTIFIER, NOT RELATED TO SPEC
- SPEC SECTION FOR IDENTIFIED ELEMENT

MATERIAL PATTERNS

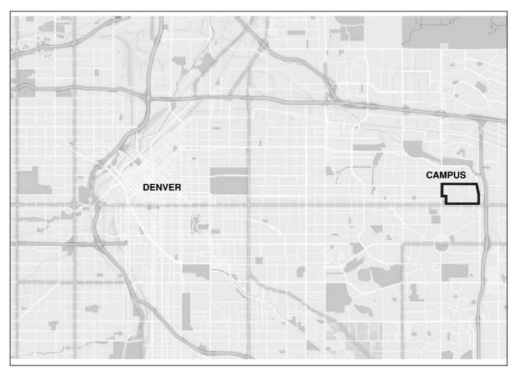
BRICK MASONRY
CEMENT PLASTER
CONCRETE - CAST-IN-PLACE
CONCRETE MASONRY
EARTH OR BACKFILL
GRAVEL OR ROAD BASE
GYPSUM BOARD
INSULATION - BATT
INSULATION - BATT - MINERAL WOOL
INSULATION - RIGID
INSULATION - RIGID - MINERAL WOOL
INSULATION - SPRAY FOAM
LIMESTONE
METAL - ALUMINUM
METAL - STEEL
MORTAR
PLYWOOD
WOOD
DAMPPROOFING (BROWN)
WATERPROOFING (BLUE)
AIR BARRIER (GREEN)
FLEXIBLE FLASHING - AIR BARRIER (GREEN)
WEATHER BARRIER (GREEN)
UNDERLAYMENT (BLUE)
VAPOR RETARDER (BROWN)
FLEXIBLE FLASHING - MASONRY (BLUE)
FLASHING, ROOF MEMBRANE (BLUE)

DRAWING INDEX

CAMPUS MAP



VICINITY MAP



CODE STUDY

UNIVERSITY OF COLORADO - MEDICAL CAMPUS - RESEARCH 1, AURORA, COLORADO 80045

This project will encompass the following:
- Addition of 2 hand sinks
- Replacement of one Biosafety Cabinet

The new construction will not alter the means of egress established under previous code versions. The buildings overall occupancy will ne unchanges by the addition of the hand sinks.

APPLICABLE CODES

2018 Internation Building Code (IBC)
2018 International Existing Building Code (IEBC)
2018 International Plumbing Code (IPC)
2018 Interantional Mechanical Code (IMC)
2018 Internation Energy Conservatin Code (IECC)
2021 NFPA 101 Life Safety Code (Egress Only)

ADDITIONAL STANDARDS
CDC & NIH Biosafety in Microbiology and Biomedial Laboratories

CONSTRUCTION TYPE
Type 1A

OCCUPANCY
B Office

BUILDING AREA
327,290 SF

PROJECT AREA
420 SF

MEANS OF EGRESS
Means of egress has been established under code versions and are unchanged.

EXIT WIDTHS
Stairways and stairway entry doors are existing. Egress widths and capacities have been established under pervious code versions and are unchanged.

FINISH MATERIALS
IBC Chapter 8

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1945 North Wheeling Street
Aurora, CO 80045-0508

Architect
AndersonMasonDale Architects, P.C.
3198 Speer Boulevard
Denver, CO, 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
12499 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

MEP Engineer
Cator Ruma & Associates
896 Tabor Street
Lakewood, CO 80401
Telephone: 303-232-6200

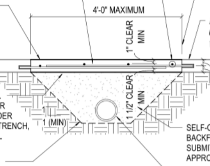
David C Pfeifer

Issue	Date
100% Construction Documents	29 APRIL 2022

Project Number:	21-717
Drawn By:	JF
Reviewed By:	JT
Approved By:	DP

INDEX, CODE STUDY & ABBREVIATIONS

G-100



NOTES:
1. REFER TO ARCHITECTURAL AND PLUMBING DRAWINGS FOR TRENCH LOCATIONS AND EXTENTS.

1 NO SCALE **TYPICAL TRENCH IN EXISTING SOG**

CONCRETE NOTES

STRUCTURAL CONCRETE SPECIAL INSPECTIONS

ITEM	FREQUENCY	STANDARD	CRITERIA
REINFORCING STEEL			
- DURING PLACEMENT	P	ACI 318 7.7, 8.7, 11.7, 20.2, 20.4, 20.6, 25, 26.6	VERIFY GRADE, FINISH, SIZE, BAR QUANTITY, LOCATION, SPACING, COVER, HOOK LENGTHS, SPLICE LENGTH, SPLICE LOCATIONS, BEND DIAMETERS, COATING, SURFACE CONDITION, AND SUPPORT
- PRIOR TO PLACEMENT OF CONCRETE	100%		
- FIELD BENDING	P	ACI 301 3.3.2.8	-
BOLTS AND EMBEDMENTS			
- PRIOR TO PLACEMENT OF CONCRETE	100%	-	VERIFY TYPE, FINISH, DIAMETER, LENGTH, QUANTITY, EMBEDMENT LENGTH, SPACING AND EDGE DISTANCES. VERIFY USE OF PLACING TEMPLATE WHERE SPECIFIED
CONCRETE			
- MIX DESIGN	EACH TRUCK	-	VERIFY USE OF APPROVED DESIGN MIXTURE FOR EACH TRUCK LOAD
- FORMWORK PRIOR TO PLACEMENT OF CONCRETE	P	ACI 318 26.11.1	INSPECT FIRST POUR OF EACH TYPE (GRADE BEAM, COLUMN, STRUCTURAL SLAB, SLAB-ON-DECK, ETC.)
- PLACEMENT OF CONCRETE	C	ACI 318 26.5.2	-
- CURING	P	ACI 318 26.5.3-26.5.5	-

STRUCTURAL CONCRETE TESTING

ITEM	FREQUENCY	STANDARD	CRITERIA
CONCRETE			
- COMPOSITE SAMPLE	100 CY/MIX/DAY	ASTM C172	OBTAIN AT POINT OF PLACEMENT.
- SLUMP/SLUMP FLOW	EACH COMPOSITE SAMPLE	ASTM C143 (SLUMP) OR ASTM C1611 (SLUMP FLOW)	SPECIFIED SLUMP SHALL BE AS SUBMITTED IN THE MIX DESIGN ± 1 1/2". PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE
- TEMPERATURE	EACH COMPOSITE SAMPLE AND 60 MINUTE INTERVALS	ASTM C1064	REQUIRED WHEN AIR TEMPERATURE IS 40 °F AND BELOW OR 80°F AND ABOVE
- COMPRESSIVE STRENGTH	EACH COMPOSITE SAMPLE	ASTM C31 ASTM C39 EITHER: (4)6x12 OR (6)4x8 CYLINDERS	TEST PER SCHEDULE BELOW: - 7 DAYS: (1) 6x12 OR (1) 4x8 - 28 DAYS: (2) 6x12 OR (3) 4x8 - 56 DAYS: (1) 6x12 OR (2) 4x8 (IF 28 DAY TESTS DO NOT ACHIEVE SPECIFIED 28 DAY STRENGTH) ACCEPTANCE CRITERIA PER ACI 318
FLOOR FLATNESS REQUIREMENTS			
- MEASURE CONCRETE FLOOR FLATNESS (FF) AND FLOOR LEVELNESS (FL)	-	ASTM E1155	PERFORM MEASUREMENTS WITHIN 48 HOURS OF FINISHING OPERATIONS. MEASURE AREAS INDICATED IN THE SPECIFICATIONS

STRUCTURAL CONCRETE TESTING NOTES:
1. NONDESTRUCTIVE TESTING MAY BE PERMITTED BY THE ARCHITECT, BUT WILL NOT BE USED AS SOLE BASIS FOR APPROVAL OR REJECTION OF DEFICIENT CONCRETE.
2. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE FOLLOWING INFORMATION: DATE OF CONCRETE PLACEMENT, LOCATION OF CONCRETE BATCH IN WORK, DESIGN 28-DAY COMPRESSIVE STRENGTH, SLUMP, CONCRETE SUPPLIER AND MIXTURE ID NUMBER, TIME OF BATCH AND PLACEMENT, AMBIENT AIR TEMPERATURE, SITE ADDED WATER AND ADMIXTURES, UNIT WEIGHT, AND AS REQUIRED BY ASTM C39.

1) GENERAL:
1A) ALL WORK SHALL CONFORM WITH ACI 301-10, UNLESS NOTED OTHERWISE IN DRAWINGS OR PROJECT SPECIFICATIONS.

1B) DETAIL BARS IN ACCORDANCE WITH THE DRAWINGS, PROJECT SPECIFICATIONS, AND ACI PUBLICATION SP-66 (2004): "ACI DETAILING MANUAL"

2) REINFORCING MATERIALS:
2A) ALL REINFORCING SHALL BE ASTM A615, Fy = 60 ksi, Fu = 90 ksi

3) REINFORCING FABRICATION:
3A) SPLICES:
- NO SPLICING OF REINFORCEMENT PERMITTED EXCEPT AS NOTED ON DRAWINGS. MAKE BARS CONTINUOUS AROUND CORNERS WHERE DETAIL NOT PROVIDED. WHERE PERMITTED, SPLICES MAY BE MADE BY CONTACT.
- SPLICE REINFORCEMENT 24" MINIMUM USING CONTACT LAPS.

3B) MISCELLANEOUS REINFORCING REQUIREMENTS:
- PROVIDE ADDITIONAL BARS OR STIRRUPS REQUIRED TO SECURE REINFORCING IN PLACE DURING CONCRETE PLACEMENT.
- MAKE ALL REINFORCING BAR BENDS IN THE FABRICATOR'S SHOP UNLESS NOTED.
- NO WELDING OF REINFORCING PERMITTED UNLESS NOTED ON DRAWINGS. WHERE PERMITTED, PERFORM WELDING IN ACCORDANCE WITH AWS D1.4-2011.

4) STRUCTURAL CONCRETE MIX REQUIREMENTS:
4A) SEE 'CONCRETE MIX TABLE'

CONCRETE MIX TABLE

CONC MIX TYPE	INTENDED USE	28 DAY STRENGTH f'c (KSI)	CONC WEIGHT	MAX W/C RATIO, INCLUDING FLY ASH	MAX AGGREGATE SIZE, IN (ASTM C33)	TOTAL AIR CONTENT (%), NOTE a	OTHER REQTS, NOTE b
1	SLAB ON GRADE WITH MOISTURE SENSITIVE FLOORING, TYPICAL	3.5	NWC	--	1	NP	SVT

CONCRETE MIX TABLE NOTES:
PROPORTIONS OF MATERIALS IN CONCRETE MIX SHALL BE ESTABLISHED TO:
- PROVIDE THE MINIMUM COMPRESSIVE STRENGTH AS INDICATED IN THE MIX TABLE.
- PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE WORKED READILY INTO FORMS AND AROUND REINFORCEMENT UNDER CONDITIONS OF PLACEMENT TO BE EMPLOYED, WITHOUT SEGREGATION OR EXCESSIVE BLEEDING. CONTRACTOR SHALL SELECT APPROPRIATE SLUMP. USE ADMIXTURES AS REQUIRED TO OBTAIN DESIRED RESULTS.

USE TYPE I / II PORTLAND CEMENT UNLESS NOTED OTHERWISE. FOR CONCRETE MIXES USED ON FLOORS MINIMUM CEMENTITIOUS CONTENT SHALL BE 540 POUNDS PER CUBIC YARD.

FOR CONCRETE PLACED BY PUMPING PROVIDE CONCRETE MIX FLOWABILITY TO FACILITATE PUMPING. ENTRAINED AIR MAY BE USED TO FACILITATE PUMPING SUBJECT TO THE PROVISIONS OF NOTE b BELOW.

a. NP = AIR ENTRAINING ADMIXTURE NOT PERMITTED IN THIS MIX.
b. ABBREVIATIONS FOR OTHER REQUIREMENTS AS FOLLOWS:
SVT = CONTRACTOR SHALL PROVIDE CONCRETE WITH REDUCED WATER IN ORDER TO ACHIEVE THE SLAB VAPOR TRANSMISSION REQUIRED FOR THE SPECIFIED FLOORING MATERIALS.

5) SLAB-ON-GRADE:
5A) VERIFY ALKALINITY OF CONCRETE SURFACE, SLAB VAPOR TRANSMISSION, AND SLAB FLATNESS/LEVELNESS ARE COMPATIBLE WITH FLOORING SYSTEM AND ADHESIVES PRIOR TO INSTALLING FLOORING.

5B) TAKE PRECAUTIONS TO MINIMIZE SLAB CURLING. GRIND SLAB OR USE LEVELING COMPOUND IF FLOOR FLATNESS AND LEVELNESS VALUES ARE NOT ACCEPTABLE TO THE ARCHITECT.

6) PLACING REINFORCEMENT:
6A) REINFORCEMENT PROTECTION:
- SEE DETAILS FOR MINIMUM CLEAR COVER ON REINFORCEMENT.
- SEE ACI 117-10 FOR REINFORCEMENT PLACING TOLERANCES

6B) PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AND WELDED WIRE REINFORCEMENT AT POSITIONS SHOWN ON PLANS. ALL REINFORCING, DOWELS, BOLTS, AND EMBEDDED PLATES SHALL BE SET AND TIED IN PLACE BEFORE THE CONCRETE IS POURED. "STABBING" INTO PREVIOUSLY PLACED CONCRETE IS NOT PERMITTED.

7) MODIFICATIONS TO HARDENED OR EXISTING CONCRETE
7A) UNLESS NOTED ON THE STRUCTURAL DOCUMENTS MODIFICATIONS AS LISTED BELOW SHALL NOT BE MADE TO HARDENED OR EXISTING CONCRETE WITHOUT APPROVAL OF THE ARCHITECT:
- SAW CUTTING, CORING, OR CHIPPING

7B) DO NOT CUT OR DAMAGE ANY REINFORCING WITHOUT APPROVAL OF THE ARCHITECT

POST-INSTALLED ANCHOR NOTES

1) PERSONNEL REQUIREMENTS:
1A) THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. SUBMIT DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS HAVE PASSED THE TRAINING COURSE PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

2) INSTALLATION REQUIREMENTS:
2A) ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS AND PER MANUFACTURER'S ON-SITE TRAINING.

2B) ALL ADHESIVE ANCHORS AND ADHESIVE ANCHORED REINFORCEMENT DESIGNS ARE FOR INSTALLATION IN THE FOLLOWING CONDITIONS, UNLESS NOTED OTHERWISE. WRITTEN APPROVAL MUST BE RECEIVED FROM ENGINEER PRIOR TO INSTALLATION IN ALTERNATE CONDITIONS.
- DRY CONCRETE, UNLESS NOTED OTHERWISE.
- CONCRETE TEMPERATURE AT TIME OF INSTALLATION THROUGH CURE TIME MUST BE WITHIN THE TEMPERATURE RANGE SPECIFIED IN MANUFACTURER'S PRINTED INSTALLATION INSTRUCTION FOR ADHESIVE GEL AND CURE TIMES.
- ANCHOR HOLES TO BE HAMMER DRILLED AND CLEANED.
- CONCRETE MUST BE AT LEAST 21 DAYS OLD BEFORE INSTALLATION OF ANCHORS.
- HOLES TO BE CLEANED AND PREPARED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS AND EVALUATION REPORT PRIOR TO ADHESIVE INJECTION.

2C) THE POSITION OF EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL BE LOCATED PRIOR TO INSTALLING POST INSTALLED ANCHORS OR REINFORCEMENT. EXISTING REINFORCEMENT SHALL BE LOCATED USING A SCANNER, GPR, X-RAY, CHIPPING OR OTHER MEANS. DO NOT DAMAGE OR CUT EXISTING REINFORCEMENT.

3) SUBSTITUTION REQUESTS:
3A) SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS AND PRODUCT DATA DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS IN COMPLIANCE WITH THE RELEVANT BUILDING CODES, LOAD RESISTANCE, INSTALLATION CATEGORY, CREEP APPROVAL, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE OF THE SPECIFIED PRODUCT.

POST-INSTALLED ANCHOR TABLE

ANCHOR TYPE	PRODUCT	Fy (KSI)	Fu (KSI)	COMMENT
ADHESIVE IN CONCRETE	HILTI HIT-HY 200-R V3	-	-	SUBMIT CALCULATIONS FOR SUBSTITUTIONS

POST-INSTALLED ANCHOR/REINFORCING STEEL TESTING

ITEM	FREQUENCY	STANDARD	CRITERIA
ADHESIVE ANCHORS, REINFORCING STEEL ANCHORED INTO HARDENED CONCRETE			
- TENSION TEST	FIRST 3 AND 1% OF REMAINING	ASTM E488 STATIC TENSION	TEST THE INSTALLATION OF THE FIRST 3 OF EACH TYPE, BASE MATERIAL, AND POSITION (DOWN, HORIZONTAL, OVERHEAD). OBSERVE ASTM E488 MINIMUM EDGE DISTANCES FOR DETERMINING TEST LOCATIONS. SUBMIT PROPOSED TEST LOCATIONS AND REQUESTS FOR REQUIRED TENSION TEST LOAD VALUES TO ENGINEER

POST-INSTALLED ANCHORS/REINFORCING STEEL SPECIAL INSPECTIONS

ITEM	FREQUENCY	STANDARD	CRITERIA
ADHESIVE ANCHORS, REINFORCING STEEL ANCHORED INTO HARDENED CONCRETE			
- PRIOR TO START OF WORK	-	ICC-ES REPORT	REVIEW CONTRACTOR'S INSTALLATION PROCEDURE
- PRIOR TO INSTALLATION OF ANCHOR	EACH ANCHOR	ICC-ES REPORT	VERIFY TYPE, DIAMETER, LENGTH, FINISH, AND BASE MATERIAL.
- DURING INSTALLATION OF ANCHOR	CONTINUOUS	ICC-ES REPORT	CONTINUOUS INSPECTION REQUIRED REGARDLESS IF PERIODIC INSPECTION IS PERMITTED BY ICC-ES REPORT. VERIFY HOLE DIMENSIONS, HOLE CLEANING, ANCHOR EMBEDMENT, EDGE DISTANCES AND SPACING
- AFTER INSTALLATION OF ATTACHED ASSEMBLY	100% VISUAL	-	VERIFY NUMBER, EDGE DISTANCES, AND ANCHOR FLUSH WITH AND PERPENDICULAR TO THE RECEIVING SURFACE
- CURE TIME	100% VISUAL	-	VERIFY FULL CURE TIME HAS ELAPSED PRIOR TO APPLICATION OF TORQUE OR LOAD TO ANCHOR

DESIGN CRITERIA

1) CODES AND STANDARDS:
1A) GENERAL DESIGN
- INTERNATIONAL BUILDING CODE 2018

1B) CONCRETE
- ACI 301-LATEST EDITION "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
- ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

DEFERRED SUBMITTALS

1) GENERAL:
1A) THE FOLLOWING PORTIONS OF THE STRUCTURAL DESIGN WILL NOT BE SUBMITTED AT THE TIME OF PERMIT APPLICATION. WHEN RECEIVED AND REVIEWED, THESE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL BY THE CONTRACTOR:
- ANCHORAGE, BRACING AND ATTACHMENT OF REQUIRED ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE SPRINKLER, AND OTHER EQUIPMENT AND SYSTEMS.

1B) CONNECTION OF DEFERRED SUBMITTAL ITEMS TO PRIMARY STRUCTURE BY DEFERRED SUBMITTAL SUPPLIER. DEFERRED SUBMITTAL SUPPLIER TO PROVIDE CONNECTIONS AND FRAMING ARRANGEMENT TO AVOID LOADING WHICH EXCEEDS THE CAPACITY OF THE ELEMENT BEING ATTACHED TO.

1C) ALL DEFERRED SUBMITTALS TO BE ATTACHED TO PRIMARY STRUCTURE WITH A PINNED CONNECTION. MOMENT CONNECTIONS TO PRIMARY STRUCTURE NOT PERMITTED UNLESS NOTED ON DRAWINGS OR APPROVED BY ENGINEER IN WRITING PRIOR TO SUBMITTAL OF DRAWINGS OR CALCULATIONS.

1D) WALLS AND THE UNDERSIDE OF CONCRETE ON METAL DECK SHALL BE CONSIDERED CRACKED FOR THE PURPOSE OF DESIGNING ANCHORS FOR ATTACHMENT OF DEFERRED SUBMITTAL ITEMS.

1E) SUBMIT STAMPED STRUCTURAL CALCULATIONS FOR ALL DEFERRED SUBMITTAL ITEMS PRIOR TO OR CONCURRENTLY WITH DRAWINGS OR PRODUCT DATA. INCLUDE ANALYSIS OF ATTACHMENT TO PRIMARY STRUCTURE. INCLUDE CURRENT ICC REPORT WITH ALL PROPRIETARY STRUCTURAL ELEMENTS AND ANCHORS/FASTENERS.

1F) POWDER ACTUATED FASTENERS (PAF) INTO CONCRETE SHALL NOT BE USED TO RESIST TENSION LOADS.

GENERAL NOTES

1) GENERAL:
1A) ENGINEER: REFERENCES ON THE STRUCTURAL DRAWINGS TO 'ENGINEER' MEAN THE STRUCTURAL ENGINEER OF RECORD. OTHER ENTITIES ARE SPECIFICALLY NOTED AS "CONTRACTOR'S ENGINEER", "MECHANICAL ENGINEER", ETC.

1B) THESE NOTES SUPPLEMENT THE SPECIFICATIONS, WHICH SHALL BE REFERENCED FOR ADDITIONAL REQUIREMENTS.

1C) UNDERGROUND UTILITIES: LOCATE EXISTING UTILITIES AND NOTIFY ARCHITECT OF EXISTING UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH WORK.

2) USE OF DRAWINGS:
2A) DO NOT SCALE DRAWINGS.

2B) DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

2C) DETAILS NOTED TYPICAL APPLY TO ALL SIMILAR CONDITIONS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ELSEWHERE ON THE PROJECT.

2D) WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES AND SPECIFICATIONS:
- CONTACT THE ARCHITECT PRIOR TO PROCEEDING WITH CONSTRUCTION
- THE MORE STRINGENT REQUIREMENTS SHALL GOVERN FOR BIDDING / PRICING

3) EXISTING STRUCTURES:
3A) CONTRACT DOCUMENTS HAVE BEEN PREPARED USING AVAILABLE DRAWINGS AND SITE OBSERVATION AS PERMITTED BY ACCESS RESTRICTIONS DURING DESIGN.

3B) DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT KNOWN OR ARE AT VARIANCE WITH PROJECT DOCUMENTATION. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL CONDITIONS NOT PER THE CONTRACT DOCUMENTS. EXAMPLES INCLUDE:
- SIZES OR DIMENSIONS OTHER THAN THOSE SHOWN
- DAMAGE OR DETERIORATION TO MATERIALS AND COMPONENTS
- CONDITIONS OF INSTABILITY OR LACK OF SUPPORT
- ITEMS NOTED AS EXISTING ON THE DRAWINGS BUT NOT FOUND IN THE FIELD

3C) PREPARE DIMENSIONAL DRAWINGS OF ALL DISCOVERED ITEMS.

3D) CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STRUCTURAL CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS.

3E) CONTRACTOR SHALL MAKE ALLOWANCE FOR THE RESOLUTION OF SUCH DISCOVERIES IN THE CONSTRUCTION SCHEDULE.

3F) SUBMIT A DIMENSIONED DRAWING OF ALL NEW OPENINGS THROUGH EXISTING STRUCTURE AND SECURE APPROVAL PRIOR TO CUTTING. NEW OPENING MAY BE EITHER SHOWN ON THE CONTRACT DOCUMENTS OR PROPOSED BY THE CONTRACTOR. DRAWING SHALL SHOW:
- VERTICAL & HORIZONTAL LOCATION AND SIZE OF NEW OPENING(S)
- ALL EXISTING OPENINGS IN THE VICINITY OF THE NEW OPENING(S)
- ALL EXISTING STRUCTURE (BEAMS, COLUMNS, SLABS, WALLS, ETC) IN THE VICINITY OF THE NEW OPENING(S)
- ALL REINFORCING BAR SIZES AND POSITIONS (LAYOUT LOCATION AND DEPTH) CONFLICTING WITH OR IN THE VICINITY OF THE NEW OPENING(S).

4) COORDINATION:
4A) STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.

4B) COORDINATE DIMENSIONS OF ALL OPENINGS, BLOCKOUTS, DEPRESSIONS, ETC., WITH ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.

4C) SEE ARCHITECTURAL PLANS FOR INTERIOR PARTITIONS. PARTITION FRAMING SHALL BE CONNECTED TO THE PRIMARY STRUCTURE IN SUCH A WAY SO AS TO ALLOW FOR VERTICAL LIVE LOAD DEFLECTIONS OF SPAN/360 AT FLOOR FRAMING OR SPAN/240 AT ROOF FRAMING. DO NOT MAKE RIGID VERTICAL AND HORIZONTAL CONNECTIONS TO THE PRIMARY STRUCTURE IN THE PLANE OF THE PARTITION.

5) SUBMITTALS AND SUBSTITUTIONS:
5A) SUBMITTALS: REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
- IF THE CONTRACTOR REQUESTS A CHANGE FROM THE STRUCTURAL DRAWINGS, IT SHALL BE APPROVED BY THE ARCHITECT AND DESIGNED BY MARTIN/MARTIN, INC. PRIOR TO SUBMITTING SHOP DRAWINGS. VARIATION SHALL BE INDICATED ON THE SHOP DRAWINGS. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR MAKING THE CHANGE.
- CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE IN SUBMITTALS
- ALL SHOP DRAWINGS SHALL REFERENCE THE STRUCTURAL DRAWING NUMBER AND DETAIL USED TO PREPARE THE SUBMITTAL

5B) SUBSTITUTIONS: ARCHITECT'S APPROVAL SHALL BE SECURED FOR ALL SUBSTITUTIONS

5C) NONCONFORMANCE: NOTIFY ARCHITECT OF CONDITIONS NOT CONSTRUCTED PER THE CONTRACT DOCUMENTS PRIOR TO PROCEEDING WITH CORRECTIVE WORK. SUBMIT PROPOSED REPAIR TO THE ARCHITECT FOR ACCEPTANCE. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR DESIGNING THE REPAIR.

5D) ALL SHOP DRAWINGS SHALL BE SUBMITTED IN ELECTRONIC FORMAT ONLY.

6) TEMPORARY CONDITIONS, CONSTRUCTION ENGINEERING, AND OSHA STANDARDS:
6A) THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION AND ONLY FOR LOADS ANTICIPATED DURING THE STRUCTURE'S SERVICE LIFE.

6B) THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. REFER TO "LATERAL LOAD RESISTING SYSTEM DESCRIPTION" IN DESIGN CRITERIA FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE ALL REQUIRED ENGINEERING AND OTHER MEASURES TO ACHIEVE THE MEANS, METHODS, AND SEQUENCES OF WORK WHICH MAY INCLUDE, BUT IS NOT LIMITED TO:
- LAYOUT
- DESIGN FOR FORMWORK
- DESIGN OF CONCRETE MIXES
- SURVEYING TO VERIFY CONSTRUCTION TOLERANCES
- STRUCTURAL ENGINEERING TO RESIST ANY OTHER LOADS NOT IDENTIFIED ON DESIGN DRAWINGS

6C) NOTHING SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSTRUED AS ELIMINATING THE NEED FOR THE CONTRACTOR TO COMPLY WITH ALL OSHA REQUIREMENTS. WHERE THE STRUCTURAL DRAWINGS APPEAR TO CONFLICT WITH OSHA REQUIREMENTS, THE STRUCTURAL DRAWINGS REPRESENT FINAL CONDITIONS ONLY.

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
22.0412.S.01

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1945 North Wheeling Street
Aurora, CO 80045-0508

Architect
AndersonMasonDale Architects, P.C.
3198 Speer Boulevard
Denver, CO, 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
12499 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

MEP Engineer
Cator Ruma & Asscoiates
896 Tabor Street
Lakewood, CO 80401
Telephone: 303-232-6200

Issue	Date
100% Construction Documents	29 APRIL 2022

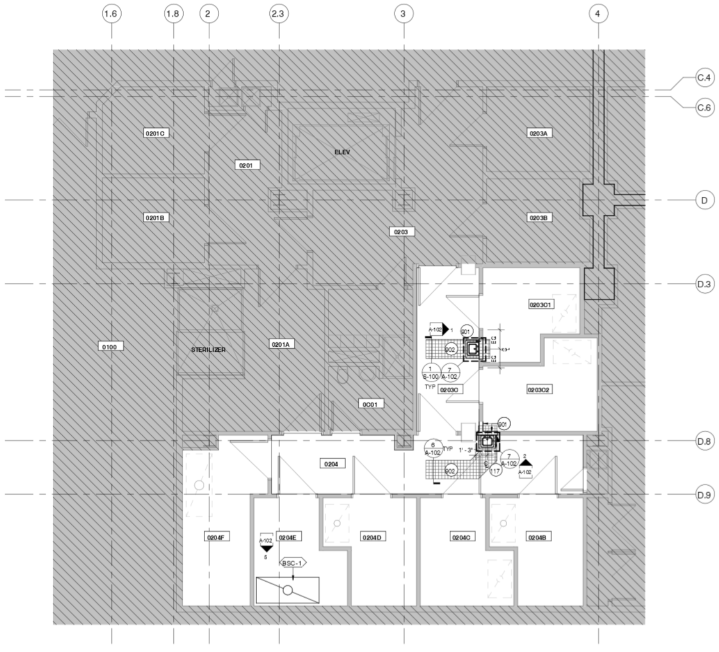
Benjamin W. Downey
Digitally signed by Benjamin W. Downey
Date: 2022.04.26 11:46:33-06'00'

Project Number: 22.0412.S.01
Drawn By: BWD
Reviewed By: BWD
Approved By: BWD

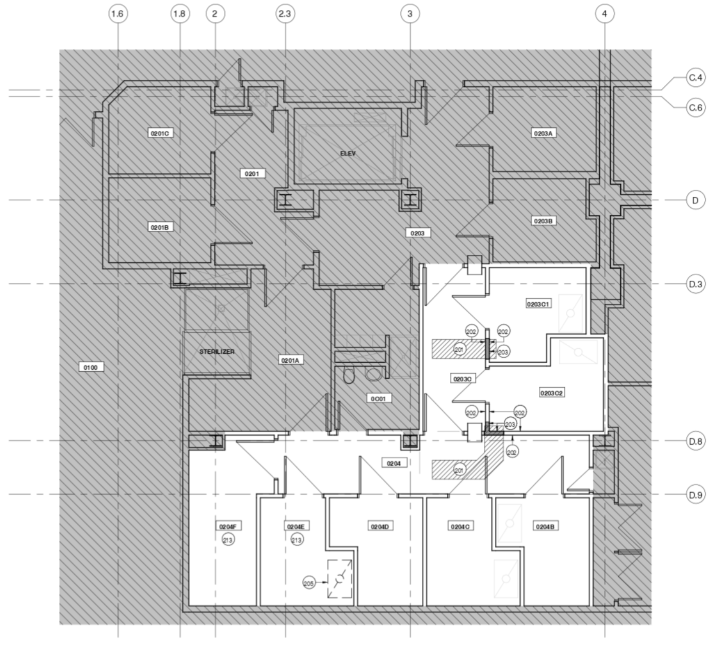
STRUCTURAL NOTES AND DETAILS

S-100

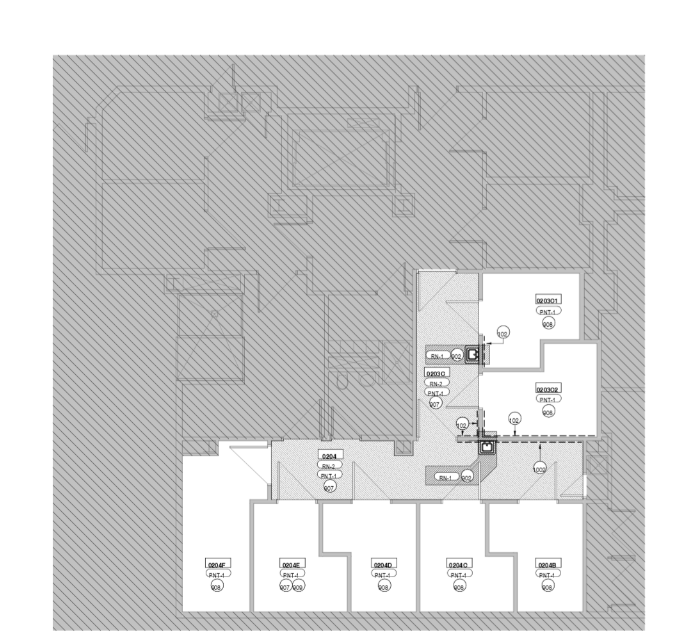
MM JOB #: 22.0412.S.01
PRINCIPAL: BEN DOWNEY
EOR: BEN DOWNEY
PROJECT MANAGER: BEN DOWNEY
DESIGNERS: BEN DOWNEY
LEAD REVIT TECH:
DATE PRINTED: 4/26/2022 11:40:10 AM
FILE PATH: G:\PROJECTS\22.0412.S.01-CU Anschutz R1 ABSL-3 Renovation\BIM\22.0412.S.01 - CU RC1 ABSL Suite Renovation - S21.rvt



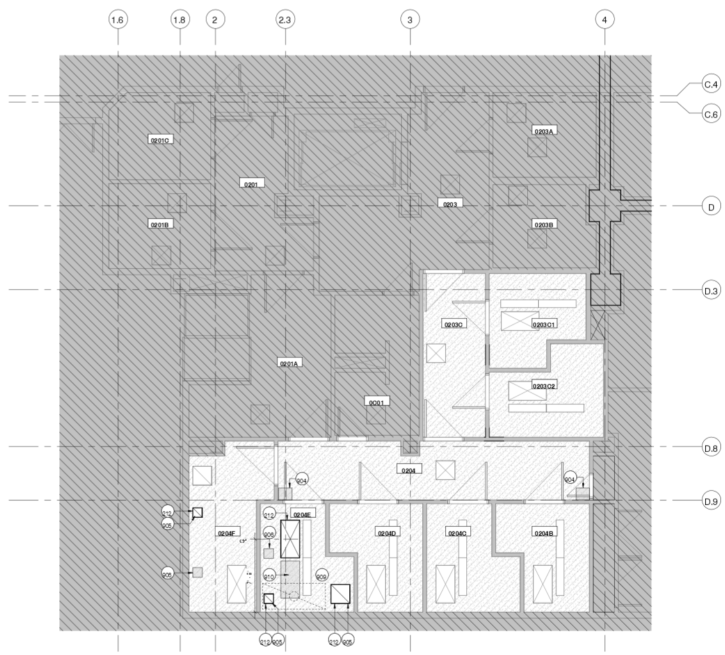
BASEMENT FLOOR PLAN 2 A-101
A-102 3/16" = 1'-0"



BASEMENT - DEMOLITIION 1 A-101
A-102 3/16" = 1'-0"



BASEMENT FINISH PLAN 3 A-101
A-102 3/16" = 1'-0"



FIRST LEVEL REFLECTED CEILING PLAN 6 A-101
A-102 3/16" = 1'-0"

4/29/2022 4:51:37 PM

WORK NOTES

102 REINSTALL BUMPER PROTECTION RAIL, MATCH HEIGHT OF EXISTING
117 RELOCATED DATA OUTLET, MOVES FROM 18"AFF TO 84"AFF
201 REMOVE CONCRETE SLAB ON GRADE, RE: PLUMBING FOR EXTENTS
202 REMOVE AND SALVAGE NEOPRENE WALL PROTECTION AS REQUIRED FOR SLAB TRENCHING, SEE FLOOR PLAN FOR RE-INSTALLATION
203 REMOVE PARTITION AS REQUIRED FOR SLAB TRENCHING.
205 REMOVE EXISTING BIOSAFETY CABINET
212 REMOVE EXISTING CEILING AS REQUIRED TO INSTALL NEW EXHAUST GRILL, RE: MECH
213 RE: RCP FOR CEILING DEMOLITION REQUIREMENTS
901 PATCH AND REPAIR PARTITION, MATCH EXISTING PARTITION CONSTRUCTION
902 PATCH AND REPAIR RESINOUS FLOOR, INCLUDING COVE. MATCH COLOR AND FINISH.
904 PATCH AND REPAIR CEILING AT VIDEO CAMERA, MATCH PAINT COLOR AND FINISH TO ADJACENT (EPNT-1)
905 PATCH AND REPAIR CEILING AS REQUIRED FOR INSTALLATION OF NEW EXHAUST GRILLE.
906 PATCH AND REPAIR CEILING AS REQUIRED AT LOCATION OF REMOVED CAGE RACK SUPPLY, MATCH COLOR AND FINISH OF ADJACENT CEILING.
907 PAINT WALLS, DOOR AND DOOR FRAME. REMOVE AND REINSTALL SIGNAGE. MASK OFF WALL DEVICES AS REQUIRED.
908 PAINT WALLS, DOOR AND DOOR FRAME. REMOVE AND REINSTALL SIGNAGE. MASK OFF WALL DEVICES AS REQUIRED. BSC TO REMAIN IN PLACE, CONSULT WITH ARCHITECT FOR PAINTING AROUND BSC EXTENTS.
909 PAINT CEILING, PNT-1
910 PATCH AND REPAIR CEILING AS REQUIRED AT LOCATION OF RELOCATED SUPPLY GRILLE
1002 SALVAGED BUMPER PROTECTION RAIL. MODIFY AT NEW HANDSINK, PROVIDE NEW BUMPER RAIL TERMINATION CAPS AS INDICATED IN ELEVATION

LEGEND

- XXX-1 — MATERIAL TAG, RE: FINISH LEGEND
- EXISTING SUSPENDED GB CEILING
- MECHANICAL RETURN
- MECHANICAL SUPPLY
- EXISTING LIGHT FIXTURE
- WLP-1 URETHANE WALL PROTECTION BUMPER
- NEW PAINT EXTENTS, FULL HEIGHT OF WALL
- REMOVAL OF SLAB ON GRADE EXTENTS
- SLAB ON GRADE PATCHING, RE: DETAILS X, X & X/A-102
- RN-1 — RN-1 RESINOUS FLOORING
- RN-2 — RN-2 - RESINOUS FLOORING TOP COAT ONLY

OFCI EQUIPMENT SCHEDULE

TAG	EQUIPMENT	ROOM
BSC-1	BIOSAFETY CABINET - NU-677-600	0204E
TA-2C	PAPER TOWEL DISPENSER	0203C
TA-2C	PAPER TOWEL DISPENSER	0204
TA-4C	SOAP DISPENSER	0203C
TA-4C	SOAP DISPENSER	0204

GENERAL NOTES

1. DEMO GB AS REQ'D TO INSTALL NEW BLOCKING, POWER, DATA, PIPING, EQUIPMENT, FIXTURES, ETC. PATCH AND REPAIR EXISTING PARTITIONS AT INSTALLATION OF NEW WORK. RE: ALL DISCIPLINES FOR LOCATIONS OF NEW WORK AT EXISTING CONSTRUCTION.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND INFORMATION SHOWN IN THESE DOCUMENTS PRIOR TO START OF ANY WORK.
3. COORDINATE DEMOLITION WITH NEW WORK SHOWN ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL & TECHNOLOGY DRAWINGS. PROVIDE DEMOLITION ONLY AS REQUIRED FOR NEW WORK. DO NOT OVER-CUT OR OVER-EXTEND REQUIRED DEMOLITION WITHOUT PRIOR APPROVAL.
4. COORDINATE DEMOLITION WORK WITH BUILDING OCCUPANCY. MAINTAIN REQUIRED EXITS AND LIFE SAFETY SYSTEMS, INCLUDING FIRE SPRINKLERS AND FIRE ALARM AT OCCUPIED AREAS. PROVIDE TEMPORARY PARTITIONS TO SEPARATE DEMOLITION ACTIVITIES FROM OCCUPIED AREAS AND TO MAINTAIN REQUIRED ACCESS AND EGRESS. ALLOW FOR DELIVERIES AND EMERGENCY ACCESS.
5. PROTECT ALL SURFACES, DEVICES, HANDRAILS, GUARDRAILS, DOORS, FRAMES, HARDWARE, ETC. NOT SHOWN TO BE REMOVED. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGE THAT TAKES PLACE DURING DEMOLITION ACTIVITIES. IF REPAIR IS NOT POSSIBLE WITHOUT BEING VISIBLE, THE DAMAGED ITEM SHALL BE REPLACED IN ITS ENTIRETY.
6. PATCH, LEVEL AND PREP EXISTING FLOOR SUBSTRATES THAT RECEIVE NEW FLOOR FINISHES. VERIFY PREPARATION WITH FINISH MATERIAL MANUFACTURER.
7. PATCH AND REPAIR ANY DEMOLISHED GB AREAS FROM EXISTING PARTITIONS FOR INSTALLATION OF NEW BLOCKING, POWER, DATA, PIPING, EQUIPMENT, FIXTURES, ETC. RE: ALL DISCIPLINES FOR LOCATIONS OF NEW WORK AT EXISTING CONSTRUCTION.
8. INSPECT ALL EXISTING SURFACES TO RECIEVE NEW FINISHES AND PATCH, REPAIR AND CLEAN TO SUITABLE CONDITION COMPLIANT TO FINISH MFR.
9. EXTEND FLOOR FINISHES TO WALL SURFACE UNDER CABINET & MILLWORK, FURNITURE AND EQUIPMENT; ITEMS RENDERED TRANSPARENT IN FINISH PLANS TO SHOW FLOOR FINISH UNDERNEATH.

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1945 North Wheeling Street
Aurora, CO 80045-0508

Architect
AndersonMasonDale Architects, P.C.
3198 Speer Boulevard
Denver, CO, 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
12499 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

MEP Engineer
Cator Ruma & Associates
896 Tabor Street
Lakewood, CO 80401
Telephone: 303-232-6200

STATE OF COLORADO DAVID O. PFEIFER C-4590 4/29/2022 LICENSED ARCHITECT

Issue	Date
100% Construction Documents	29 APRIL 2022

Project Number:	21-717
Drawn By:	JF
Reviewed By:	JT
Approved By:	DP

BASEMENT LEVEL PLANS

A-101

FINISH LEGEND

TAG	CSI SECTION #	CSI SECTION NAME	TYPE	MFR	PRODUCT / PATTERN	COLOR	COMMENTS
FLOOR							
RN-1	09 65 66	RESINOUS FLOORING	RESINOUS FLOORING	STONHARD	STONBLEND HDF	MATCH EXISTING	
RN-2	09 65 66	RESINOUS FLOORING	RESINOUS FLOORING	STONHARD	STONBLEND HDF		TOP COAT OF EXISTING FLOOR
BASE							
RNB-1	09 67 23	RESINOUS FLOORING	RESILIENT BASE	STONHARD	STONBLEND HDF	MATCH EXISTING	
WALL							
EPNT-1	09 91 23	INTERIOR PAINTING	EPOXY PAINT			MATCH EXISTING	
CEILING							
EPNT-1	09 51 23	INTERIOR PAINTING	EPOXY PAINT			MATCH EXISTING	
ACCESSORY							
WLP-1	10 26 00	WALL PROTECTION	URETHAYNE WALL BUMPER				PROVIDE IN WALL METAL BACKING
WLP-2	10 26 00	WALL PROTECTION	ALUMINUM WALL PROTECTION RAIL				PROVIDE IN WALL METAL BACKING

TA FIXTURES

TA-2c ROLL PAPER TOWEL DISPENSER, SURFACE MOUNTED

TA-4c LIQUID-SOAP DISPENSER, SURFACE MOUNTED

WORK NOTES

110 EXISTING CARD READER

111 SALVAGED SIGNAGE, TYP

113 EXISTING AIR FLOW MONITOR

114 EXISTING RESINOUS BASE

115 EXISTING PASS-THRU

116 SALVAGED FOLD DOWN DESK (FDD)

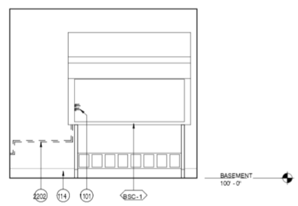
117 RELOCATED DATA OUTLET, MOVES FROM 18"AFF TO 84"AFF

1001 BUMPER RAIL ENDCAP

1101 (2) SERVICE VALVES, BSC MFR PROVIDED

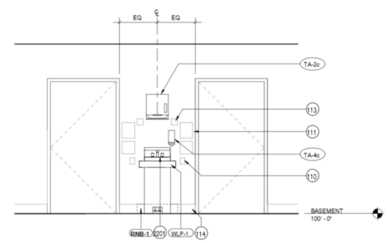
2201 HAND SINK WITH HAND/FOOT PEDAL OPERATION, RE: PLUMB

2202 FINAL MED GAS CONNECTION TO BSC BY CONTRACTOR, RE: PLUMBING



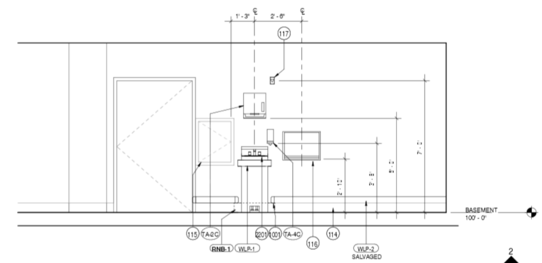
ELEVATION - 0204E - WEST

3/8" = 1'-0"



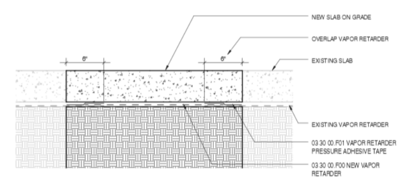
ELEVATION - 203 SOUTH

3/8" = 1'-0"



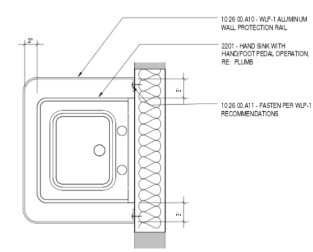
ELEVATION 204 - EAST

3/8" = 1'-0"



SECTION DETAIL - VAPOR BARRIER 6 A-102

A-101 1 1/2" = 1'-0"



PLAN DETAIL - SANI-RAIL @ HAND SINK 7 A-102

A-101 1 1/2" = 1'-0"

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1945 North Wheeling Street
Aurora, CO 80045-0508

Architect
AndersonMasonDale Architects, P.C.
3198 Speer Boulevard
Denver, CO, 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
12499 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

MEP Engineer
Cator Ruma & Associates
896 Tabor Street
Lakewood, CO 80401
Telephone: 303-232-6200

DAVID C.
4/29/2022
LICENSED ARCHITECT

Issue	Date
100% Construction Documents	29 APRIL 2022

Project Number:	21-717
Drawn By:	JF
Reviewed By:	JT
Approved By:	DP

SCHEDULES, ELEVATIONS & DETAILS

A-102

4/26/2022 4:51:32 PM

GENERAL LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYMBOL	DESCRIPTION
	X / Y-Y	SECTION DESIGNATION SECTION CUT ON THIS SHEET			CAP END OF PIPE
				SLOPE	PITCH DOWN IN DIRECTION OF ARROW
					PIPE ANCHOR
	X / Y-Y	VIEW REFERENCE DESIGNATION VIEW REFERENCE ON THIS SHEET			PIPE ALIGNMENT GUIDE
					UNION OR FLANGE
	X / 123	EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER (UNIT SERVED – FLOOR –SEQUENCE #)			CONCENTRIC PIPE REDUCER
					ECCENTRIC PIPE REDUCER
	A 10 / 250	DIFFUSER IDENTIFICATION DIFFUSER NECK DIAMETER DIFFUSER CFM	PRV		PRESSURE REDUCING VALVE
			PTRV		PRESSURE AND/OR TEMPERATURE RELIEF VALVE
	B 24x24 / 9999	LINEAR DIFFUSER IDENTIFICATION LINEAR DIFFUSER NECK DIAMETER LINEAR DIFFUSER LENGTH LINEAR DIFFUSER CFM			ISOLATION VALVE (RE: SPEC FOR TYPE)
					VERTICAL PIPE VALVE
			CV		CHECK VALVE
	C FTR / 24	FINNED TUBE RADIATOR ACTIVE ELEMENT LENGTH EQUIPMENT UNIT IDENTIFICATION EQUIPMENT UNIT NUMBER RADIATOR ENCLOSURE LENGTH (OR W-W=WALL-TO-WALL)			SOLENOID / MOTORIZED VALVE
					SOLENOID VALVE
					HOSE END DRAIN VALVE
	<#>	KEYNOTE REFERENCE	P/T		PRESSURE / TEMPERATURE TAP
	K	KITCHEN/OWNER/MEDICAL EQUIPMENT REFERENCE			STRAINER
		TYPICAL ROOM REFERENCE (TOP = RM #, BOTTOM = FUR)			STRAINER W/ BLOWDOWN
		POINT OF CONNECTION, NEW TO EXISTING			BRAIDED FLEXIBLE PIPE CONNECTOR
		POINT OF DISCONNECTION, DEMO			
		DIRECTION OF FLOW IN PIPE			DOUBLE-BOWL FLEXIBLE PIPE CONNECTOR
		DUCTWORK, PIPING AND EQUIPMENT TO BE REMOVED			THERMOMETER
(E)		EXISTING			PRESSURE GAUGE
(N)		NEW			SIGHT GLASS
(R)		RELOCATED	C.A.P.		CEILING ACCESS PANEL
(F)		FUTURE			PUMP
DIA	ø	DIAMETER	TB		THRUST BLOCK
WAD		WALL ACCESS DOOR	MAV		MANUAL AIR VENT
NIC		NOT IN CONTRACT	AAV		AUTOMATIC AIR VENT
AFF		ABOVE FINISHED FLOOR			
GC		GENERAL CONTRACTOR			
MC		MECHANICAL CONTRACTOR			
EC		ELECTRICAL CONTRACTOR			
UNO		UNLESS NOTED OTHERWISE			
C		COMMON			
NC		NORMALLY CLOSED			
NO		NORMALLY OPENED			

HVAC LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYMBOL	DESCRIPTION
HWS	HWS	HOT WATER SUPPLY PIPING			SUPPLY DUCT UP / DOWN
HWR	HWR	HOT WATER RETURN PIPING			RETURN DUCT UP / DOWN
HTWS	HTWS	HIGH TEMPERATURE HEATING WATER SUPPLY PIPING			EXHAUST DUCT UP / DOWN
HTWR	HTWR	HIGH TEMPERATURE HEATING WATER RETURN PIPING			ROUND DUCT UP / ROUND DUCT DOWN
CHWS	CHWS	CHILLED WATER SUPPLY PIPING	42X12		FLAT OVAL DUCTWORK
CHWR	CHWR	CHILLED WATER RETURN PIPING			FLEXIBLE DUCT CONNECTION
D	D	COOLING COIL DRAIN PAN PIPING	BDD		BACKDRAFT DAMPER
CWS	CWS	CONDENSER WATER SUPPLY PIPING	TCD		TEMP. CONTROL DAMPER–OPPOSED BLADE
CWR	CWR	CONDENSER WATER RETURN PIPING	TCD		TEMP. CONTROL DAMPER– PARALLEL BLADE
GHMS	GHMS	GLYCOL HEATING WATER SUPPLY PIPING	MVD		MANUAL VOLUME DAMPER
GHMR	GHMR	GLYCOL HEATING WATER RETURN PIPING	MD		DUCT MOTORIZED DAMPER
PCWS	PCWS	PROCESS CHILLED WATER SUPPLY PIPING			CONICAL FITTING WITH MVD
PCWR	PCWR	PROCESS CHILLED WATER RETURN PIPING			SPIN-IN FITTING WITH MVD
LPS	LPS	LOW PRESSURE STEAM SUPPLY PIPING (0 – 15#)	FD		DUCT FIRE DAMPER
LPC	LPC	LOW PRESSURE CONDENSATE RETURN PIPING	FSD		COMBINATION DUCT SMOKE & FIRE DAMPER
MPS	MPS	MEDIUM PRESSURE STEAM SUPPLY PIPING (16# – 60#)	SD		DUCT SMOKE DAMPER
MPC	MPC	MEDIUM PRESSURE CONDENSATE RETURN PIPING			DUCT SMOKE DETECTOR
HPS	HPS	HIGH PRESSURE STEAM SUPPLY PIPING (61# – 125#)	DAD		DUCT ACCESS DOOR
HPC	HPC	HIGH PRESSURE CONDENSATE RETURN PIPING			TURNING VANES IN DUCT ELBOW
PC	PC	PUMPED CONDENSATE PIPING			
BBD	BBD	BOILER BLOWDOWN PIPING	EP		ELECTRIC–PNEUMATIC CONTROL VALVE
BF	BF	BOILER FEED WATER PIPING	PE		PNEUMATIC–ELECTRIC CONTROL SWITCH
RL	RL	REFRIGERANT LIQUID PIPING		S EB	WALL SWITCH / EMERGENCY SWITCH
RS	RS	REFRIGERANT SUCTION PIPING		TS	TEMPERATURE SENSOR
RHG	RHG	REFRIGERANT HOT GAS PIPING		T	WALL MOUNTED THERMOSTAT
TT	TT	THERMOSTATIC STEAM TRAP		CO2	WALL MOUNTED CARBON DIOXIDE SENSOR
F&T	F&T	FLOAT AND THERMOSTATIC STEAM TRAP		O2	WALL MOUNTED OXYGEN SENSOR
IBT	IBT	INVERTED BUCKET STEAM TRAP		H	HUMIDISTAT
TCV		(2 OR 3–WAY) TEMPERATURE CONTROL VALVE			UNIT MOUNTED THERMOSTAT
		VENTURI METER		P PM	PRESSURE SENSOR / PRESSURE MONITOR
BV		CALIBRATED BALANCING VALVE			UNDERCUT DOOR
AFV	AFV	AUTO FLOW VALVE			UNDERCUT DOOR
RSV	RSV	REFRIGERANT SERVICE VALVE		RISE	DUCT RISE
DPS	DPS	DIFFERENTIAL PRESSURE SWITCH		DROP	DUCT DROP
FS	FS	FLOW SWITCH	A.L.		ACOUSTICALLY LINED DUCTWORK
EJ	EJ	EXPANSION JOINT	TCOAD		TEMPERATURE CONTROL OUTSIDE AIR DAMPER
BJ	BJ	BALL JOINT EXPANSION COMPENSATOR	TCRAD		TEMPERATURE CONTROL RETURN AIR DAMPER
SA		SUPPLY AIR	TCEAD		TEMPERATURE CONTROL EXHAUST AIR DAMPER
RA		RETURN AIR	SP IN WC		STATIC PRESSURE IN INCHES WATER COLUMN
EA		EXHAUST AIR	EODM		END OF MAIN DRIP
OA		OUTSIDE AIR	SCCR		SHORT CIRCUIT CURRENT RATING
			SD		SUPPLY AIR DEVICE
			RG		RETURN AIR DEVICE
			RG		RETURN AIR DEVICE WITH SOUND BOOT
			EG		EXHAUST AIR DEVICE

DOUBLE/SINGLE LINE DUCT LEGEND
(Not all symbols listed below are used on these drawings)

SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE
45° TEE (ROUND)		90° TEE (RECTANGULAR)		FLEX DUCT		90° RADIUS ELBOW	
45° TEE (RECTANGULAR)		90° TEE (ROUND)		MANUAL VOLUME DAMPER		90° ELBOW	
DUCT SPLIT		GRD RUNOUT		REDUCER		45° ELBOW	

PLUMBING LEGEND
(Not all symbols listed below are used on these drawings)

ABBR.	SYMBOL	DESCRIPTION	ABBR.	SYMBOL	DESCRIPTION
CW	CW	DOMESTIC COLD WATER PIPING	CO		GRADE CLEANOUT / SURFACE CLEANOUT
HW	HW	DOMESTIC HOT WATER PIPING	FCO		FLOOR CLEANOUT
HWC	HWC	DOMESTIC HOT WATER CIRC PIPING	WCO		WALL CLEANOUT
CW-S	CW-S	SOFTENED DOMESTIC COLD WATER PIPING	SCO		STORM LINE CLEANOUT
HW-S	HW-S	SOFTENED DOMESSTIC HOT WATER PIPING	AD		AREA DRAIN
140°F HW	140°F HW	DOMESTIC HOT WATER PIPING @ TEMP SHOWN	FD		FLOOR DRAIN
140°F HWC	140°F HWC	DOMESTIC HOT WATER CIRC PIPING @ TEMP SHOWN	FS		FLOOR SINK
TW	TW	TEMPERED WATER PIPING	RD / OD		ROOF DRAIN OR OVERFLOW DRAIN
TWC	TWC	TEMPERED WATER CIRC PIPING			
ICW	ICW	INDUSTRIAL COLD WATER PIPING	VB		ATMOSPHERIC VACUUM BREAKER
IHW	IHW	INDUSTRIAL HOT WATER PIPING	BFP		BACKFLOW PREVENTER
IHWC	IHWC	INDUSTRIAL HOT WATER CIRC PIPING	SA		SHOCK ARRESTOR W / ISOLATION VALVE
NPCW	NPCW	NON–POTABLE COLD WATER PIPING	GC		GAS SHUT–OFF VALVE
NPHW	NPHW	NON–POTABLE HOT WATER PIPING			STOP AND DRAIN VALVE
NPHR	NPHR	NON–POTABLE HOT WATER CIRC PIPING	BV		BALANCING VALVE
V	V	VENT PIPING	WH		WALL HYDRANT
AV	AV	ACID RESISTANT VENT PIPING	HB		HOSE BIBB
W	W	WASTE PIPING	RH		ROOF HYDRANT
N	N	WASTE PIPING BELOW FLOOR	YH		YARD HYDRANT
AW	AW	ACID RESISTANT WASTE PIPING	DSN		DOWNSPOUT NOZZLE
AW	AW	ACID RESISTANT WASTE PIPING BELOW FLOOR	MH		MANHOLE
GW	GW	GREASE WASTE (TO GREASE INTERCEPTOR)	CI		CAST IRON
GW	GW	GREASE WASTE PIPING BELOW FLOOR	CB		CATCH BASIN
SD	SD	STORM DRAIN PIPING	VTR		VENT THRU ROOF
SD	SD	STORM DRAIN PIPING BELOW FLOOR	IE		INVERT ELEVATION
OD	OD	OVERFLOW DRAIN PIPING	PVC		POLYVINYL CHLORIDE
OD	OD	OVERFLOW DRAIN PIPING BELOW FLOOR			
CA	CA	COMPRESSED AIR			
G	G	NATURAL GAS PIPING			

AIR DEVICE SCHEDULE

DESIG.	FUNCTION	STYLE	MFR.	MODEL	FRAME STYLE	MODULE SIZE	MATERIAL	FINISH	REMARKS
B	CEILING EXHAUST	MODULAR PERFORATED FACE GRILLE	TITUS	PAR	LAY-IN CEILING ORSURFACE	12x24 & 24x24	STEEL	WHITE	WITH 10x22 OR 22x22 DUCT COLLAR

REMARKS:
GENERAL: APPLIES TO ALL AIR DEVICES. MANUAL VOLUME DAMPERS SHALL BE ACCEPTABLE IF INTEGRAL TO THE BRANCH DUCT OR IN LINE TO THE AIR DEVICE BY THE CONTRACTOR INSTALLING DUCTWORK. A DAMPER LOCATED AT THE AIR DEVICE SHALL BE ACCEPTABLE WHEN PERMITTED BY ENGINEER ON A CASE-BY-CASE BASIS OR WHEN THE MANUFACTURER REQUIRES AN INTEGRAL MANUAL VOLUME DAMPER.

PLUMBING FIXTURE SCHEDULE

FIXTURE						TRIM			ELECTRICAL ACCESSORY REQUIREMENTS	FLOW	CONNECTIONS				REMARKS
DESIG.	FIXTURE NAME	FIXTURE DESCRIPTION	MANUFACTURER	MODEL	SIZE	MANUFACTURER	MODEL	SUPPLY	I.R. / BATTERY / HP		WASTE	VENT	CW	HW	
S-1	HAND WASHING SINK	SINGLE BOWL WALL HUNG HANDWASH SINK KIT. SINK IS NFR FROM SS WITH SATIN FINISH, CENTER DRAIN AND INTEGRAL FAUCET	ELKAY	CHSP1710C	N/A	WATERSAVER	L2522TWF-WB-3010	RE: SPEC	MANUAL	–	2"	1 1/2"	3/4"	3/4"	REFER TO ARCHITECTURAL DRAWING FOR LOCATION AND MOUNTING HEIGHT. PROVIDE WITH BOTH FOOT PEDALS AND WRIST BLADE HANDLE. PROVIDE STAINLESS STEEL SHROUD BELOW SINK TO COVER UTILITIES.

NOTES:
1. REFER TO GENERAL SPECIFICATIONS FOR SINKS AND MISCELLANEOUS FIXTURE REQUIREMENTS.
2. GRAB BARS BY ARCHITECT.
3. THIS SCHEDULE INCLUDES ITEMS THAT MAY NOT BE INCLUDED IN THE DRAWING DOCUMENTS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND MOUNTING HEIGHT.

PLUMBING NOTES:

1. CONTRACTOR SHALL NOT SHUT–OFF/PUT OUT OF SERVICE ANY SYSTEMS/SERVICES WITHOUT FIRST COORDINATING WITH OWNER.
2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK AND SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FOR RESOLUTIONS.
3. THIS CONTRACTOR SHALL COORDINATE LOCATIONS OF PIPING WITH OTHER TRADES AND ADVISE ARCHITECT/ENGINEER OF ANY POSSIBLE CONFLICTS. VERIFY EXACT LOCATIONS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS.
4. SEE PLUMBING FIXTURE SCHEDULE FOR PIPE SIZING TO INDIVIDUAL PLUMBING FIXTURES.
5. ALL EXISTING FIXTURES AND EQUIPMENT TO BE REMOVED SHALL HAVE ALL ASSOCIATED PIPING CONTROLS, HANGERS, SUPPORTS AND ANY MISCELLANEOUS ASSOCIATED SERVICE OR PART REMOVED COMPLETELY.
6. ALL MEDICAL GAS PIPING SHALL HAVE TOP TAKE–OFFS WHENEVER POSSIBLE.
7. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE ELEVATIONS AND LOCATIONS.
8. SEE ARCHITECTURAL CONSTRUCTION DOCUMENTS FOR DIMENSIONED LOCATION OF PLUMBING FIXTURES AND WALLS.
9. PROVIDE CLEANOUTS IN ACCESSIBLE LOCATIONS PER THE PROJECT SPECIFICATIONS AND LOCAL PLUMBING CODES.

GENERAL NOTES:

1. WORK INCLUDED IN THE CONTRACT IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
2. A DETAILED METHOD OF PROCEDURE IS REQUIRED WHEN A CONSTRUCTION ACTIVITY AFFECTS THE SAFETY OF THE OCCUPANTS, OWNER'S EQUIPMENT OR VALUABLE CONTENTS OR ANY SYSTEM WHICH SUPPORTS THESE SYSTEMS, OR ESSENTIALLY AFFECTS THE BUILDING MANAGEMENT, OPERATIONS OR SECURITY.
3. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK AND SHALL NOTIFY THE ENGINEER/ARCHITECT OF ANY DISCREPANCIES FOR RESOLUTION.
4. COORDINATE WORK WITH ALL TRADES.
5. COORDINATE ALL DUCTWORK AND PIPING WITH EQUIPMENT, STRUCTURE, ETC.
6. CONTRACTOR SHALL NOT SHUT DOWN / TAKE OUT OF SERVICE ANY SYSTEMS WITHOUT FIRST COORDINATING WITH OWNER AND PREPARING M.O.P.

HVAC PLAN NOTES:

1. ALL SUPPLY AIR DIFFUSERS ARE 4–WAY AIR PATTERN UNLESS SHOWN OTHERWISE.
2. DUCT SIZE OF BRANCH DUCT TO AIR DEVICE SHALL BE THE SAME SIZE AS NECK SIZE OF AIR DEVICE UNLESS NOTED OTHERWISE.
3. UNLESS OTHERWISE NOTED, ALL SUPPLY AIR DUCTWORK SHALL BE EXTERNALLY WRAPPED TO THICKNESS AS STATED IN SPECIFICATIONS. RETURN AND EXHAUST DUCTWORK IS NEITHER LINED NOR WRAPPED.
4. PROVIDE ROOM AIR BALANCE TO ACHIEVE POSITIVE (+) OR NEGATIVE (–) AT THE DIFFERENTIAL PRESSURE BASED ON THE PRE–CONSTRUCTION MEASUREMENTS.

DEMOLITION GENERAL NOTES:

1. EXISTING ITEMS TO REMAIN ARE DENOTED LIGHTLY UNLESS OTHERWISE NOTED. ALL ITEMS SHOWN DARK AND DASHED SHALL BE REMOVED UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL NOT SHUT–OFF OR PUT–OUT OF SERVICE ANY SYSTEMS OR SERVICE WITHOUT FIRST COORDINATING WITH THE OWNER.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND UNDERSTAND THE EXTENT OF THE REMODEL WORK REQUIRED PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR WORK REQUIRED TO ACHIEVE THE END RESULT AS INDICATED BY THE CONTRACT DOCUMENT.
4. CONTRACTOR SHALL DETERMINE AND COORDINATE THE EXACT EXTENT OF DEMOLITION TO FACILITATE ALL WORK INDICATED BY THE CONTRACT DOCUMENT.
5. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, VERIFY EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
6. ALL ITEMS IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED. REMOVED ITEMS SHALL BE TURNED OVER TO THE OWNER UNLESS OTHERWISE NOTED AND STORED IN THE AREA DESIGNATED BY THE OWNER. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL ITEMS THE OWNER CHOOSES NOT TO ACCEPT.
7. WHERE EXISTING PIPING, T.C. TUBING/WIRING ETC. ARE TO BE REMOVED FROM WALLS WHICH ARE REMAINING, THE WALLS SHALL BE REPAIRED TO MATCH ORIGINAL CONDITIONS.
8. WHERE EXISTING PIPING TO BE REMOVED PASSES THROUGH FLOORS, THEY SHALL BE CUT BACK TO WITHIN CONCRETE AND FILLED WITH GROUT TO ACHIEVE A SMOOTH AND EVEN FINISH WITH CONCRETE SURFACE.

CONTROL SCOPE NOTES:

COMMISSIONING WILL BE PERFORMED AFTER CONSTRUCTION IS COMPLETED. THIS COMMISSIONING IS TO TEST THE SPACE AGAINST THE CURRENT VERSION OF THE BMBL DOCUMENT. THE INTENT OF THIS RE–COMMISSIONING IS TO VERIFY THE SPACES DO NOT REVERSE PRESSURE AND BECOME POSITIVE UNDER ANY CONDITION. THE CONTROLS CONTRACTOR WILL NEED TO WORK WITH THE COMMISSIONING AGENT TO ENABLE AND DISABLE EQUIPMENT IN A MANNER TO SIMULATE EQUIPMENT (FAN, AIR HANDLING UNIT, ETC.) FAILURE TO DETERMINE IF THE BSL SPACES REMAIN NEGATIVE OR NEUTRAL DURING THE EQUIPMENT SWITCH OVER FROM LEAD TO LAG/STANDBY. MODIFYING THE PROGRAMMING MAY BE REQUIRED DURING THIS RE–COMMISSIONING.

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1640 North Wheeling Street
Aurora, CO 80045-6566

Architect
AndersonMasonDale Architects, P.C.
3188 Speer Boulevard
Denver, CO 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
10455 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

MEP Engineer
Cator Rumo & Associates
998 Tabor Street
Lakewood, CO 80401
Telephone: 303-233-6200

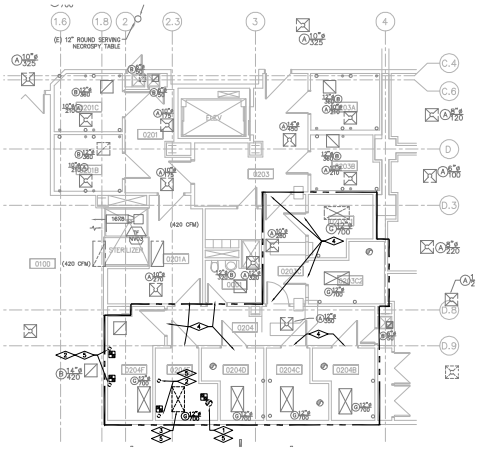
Issue	Date
100% Construction Documents	29 APR 2022

Sean T. Cornell

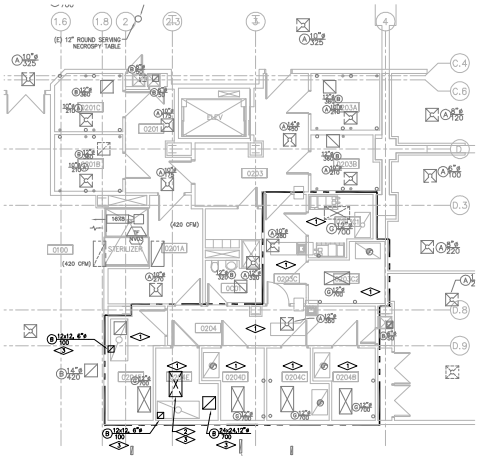
Project Number:	21-717
Drawn By:	LKL
Reviewed By:	STC
Approved By:	STC

MECHANICAL LEGENDS, SCHEDULES AND GENERAL NOTES

M-001



BASEMENT HVAC DEMO PLAN
SCALE: 1/8"=1'-0"



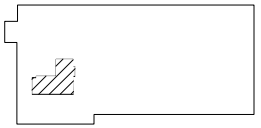
BASEMENT HVAC PLAN
SCALE: 1/8"=1'-0"

DEMO KEY NOTES:

1. REMOVE HARD-DUCTED CONNECTION TO BSC.
2. REMOVE IRIS DAMPER AND DUCT.
3. REMOVE EXISTING CEILING DIFFUSER. SALVAGE FOR RE-USE.
4. PROVIDE A PRE-DEMOLITION MEASUREMENT/RECORDING OF PRESSURE CASCADE THROUGH ALL DOORS IN THIS ABSL-3 SUITE.
5. COORDINATE WITH G.C. FOR PATCHING, PAINTING, CAULKING, ETC. OF CEILINGS WHERE DUCTS ARE REMOVED.

NEW KEY NOTES:

1. REBALANCE ALL ROOMS TO MATCH PRESSURE CASCADE PRIOR TO START OF CONSTRUCTION.
2. RELOCATE EXISTING DIFFUSER EAST TO BE AT LEAST ONE FOOT AWAY FROM BSC. COORDINATE NEW LOCATION WITH EXISTING SURFACE MOUNTED LIGHT RUNNING E-W.
3. COORDINATE WITH G.C. TO HAVE ALL PERIMETERS OF DIFFUSERS AND GRILLES CAULKED AIR TIGHT.



NORTH BLDG KEY PLAN

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1640 North Wheeling Street
Aurora, CO 80045-6566

Architect
AndersonMasonDale Architects, P.C.
3188 Speer Boulevard
Denver, CO, 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
12499 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

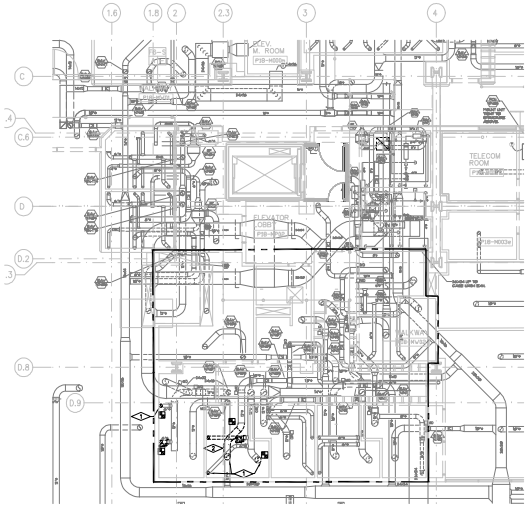
MEP Engineer
Cator Rumo & Associates
999 Tabor Street
Lakewood, CO 80401
Telephone: 303-233-4200

Issue	Date
100% Construction Documents	29 APR 2022

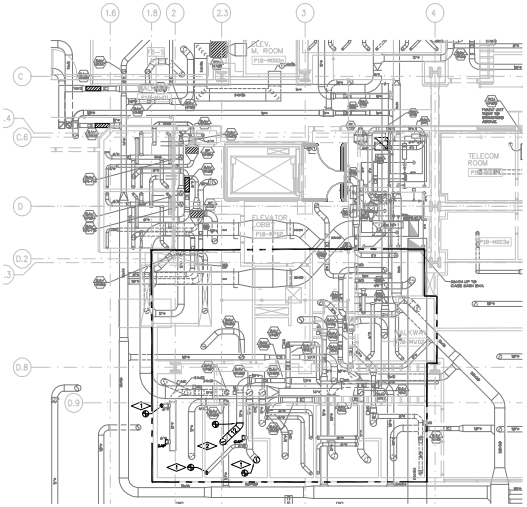
Project Number:	21-717
Drawn By:	LKL
Reviewed By:	STC
Approved By:	STC

BASEMENT HVAC PLANS

M-101



INTERSTITIAL HVAC DEMO PLAN
SCALE: 1/8"=1'-0"



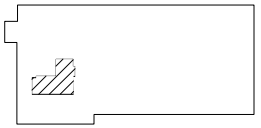
INTERSTITIAL HVAC PLAN
SCALE: 1/8"=1'-0"

DEMO KEY NOTES:

1. REMOVE PORTION OF EXHAUST DUCT TO PREP FOR INSTALLATION OF NEW GRILLE.
2. REMOVE PORTION OF SUPPLY DUCT TO RELOCATE THE SUPPLY DIFFUSER EAST – AWAY FROM NEW BSC.

NEW KEY NOTES:

1. CONNECT EXISTING EXHAUST DUCT TO NEW BACK-PAN OF NEW EXHAUST GRILLE.
2. CONNECT EXISTING 12" SUPPLY DUCT TO RELOCATED DIFFUSER.



NORTH BLDG
KEY PLAN

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1643 North Wheeling Street
Aurora, CO 80045-6508

Architect
AndersonMasonDale Architects, P.C.
3189 Speer Boulevard
Denver, CO, 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
12499 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

MEP Engineer
Cator Rumo & Associates
999 Tabor Street
Lakewood, CO 80401
Telephone: 303-232-8200

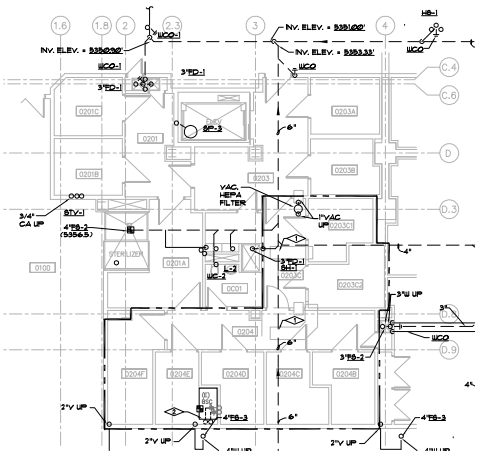
Issue	Date
100% Construction Documents	29 APR 2022

Project Number:	21-717
Drawn By:	LKL
Reviewed By:	STC
Approved By:	STC

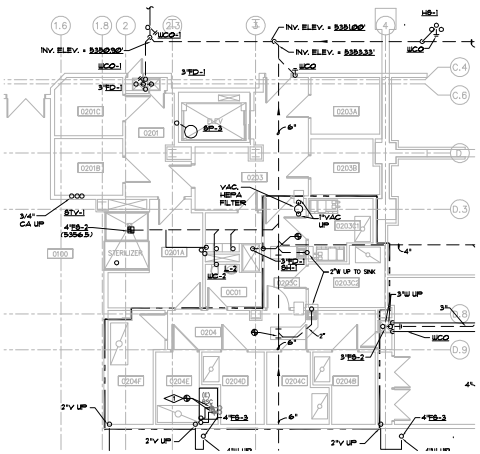
INTERSTITIAL HVAC PLANS

M-102

FILENAME: P:\CU Anschutz\2021-647 R1 ABSL-3 Upgrades\Cad\Mech\p-hvac-interior.dwg LAYOUT: M-102 REVISED: 4/26/2022 07:01 PLOTTED: 4/26/2022 01:24:42 USER: Lisa Lange



BASEMENT PLUMBING DEMO PLAN
SCALE: 1/8"=1'-0"



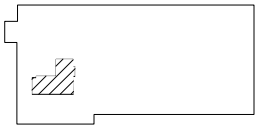
BASEMENT PLUMBING PLAN
SCALE: 1/8"=1'-0"

DEMO KEY NOTES:

1. REMOVE SECTION OF PIPE TO INSTALL Y-FITTING.
2. REMOVE CO2 AND VAC PIPING BACK TO ISOLATION VALVES AT WALL.

NEW KEY NOTES:

1. ROUTE CO2 AND VAC PIPING EXPOSED ALONG WALL OVER TO NEW BSC. CONNECT PER MANUFACTURER'S INSTRUCTIONS. SEAL ANY PENETRATIONS ON WALL AIR TIGHT.



NORTH BLDG
KEY PLAN

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1643 North Wheeling Street
Aurora, CO 80045-6566

Architect
AndersonMasonDale Architects, P.C.
3188 Speer Boulevard
Denver, CO 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
10400 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

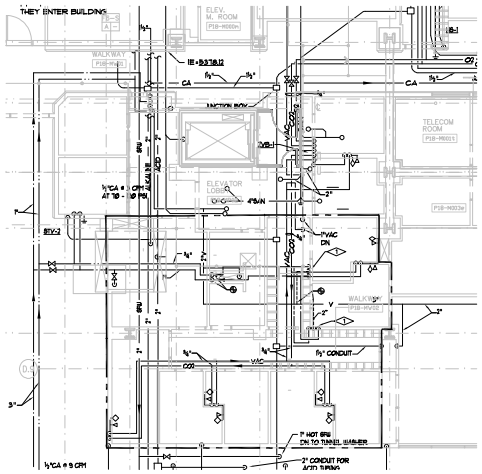
MEP Engineer
Cator Rumpf & Associates
999 Tabor Street
Lakewood, CO 80401
Telephone: 303-233-6200

Issue	Date
100% Construction Documents	29 APR 2022

Project Number:	21-717
Drawn By:	LKL
Reviewed By:	STC
Approved By:	STC

BASEMENT PLUMBING PLANS

P-101

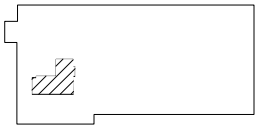


INTERSTITIAL PLUMBING PLAN

SCALE: 1/8"=1'-0"

NEW KEY NOTES:

1. 1/2"CW, 1/2" HW AND 2" V DOWN TO NEW SINK. SEAL ALL CEILING AND WALL PENETRATIONS AIR TIGHT.



NORTH BLDG KEY PLAN

AndersonMasonDale Architects

CU Anschutz Research 1 - ABSL Suite Renovation

12950 E. Montview Blvd.
Aurora, CO 80045
21-717

Owner
University of Colorado - Anschutz Medical Campus
Campus Services Building
1640 North Wheeling Street
Aurora, CO 80045-6566

Architect
AndersonMasonDale Architects, P.C.
3188 Speer Boulevard
Denver, CO 80211
Telephone: 303-294-9448

Structural Engineer
Martin/Martin Consulting Engineers
12499 West Colfax Ave.
Lakewood, CO 80215
Telephone: 303-431-6100

MEP Engineer
Cator Rump & Associates
999 Tabor Street
Lakewood, CO 80401
Telephone: 303-232-6200

Issue	Date
100% Construction Documents	29 APR 2022

Project Number:	21-717
Drawn By:	LKL
Reviewed By:	STC
Approved By:	STC

INTERSTITIAL PLUMBING PLANS

P-102