# OGDEN-WEBER TECHNICAL COLLEGE MANUFACTURING TECHNOLOGY SKY BRIDGE

STATE OF UTAH **Utah Department of Government Operations** Diviosn of DFCM

Contact: Mathew Daley, Project Manager

OGDEN-WEBER TECHNICAL COLLEGE 200 N. Washington Blvd. Ogden, UT 84404

Contact: Josh Ulm

**SANDERS ASSOCIATES ARCHITECTS** 2668 Grant Ave. Suite 100 Ogden, UT 84401

Contact: M. Shane Sanders, AIA Telephone: 801.621.7303

STRUCTURAL:

ARW ENGINEERS 1594 W. Park Circle #100 Ogden, UT 84404

Contact: Robert Moyle, PE, SE Telephone: 801.782.6008

MECHANICAL:

**CUNNING AND ASSOCIATES** 4685 W. 11600 N. Tremonton, UT 84337

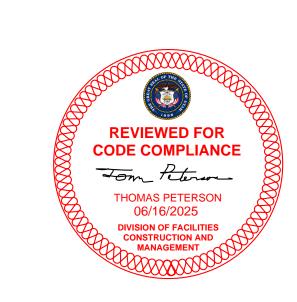
Contact: Norm Cunning, PE Telephone: 801.726.5047

ELECTRICAL:

SINE SOURCE ENGINEERING 95 West Golf Course Road Suite 102 Logan, UT 84321

Contact: Shane Swenson, PE Telephone: 435.787.1445





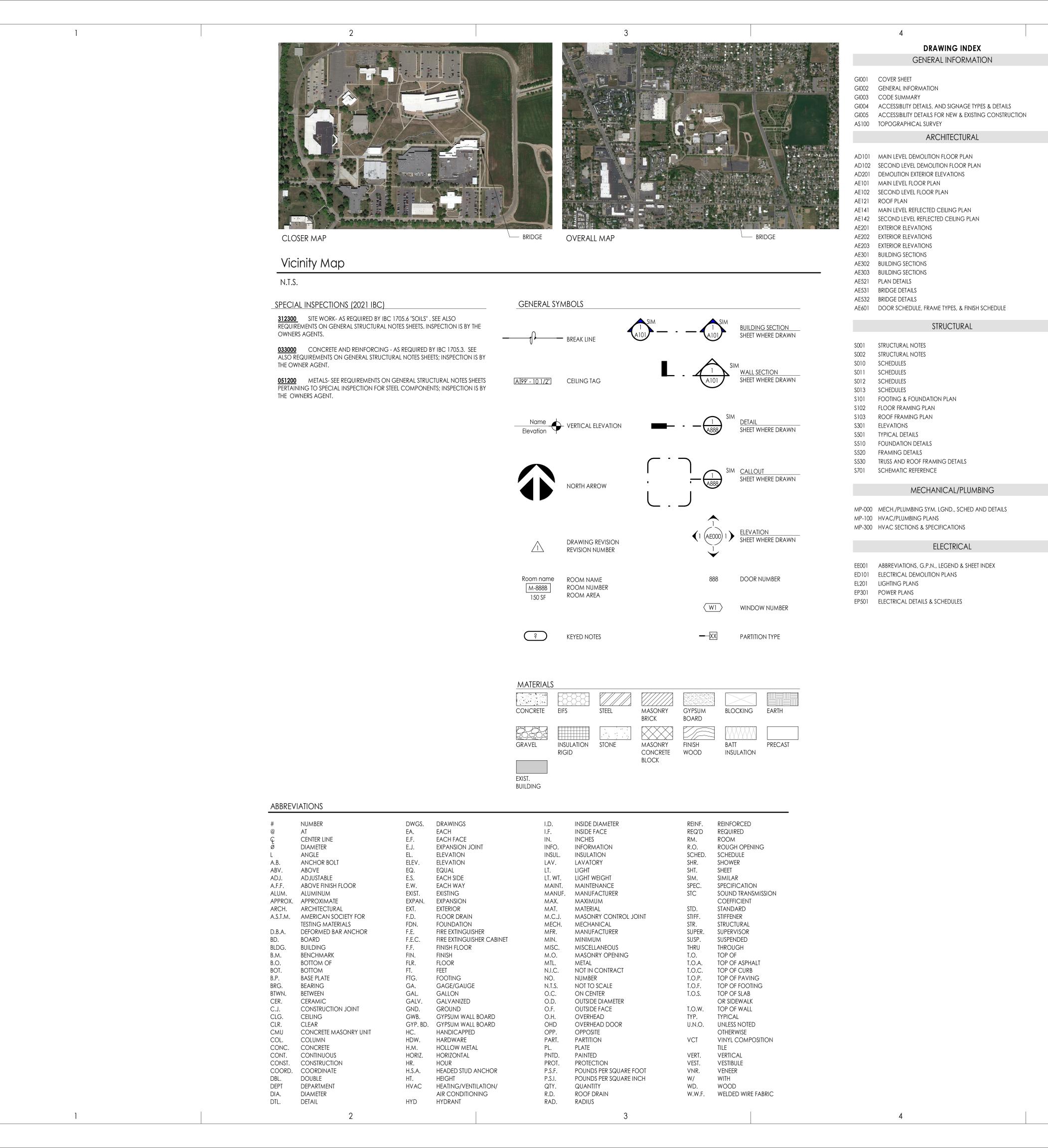
CTURING Description 1 4-21-25 DFCM PLAN REVIEW

BER

No. Date Description DFCM Project No. 25394240 A SAA Project No. 2023-34

COVER SHEET

Sheet Number



# MISCELLANEOUS GENERAL NOTES

- 1. THE PROJECT MANUAL, UNDER SEPARATE COVER, IS AN INTEGRAL PART OF THESE CONSTRUCTION DRAWINGS.
  - 2. PLANS, SECTIONS, ELEVATIONS, DETAILS AND DIMENSIONS LABELED "TYPICAL" SHALL APPLY TO ALL SITUATIONS OCCURRING THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY NOTED ON THE DRAWINGS.
  - 3. ALL WORK, MATERIALS, AND METHODS SHALL BE IN CONFORMANCE WITH
  - THE CODES, ORDINANCES AND REGULATIONS OF ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION AT THE PROJECT LOCATION. 4. CONTRACTORS ARE RESPONSIBLE FOR ALL WORK REGARDLESS OF THE LOCATION OF THE INFORMATION ON THE DOCUMENTS.
  - 5. KEEP SITE CLEAN AND CLEAR OF DEBRIS AND IN ORDERLY CONDITION THAT DOES NOT DETRACT FROM THE SURROUNDING SITE AND REPAIR ANY DAMAGE CAUSED BY WORK OF THE CONTRACT. 6. INSTALL SEALANT AT EXTERIOR SIDE OF ALL JOINTS, SEAMS, CONNECTIONS
  - OR OPENINGS WHICH WOULD ALLOW WATER OR AIR INFILTRATION EXCEPT AS NOTED OTHERWISE. SEALANT COLOR TO MATCH ADJACENT SURFACE. COLOR REQUIRES ARCHITECTS APPROVAL.
  - 7. ALL SPECIAL ACCESSIBLE FACILITIES SHALL BE IDENTIFIED WITH APPROVED SIGNAGE.
  - 8. THE CONTRACTOR IS RESPONSIBLE FOR PRODUCING A WEATHER TIGHT BUILDING, DETAILS AND OMISSIONS TO DRAWINGS NOTWITHSTANDING. ALL DRAWING CONFLICTS WHICH MAY NOT ALLOW A WEATHERTIGHT
  - CONDITION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. 9. DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CONTRACTOR SHALL SUBMIT SPECIFIC DISCREPANCIES FOR ARCHITECT REVIEW.
  - 10. PROVIDE FULL METAL BACKING PLATE (16 GAUGE X 6" HIGH SECURED TO 3 STUDS MIN.) OR WOOD BLOCKING AS REQUIRED TO SECURELY ANCHOR ALL WALL MOUNTED EQUIPMENT (CABINETS, TOILET ROOM ACCESSORIES, HARDWARE, ETC.). BLOCKING SHALL PROVIDE A RIGID CONNECTION CAPABLE OF SUPPORTING DESIGN LOADS. PROVIDE A 16 GAUGE X 6" STL. STUD/TRACK SECURED TO 2 STUDS TO SECURELY SUPPORT ALL WALL STOPS (DOOR BUMPER).
  - 11. COORDINATE WITH ALL TRADES, SIZES AND LOCATIONS OF ALL OPENINGS FOR MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT, EQUIPMENT PADS OR BASES, AS WELL AS ELECTRIC POWER, WATER, AND DRAIN INSTALLATIONS, BEFORE PROCEEDING WITH WORK. CONTRACTOR SHALL PROVIDE COORDINATION DRAWINGS FOR PROPER PLACEMENT OF ALL TRADES' WORK, ANY CONCERNS, SPACE LIMITATIONS OR STRUCTURAL CONFLICTS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. A REASONABLE RESPONSE TIME SHALL BE ALLOWED AS NOTED IN THE
  - SPECIFICATIONS. 12. ALL FLOOR OR WALL OPENINGS REQUIRED FOR PIPES, DUCTS, CONDUITS, ETC. SHALL BE SEALED IN AN APPROVED MANNER.
  - 13. FIRE SPRINKLER DESIGN TO BE DONE BY A CERTIFIED SUB-CONTRACTOR PRIOR TO SUBMITTAL TO ARCHITECT. SUBMITTAL TO THE ARCHITECT ALSO INDICATES THAT THE CONTRACTOR HAS REVIEWED AND COORDINATED FIRE-SPRINKLER PIPING LOCATIONS WITH ALL TRADES.
  - 14. ROOMS ENCLOSED WITH RATED WALLS REQUIRE RATED DOORS. ANY DUCTS PASSING THROUGH WALLS REQUIRE FIRE DAMPERS AND OR FIRE/SMOKE DAMPERS. ANY CONDUIT OR PIPING REQUIRES RATED SEALANT AT JOINTS.
  - 15. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND LOCATE ELECTRICAL, DATA AND PHONE RECEPTACLES, SWITCHES, ETC. TO AVOID CASEWORK DOORS, ETC.
  - 16. THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF THE ARCHITECTURAL AND STRUCTURAL DESIGN CONCEPT. THE DIMENSIONS OF THE BUILDING, THE TYPE OF STRUCTURAL, MECHANICAL, ELECTRICAL AND UTILITY SYSTEMS AND MAJOR ARCHITECTURAL ELEMENTS OF CONSTRUCTION AS "SCOPE" DOCUMENTS.
  - 17. THE DRAWINGS AND SPECIFICATIONS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR THE FULL PERFORMANCE AND COMPLETION OF THE WORK. CONTRACTS SHALL BE LET ON THE BASIS OF SUCH DOCUMENTS, WITH THE UNDERSTANDING THAT THE CONTRACTOR IS TO FURNISH ALL ITEMS REQUIRED FOR PROPER COMPLETION OF THE WORK WITH OUT ADJUSTMENT TO CONTRACT PRICE. IT IS INTENDED THAT THE WORK TO BE OF SOUND AND QUALITY CONSTRUCTION AND THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE INCLUSION OF ADEQUATE AMOUNTS TO COVER INSTALLATION OF ALL ITEMS INDICATED. DESCRIBED OR REASONABLY IMPLIED.

SANDERS ASSOCIATES ARCHITECT Phone: 801.621.73



BRII S  $\Delta$ I-WE

CTURING MANUF,

Z W

(

No. Date

BL

1 4-21-25 DFCM PLAN REVIEW Revision No. Date Description DFCM Project No. 25394240 2023-34 A | SAA Project No.

Drawing Title

GENERAL INFORMATION

Sheet Number

DFCM approval

**REVIEWED FOR** 

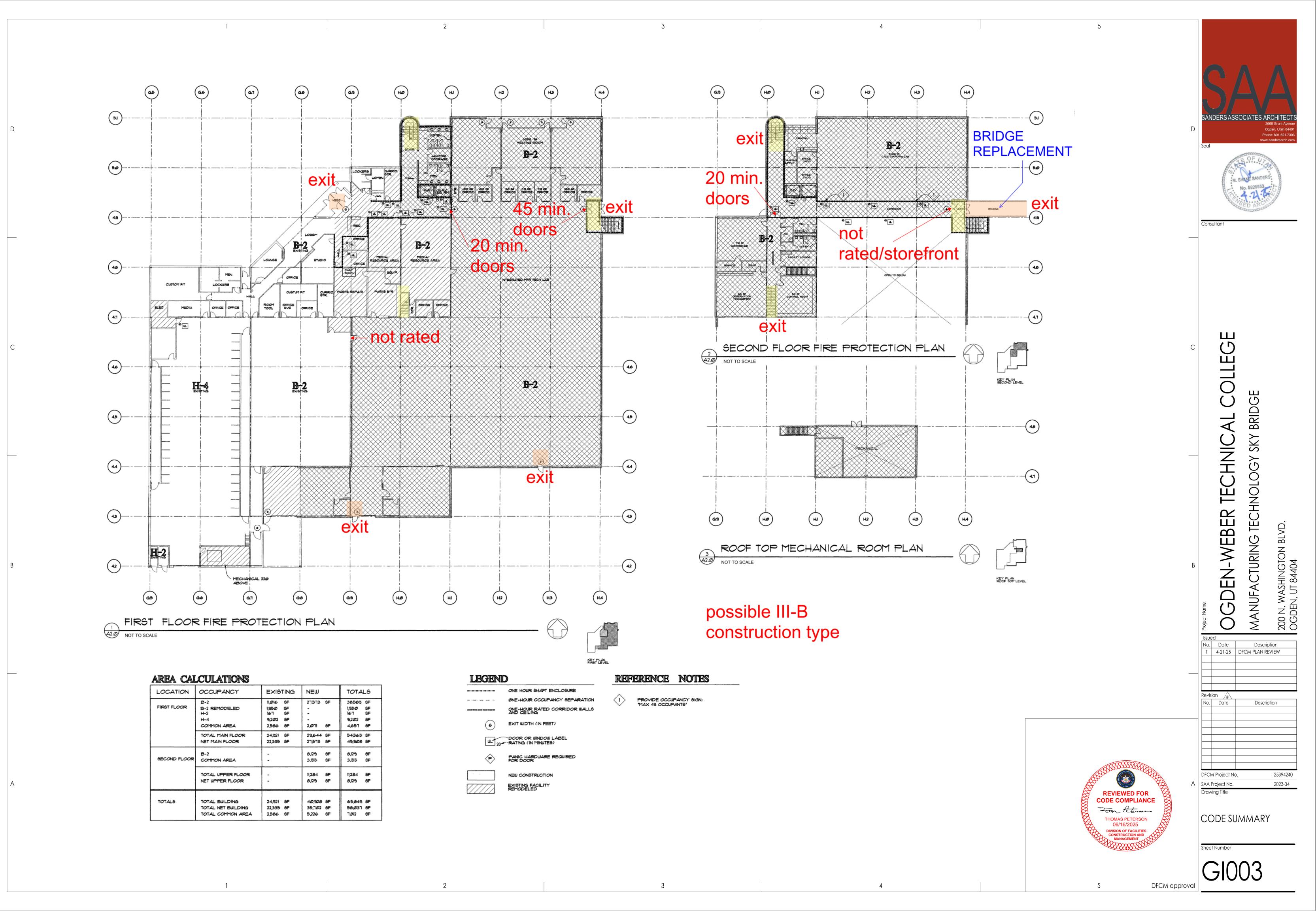
**CODE COMPLIANCE** 

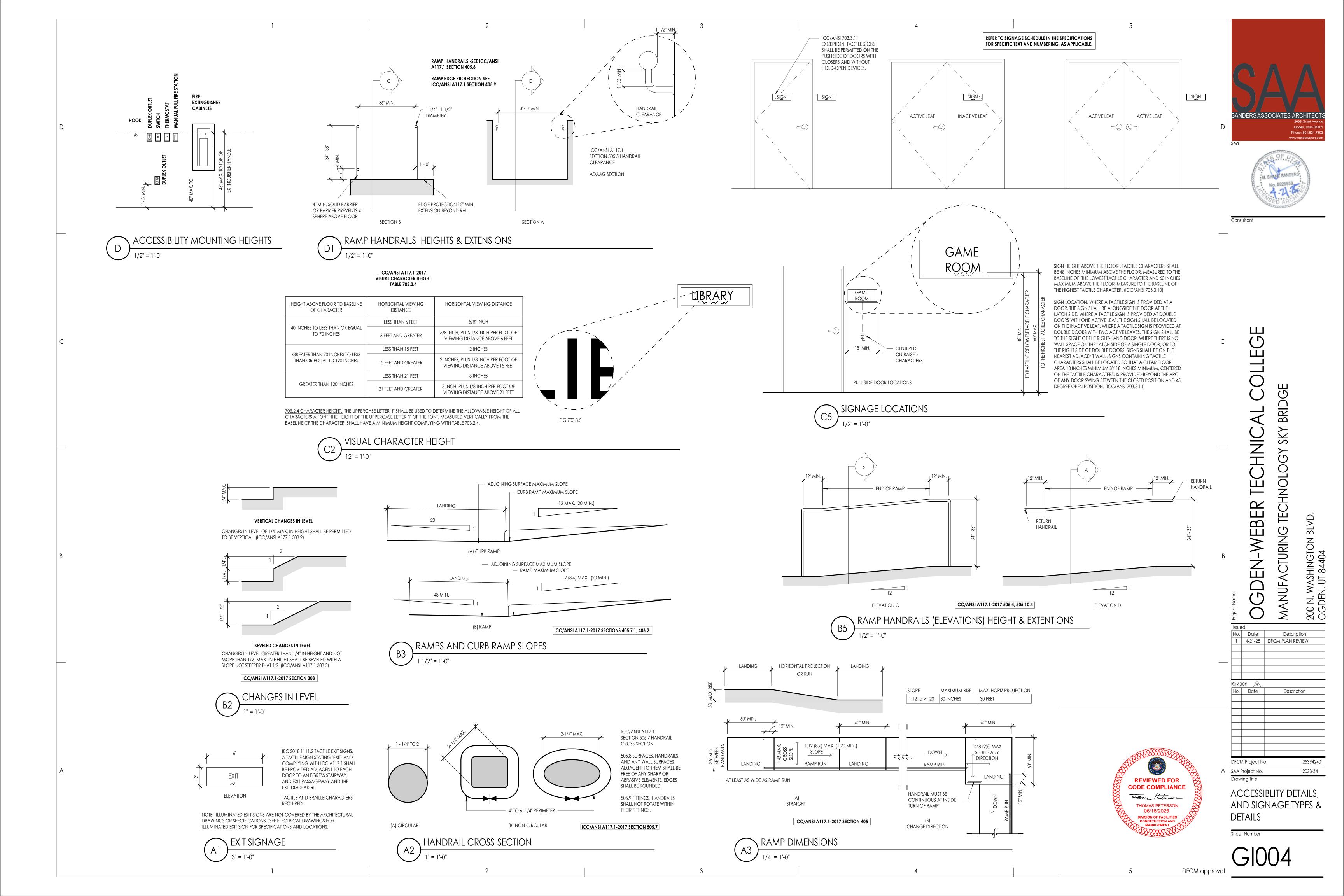
Tom Peterson

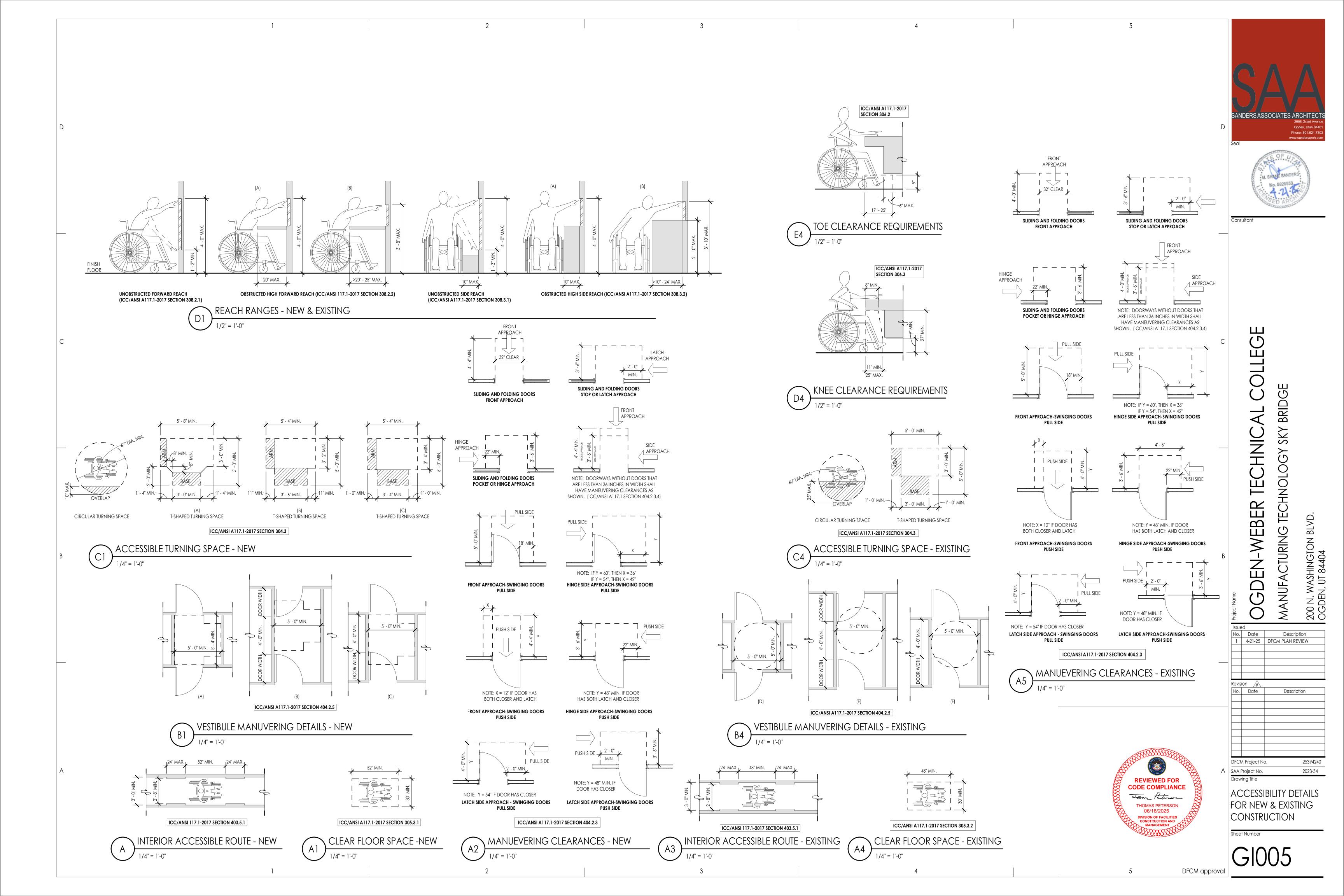
THOMAS PETERSON

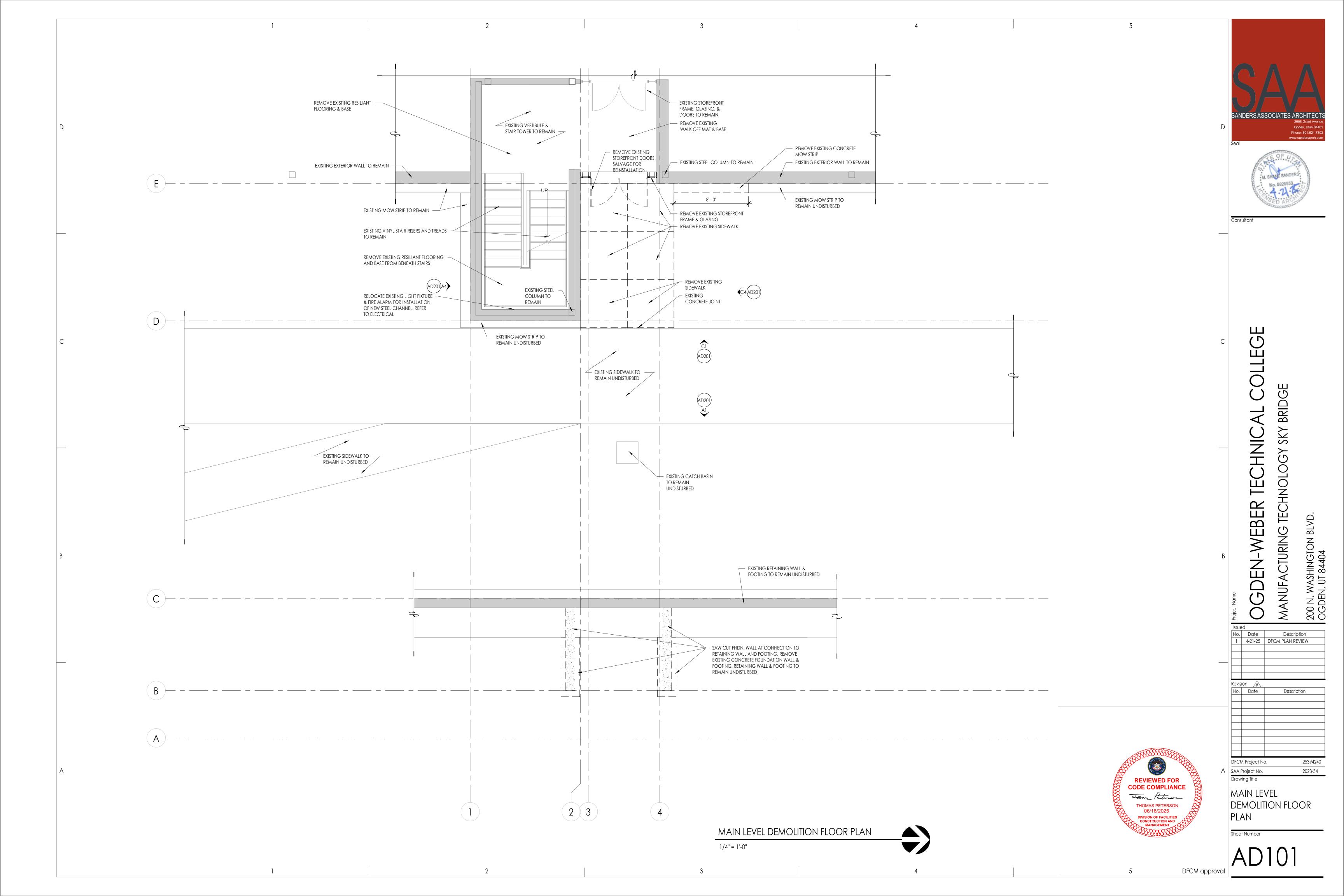
06/16/2025

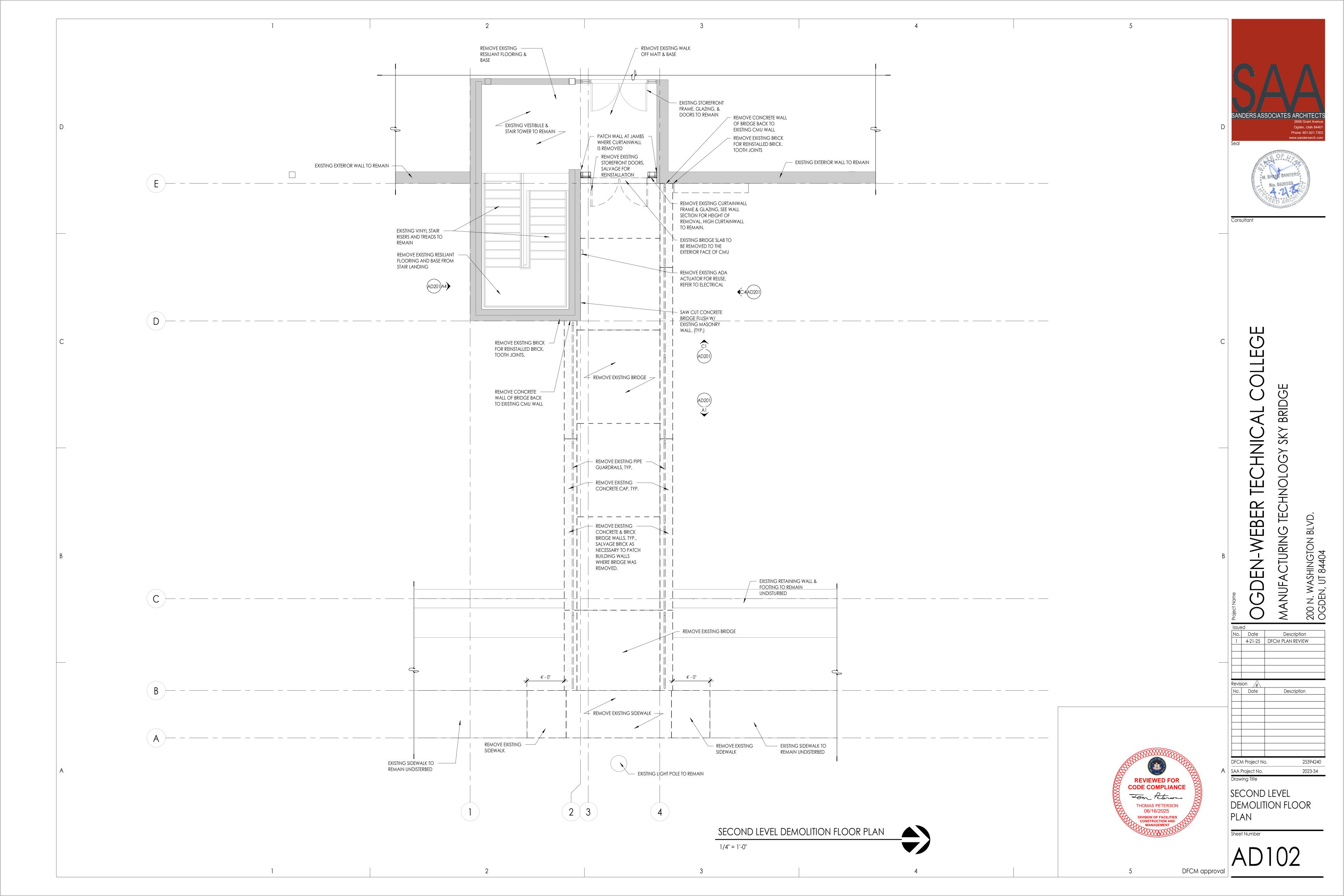
DIVISION OF FACILITIES
CONSTRUCTION AND
MANAGEMENT

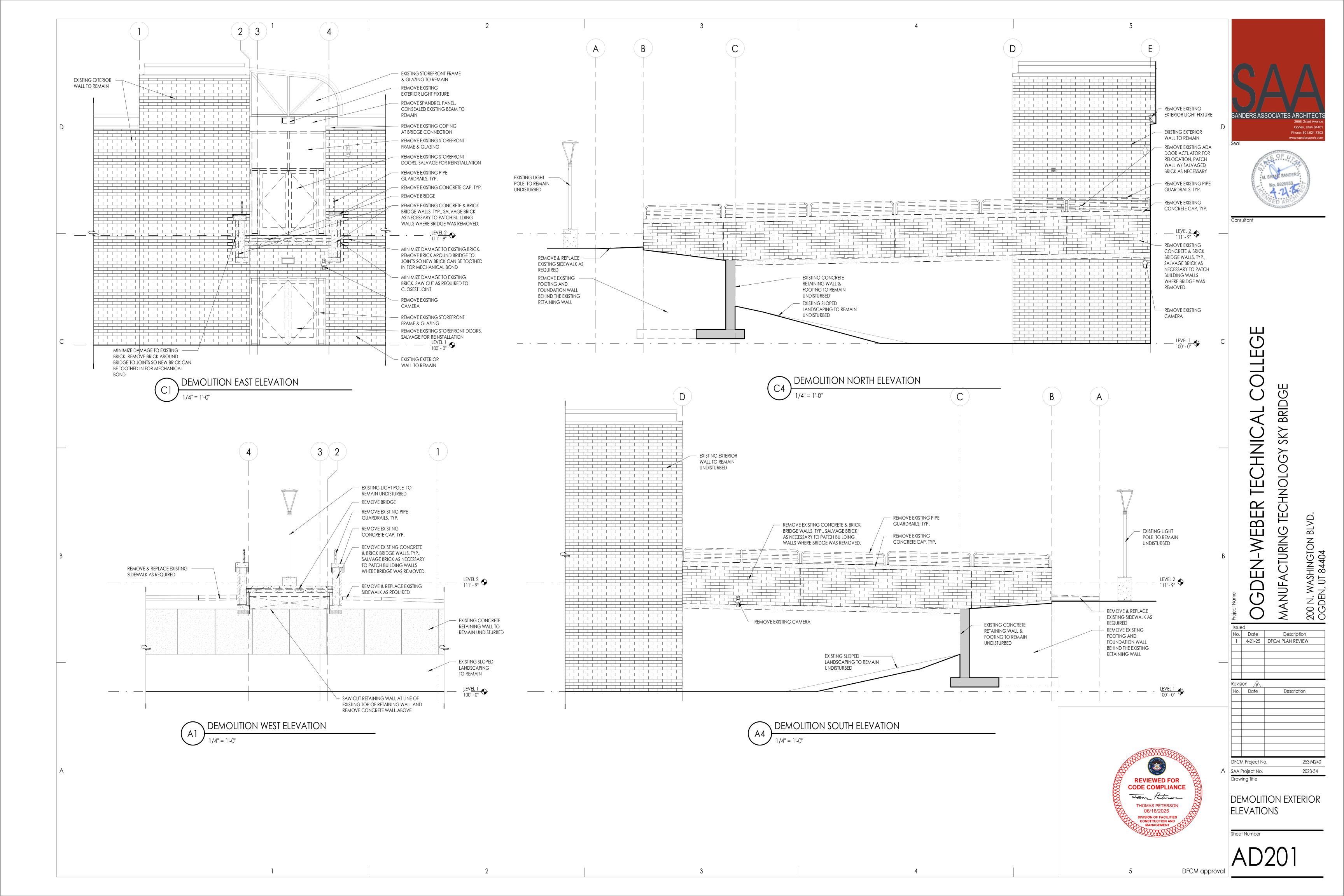


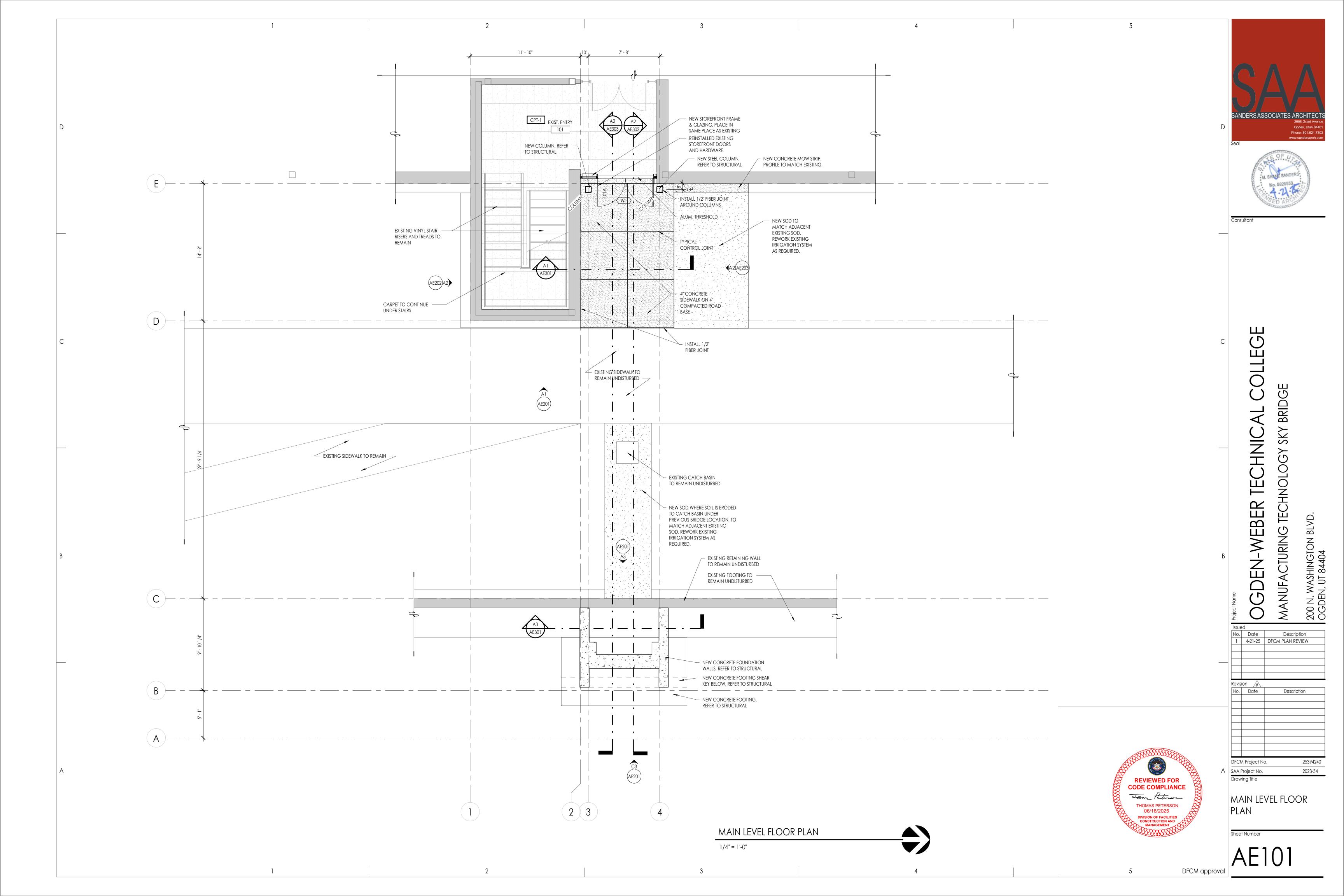


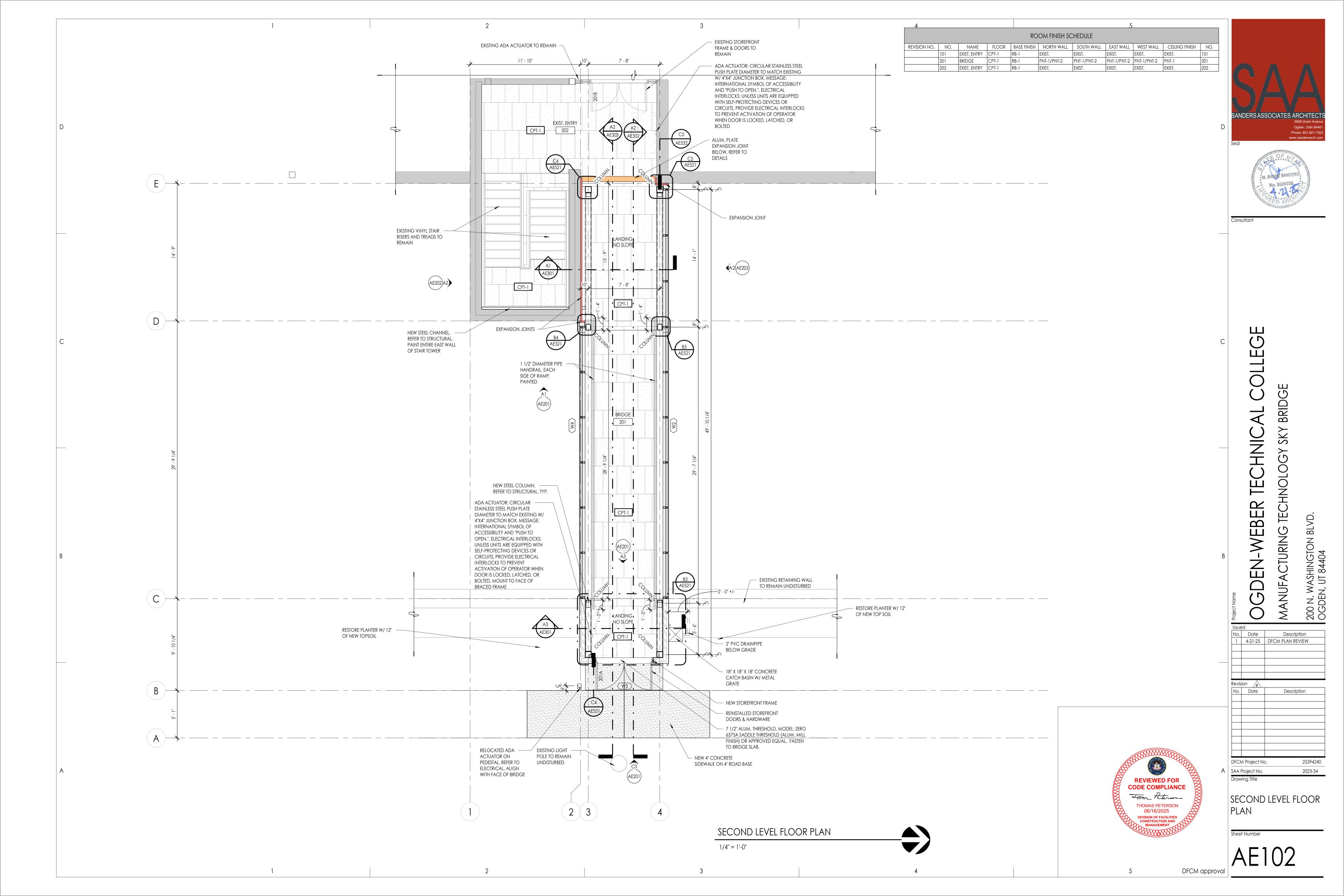


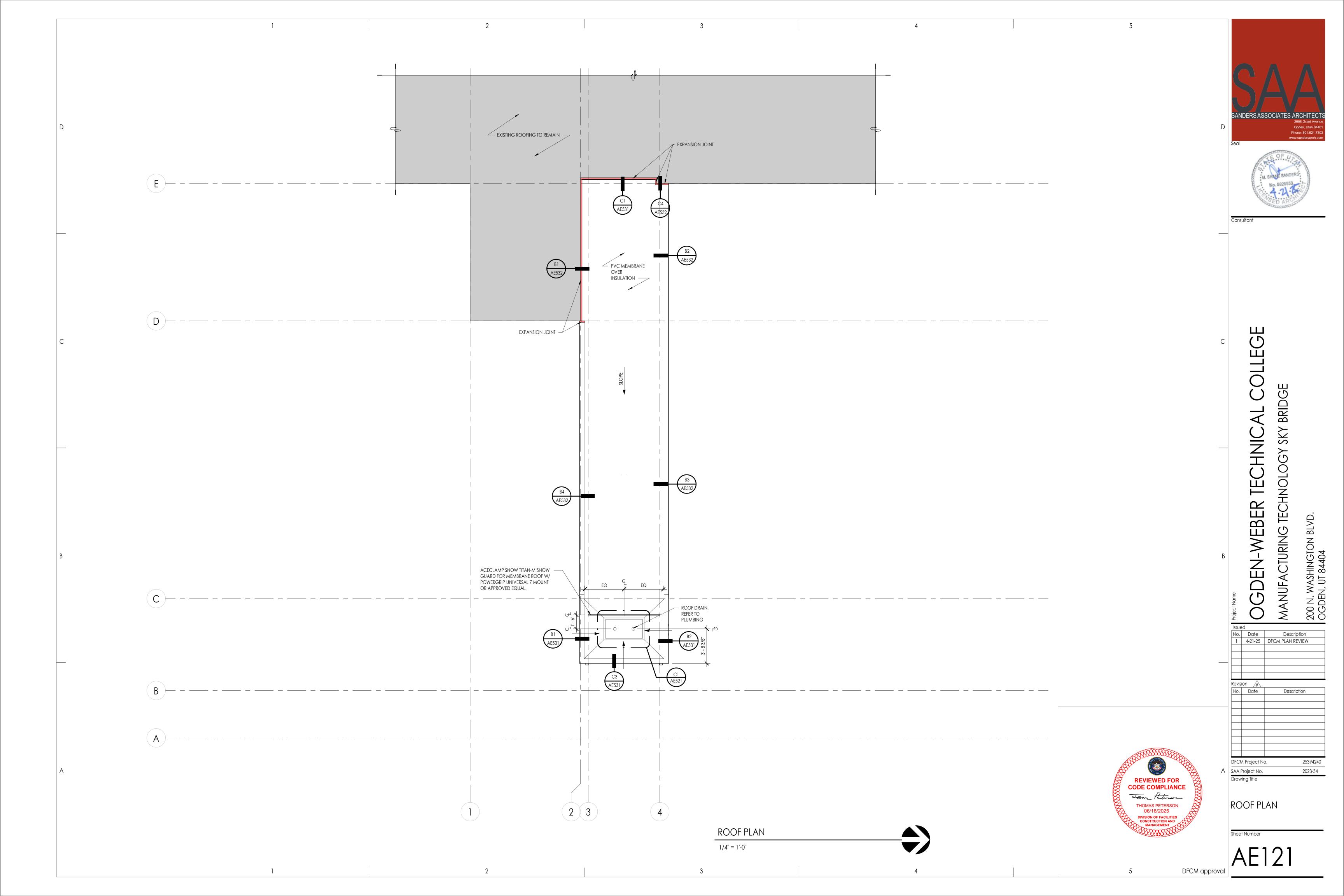


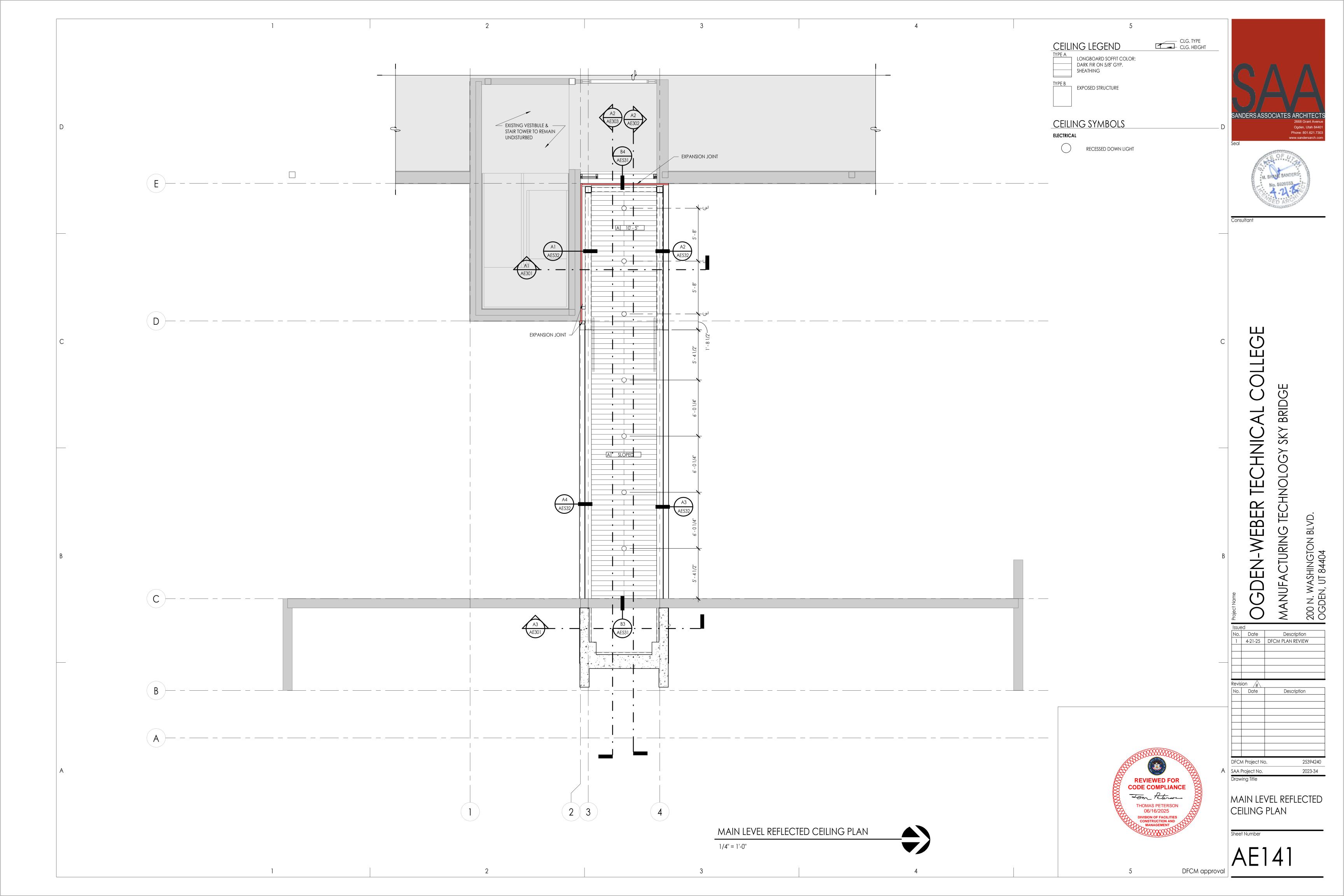


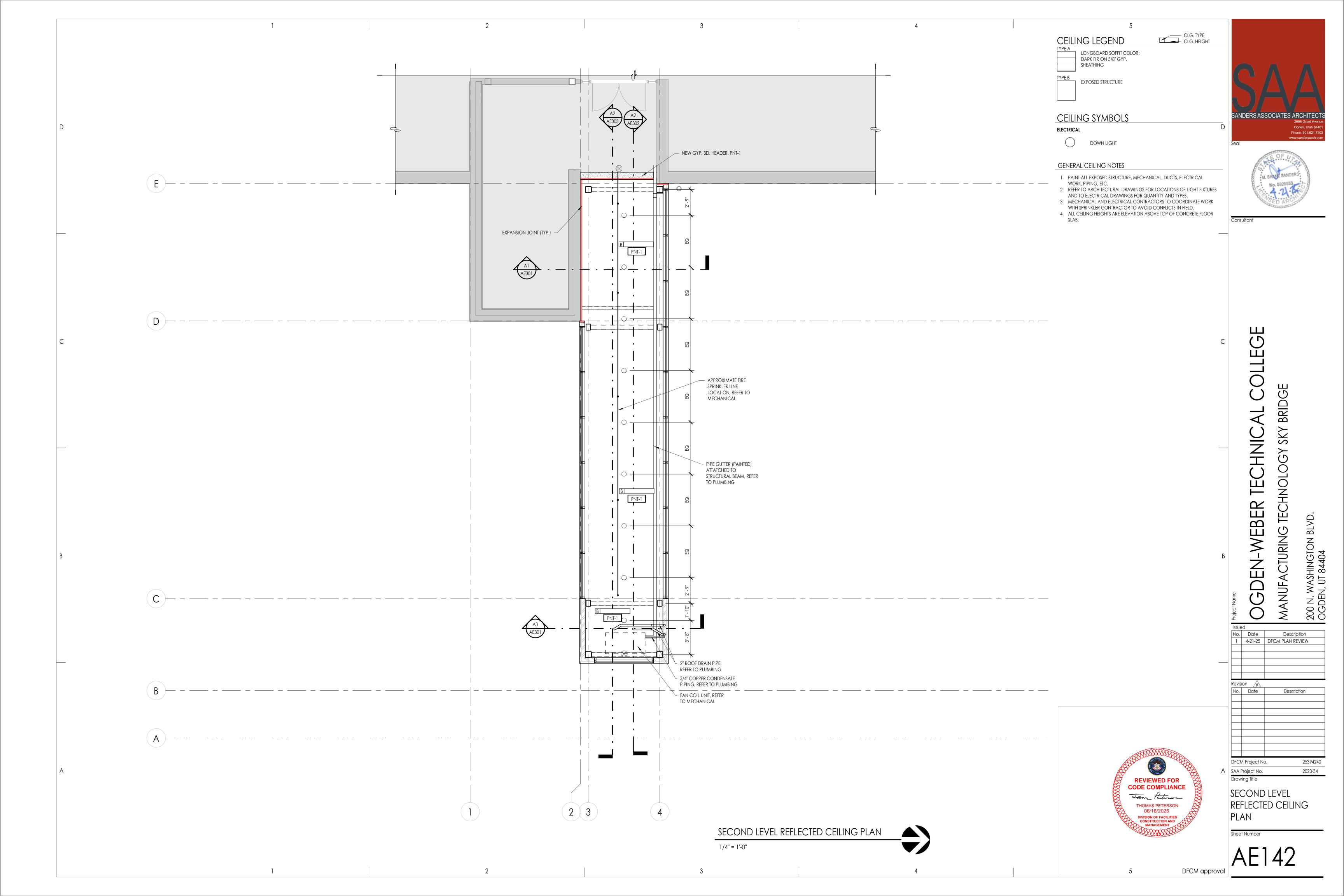


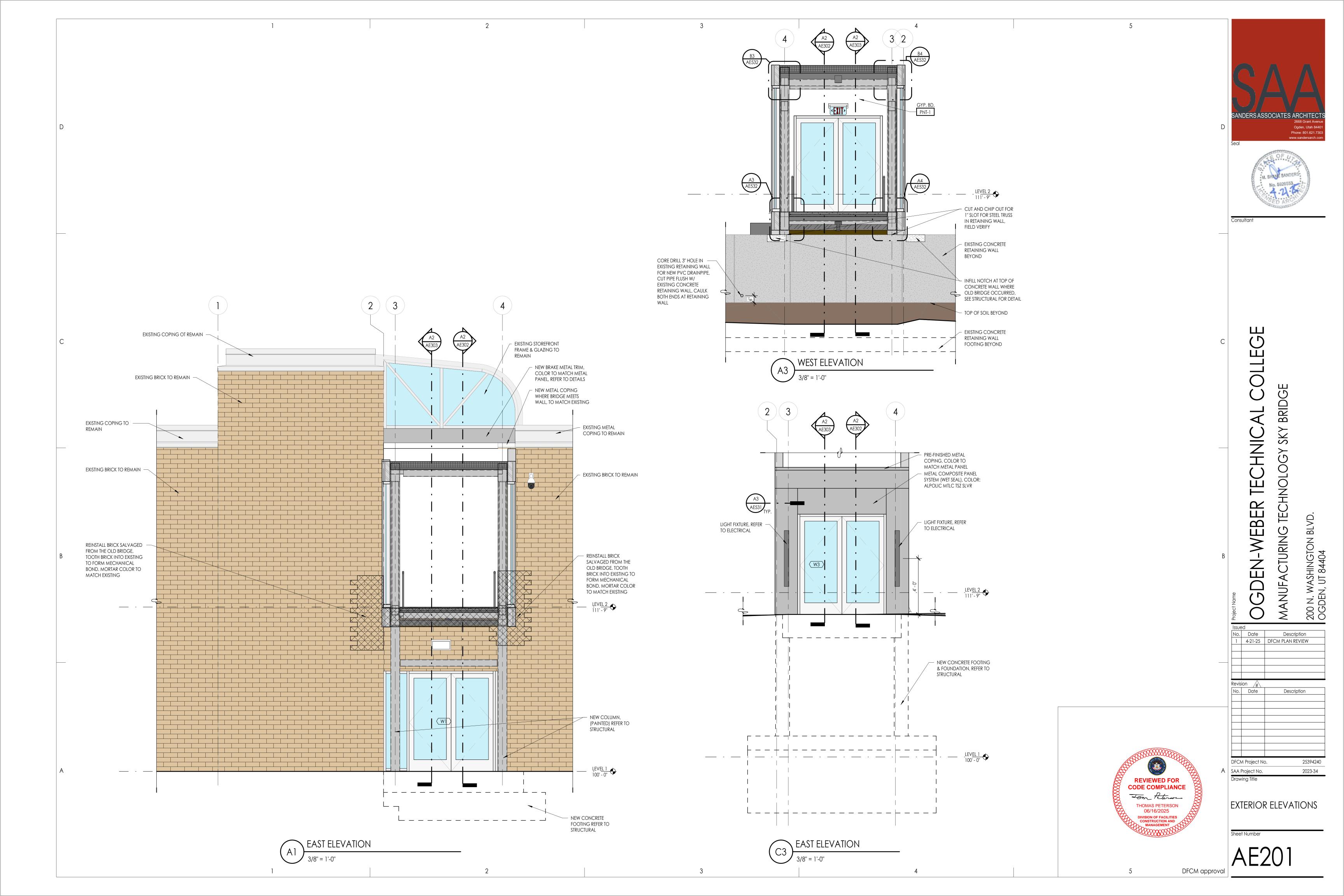


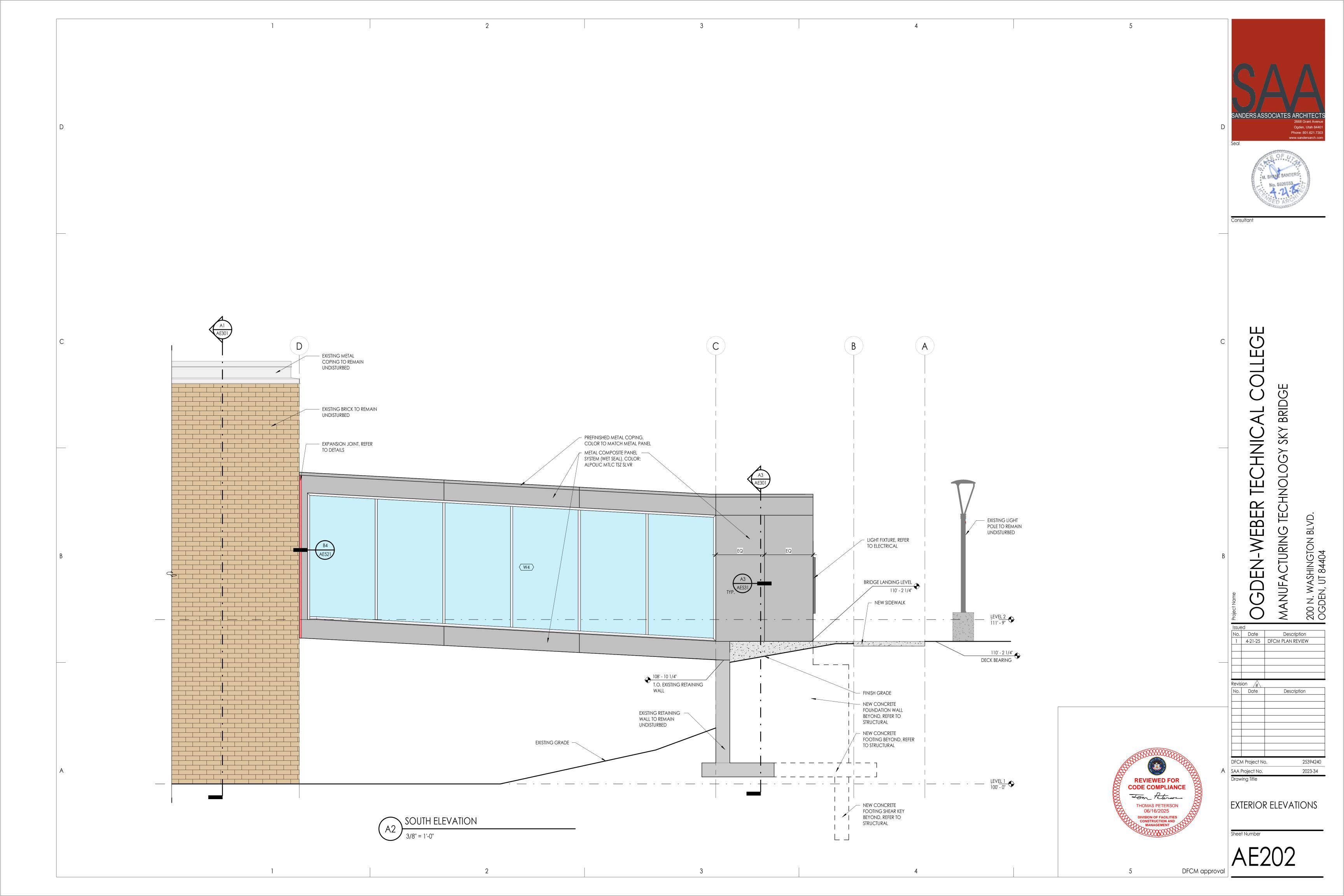


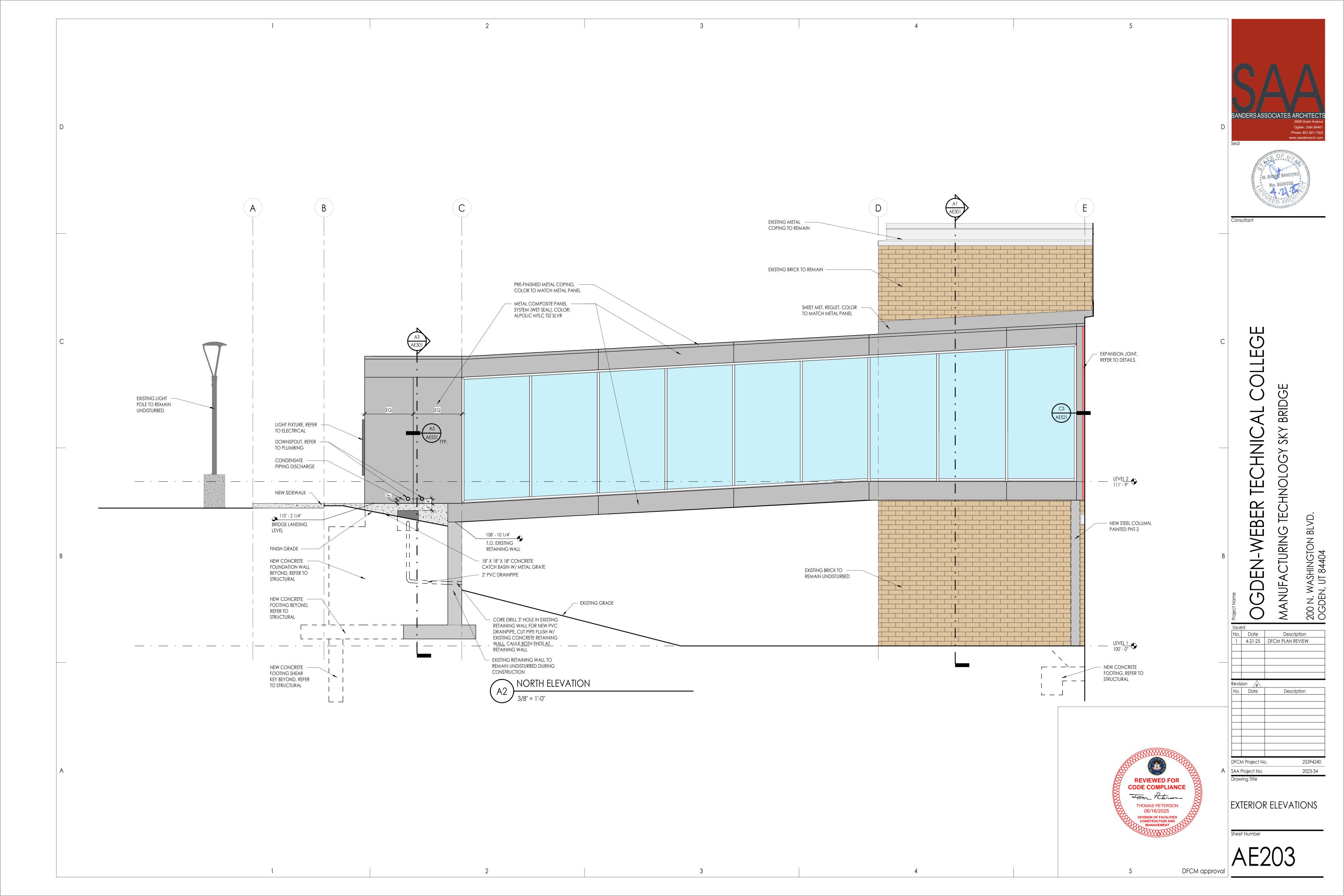


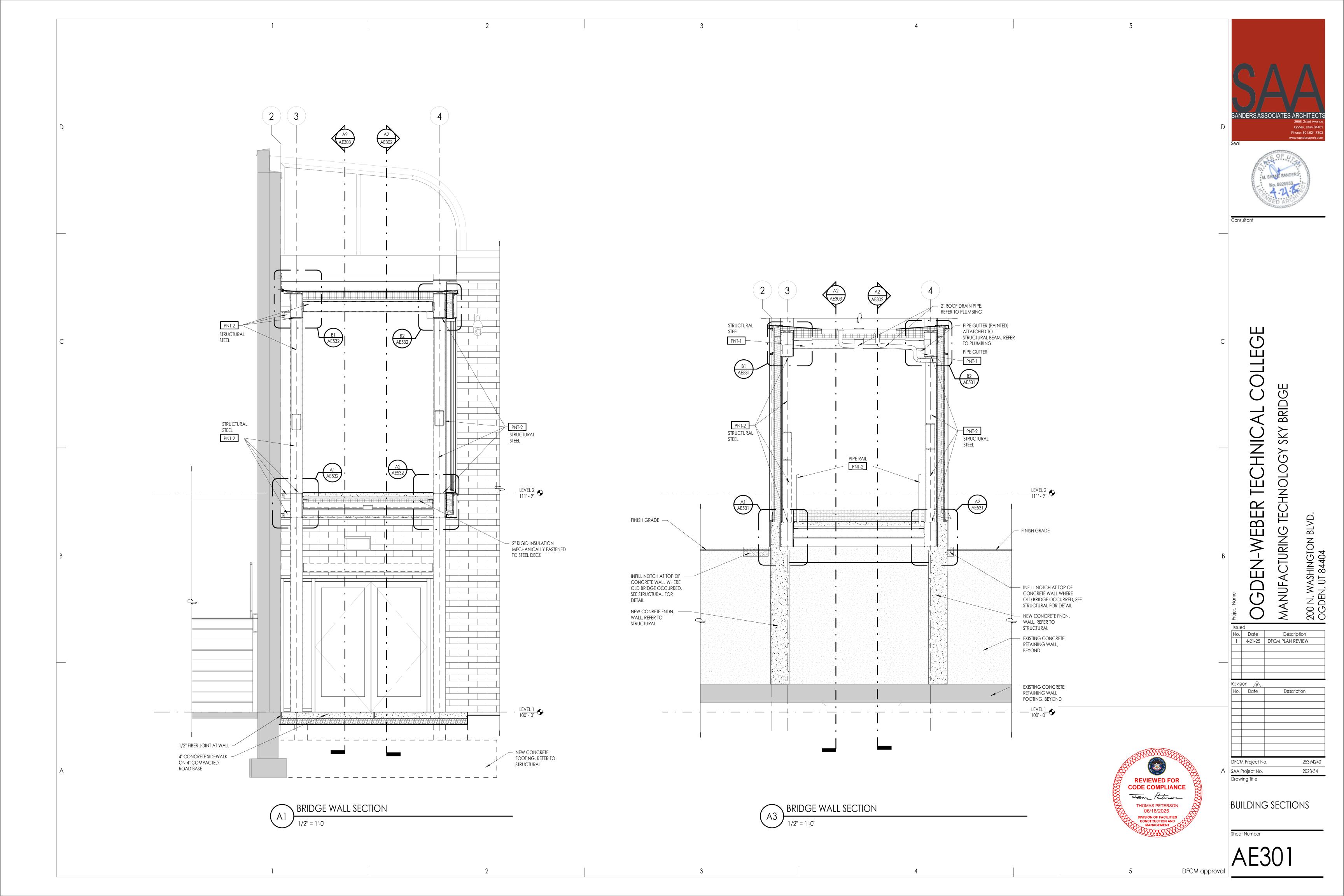


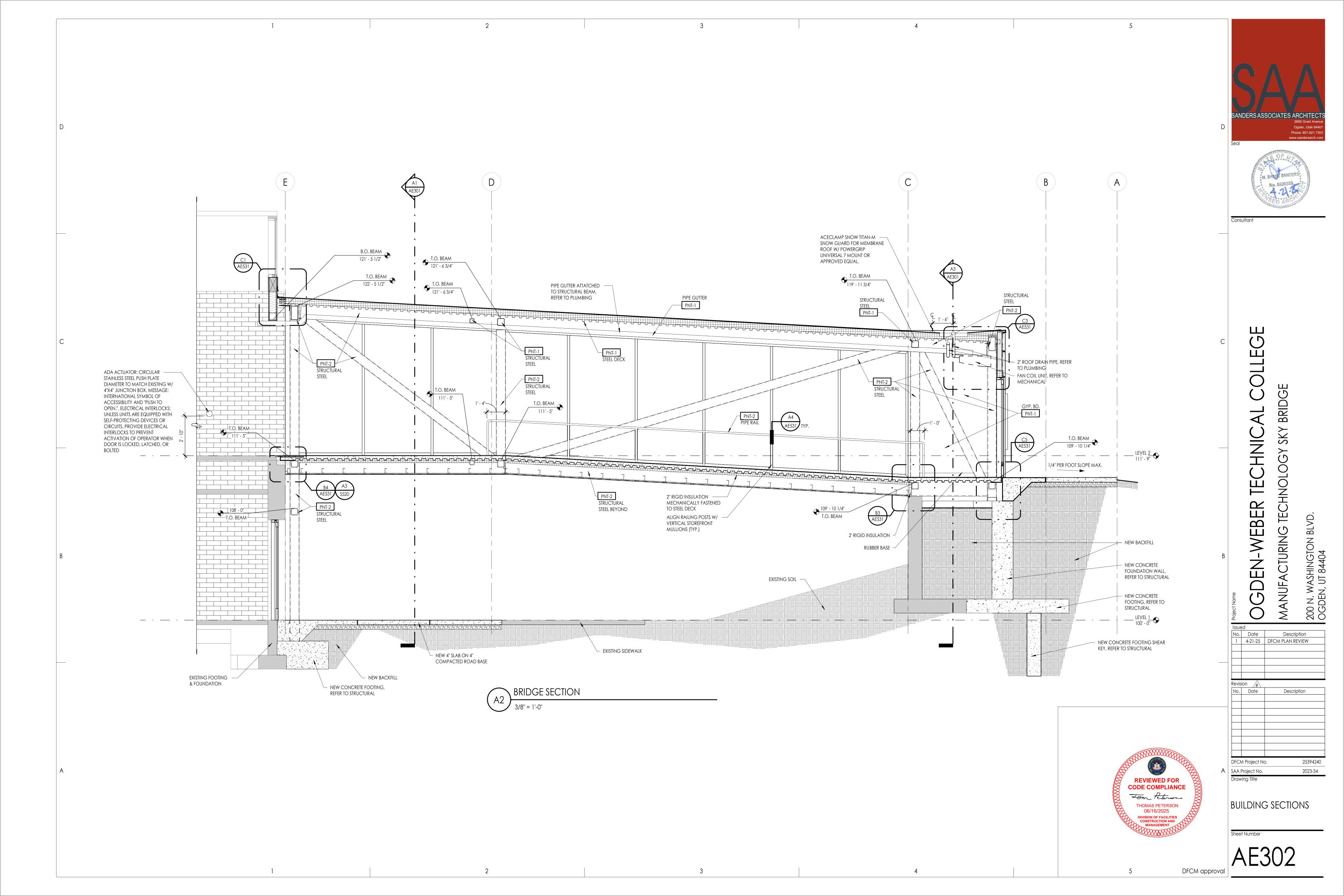


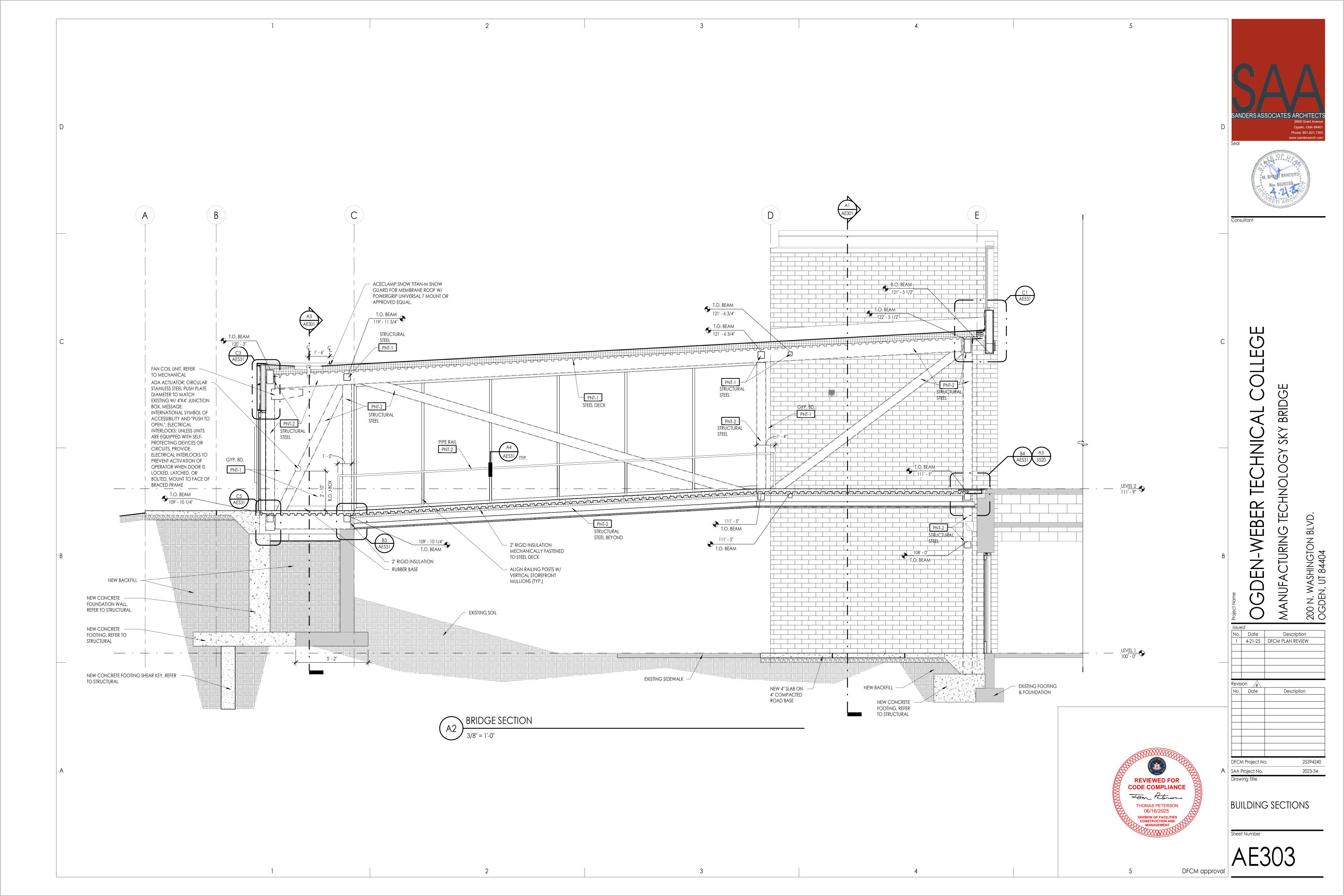


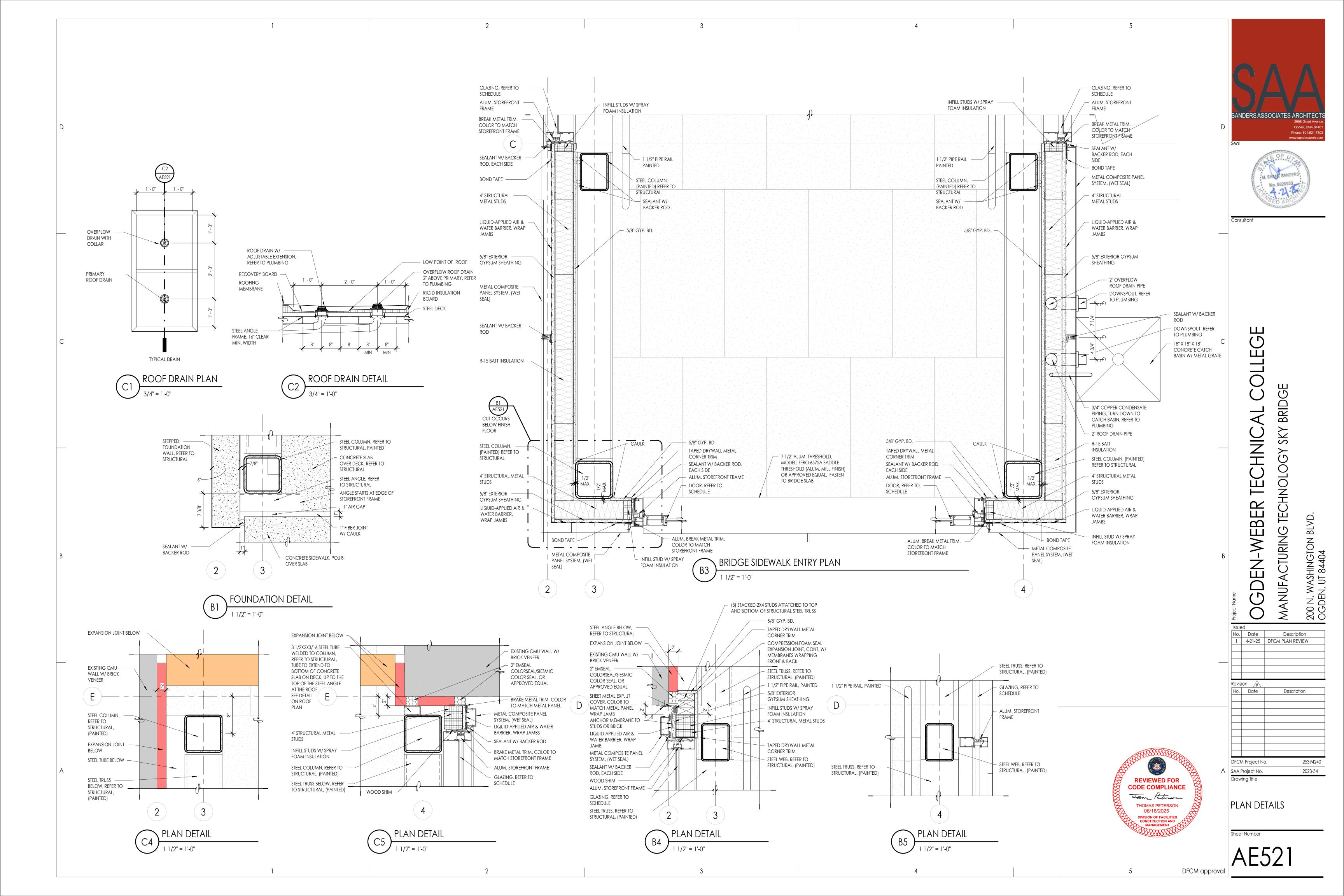


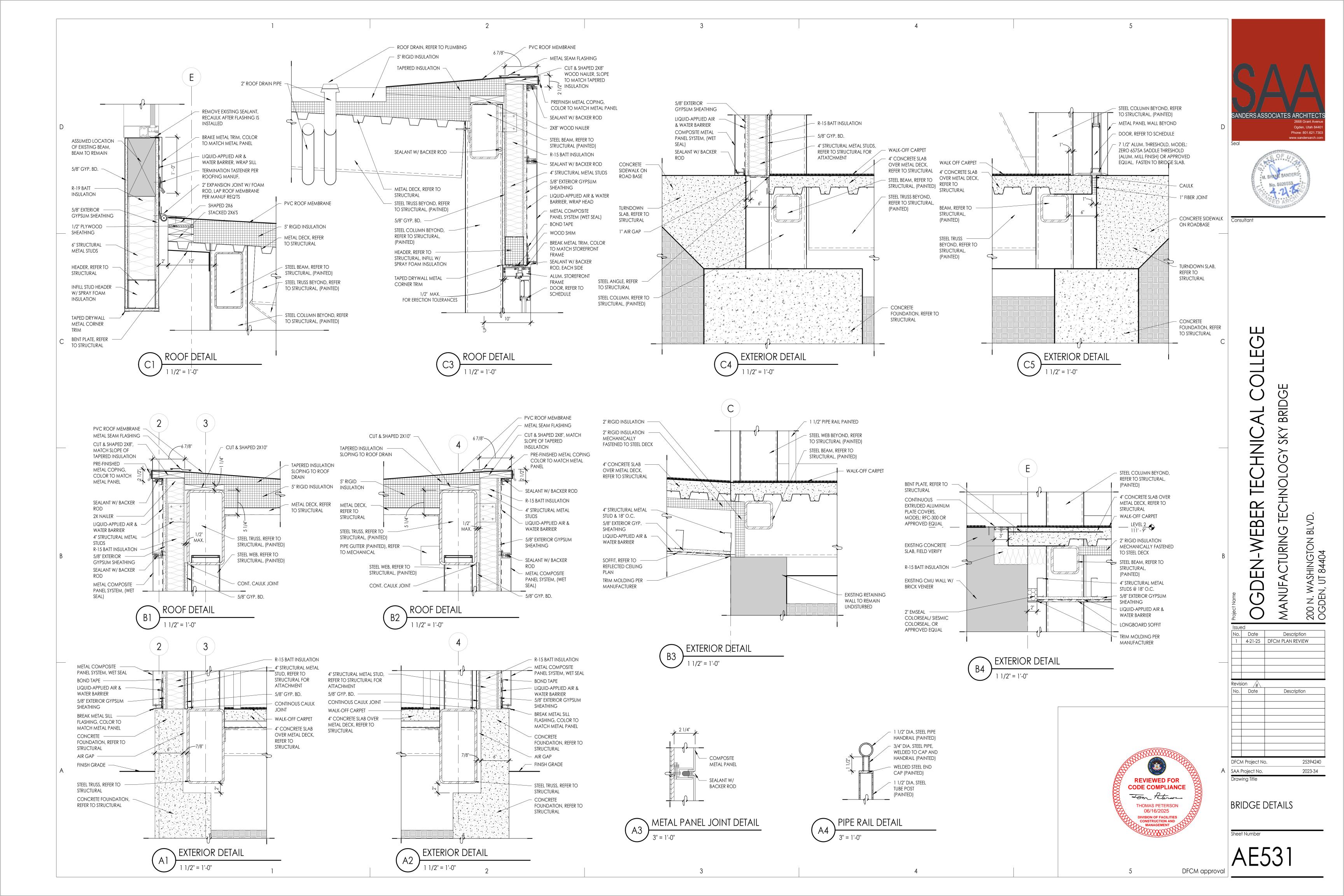


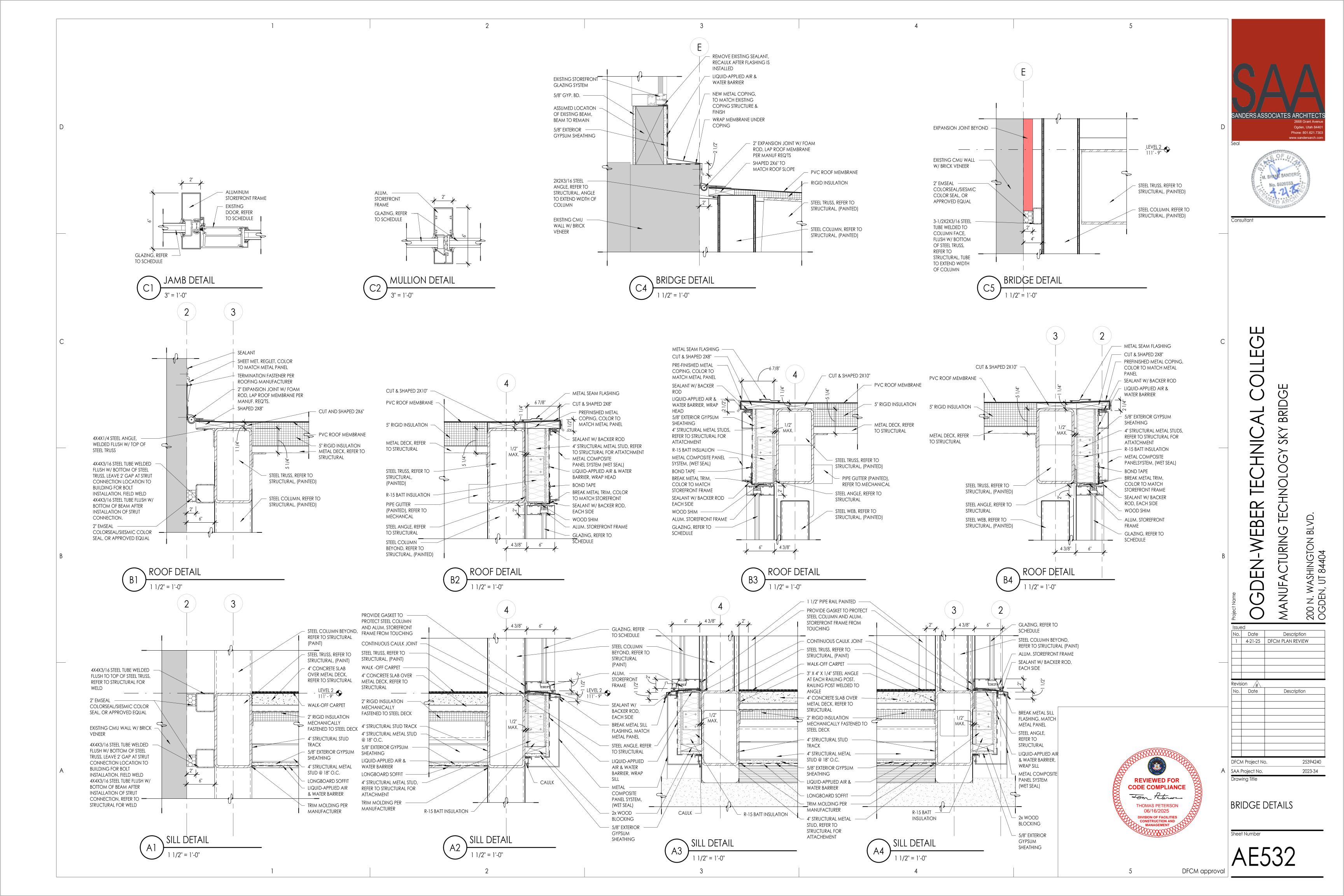


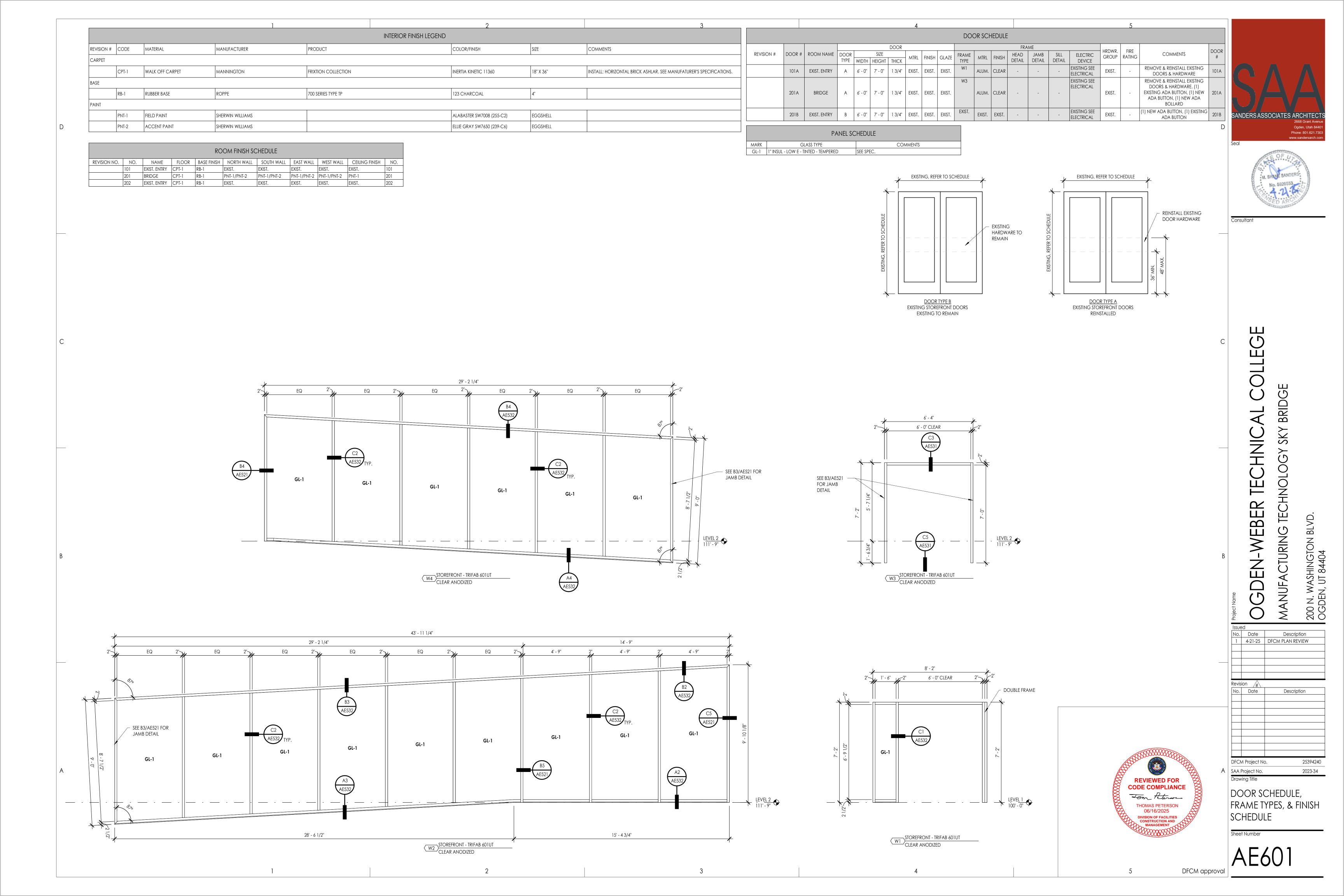












### STRUCTURAL NOTES

# A. GENERAL

- 1. THE STRUCTURAL NOTES ARE INTENDED TO COMPLEMENT THE PROJECT SPECIFICATIONS WHICH ARE PART OF THE CONSTRUCTION DOCUMENTS. SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL GOVERN OVER THE STRUCTURAL NOTES AND TYPICAL DETAILS.
- 2. THESE DRAWINGS (AND, WHERE APPLICABLE, ACCOMPANYING WRITTEN SPECIFICATIONS) ARE THE ONLY CONTRACT DOCUMENTS PROVIDED BY ARW ENGINEERS FOR THE PROJECT REPRESENTED HEREIN. NOTHING IN ANY DIGITAL MODEL OR DIGITAL FILE RELATED TO THIS PROJECT SHALL BE TAKEN TO SUPERSEDE ANY INFORMATION SHOWN IN THESE DRAWINGS (INCLUDING, BUT NOT LIMITED
- 3. THE ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. THE STRUCTURAL DRAWINGS ARE SUPPLEMENTARY TO AND MUST BE USED IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND OTHER CONSULTANTS DRAWINGS. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- 4. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS. SUBMITTALS SHALL BE MADE IN A TIMELY MANNER AS INDICATED IN SPECIFICATIONS, REVIEW OF SUBMITTALS BY ARW ENGINEERS IS FOR GENERAL COMPLIANCE ONLY AND IS NOT INTENDED AS APPROVAL. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND ELEVATIONS ON SUBMITTALS AS RELATED TO DESIGN DOCUMENTS. PREPARATION OF SHOP DRAWINGS FOR STRUCTURAL ELEMENTS WILL REQUIRE INFORMATION (I.E. DIMENSIONS, ETC.) FOUND IN THE ARCHITECTURAL, STRUCTURAL, AND OTHER CONSULTANTS DRAWINGS.
- 5. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN ON CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY ARCHITECT PRIOR TO FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS.
- 6. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL LOCATIONS AND SIZES OF MECHANICAL EQUIPMENT OR OTHER EQUIPMENT BEFORE FABRICATING AND ERECTING STRUCTURAL ELEMENTS SIZES AND LOCATIONS THAT DIFFER FROM THOSE SHOWN ON THE CONTRACT DOCUMENTS SHALL BE
- 7. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ARCHITECT FOR ARCHITECT AND/OR ENGINEER APPROVAL BEFORE PROCEEDING WITH ANY CHANGES, MODIFICATIONS, OR SUBSTITUTIONS.
- 8. OBSERVATION VISITS TO THE SITE BY ARW ENGINEERS FIELD REPRESENTATIVES SHALL NEITHER BE
- CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION. 9. DURING AND AFTER CONSTRUCTION, BUILDER AND/OR OWNER SHALL KEEP LOADS ON STRUCTURE
- WITHIN THE LIMITS OF DESIGN LOADS AS NOTED IN THESE DOCUMENTS. 10. TYPICAL OR SIMILAR DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN. TYPICAL OR SIMILAR DETAILS REFER TO THE CONDITION ADDRESSED AND ARE NOT
- NECESSARILY DETAILS LABELED "TYPICAL" OR "SIMILAR" IN THE PLANS AND DOCUMENTS. 11. DRAWINGS AND DETAILS HAVE BEEN PREPARED WITH THE INTENT TO VISUALLY REPRESENT INFORMATION PROVIDED IN SCALED FORM; HOWEVER CONTRACTOR/SUPPLIERS SHOULD NOT SCALE PLANS OR DETAILS FOR DIMENSIONAL INFORMATION.
- 12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN AND INSTALL ADEQUATE TEMPORARY SHORING AND BRACING FOR ALL STRUCTURAL ELEMENTS UNTIL THE ENTIRE STRUCTURAL SYSTEM IS
- 13. ENGINEER SHALL NOT BE RESPONSIBLE FOR ACTIVITIES UNDER CONTROL OF THE CONTRACTOR SUCH AS CONSTRUCTION SITE SAFETY, MEANS, METHODS AND SEQUENCING OF CONSTRUCTION. ENGINEER SHALL NOT BE RESPONSIBLE FOR FABRICATION, ERECTION AND CONSTRUCTION REQUIREMENTS AS PRESCRIBED BY OSHA OR OTHER REGULATORY AGENCIES REGARDLESS OF INDICATIONS IN THESE DOCUMENTS. 14. NOTICE OF COPYRIGHT: THESE STRUCTURAL DRAWINGS ARE HEREBY COPYRIGHTED BY ARW
- ENGINEERS, ALL RIGHTS RESERVED. THESE DOCUMENTS DEFINE A STRUCTURE AND ARE INSTRUMENTS OF SERVICE, FOR ONE USE ONLY. REPRODUCTION AND DISTRIBUTION OF THESE DRAWINGS IS ONLY ALLOWED AS REQUIRED FOR REGULATORY AGENCIES AND FOR CONVEYANCE OF INFORMATION TO PARTIES INVOLVED IN THE CONSTRUCTION OF THIS PROJECT. THESE DOCUMENTS SHALL NOT BE REPRODUCED OR COPIED, IN PART OR WHOLE BY ANY PARTY FOR USE IN PREPARATION OF SHOP DRAWINGS OR OTHER SUBMITTALS.
- 15. WHERE THE WORD "SHALL" OCCURS IN THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS, IT IS CONSIDERED A MANDATORY OBLIGATION AND SYNONYMOUS WITH THE PHRASE "HAS DUTY TO".

# **B. STATEMENT OF SPECIAL INSPECTIONS AND SPECIAL INSPECTIONS**

- 1. THE DESIGNATED SEISMIC/WIND SYSTEMS AND SEISMIC/WIND-FORCE-RESISTING SYSTEMS THAT ARE SUBJECT TO SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC SECTION 1705.12 AND 1705.13 ARE IDENTIFIED ON THESE DOCUMENTS WITH A CIRCLE "L". ALL OTHER ITEMS REQUIRING SPECIAL INSPECTION ARE IDENTIFIED IN THE SPECIAL INSPECTION SCHEDULE ON SHEET S013.
- 2. SPECIAL INSPECTIONS AND TESTING ARE TO BE PROVIDED AS REQUIRED BY IBC SECTIONS 1704 THROUGH 1705 AND OTHER APPLICABLE SECTIONS OF THE IBC. THE TYPE AND FREQUENCY OF TESTING AND SPECIAL INSPECTIONS SHALL BE AS NOTED IN THE SPECIAL INSPECTION SCHEDULE, JOB SPECIFICATIONS, AND ACCORDANCE WITH IBC SECTION 110 AND CHAPTER 17. CONTRACTOR SHALL COORDINATE AND COOPERATE WITH REQUIRED INSPECTIONS.
- 3. ALL TESTING AND SPECIAL INSPECTION SHALL BE PROVIDED BY A QUALIFIED INDEPENDENT SPECIAL INSPECTION AGENCY IN ACCORDANCE WITH IBC 1704 AND AS OUTLINED IN THE JOB SPECIFICATIONS REPORTS OF FINDINGS OR DISCREPANCIES SHALL BE NOTED AND FORWARDED TO THE CONTRACTOR, ARCHITECT, ENGINEERS, AND BUILDING OFFICIAL IN A TIMELY MANNER.
- STRUCTURAL OBSERVATION VISITS SHALL BE PERFORMED BY A REPRESENTATIVE FROM ARW ENGINEERS IN ACCORDANCE WITH THE CONTRACT AS NEEDED TO OBSERVE THE CONSTRUCTION OF CRITICAL BUILDING ELEMENTS (I.E. FOOTINGS, BRACED FRAMES, MOMENT FRAMES, DRAG STRUTS AND THEIR CONNECTIONS, COLLECTORS, AND ROOF AND FLOOR DIAPHRAGMS), STRUCTURAL OBSERVATION REPORTS FOR EACH VISIT SHALL BE SENT DIRECTLY TO THE ARCHITECT FOR DISTRIBUTION TO THE CONTRACTOR AND BUILDING OFFICIAL. STRUCTURAL OBSERVATION VISITS SHALL NEITHER BE CONSTRUED AS SPECIAL INSPECTION NOR APPROVAL OF COMPLETED
- 5. IN ACCORDANCE WITH IBC 1704.4, THE CONTRACTOR SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER. THE STATEMENT SHALL BE SUBMITTED PRIOR TO THE CONSTRUCTION OF ANY SEISMIC/WIND-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC/WIND SYSTEM, OR COMPONENT IDENTIFIED IN THESE DOCUMENTS WITH A

# C. BASIS OF DESIGN

- 1. GOVERNING BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC) 2021
- RISK CATEGORY: II 2. SUSPENDED FLOOR LOADS
- a. LIVE LOAD = 100 PSF UNREDUCED
- b. DEAD LOAD = 40 PSF (CONCRETE, DECK, CARPET, SOFFIT, LIGHTING, AND MISCELLANEOUS). DOES NOT INCLUDE STEEL SELF-WEIGHT.
- ROOF LOADS
- a. FLAT-ROOF SNOW LOAD, Pf: 27 PSF
- GROUND SNOW LOAD, Pg: 38 PSF SNOW EXPOSURE FACTOR, Ce: 1.0
- 3. SNOW LOAD IMPORTANCE FACTOR, Is: 1.0 4. THERMAL FACTOR, Ct: 1.0
- 5. SLOPE FACTOR, Cs: 1.0 SNOW DRIFT: SHOWN ON PLANS WHERE APPLICABLE.
- b. LIVE LOAD = 20 PSF c. DEAD LOAD = 7 PSF (ROOF DECK, INSULATION, MISCELLANEOUS).
- DOES NOT INCLUDE STEEL SELF-WEIGHT. 4. WIND DESIGN
- a. BASIC WIND SPEED (3 SECOND GUST): 115 MPH b. ALLOWABLE STRESS DESIGN WIND SPEED, V<sub>ASD</sub>: 89 MPH
- WIND EXPOSURE: C
- d. INTERNAL PRESSURE COEFFICIENT, GC<sub>Pl</sub>: ± 0.18 e. COMPONENT AND CLADDING DESIGN WIND PRESSURE SHALL BE AS REQUIRED PER ASCE 7-16.
- 5. SEISMIC DESIGN:
- a. SEISMIC IMPORTANCE FACTOR, I<sub>E</sub>: 1.0 b. SITE CLASS: D (DEFAULT)
- c. MAPPED SPECTRAL RESPONSE ACCELERATIONS :  $S_8 = 1.401$ ,  $S_1 = 0.516$ d. SPECTRAL RESPONSE COEFFICIENTS: S<sub>DS</sub> = 1.121, S<sub>D1</sub> = 0.614
- e. SEISMIC DESIGN CATEGORY: D f. BASIC SEISMIC-FORCE-RESISTING SYSTEM: STEEL ORDINARY MOMENT FRAMES WITH UNLIMITED
- HEIGHT CHAPTER 15 TABLE 15.4-1 DESIGN BASE SHEAR:  $V_{N-S} = C_SW$ ,  $V_{E-W} = C_SW$
- h. SEISMIC RESPONSE COEFFICIENT, Cs: 1.121 RESPONSE MODIFICATION FACTOR, R: 1.0
- ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

# D. FOUNDATION

- GENERAL
- a. DESIGN SOIL PRESSURE: 1500 PSF
- b. ALL FOOTINGS SHALL BE PLACED ON MECHANICALLY COMPACTED FILL COMPACTED TO NOT LESS THAN 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557). c. UNLESS NOTED OTHERWISE, ALL CONCRETE SLABS ON EARTH SHALL BEAR ON STRUCTURAL FILL
- COMPACTED TO 90% OF MODIFIED PROCTOR DENSITY (ASTM D-1557). d. TOP OF FOOTING ELEVATIONS SHOWN ON THE FOOTING AND FOUNDATION PLAN ARE BASED ON
- PRELIMINARY GRADING INFORMATION AND SHALL BE VERIFIED PRIOR TO CONSTRUCTION. STEPS WHERE SHOWN ARE AT APPROXIMATE LOCATIONS. ACTUAL STEP LOCATIONS SHALL BE AT THE CONTRACTOR'S DISCRETION BASED UPON FIELD CONDITIONS. ALL EXTERIOR FOUNDATIONS SHALL BEAR A MINIMUM OF 30" BELOW LOWEST ADJACENT FINAL GRADE.
- e. ALL WALLS (EXCEPT CANTILEVERED RETAINING WALLS) SHALL BE ADEQUATELY BRACED AGAINST LATERAL MOVEMENT PRIOR TO BACKFILLING. DESIGN AND ERECTION OF BRACING/SHORING SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. BRACING SHALL REMAIN IN PLACE UNTIL SUPPORTING STRUCTURAL ELEMENTS ARE IN PLACE AND HAVE ATTAINED FULL STRENGTH.
- f. UNLESS NOTED OTHERWISE, ALL FOOTINGS AT COLUMNS SHALL BE CENTERED BELOW COLUMNS. g. UNLESS NOTED OTHERWISE, ALL FOOTINGS SHALL HAVE VERTICAL FACES FORMED WITH STANDARD FORMING MATERIALS (WOOD, METAL, ETC.). WITH PRIOR APPROVAL OF ARCHITECT AND ENGINEER, CONCRETE FOR FOOTINGS CAN BE PLACED IN EXCAVATED SOIL "FORMS" PROVIDED
- THAT THE DIMENSIONS ARE INCREASED 3" ON ALL SIDE. h. UNLESS NOTED AND DETAILED OTHERWISE, NO PIPES, DUCTS, CONDUITS, NON-STRUCTURAL ITEMS, ETC. SHALL BE BURIED BELOW OR EMBEDDED IN FOOTINGS / FOUNDATION WALLS. SEE TYPICAL DETAIL FOR CONDITIONS WHERE THESE ITEMS CROSS OR RUN PARALLEL TO FOOTINGS / FOUNDATION WALLS.

### E. CONCRETE

1. ALL CONCRETE MIX DESIGNS SHALL COMPLY WITH THE PROJECT SPECIFICATIONS AND THE REQUIREMENTS LISTED BELOW

ELEMENT	EXPOSURE CATEGORY F S W C	f'c, AT 28 DAYS (PSI)	MAX. W/C RATIO	AIR CONTENT %	MAX. AGGREGATE SIZE
Interior Slabs on Metal Deck	F0 S0 W0 C0	3000			
FTG / FDN Walls <sup>a</sup>	F0 S0 W1 C0	3000			1"
FTG / / FDN Walls <sup>b</sup>	F2 S0 W1 C1	4500	0.45	Note c	1"
All Other Site Cast Concrete	F2 S0 W1 C1	4500	0.45	Note c	1"

- a. ELEMENT IS NOT EXPOSED TO FREEZING AND / OR IS BURIED IN SOIL BELOW THE FROST LINE. b. ELEMENT IS EXPOSED TO FREEZING AND / OR IS LOCATED ABOVE THE FROST LINE. c. TOTAL AIR CONTENT FOR CONCRETE EXPOSED TO CYCLES OF FREEZING AND THAWING SHALL
- BE DETERMINED IN ACCORDANCE WITH THIS SCHEDULE. TOLERANCE ON AIR CONTENT AS DELIVERED SHALL BE +/- 1.5 PERCENT.

NOMINAL MAXIMUM		CONTENT, PERCEI
AGGREGATE SIZE, IN.	F1	F2 AND F3
3/8	6	7.5
1/2	5.5	7
3/4	5	6
1	4.5	6
1-1/2	4.5	5.5
2	4	5
3	3.5	4.5

- 2. WATER USED IN MIXING CONCRETE SHALL CONFORM TO ASTM C1602.
- 3. NO CONDUIT, PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO ALUMINUM PRODUCTS SHALL BE EMBEDDED IN CONCRETE. PENETRATIONS THRU STRUCTURAL CONCRETE ELEMENTS MUST BE APPROVED BY THE ENGINEER AND SHALL BE BUILT INTO THE ELEMENT PRIOR TO CONCRETE
- 4. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, ETC. TO BE CAST IN TO CONCRETE, AND FOR EXTENT AND LOCATION OF DEPRESSIONS, CURBS, RAMPS, ETC.
- 5. UNLESS NOTED OTHERWISE, MINIMUM REINFORCING IN ALL CONCRETE FOUNDATION WALLS SHALL BE

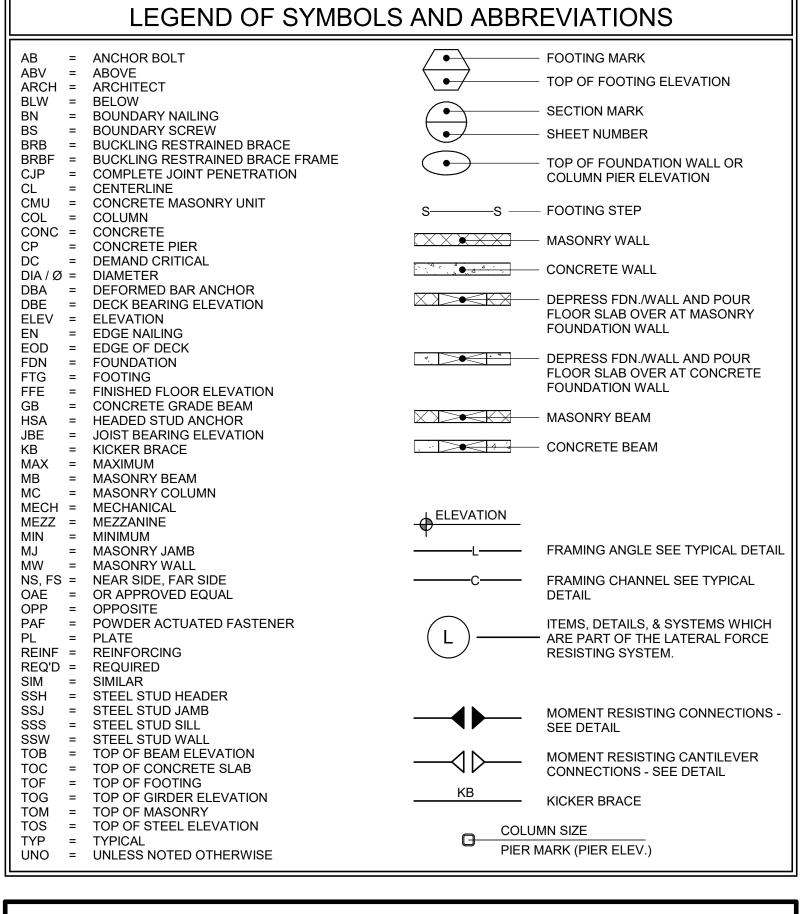
	AS FULLUWS.			
		TOP &		
	THICKNESS	BOTTOM BARS	VERTICAL	HORIZONTAL
	6"	(1) #5	#4 AT 18"o.c.	#4 AT 16"o.c.
	8"	(2) #5	#4 AT 18"o.c.	#4 AT 12"o.c.
	10"	(2) #5	#4 AT 12"o.c.	#5 AT 12"o.c.
	12"	(2) #5	#4 AT 18"o.c. EA FACE	#4 AT 16"o.c. EA FACE
6.	<b>UNLESS NOTE</b>	D OTHERWISE, CON	NCRETE SLABS ON EARTH :	SHALL 4" THICK UNREINFORCED :
7.	<b>UNLESS NOTE</b>	D OTHERWISE, FOR	R NON-DETAILED OPENINGS	S IN CONCRETE WALLS LARGER THAN 12"
	AND SMALLED	THAN 24" IN ANV DI	IDECTION ADD (2) #5 BADS	ON ALL SIDES IN ADDITION TO DECLIFAD

- AND SMALLER THAN 24" IN ANY DIRECTION ADD (2) #5 BARS ON ALL SIDES IN ADDITION TO REGULAR WALL REINFORCING AND EXTEND 24" EACH WAY BEYOND OPENING. IF 24" IS NOT AVAILABLE ON EVERY SIDE, NOTIFY STRUCTURAL ENGINEER FOR FURTHER DIRECTION. OPENINGS SHALL HAVE A MINIMUM OF 12" OF CONCRETE ABOVE THE OPENING, TYP. 8. CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS SHALL BE MADE AND LOCATED SO AS TO NOT IMPAIR THE STRENGTH OF THE STRUCTURE AND AS APPROVED BY THE STRUCTURAL ENGINEER.
- PROVIDE 2 X 4 (SHAPED) KEYWAY IN ALL VERTICAL AND HORIZONTAL JOINTS UNLESS NOTED OR DETAILED OTHERWISE. ALL STEEL REINFORCING SHALL BE CONTINUOUS THROUGH COLD JOINTS UNLESS NOTED OTHERWISE. SEE TYPICAL DETAILS FOR COLD/CONSTRUCTION JOINTS FOR SLABS ON 9. WHERE NEW CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE JOINT SHALL
- BE CLEAN AND FREE OF LAITANCE. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE PREWETTED AND STANDING WATER REMOVED.

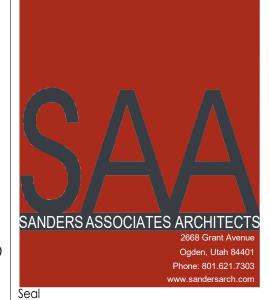
# F. ANCHOR BOLTS/EMBEDDED BOLTS

- 1. ALL ANCHOR BOLTS SHALL HAVE ASTM A-563 HEAVY HEX NUT AND ASTM F-436 WASHERS AT STANDARD OR OVERSIZED HOLES PER AISC SPECIFICATION TABLE J3.3. WHERE HOLE SIZES DO NOT COMPLY WITH THE LIMITATIONS FOR OVERSIZED HOLES THE STRUCTURAL ENGINEER SHALL BE NOTIFIED TO DETERMINE STEEL PLATE WASHER REQUIREMENTS. ANCHOR BOLTS SHALL COMPLY WITH THE FOLLOWING:
- a. AT ALL ANCHOR BOLTS (UNLESS NOTED OTHERWISE) ASTM F1554 GRADE 36 HEADED BOLTS. (ASTM A36 THREADED ROD MAY BE USED WITH DOUBLE NUT AND WASHER.)
- 2. EMBEDDED BOLTS IN MASONRY SHALL BE (UNLESS NOTED OTHERWISE) ASTM A-307 GRADE HEADED
- 3. SEE TYPICAL ANCHOR BOLT DETAIL FOR DEFINITIONS OF EMBEDMENT LENGTH, ETC.
- 4. FURNISH TEMPLATES AND OTHER DEVICES AS NECESSARY FOR PRESETTING ALL BOLTS PRIOR TO
- PLACING CONCRETE AND/OR GROUT. 5. IF THREADED RODS ARE USED AS PERMITTED ABOVE, THEY SHALL BE CLEAR OF SOIL AND DIRT.
- 6. WHERE REQUIRED FOR ERECTION, HOLES LARGER THAN OVERSIZED MAY BE PERMITTED WITH THE
- USE OF STEEL PLATE WASHERS AT THE DISCRETION OF THE STRUCTURAL ENGINEER.

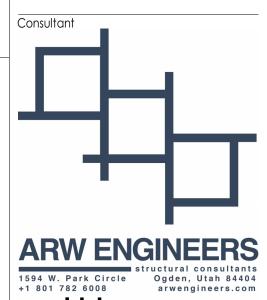
# STRUCTURAL NOTES CONTINUED ON SHEET S002



	Structural Sheet Index						
SHEET NUMBER	SHEET NAME						
S001	STRUCTURAL NOTES						
S002	STRUCTURAL NOTES						
S010	SCHEDULES						
S011	SCHEDULES						
S012	SCHEDULES						
S013	SCHEDULES						
S101	FOOTING & FOUNDATION PLAN						
S102	FLOOR FRAMING PLAN						
S103	ROOF FRAMING PLAN						
S301	ELEVATIONS						
S501	TYPICAL DETAILS						
S510	FOUNDATION DETAILS						
S520	FRAMING DETAILS						
S530	TRUSS AND ROOF FRAMING DETAILS						
S701	SCHEMATIC REFERENCE						







Ш

Ш

Ш  $\Delta$ 

Ш

No. Date Description 4-15-2025 DFCM PLAN REVIEW Revision Description No. Date

Drawing Title

DFCM approval

**REVIEWED FOR CODE COMPLIANCE** Tom Peterson

> THOMAS PETERSON 06/16/2025 DIVISION OF FACILITIES

A | SAA Project No.

Sheet Number

DFCM Project No

VIEW AND PRINT THIS DRAWING IN COLOR

STRUCTURAL NOTES

2023-34

25394240

### G. ADHESIVE/MECHANICAL ANCHORS

- 1. WITHOUT WRITTEN APPROVAL OF THE ENGINEER, CONTRACTOR SHALL NOT SUBSTITUTE POST-INSTALLED ANCHORS WHERE CAST-IN-PLACE ANCHORS ARE SPECIFIED IN THE DRAWINGS.
- 2. WHERE STRUCTURAL DETAILS SPECIFY SPECIFIC BRANDS AND/OR TYPES OF ADHESIVES OR ANCHORS, SUBSTITUTIONS OF OTHER BRANDS AND/OR TYPES IS NOT ALLOWED, WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- 3. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS SHALL BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. SUBSTITUTION REQUESTS SHALL INCLUDE AN ICC ESR OR IAPMO REPORT AND SUPPORTING CALCULATIONS INDICATING COMPLIANCE WITH DESIGN
- 4. ALL ADHESIVE/MECHANICAL ANCHORS SHALL BE INSTALLED, INCLUDING HOLE DRILLING AND PREPARATION, IN ACCORDANCE WITH AN APPROVED INDEPENDENT EVALUATION REPORT (ICC-ES, IAPMO, OR APPROVED EQUAL), AS INDICATED BELOW, AND IN ACCORDANCE WITH ALL
- MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII). 5. INSTALLERS SHALL BE, AT A MINIMUM, TRAINED FOR THE SPECIFIC APPLICATION INSTALLATION TECHNIQUE FOR THE SPECIFIC PRODUCT BY THE PRODUCT MANUFACTURERS FIELD EMPLOYEE OR
- SHALL POSSESS A TRAINING CARD OBTAINED BY THE MANUFACTURERS ONLINE TRAINING PROGRAM. 6. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION. ADHESIVE ANCHORS SHALL NOT BE FULLY LOADED UNTIL CONCRETE HAS
- REACHED DESIGN STRENGTH. ADHESIVE ANCHORS SHALL CONSIST OF REINFORCING BAR OR THREADED RODS AS INDICATED IN THESE DOCUMENTS.
- 8. UNLESS APPROVED BY THE ENGINEER OF RECORD, CONCRETE AND DRILLED ANCHOR HOLES SHALL BE DRY AND FREE OF WATER FOR 14 DAYS PRIOR TO ADHESIVE INSTALLATION. CONTACT THE ENGINEER OF RECORD FOR GUIDANCE IF THE CONTRACTOR CHOOSES TO INSTALL IN DAMP, WATER-SATURATED, OR WATER-FILLED HOLES.
- CONCRETE TEMPERATURE AT THE TIME OF INSTALLATION SHALL BE MONITORED BY THE CONTRACTOR. CONTRACTOR SHALL COMPLY WITH ALL MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) RELATIVE TO SUBSTRATE TEMPERATURE.
- 10. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION SHALL INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM. OR EQUIVALENT IN ACCORDANCE WITH ACI 318-19 26.7.2 (e) PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. CONTINUOUS SPECIAL INSPECTION SHALL BE PROVIDED FOR THESE ANCHORS.
- 11. UNLESS NOTED OTHERWISE, ALL ADHESIVE ANCHORS INTO CONCRETE SHALL BE: a. HILTI HIT-RE 500V3 (ESR-3814), OR HILTI HIT-HY 200-V3 (ESR-4868).
- b. SIMPSON SET-3G (ESR-4057), OR AT-XP (ER-263).
- DEWALT PURE 110+ (ESR-3298), OR AC200+ GOLD (ESR-4027-COLD WEATHER). 12. UNLESS NOTED OTHERWISE, ALL ADHESIVE ANCHORS INTO GROUTED MASONRY (CMU) SHALL BE:
- a. HILTI HIT-HY 270 (ESR-4143). b. SIMPSON SET-3G (ESR-4844), OR AT-XP (ER-281).
- c. DEWALT AC100+ GOLD (ESR-3200).
- 13. UNLESS NOTED OTHER WISE, ALL MECHANICAL ANCHORS INTO CONCRETE SHALL BE: a. HILTI KWIK BOLT-TZ2 (ESR-4266).
- SIMPSON STRONG-BOLT 2 (ESR-3037). 14. UNLESS NOTED OTHERWISE, ALL MECHANICAL ANCHORS INTO GROUTED MASONRY (CMU) SHALL BE:
- a. HILTI KWIK BOLT-TZ2 (ESR-4561). b. SIMPSON STRONG BOLT 2 (ER-240).
- DEWALT SCREWBOLT+ (ESR-4042). 15. UNLESS NOTED OTHERWISE, ALL SCREW ANCHORS INTO CONCRETE SHALL BE:
- a. SIMPSON TITEN HD (ESR-2713).
- DEWALT SCREWBOLT+ (ESR-3889). HILTI KH-EZ (ESR-3027).
- 16. UNLESS NOTED OTHERWISE, ALL SCREW ANCHORS INTO GROUTED MASONRY (CMU) SHALL BE:
- a. SIMPSON TITEN HD (ESR-1056).
- DEWALT SCREWBOLT+ (ESR-1678). HILTI KH EZ (ESR-3056).
- 17. ALL MASONRY CELLS WITHIN 8" OF THE ANCHOR SHALL BE SOLID GROUTED.
- 18. THE TESTING LABORATORY WILL PERFORM VISUAL INSPECTION OF ANCHORS AND DOWELS AS SPECIFIED IN THE SPECIAL INSPECTION SCHEDULE AND THE APPROVED INDEPENDENT EVALUATION REPORT. TENSION TESTING CAN BE REQUIRED AT THE DIRECTION OF THE STRUCTURAL ENGINEER OF
- RECORD OR THE SPECIAL INSPECTOR. 19. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON THAT HOLE AND SHIFT THE ANCHOR LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM SPACE OF (2) ANCHOR HOLE DIAMETERS OR 2 INCHES, WHICH EVER IS LARGER, OF SOUND CONCRETE/MASONRY BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT OR AN APPROVED ANCHORING ADHESIVE. AT CONTRACTORS OPTION, LOCATE EXISTING REINFORCEMENT PRIOR TO DRILLING/CORING. IF THE ANCHOR OR DOWEL CANNOT BE SHIFTED AS NOTED ABOVE, THE
- 20. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES. MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.

# H. SUSPENDED CONCRETE SLABS / SLABS ON METAL DECK

DETAIL) UNLESS NOTED OTHERWISE.

ENGINEER WILL DETERMINE A NEW LOCATION.

- 1. UNLESS NOTED OTHERWISE. ALL CONCRETE SLABS ON METAL DECK SHALL BE 4" TOTAL THICKNESS LIGHT WEIGHT CONCRETE WITH A WEIGHT LESS THAN 110 POUNDS PER CUBIC FOOT, REINFORCED WITH #3 BARS AT 10"o.c. EACH DIRECTION. REINFORCING STEEL SHALL BE CHAIRED TO 1" TOP COVER, FIBER MESH MAY BE USED IN PLACE OF REINFORCEMENT IN SLABS ON DECK WHEN USED IN ACCORDANCE WITH AN APPROVED ICC RESEARCH REPORT AND WHERE APPROVED BY THE ENGINEER. WHERE THE SLAB CONSTRUCTION IS USED TO OBTAIN A UL FIRE RATING, THE PROPOSED
- FIBER MESH SHALL HAVE UL ACCEPTANCE AS AN APPROVED ALTERNATIVE TO WELDED WIRE FABRIC. AROUND OPENINGS IN SUSPENDED CONCRETE SLABS, ADD REINFORCING BARS EQUIVALENT TO BARS CUT BY OPENING WITH HALF ON EACH SIDE OF OPENING. BARS PARALLEL TO PRINCIPAL REINFORCING SHALL RUN FULL LENGTH OF SPAN. BARS PARALLEL TO TEMPERATURE REINFORCING SHALL RUN 24"
- 3. SLAB PENETRATIONS LESS THAN 6" IN ALL DIRECTIONS WITH A CLEAR SPACING OF AT LEAST 3 TIMES THE LONGEST DIMENSION, DO NOT REQUIRE SUPPLEMENTAL REINFORCING. OTHERWISE, THE PENETRATIONS SHALL BE FRAMED ON 4 SIDES WITH STEEL ANGLES OR BENT PLATES (SEE TYPICAL
- 4. EVERY EFFORT SHALL BE MADE TO PROVIDE A LEVEL FINISHED FLOOR WHILE MAINTAINING THE MINIMUM INDICATED SLAB THICKNESS.
- CONTROL JOINTS IN SUSPENDED CONCRETE SLABS AND CONCRETE SLABS ON DECK SHALL NOT BE
- USED UNLESS SPECIFICALLY APPROVED AND DETAILED BY THE ENGINEER.
- CONTRACTOR SHALL PROVIDE ALL TEMPORARY SHORING, BRACING, AND GUYING AS REQUIRED DURING ERECTION AND PLACEMENT OF SUSPENDED CONCRETE SLABS ON METAL DECK.
- 7. CONTRACTOR SHALL PLACE CONCRETE ON METAL DECK IN ACCORDANCE WITH THE CONSTRUCTION LIVE LOAD LIMITS NOTED IN THE METAL DECKING NOTES. IF MEANS AND METHODS ARE USED THAT EXCEED THESE LIMITS, THE CONTRACTOR IS RESPONSIBLE FOR INCREASING THE GAGE OF THE DECK OR PROVIDING NECESSARY SHORING AT NO ADDITIONAL COST TO THE OWNER AFTER THE CONTRACT HAS BEEN AWARDED. SHORING SHALL BE COORDINATED WITH ARW ENGINEERS.

# I. REINFORCING STEEL

- 1. REINFORCING BAR STRENGTH REQUIREMENTS:
- a. ALL REINFORCING BARS, SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60 AND ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM STANDARD A-1064 AND SHALL BE SUPPLIED IN FLAT SHEETS. ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 117, TO MAINTAIN EXACT REQUIRED POSITION.
- 2. HEADED SHEAR STUD ASSEMBLIES SHALL CONFORM TO ASTM A1044.
- 3. STEEL DISCONTINUOUS FIBER REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO ASTM A820 AND SHALL HAVE A LENGTH TO DIAMETER RATIO NOT SMALLER THAN 50 AND NOT GREATER THAN 100. 4. HEADED DEFORMED BARS SHALL CONFORM TO ASTM A970. OBSTRUCTIONS OR INTERRUPTIONS OF THE BAR DEFORMATIONS, IF ANY, SHALL NOT EXTEND MORE THAN 2 BAR DIAMETERS FROM THE
- 5. ALL REINFORCING STEEL SHALL BE TIED IN PLACE AND ADEQUATELY SUPPORTED PRIOR TO PLACING CONCRETE. WET STABBING OF ANY REINFORCING STEEL IS NOT PERMITTED, UNLESS SPECIFICALLY DETAILED OTHERWISE OR APPROVED BY THE ENGINEER.
- ALL FIELD BENT DOWELS SHALL BE GRADE 40 WITH SPACING INDICATED REDUCED BY 1/3. 7. UNLESS NOTED OTHERWISE, REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVERAGE: a. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ..... 3" b. EXPOSED TO EARTH OR WEATHER:
- #6 & LARGER ..... 2" 2. #5 & SMALLER .....1-1/2"

BEARING FACE OF THE HEAD.

- c. NOT EXPOSED TO WEATHER OR EARTH:
- 1. SLABS, WALLS, JOISTS, #11 & SMALLER ..... 3/4"
- 2. BEAMS, COLUMNS: MAIN REINFORCING OR TIES ..... 1-1/2" d. SLAB ON GRADE
- PLACE REINFORCING AT CENTER OF SLAB UNLESS INDICATED OTHERWISE 8. EXCEPT WHERE NOTED ON PLANS OR DETAILS CONTINUOUS REINFORCEMENT SHALL BE SPLICED AT
- POINTS OF MINIMUM STRESS BY LAPPING PER THE REBAR LAP SCHEDULE. 9. REINFORCING STEEL MAY BE SPLICED WITH MECHANICAL COUPLERS THAT HAVE A TENSION CAPACITY OF AT LEAST 125% OF THE STRENGTH OF THE BAR. MECHANICAL COUPLERS SHALL BE A POSITIVE CONNECTING TYPE COUPLER, AND SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED ICC RESEARCH REPORT. WHERE THESE ARE USED, SPLICES ON ADJACENT BARS SHALL BE STAGGERED AT LEAST 24 INCHES ALONG THE LENGTH OF THE BARS.
- 10. ALL VERTICAL REINFORCING IN STRUCTURAL ELEMENTS ABOVE SHALL BE SPLICED WITH MATCHING DOWELS EMBEDDED WITHIN THE FOOTINGS OR STRUCTURE BELOW. SPLICE LENGTHS SHALL COMPLY WITH REBAR LAP SCHEDULE. DOWELS INTO FOOTINGS SHALL TERMINATE WITH A STANDARD HOOK, AND SHALL EXTEND TO WITHIN 4" OF THE BOTTOM OF THE FOOTING, BUT NEED NOT EXTEND MORE THAN 20" INTO FOOTING
- 11. DO NOT WELD REINFORCING EXCEPT AS NOTED ON PLANS, WHERE REINFORCING IS WELDED, USE ASTM A-706 REINFORCING.
- 12. REINFORCING BARS, TIES, AND TENDONS SHALL BE SUPPORTED BY NYLON CONES, PLASTIC-COATED TIE-WIRES, OR PLASTIC-COATED CHAIRS. REINFORCING IN FOOTINGS IS PERMITTED TO BE SUPPORTED ON CONCRETE DOBIES.
- 13. UNLESS NOTED OTHERWISE, HOOKS, STIRRUPS, TIES, AND OTHER BENDS IN REINFORCING STEEL SHALL MEET THE STANDARDS SET FORTH IN ACI 318/318R-19. UNLESS OTHERWISE PERMITTED BY THE ENGINEER, ALL REINFORCEMENT SHALL BE BENT COLD. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, EXCEPT AS SHOWN ON THESE DRAWINGS OR OTHERWISE PERMITTED BY THE ENGINEER.
- 14. UNLESS SPECIFICALLY NOTED AND/OR DETAILED IN THE STRUCTURAL DRAWINGS CONDUIT SHALL NOT BE IN CONTACT WITH REINFORCING STEEL

# J. STRUCTURAL STEEL

- 1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING:
- a. ANSI/AISC 360-16 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", WITH "COMMENTARY" AND "SUPPLEMENTS" AS REQUIRED BY BUILDING CODE.
- b. AISC 303-16 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCLUDING THE
- FOLLOWING SECTIONS: 4.4, 4.4.1, AND 4.4.2. c. AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
- d. AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS".
- e. AWS D1.1 AND 1.3, "STRUCTURAL WELDING CODE" (EXCEPT SPECIFIC ITEMS DO NOT APPLY IF THEY CONFLICT WITH AISC).
- ANSI/AISC 341-16 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS". AWS D1.8, "STRUCTURAL WELDING CODE - SEISMIC"
- 2. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING:
- a. WIDE FLANGE SHAPES, CHANNELS, AND WT SHAPES ASTM A992 (Fy = 50 ksi) b. OTHER SHAPES, PLATES, ANGLES, AND BARS - ASTM A36 (UNO)
- HOLLOW STRUCTURAL SECTIONS (HSS) ASTM A500, GRADE C (Fv = 50 ksi)
- d. DEFORMED BAR ANCHORS (DBA) ASTM A-496, WELDED IN ACCORDANCE WITH AWS D1.
- e. HEADED STUD ANCHORS (HSA) ASTM A-108, GRADE 1015 STEEL AND WELDED IN ACCORDANCE WITH AWS D1.1 FOR TYPE "B". USE 3/4" DIAMETER STUDS, UNLESS NOTED OTHERWISE. f. THREADED ROD - ASTM A-449.
- NON-SHRINK GROUT ASTM C1107. NON-SHRINK GROUT SHALL BE PRE-PACKAGED, NON-METALLIC, WITH A 28-DAY COMPRESSIVE STRENGTH OF 6,000 PSI.
- 3. CONNECTIONS SHALL COMPLY WITH THE STRUCTURAL DRAWINGS UNLESS WRITTEN APPROVAL TO CHANGE IS GIVEN BY THE STRUCTURAL ENGINEER.
- 4. ALL SHOP FABRICATIONS SHALL BE PERFORMED BY AN APPROVED FABRICATOR IN ACCORDANCE WITH SECTIONS 1702 AND 1704 OF THE IBC OR WITH SHOP INSPECTION BY AN INDEPENDENT AGENCY IN ACCORDANCE WITH SECTION 1704.2.5 OF THE IBC.
- WELDING a. ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS QUALIFIED WELDERS IN ACCORDANCE WITH ANSI/AWS D1.1 (LATEST EDITION). b. USE E-70XX ELECTRODES UNLESS NOTED OTHERWISE. E-60XX MAY BE USED FOR WELDING STEEL
- c. ALL INTERSECTING STEEL SHAPES WHICH ARE NOT CONNECTED WITH BOLTS SHALL BE WELDED TOGETHER WITH A FILLET WELD ALL AROUND UNLESS NOTED OTHERWISE. WHERE WELD SIZES
- ARE NOT SHOWN, USE THE FOLLOWING: 1. WHERE THE THICKNESS OF THE CONNECTED PARTS IS EQUAL TO OR THICKER THAN 1/4", WELD SIZE SHALL BE 1/16" LESS THAN THE THICKNESS OF THE THINNEST PART.
- 2. WHERE ANY OF THE CONNECTED PARTS IS LESS THAN 1/4" THICK, WELD SIZE SHALL BE THE SAME AS THE THICKNESS OF THE THINNEST PART. d. WELDING OF HSA'S (HEADED STUD ANCHORS) AND DBA'S (DEFORMED BAR ANCHORS) SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS AND AWS D1.1 REINFORCING BARS SHALL
- NOT BE SUBSTITUTED FOR HSA'S OR DBA'S. e. WHEREVER POSSIBLE, WELDS SHALL BE SHOP WELDS. SPECIAL CONSIDERATIONS, SUCH AS ITEMS WHICH MAY NEED ADJUSTMENT AT THE SITE, REQUIRE THAT SOME WELDS BE FIELD WELDS. WHERE QUESTIONS OR DISCREPANCIES OCCUR THE CONTRACTOR SHALL COORDINATE THE WORK BETWEEN THE SHOP FABRICATOR AND THE STEEL ERECTOR.
- a. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL TO STEEL CONNECTIONS SHALL USE HIGH
- STRENGTH BOLTS CONFORMING TO ASTM F3125 GR. A325. b. UNLESS NOTED OTHERWISE, ALL BOLTING IS CLASSIFIED AS NON-SLIP CRITICAL BEARING TYPE
- CONDITION, WITH ALL PLIES OF THE JOINT IN FIRM CONTACT. c. WHERE OVERSIZED OR SLOTTED HOLES OCCUR IN THE OUTER PLY, AN ASTM F436 WASHER OR 5/16" THICK COMMON PLATE WASHER SHALL BE USED AS REQUIRED TO COMPLETELY COVER THE

CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE. TIGHTEN BOLTS TO A SNUG TIGHT

- d. BOLTS SHALL BE CENTERED IN SLOTTED HOLES, UNLESS NOTED OTHERWISE.
- e. WHERE A STEEL BEAM TO BEAM CONNECTION IS NOT SHOWN, PROVIDE AN AISC STANDARD FRAMED CONNECTION SIZED FOR 1/2 OF THE TOTAL LOAD CAPACITY OF THE BEAM FOR THE SPAN AND STEEL SPECIFIED. METAL DECKING
- a. UNLESS NOTED OTHERWISE, METAL ROOF DECK SHALL BE 16 GAUGE TYPE B GALVANIZED STEEL DECK. SEE ROOF DECK SCHEDULE FOR ATTACHMENTS.
- b. UNLESS NOTED OTHERWISE, METAL FLOOR DECK SHALL BE 18 GAUGE TYPE B COMPOSITE, GALVANIZED, UNVENTED STEEL DECK. UNLESS NOTED OTHERWISE, ATTACH TO SUPPORTING STRUCTURE WITH 3/4" DIAMETER WELDS AT 12" MAXIMUM SPACING. ATTACH SIDE SEAMS WITH BUTTON PUNCH OR SIDE SEAM SCREWS AT 12" MAXIMUM SPACING.
- UNLESS NOTED OTHERWISE, METAL FLOOR DECK IS BASED ON A "LIGHT DUTY" CONSTRUCTION LIVE LOAD OF 20 PSF (IN ADDITION TO THE UNIFORM WET CONCRETE SLAB THICKNESS). SEE STEEL DECK INSTITUTE DESIGN MANUAL FOR ADDITIONAL INFORMATION. c. PAINTED STEEL DECK SHALL CONFORM TO EITHER ASTM A1008 OR A1039, GRADE 50 STEEL AND
- GALVANIZED STEEL DECK SHALL CONFORM TO EITHER ASTM A653 OR A1063, GRADE 50 STEEL, WITH A ZINC COATING DESIGNATION OF G60. d. BUILDING ELEMENTS MAY BE SUPPORTED BY HANGING DIRECTLY FROM METAL DECKING, PROVIDED THAT THE TOTAL WEIGHT PER CONNECTION IS LESS THAN 50 LBS AND THAT THE ATTACHMENT TO THE DECKING IS DISTRIBUTED ACROSS AT LEAST TWO RIBS AND SPACED AT
- LEAST 6 FEET APART IN ANY DIRECTION. 8. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT
- APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS. 9. WHEN DETERMINING THE FIRE RESISTANCE OF ASSEMBLIES. USE THE FOLLOWING: STEEL ROOF MEMBERS ARE CONSIDERED UN-RESTRAINED AND STEEL FLOOR FRAMING MEMBERS ARE
- CONSIDERED RESTRAINED. 10. UNLESS NOTED OTHERWISE, ALL HORIZONTAL FRAMING MEMBERS SHALL BE ERECTED WITH THE
- NATURAL CROWN UP. 11. UNLESS OTHERWISE SHOWN OR DETAILED IN THE PLANS, ALL STEEL COLUMNS, BEAMS, BRACES, STRUTS, ETC. SHALL BE CONTINUOUS BETWEEN CONNECTIONS OR SUPPORTS. SPLICES IN MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL BY THE ENGINEER OF RECORD.

### K. COLD-FORMED STEEL

- 1. LIGHT GAUGE STEEL FRAMING a. STEEL FRAMING SIZE DESIGNATORS USED IN THE DRAWINGS FOLLOW THE CONVENTION ESTABLISHED BY THE STEEL STUD MANUFACTURERS' ASSOCIATION (SSMA) AND THE NORTH AMERICAN STEEL FRAMING ALLIANCE (NASFA). FRAMING MEMBERS PROVIDED SHALL MEET OR
  - EXCEED ALL SSMA AND NASFA STANDARDS AND DESIGN PROPERTIES. b. ALL LOAD BEARING STUDS (AND/OR) JOIST FRAMING MEMBERS ALONG WITH ALL RUNNERS BRIDGING, AND END-TRACKS SHALL BE OF THE DESIGNATION SHOWN ON THE PLANS. ALL OF THE ABOVE ELEMENTS SHALL BE FORMED FROM STEEL MEETING REQUIREMENTS OF ASTM A1011/A1011M-04. ALL COMPONENTS SHALL BE GALVANIZED. ALL COMPONENTS SHALL HAVE THE FOLLOWING YIELD STRESSES:
    - COMPONENT BASE METAL THICKNESS YIELD STRESS STUDS, JOISTS & TRACKS 33 & 43 MIL 33,000 PSI
  - 54, 68 & 97 MIL 50,000 PSI END CLOSURES & BRIDGING 33, 43, 54 & 68 MIL 33.000 PSI FOLLOW ALL MANUFACTURERS' RECOMMENDATIONS FOR THE USE OF THESE PRODUCTS. . UNLESS NOTED OTHERWISE, ALL WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH AWS

D1.3 AND THE STRUCTURAL DETAILS. ALL WELDS SHALL BE COMPLETED USING E60XX

- ELECTRODES. 2. CONNECTIONS, FASTENERS
- a. ALL SCREWS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
  - SCREW SIZE SHANK DIAMETER HEAD DIAMETER NO. 6 0.138" 0.272" 0.164" NO. 8 0.272"
  - 0.190" 0.340"
- b. UNLESS NOTED OTHERWISE, ALL FRAMING ANCHORS, CLIPS, HOLD DOWNS, STRAPS, ETC. TO BE PROVIDED BY THE STEEL NETWORK OR APPROVED EQUAL
- c. UNLESS NOTED OTHERWISE, ALL EXTERIOR WALL BOTTOM TRACKS TO BE ANCHORED TO THE CONCRETE FOUNDATION WALL WITH HILTI KWIK HUS-EZ 1/4"X2-1/2" EMBEDMENT ANCHOR BOLTS @
- 3. UNLESS NOTED OTHERWISE, ALL STEEL STUD WALLS SHALL BE CONTINUOUS BETWEEN TOP AND
- BOTTOM TRACKS WITH NO SPLICES. 4. UNLESS NOTED OTHERWISE, ALL STEEL STUD JOISTS AND BOX HEADER COMPONENTS SHALL BE CONTINUOUS WITH NO SPLICES BETWEEN BEARING SUPPORTS.
- 5. ALL TOP AND BOTTOM TRACKS OF STUD WALLS AND BOX HEADERS SHALL BE CONTINUOUS. WHERE LONG TRACKS ARE NOT AVAILABLE, TRACKS MAY BE WELDED TOGETHER PER NOTE 1D OF THESE
- 6. UNLESS NOTED OTHERWISE, ALL WALLS SHALL BE 400S162-43 STUDS SPACED AT 16"O.C. W/ 400T125-43 TOP AND BOTTOM TRACKS. ATTACH TRACK TO STUDS W/ (1) #8 TEK SCREWS EACH SIDE OF STUD.
- 7. TYPICAL HEADERS WHERE NOT OTHERWISE INDICATED UP TO 10'-0" OPENING (2) 600S162-54 STUDS AND (2) 400T125-54 TRACKS
- SEE DETAIL B3/S530 8. TYPICAL JAMB STUDS, WHERE NOT OTHERWISE INDICATED: UP TO 10'-0" OPENING (2) 400S162-54 STUDS

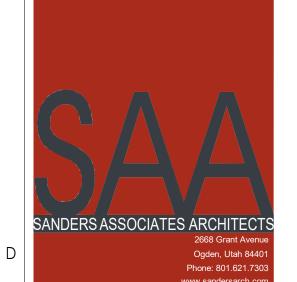
# L. NON-STRUCTURAL DELEGATED DESIGNS AND DEFERRED SUBMITTALS

- NON-STRUCTURAL DELEGATED DESIGNS AND SUBSEQUENT DEFERRED SUBMITTALS ARE FOR ITEMS NOT INCLUDED IN THE STRUCTURAL DELEGATED DESIGN SECTION. THESE ARE ITEMS THAT ARE NOT CRITICAL TO THE OVERALL PERFORMANCE OF THE STRUCTURAL SYSTEM BUT THAT IMPART LOADS
- AND FORCES TO THE STRUCTURAL SYSTEM. 2. NON-STRUCTURAL DEFERRED SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF THE DESIGN
- PROFESSIONAL RESPONSIBLE FOR THE DESIGN. 3. ARW ENGINEERS WILL REVIEW NON-STRUCTURAL DEFERRED SUBMITTALS TO VERIFY DESIGN
- CRITERIA IS COMPLIANT WITH THE APPROVED CONSTRUCTION DOCUMENTS. 4. IF THE STRUCTURAL DRAWINGS INCLUDE LOADS TO ACCOMMODATE NON-STRUCTURAL ELEMENTS THE CONTRACTOR SHALL SUBMIT DOCUMENTATION INDICATING THAT THE NON-STRUCTURAL ELEMENTS COMPLY WITH THE LOADING CRITERIA PROVIDED HEREIN. SUCH DOCUMENTATION SHALL
- BEAR THE STAMP AND SIGNATURE OF THE DESIGN PROFESSIONAL RESPONSIBLE FOR THE DESIGN. 5. WHEN THE NON-STRUCTURAL DEFERRED SUBMITTAL INDICATES THAT THE ELEMENT WILL IMPART FORCES IN EXCESS OF LOADS THAT ARE INDICATED ON THE STRUCTURAL DRAWINGS, THE CONTRACTOR SHALL SUBMIT A DETAILED GRAPHICAL REPRESENTATION OF THOSE DESIGN LOADS, INCLUDING MAGNITUDE, AND LOCATION, THE GRAPHIC SHALL BE ACCOMPANIED BY DOCUMENTATION INDICATING THAT THE NON-STRUCTURAL ELEMENT DESIGN COMPLIES WITH THE LOADING CRITERIA PROVIDED HEREIN. THE LETTER SHALL BEAR THE STAMP AND SIGNATURE OF THE DESIGN
- PROFESSIONAL RESPONSIBLE FOR THE DESIGN. 6. NON-STRUCTURAL DELEGATED DESIGN ITEMS REQUIRING DEFERRED SUBMITTALS SHALL INCLUDE, **BUT ARE NOT LIMITED TO:**
- a. SEISMIC BRACING OF ALL ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL ITEMS WHERE REQUIRED BY THE MOST RECENT VERSION OF ASCE 7 AND THE PROJECT CONTRACT DOCUMENTS.

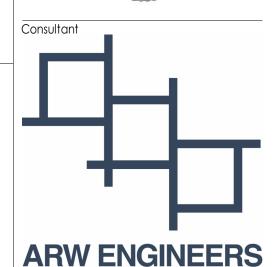
- 1. ARW ENGINEERS EXPRESSLY DISCLAIMS RESPONSIBILITY FOR ANY PORTION OF THE EXISTING
- BUILDING NOT SPECIFICALLY ADDRESSED IN THESE DRAWINGS. 2. DRAWINGS AND DETAILS HAVE BEEN PREPARED TO REFLECT THE EXISTING CONDITIONS AND CONFIGURATIONS OF STRUCTURAL ELEMENTS. HOWEVER, THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND ALERTING THE ENGINEER OF ANY

DISCREPANCIES FOUND PRIOR TO FABRICATING OR INSTALLING STRUCTURAL ELEMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING SURE THAT THE BUILDING AND ELEMENTS WITHIN THE BUILDING REMAIN STABLE UNTIL CONSTRUCTION IS COMPLETE. AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SHORING OR OTHER TEMPORARY SUPPORT OF STRUCTURAL MEMBERS UNTIL THE FINAL CONFIGURATION HAS BEEN COMPLETED.



No. 13489578-2202 Jared William McRory



1594 W. Park Circle 1 801 782 6008 Ш

Ш

Ш

 $\mathbf{\Omega}$ 

Description 4-15-2025 DFCM PLAN REVIEW Revision Description No. Date

DFCM Project No 25394240 2023-34 A | SAA Project No. Drawing Title

STRUCTURAL NOTES

Sheet Number

DFCM approval

**REVIEWED FOR** 

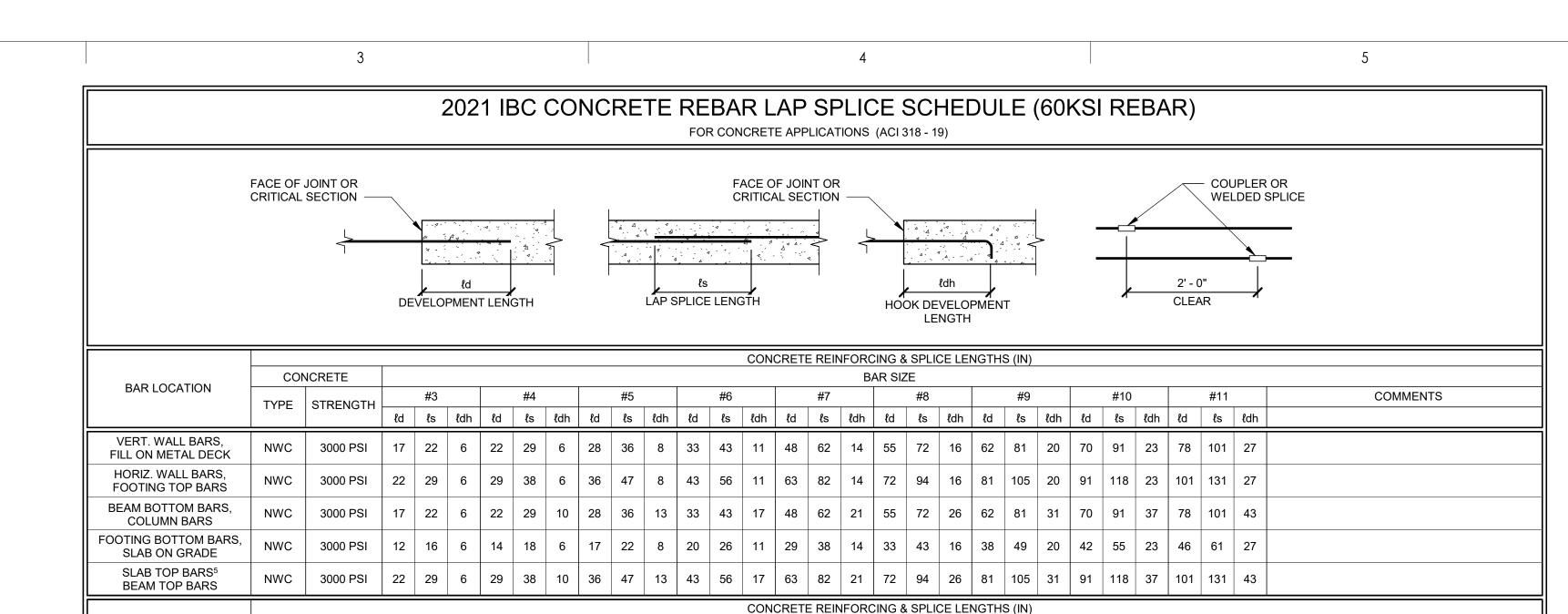
CODE COMPLIANCE

Tom Peterson

THOMAS PETERSON

06/16/2025

DIVISION OF FACILITIES



**BAR SIZE** 

#8

#9

#10

#11

COMMENTS

#7

| ld | ls | ldh | ld

SLAB TOP BARS <sup>5</sup> BEAM TOP BARS	NWC	4500 PSI	18	23	6	24	31	9	30	39	12	35	46	16	51	66	
NOTES:	LEDC MAN	A DE LIGED IN I	UEU C	\_   A _	) CDL I	250.0	110)4/4	ı ce	CTD	ICTLI	3AL N	OTEC		41511541	IM 00		_

- 1. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICES SHOWN. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITY. WHERE MECHANICAL COUPLERS ARE USED, STAGGER ADJACENT SPLICES A MINIMUM OF 24" AS
- 2. WHERE EPOXY COATING IS USED, LENGTHS INDICATED IN THIS SCHEDULE SHALL BE INCREASED BY 50%. HOOKED DEVELOPMENT LENGTHS (ldh) SHALL INCREASE BY 20%.

#4

3. WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS UNO.

#3

4. SPLICE BARS LARGER THAN #11 USING MECHANICAL COUPLERS. 5. SLAB TOP BARS ONLY FOR SLABS 12" OR GREATER IN THICKNESS.

CONCRETE

TYPE STRENGTH

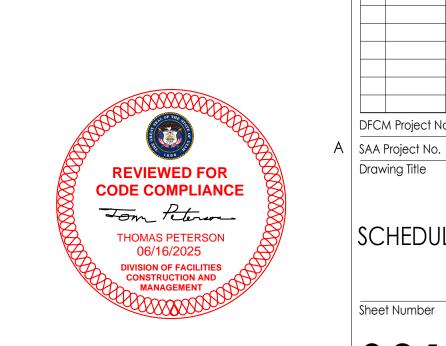
BAR LOCATION

VERT. WALL BARS, FILL ON METAL DECK HORIZ. WALL BARS, FOOTING TOP BARS

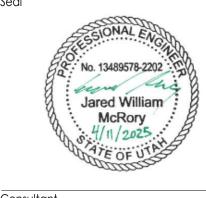
BEAM BOTTOM BARS,

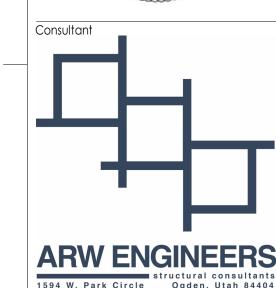
**COLUMN BARS** FOOTING BOTTOM BARS, SLAB ON GRADE

			STANDARD	HOOK & BEN	D SCHEDULE			
TYPE OF STANDARD HOOK	BAR SIZE	MIN. INSIDE BEND DIA. FOR STIRRUPS, TIES, AND HOOPS, in	STRAIGHT EXTENSION \$\ell_{\text{ext}}\$ FOR STIRRUPS, TIES, AND HOOPS in.	MIN. INSIDE BEND DIA. FOR OTHER BARS, in	STRAIGHT EXTENSION	TYPE OF STANDARD HOOK		
	#3 - #5	4d <sub>b</sub>	GREATER OF 6d <sub>b</sub> AND 3"	- 6d <sub>b</sub>		POINT AT WHICH BAR IS DEVELOPED —		
90° HOOK		6d₀	12d <sub>b</sub>	ОЦЬ	- 12d₀	90° BEND		
90 HOOK	#9 - #11	N/A	N/A	8d <sub>b</sub>	12Ub	DIA.		
	#14 - #18	N/A	N/A	10d₀		l <sub>dh</sub>		
405% 110.014	#3 - #5	4d <sub>b</sub>	GREATER OF 6d <sub>b</sub> AND 3"	N/A	N/A	135° BEND		
135° HOOK	#6 - #8	6d <sub>b</sub>	GREATER OF 6d <sub>b</sub> AND 3"	N/A	N/A	DIA.		
	#3 - #5	4d <sub>b</sub>	GREATER OF 4db AND 2.5"	6d <sub>b</sub>		ф 		
	#6 - #8	6d₀	GREATER OF FUNDAND 2.0	OUD	GREATER OF 4d♭	DIA. 180° BEND		
	#9 - #11	N/A	N/A	8d <sub>b</sub>	AND 2.5"	l <sub>ext</sub>		
	#14 - #18	N/A	N/A	10d₀		* ************************************		



SANDERS ASSOCIATES ARCHITEC<sup>-</sup>





1594 W. Park Circle +1 801 782 6008

ш

OLLE

I-WEBER

No. Date Description
1 4-15-2025 DFCM PLAN REVIEW

2023-34

Revisi	on /#\	
No.	Date	Description
DFCN	1 Project No	2539424

SCHEDULES

Drawing Title

COLD-FORMED STEEL DECK SPECIAL INSPECTION SCHEDULE ESTABLISHED PER 2021 IBC SECTION 1705.2.2 AND SDI QA/QC INSTALLER SPECIAL INSPECTOR **QUALITY ASSURANCE** QUALITY CONTROL **INSPECTION TASKS PRIOR TO DECK PLACEMENT (TABLE 1.1)** CONTINUOUS | PERIODIC | CONTINUOUS | PERIODIC PERIODIC - INSPECT THESE ITEMS ON AN INTERMITTENT BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS. FREQUENCY OF OBSERVATIONS VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION SHALL BE ADEQUATE TO CONFIRM THAT THE WORK HAS BEEN PERFORMED IN DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS ACCORDANCE WITH THE APPLICABLE DOCUMENTS. ADDITIONAL INSPECTIONS SHALL BE PERFORMED TO DETERMINE THE EXTENT OF NON-CONFORMANCE. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES CONTINUOUS - PERFORM THESE TASKS PRIOR TO FINAL ACCEPTANCE FOR EACH **INSPECTION TASKS AFTER DECK PLACEMENT (TABLE 1.2)** CONTINUOUS PERIODIC CONTINUOUS PERIODIC ITEM OR ELEMENT. WITHIN THE LISTED TASKS, "DOCUMENT" SHALL MEAN THE INSPECTOR SHALL VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION PREPARE REPORTS OR OTHER APPROPRIATE WRITTEN DOCUMENTATION INDICATING THAT THE WORK HAS OR HAS NOT BEEN PERFORMED IN ACCORDANCE DOCUMENTS WITH THE CONSTRUCTION DOCUMENTS. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES **INSPECTION TASKS PRIOR TO WELDING (TABLE 1.3)** CONTINUOUS | PERIODIC | CONTINUOUS | PERIODIC WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE • MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE • MATERIAL IDENTIFICATION (TYPE/GRADE) • CHECK WELDING EQUIPMENT **INSPECTION TASKS DURING WELDING (TABLE 1.4)** CONTINUOUS | PERIODIC | CONTINUOUS | PERIODIC USE OF QUALIFIED WELDERS CONTROL AND HANDLING OF WELDING CONSUMABLES • ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE) WPS FOLLOWED • **INSPECTION TASKS AFTER WELDING (TABLE 1.5)** CONTINUOUS | PERIODIC | CONTINUOUS | **PERIODIC** VERIFY SIZE AND LOCATIONS OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS WELDS MEET VISUAL ACCEPTANCE CRITERIA VERIFY REPAIR ACTIVITIES DOCUMENT ACCEPTANCE OR REJECTION OF WELDS **INSPECTION TASKS PRIOR TO MECHANICAL FASTENING (TABLE 1.6)** PERIODIC CONTINUOUS | PERIODIC | CONTINUOUS | MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION PROPER STORAGE FOR MECHANICAL FASTENERS • CONTINUOUS | PERIODIC | CONTINUOUS **PERIODIC** INSPECTION TASKS DURING MECHANICAL FASTENING (TABLE 1.7) FASTENERS ARE POSITIONED AS REQUIRED • FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS **INSPECTION TASKS AFTER MECHANICAL FASTENING (TABLE 1.8)** CONTINUOUS PERIODIC CONTINUOUS PERIODIC

# GENERAL STEEL DECK SPECIAL INSPECTION NOTES

QUALITY CONTROL TASKS SHALL BE PERFORMED BY THE INSTALLER'S QUALITY CONTROL INSPECTOR (QCI).

CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS

CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS

DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS

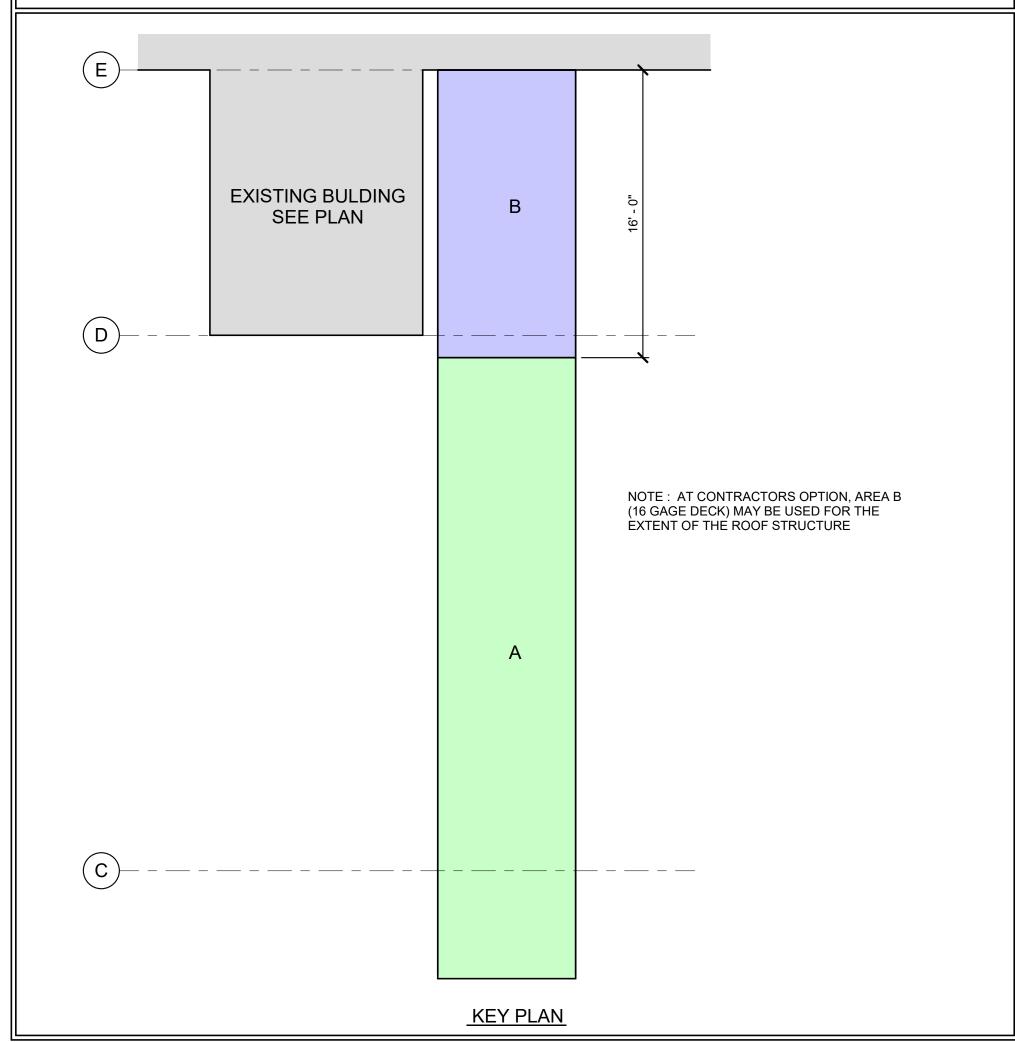
VERIFY REPAIR ACTIVITIES

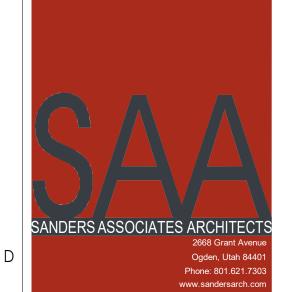
- FOR QUALITY CONTROL INSPECTION, THE CONSTRUCTION DOCUMENTS, INSTALLATION DRAWINGS, SHOP DRAWINGS, DESIGN DOCUMENTS AND THE APPLICABLE REFERENCED STANDARDS SHALL BE UTILIZED. QUALITY ASSURANCE INSPECTION OF THE DECK SHALL BE MADE AT THE PROJECT SITE. THE OWNER'S DESIGNATED REPRESENTATIVE FOR CONSTRUCTION SHALL SCHEDULE THIS WORK WITH THE QUALITY ASSURANCE INSPECTOR (QAI) AND
- THE INSTALLER TO MINIMIZE INTERRUPTIONS TO THE WORK OF THE INSTALLER.
- THE QAI SHALL REVIEW THE MATERIALS TEST REPORTS AND CERTIFICATIONS LISTED IN SECTION 2.2 OF SDI QA/QC FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. QUALITY ASSURANCE TASKS SHALL BE PERFORMED BY THE QAI.
- WHERE A TASK IS TO BE PERFORMED BY BOTH QA AND QC, IT SHALL BE PERMITTED TO COORDINATE INSPECTION FUNCTIONS BETWEEN THE QCI AND QAI SO THAT THE INSPECTIONS ARE PERFORMED BY ONLY ONE PARTY WHEN APPROVED IN ADVANCE BY THE OWNER, DESIGNER, AND AHJ. WHEN QA TASKS ARE PERFORMED ONLY BY THE QCI, EACH INSPECTION IS TO BE DOCUMENTED IN A REPORT AND THE QAI SHALL PERIODICALLY REVIEW THE WORK OF THE QCI AT AN INTERVAL ACCEPTABLE TO THE OWNER, DESIGNER, AND THE AHJ. IN THE EVENT THAT THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS CONFLICT WITH THE INSTALLATION DRAWINGS OR SHOP DRAWINGS. THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS SHALL GOVERN.
- IDENTIFICATION AND REJECTION OF MATERIALS AND WORKMANSHIP NOT IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS SHALL BE PERMITTED AT ANY TIME DURING PROGRESS OF OR FOLLOWING THE COMPLETION OF THE WORK. HOWEVER, THIS PROVISION SHALL NOT RELIEVE THE OWNER OR THE INSPECTOR OF THE OBLIGATION FOR TIMELY, IN-SEQUENCE INSPECTIONS. NONCOMFORMING MATERIAL OR WORKMANSHIP SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNERS DESIGNATED REPRESENTATIVE FOR CONSTRUCTION AND THE DECK INSTALLER. NONCONFORMING MATERIAL OR WORKMANSHIP SHALL BE BROUGHT IN CONFORMANCE, OR MADE SUITABLE FOR ITS INTENDED PURPOSE AS DETERMINED BY THE DESIGNER.

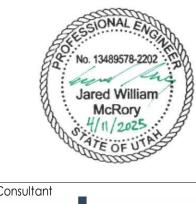
						ROOF	DECK	SCHE	EDULE	Ξ											
		DECK				ATTACH	MENT														
		DECK		SUPF	ORTS	SIDE S	SEAMS	SUPPORTS PARALLEL MIN. SHEAR MIN. SHEAR													
AREA	DEPTH	TYPE	GA.	TYPE <sup>2</sup>	PATTERN TYPE <sup>2</sup>	PATTERN	PATTERN	PATTERN	PATTERN	PATTERN	TYPE <sup>2</sup>	RN TYPE <sup>2</sup>	TTERN TYPE <sup>2</sup>	TYPE <sup>2</sup> SPACING		SPACING	TO FLUTES		CAPACITY, lb/ft (ASD)	STIFFNESS G' (kip/in)	COMMENTS
								TYPE <sup>2</sup>	SPACING												
Α	1-1/2"	В	18	PAF	36/7	VSC2	12"	PAF	12"	1900	254										
В	1-1/2"	В	16	PAF	36/7	VSC2	12"	PAF	12"	2460	334										

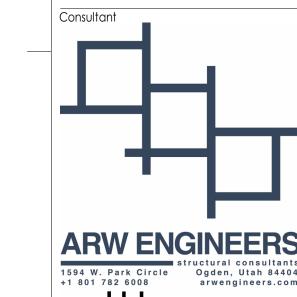
# **FASTENING PATTERNS**

- ALL ROOF DECKING TO BE SUPPLIED BY VERCO, OR APPROVED EQUAL. ALTERNATE DECKING SHALL BE SUBMITTED WITH CURRENT ICC APPROVAL TO ENGINEER FOR REVIEW AND APPROVAL. ALTERNATE DECKING SYSTEMS SHALL MEET OR EXCEED THE MINIMUM SHEAR CAPACITY AND SHALL PROVIDE GREATER THAN OR EQUAL TO THE MINIMUM SHEAR STIFFNESS LISTED IN THE SCHEDULE.
- PAF = HILTI X-HSN 24 POWDER ACTUATED FASTENERS, VSC2 = VERCO SIDELAP CONNECTION WITH PUNCHLOK TOOL, SCREWS = SELF DRILLING SCREW PER ASTM C1513, SPOT WELD = 3/4" VISIBLE DIAMETER SPOT WELD.
- USE NESTABLE (OVERLAPPING) SIDE SEAMS AT SCREW ATTACHMENTS AND INTERLOCKING SIDE SEAMS AT WELDS AND VSC2 CONNECTIONS. ALL DECK WITH A PROFILE DEPTH OF 2" OR LESS SHALL HAVE NESTED OR TELESCOPED END LAPS.
- WHERE WELDS ARE USED, SUPPORT WELDS AT INTERLOCKING SIDELAPS MAY BE 3/8" x 1-1/4" ARC SEAM WELDS IN LIEU OF ARC SPOT WELDS.









Ш

Ш  $\mathbf{\Omega}$ 

Description 1 4-15-2025 DFCM PLAN REVIEW

Revision Description

> 25394240 2023-34

A | SAA Project No. Drawing Title

SCHEDULES

Sheet Number

DFCM Project No.

**REVIEWED FOR CODE COMPLIANCE** Tom Peterson THOMAS PETERSON 06/16/2025 DIVISION OF FACILITIES

DFCM approval

REDUCTION OF RATE OF ULTRASONIC TESTING - THE RATE OF UT

IS ONLY PERMITTED TO BE REDUCED IF APPROVED BY THE EOR

12. FOR STRUCTURES IN RISK CATEGORY II, WHERE THE INITIAL RATE

FOR UT IS 10%, THE NDT RATE FOR AN INDIVIDUAL WELDER OR

UNACCEPTABLE DEFECTS DIVIDED BY THE NUMBER OF WELDS

COMPLETED, EXCEEDS 5% OF THE WELDS TESTED FOR THE WELDER OR WELDING OPERATOR. A SAMPLING OF AT LEAST 20

COMPLETED WELDS FOR A JOB SHALL BE MADE PRIOR TO

IN. (300mm) INCREMENT OR FRACTION THEREOF SHALL BE

(150mm) OF LENGTH OR FRACTION THEREOF SHALL BE

13. ALL NDT PERFORMED SHALL BE DOCUMENTED. FOR SHOP

CONSIDERED ON WELD.

THE BASIS OF REJECTION

PERMITTED IN THE JOINT AREA.

WELDING OPERATOR SHALL BE INCREASED TO 100% SHOULD THE

IMPLEMENTING SUCH AN INCREASE. WHEN THE REJECT RATE FOR

THE WELDER OR WELDING OPERATOR, AFTER A SAMPLING OF AT

LEAST 40 COMPLETED WELDS, HAS FALLEN TO 5% OR LESS, THE

RATE OF UT SHALL BE RETURNED TO 10%. FOR EVALUATING THE

REJECT RATE OF CONTINUOUS WELDS OVER 3 FT (1M) IN LENGTH

WHERE THE EFFECTIVE THROAT IS 1 IN. (25mm) OR LESS, EACH 12

CONSIDERED AS ONE WELD. FOR EVALUATING THE REJECT RATE

ON CONTINUOUS WELDS OVER 3 FT (1M) IN LENGTH WHERE THE

EFFECTIVE THROAT IS GREATER THAN 1 IN. (25mm), EACH 6 IN.

FABRICATION, THE NDT REPORT SHALL IDENTIFY THE TESTED

WELD BY PIECE MARK AND LOCATION IN THE PIECE. FOR FIELD

WORK, THE NDT REPORT SHALL IDENTIFY THE TESTED WELD BY

PIECE. WHEN A WELD IS REJECTED ON THE BASIS OF NDT, THE

14. DEMAND CRITICAL WELDS SHALL MEET THE PROVISION FOUND IN AISC 341-16 AND WELDING METHODS, PROCEDURES AND QUALITY CONTROL SHALL COMPLY WITH AWS D1.1 AND THE FOLLOWING: a. ARC STRIKES, GOUGES AND OTHER IMPERFECTIONS WITHIN

OR ADJACENT TO THE JOINT, SHALL BE REPAIRED OR

b. PREHEAT AND INTER-PASS REQUIREMENTS AS OUTLINED IN

c. UNREPAIRED CRACKS, GOUGES, AND NOTCHES WILL NOT BE

d. USE ELECTRODES WITH CHARPY V-NOTCH ABSORBED ENERGY EQUAL TO OR GREATER THAN 20 FT-LBS AT 20 DEGREES FAHRENHEIT UNDER AWS A5 CLASSIFICATION TEST METHODS, AND 40 FT-LBS AT 70 DEGREES FAHRENHEIT USING TEST PROCEDURES PRESCRIBED IN APPENDIX X OF AISC 358. ACCEPTABLE ELECTRODES INCLUDE E70TG-K2, E71 T-1.

LOCATION IN THE STRUCTURE, PIECE MARK, AND LOCATION IN THE

NDT RECORD SHALL INDICATE THE LOCATION OF THE DEFECT AND

AND THE AHJ PER AISC 360-16 CHAPTER N5.5e.

REJECT RATE. THE NUMBER OF WELDS CONTAINING

BY QA AS PRESCRIBED. REDUCTION IN THE RATE OF UT IS

PROHIBITED.

INSPECTION TASKS DURING WELDING (TABLE N5.4-2)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC
CONTROL AND HANDLING OF WELDING CONSUMABLES				
* PACKAGING		•		•
* EXPOSURE CONTROL				
NO WELDING OVER CRACKED TACK WELDS		•		•
ENVIRONMENTAL CONDITIONS				
* WIND SPEED WITHIN LIMITS		•		•
* PRECIPITATION AND TEMPERATURE				
WPS FOLLOWED				
* SETTINGS ON WELDING EQUIPMENT				
* TRAVEL SPEED				
* SELECTED WELDING MATERIALS		•		•
* SHIELDING GAS TYPE / FLOW RATE				
* PREHEAT APPLIED				
* INTERPASS TEMPERATURE MAINTAINED (MIN. / MAX)				
* PROPER POSITION (F, V, H, OH)				
WELDING TECHNIQUES				
* INTERPASS AND FINAL CLEANING				
* EACH PASS WITHIN PROFILE LIMITATIONS		•		•
* EACH PASS MEETS QUALITY REQUIREMENTS				
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	•		•	
INSPECTION TASKS AFTER WELDING (TABLE N5.4-3)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC
WELDS CLEANED		•		•
SIZE, LENGTH AND LOCATION OF WELDS	•		•	
WELDS MEET VISUAL ACCEPTANCE CRITERIA				
* CRACK PROHIBITION				
* WELD / BASE-METAL FUSION				
* CRATER CROSS SECTION				
* WELD PROFILES	<b>–</b>		•	
* WELD SIZE				
* UNDERCUT				
* POROSITY				
ARC STRIKES	•		•	
K-AREA <sup>1</sup>	•		•	
WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES <sup>2</sup>	•		•	
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	•		•	
REPAIR ACTIVITIES	•		•	
		1		
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	•		•	
NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	•	•	•	•

1WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 IN. (75mm) OF THE WELD) <sup>2</sup>AFTER ROLLED HEAVY SHAPES (SEE SECTION A3.1c) AND BUILT-UP HEAVY SHAPES (SEE SECTION A3.1d) ARE WELDED, VISUALLY INSPECT THE WELD ACCESS HOLE FOR CRACKS.

	NOTES	INSPECTION TASKS PRIOR TO BOLTING (TABLE N5.6-1)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC	NOTES
		MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS		•	•		1. PERIODIC - OBSERVE THESE ITEMS ON A RANDOM BASIS.
		FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS		•		•	OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
	PERIODIC - OBSERVE THESE ITEMS ON A RANDOM BASIS.  OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.	PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)		•		•	2. CONTINUOUS - PERFORM THESE TASKS FOR EACH BOLTED CONNECTION.  3. QUALITY CONTROL (QC) SHALL BE PROVIDED BY THE FABRICATOR
	CONTINUOUS - PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER.	PROPER BOLTING PROCEDURES SELECTED FOR JOINT DETAIL		•		•	AND ERECTOR.
3. 4.	QUALITY CONTROL (QC) SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR. QUALITY ASSURANCE (QA) SHALL BE PROVIDED BY OTHERS WHEN	CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS		•		•	4. QUALITY ASSURANCE (QA) SHALL BE PROVIDED BY OTHERS WHEN REQUIRED BY THE AUTHORITY HAVING JURISDICTION (AHJ), APPLICABLE BUILDING CODE (ABC), PURCHASER, OWNER, OR ENGINEER OF RECORD (EOR). NONDESTRUCTIVE TESTING (NDT)
	REQUIRED BY THE AUTHORITY HAVING JURISDICTION (AHJ), APPLICABLE BUILDING CODE (ABC), PURCHASER, OWNER, OR ENGINEER OF RECORD (EOR). NONDESTRUCTIVE TESTING (NDT)	PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	•			•	SHALL BE PERFORMED BY THE AGENCY OR FIRM RESPONSIBLE FOR QUALITY ASSURANCE, EXCEPT AS PERMITTED IN ACCORDANCE WITH SECTION N7.
	SHALL BE PERFORMED BY THE AGENCY OR FIRM RESPONSIBLE FOR QUALITY ASSURANCE, EXCEPT AS PERMITTED IN ACCORDANCE WITH SECTION N6.	PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS		•		•	5. FOR SNUG-TIGHT JOINTS, PRE-INSTALLATION VERIFICATION TESTING AS SPECIFIED IN TABLE N5.6-1 AND MONITORING OF THE INSTALLATION PROCEDURES AS SPECIFIED IN TABLE N5.6-2 ARE
	QC AND QA INSPECTORS SHALL BE QUALIFIED IN ACCORDANCE WITH AISC 360-16 CHAPTER N4.	INSPECTION TASKS DURING BOLTING (TABLE N5.6-2)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC	
7.	NONDESTRUCTIVE TESTING PERSONNEL SHALL BE QUALIFIED IN ACCORDANCE WITH AISC 360-16 CHAPTER N4.3. NONDESTRUCTIVE TESTING OF WELDED JOINTS SHALL COMPLY	FASTENER ASSEMBLIES, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED		•		•	6. FOR PRETENSIONED JOINTS AND SLIP-CRITICAL JOINTS, WHEN THE INSTALLER IS USING THE TURN-OF-NUT METHOD WITH MATCHMARKING TECHNIQUES, THE DIRECT-TENSION-INDICATOR
8.	WITH AISC 360-16 CHAPTER N5.5a AND b. OBSERVATION OF WELDING OPERATIONS AND VISUAL INSPECTION OF IN-PROCESS AND COMPLETED WELDS SHALL BE THE PRIMARY	JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION		•		•	METHOD, OR THE TWIST-OFF-TYPE TENSION CONTROL BOLT METHOD, MONITORING OF BOLT PRETENSIONING PROCEDURES SHALL BE AS SPECIFIED IN TABLE N5.6-2. THE QCI AND QAI NEED
	METHOD TO CONFIRM THAT THE MATERIALS, PROCEDURES AND WORKMANSHIP ARE IN CONFORMANCE WITH THE CONSTRUCTION	FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING		•		•	NOT BE PRESENT DURING THE INSTALLATION OF FASTENERS WHEN THESE METHODS ARE USED BY THE INSTALLER.
9.	DOCUMENTS. FOR STRUCTURAL STEEL, ALL PROVISIONS OF AWS D1.1 / D1.1M STRUCTURAL WELDING CODE - STEEL FOR STATICALLY LOADED STRUCTURES SHALL APPLY. THERMALLY CUT SURFACES OF ACCESS HOLES SHALL BE TESTED	FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES		•		•	7. FOR PRETENSIONED JOINTS AND SLIP-CRITICAL JOINTS, WHEN THE INSTALLER IS USING THE CALIBRATED WRENCH METHOD OR THE TURN-OF-NUT METHOD WITHOUT MATCHMARKING, MONITORING OF BOLT PRETENSIONING PROCEDURES SHALL BE AS SPECIFIED
	BY QA USING MT OR PT, WHEN THE FLANGE THICKNESS EXCEEDS 2 IN. (50mm) FOR ROLLED SHAPES, OR WHEN THE WEB THICKNESS	INSPECTION TASKS AFTER BOLTING (TABLE N5.6-3)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC	IN TABLE N5.6-2. THE QCI AND QAI SHALL BE ENGAGED IN THEIR ASSIGNED INSPECTION DUTIES DURING INSTALLATION OF
10.	EXCEEDS 2 IN. (50mm) FOR BUILT-UP SHAPES. ANY CRACK SHALL BE DEEMED UNACCEPTABLE REGARDLESS OF SIZE OR LOCATION. WHEN REQUIRED BY APPENDIX 3, TABLE A-3.1, WELDED JOINTS	DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	•		•		FASTENERS WHEN THESE METHODS ARE USED BY THE INSTALLER.  8. OBSERVATION OF BOLTING OPERATIONS SHALL BE THE PRIMARY METHOD USED TO CONFIRM THAT THE MATERIALS, PROCEDURES
	REQUIRING WELD SOUNDNESS TO BE ESTABLISHED BY RADIOGRAPHICS OR ULTRASONIC INSPECTION SHALL BE TESTED BY OA AS PRESCRIBED, REDUICTION IN THE RATE OF LIT IS						AND WORKMANSHIP INCORPORATED IN CONSTRUCTION ARE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND THE

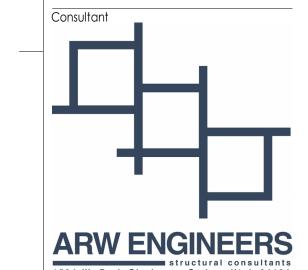
# **GENERAL STEEL SPECIAL INSPECTION NOTES:**

- QUALITY ASSURANCE (QA) INSPECTION OF FABRICATED ITEMS SHALL BE MADE AT THE FABRICATOR'S PLANT. THE QUALITY ASSURANCE INSPECTOR (QAI) SHALL SCHEDULE THIS WORK TO MINIMIZE INTERRUPTION TO THE WORK OF THE FABRICATOR.
- QA INSPECTION OF THE ERECTED STEEL SYSTEM SHALL BE MADE AT THE PROJECT SITE. THE QAI SHALL SCHEDULE THIS WORK TO MINIMIZE INTERRUPTION TO THE WORK OF THE ERECTOR. WHERE A TASK IS NOTED TO BE PERFORMED BY BOTH QC AND QA. IT IS PERMITTED TO COORDINATE THE INSPECTION FUNCTION BETWEEN THE QCI AND QAI SO THAT THE INSPECTION FUNCTIONS ARE PERFORMED BY ONLY ONE PARTY. WHERE QA RELIES UPON INSPECTION FUNCTIONS PERFORMED BY QC, THE APPROVAL OF THE ENGINEER OF RECORD AND THE AUTHORITY HAVING JURISDICTION IS
- 4. THE FABRICATOR'S QCI SHALL INSPECT THE FABRICATED STEEL TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE SHOP DRAWINGS, SUCH AS PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION. THE ERECTOR'S QCI SHALL INSPECT THE ERECTED STEEL FRAME TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE ERECTION DRAWINGS, SUCH AS BRACES, STIFFENERS,
- MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION. THE QAI SHALL BE ON THE PREMISES FOR INSPECTION DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. AS A MINIMUM, THE DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT INTO THE CONCRETE,
- SHALL BE VERIFIED PRIOR TO PLACEMENT OF THE CONCRETE. THE QAI SHALL INSPECT THE FABRICATED STEEL OR ERECTED STEEL FRAME, AS APPROPRIATE, TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS, SUCH AS
- BRACES, STIFFENERS, MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION. QUALITY ASSURANCE (QA) INSPECTIONS, EXCEPT NONDESTRUCTIVE TESTING (NDT), MAY BE WAIVED WHEN THE WORK IS PERFORMED IN A FABRICATING SHOP OR BY AN ERECTOR APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ) TO PERFORM THE WORK WITHOUT QA. NDT OF WELDS COMPLETED IN AN APPROVED FABRICATOR'S SHOP MAY BE PERFORMED BY THAT FABRICATOR WHEN
- APPROVED BY THE AHJ. WHEN THE FABRICATOR PERFORMS THE NDT, THE QA AGENCY SHALL REVIEW THE FABRICATOR'S NDT REPORTS. 3. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE AHJ STATING THAT THE MATERIALS SUPPLIED AND WORK PERFORMED BY THE FABRICATOR ARE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. AT COMPLETION OF ERECTION, THE APPROVED ERECTOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE AHJ STATING
- THAT THE MATERIALS SUPPLIED AND WORK PERFORMED BY THE ERECTOR ARE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. IDENTIFICATION AND REJECTION OF MATERIAL OR WORKMANSHIP THAT IS NOT IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS, SHALL BE PERMITTED AT ANY TIME DURING THE PROGRESS OF THE WORK. HOWEVER, THIS PROVISION SHALL NOT RELIEVE THE OWNER OR THE INSPECTOR OF THE OBLIGATION FOR TIMELY, IN-SEQUENCE INSPECTIONS. NONCONFORMING MATERIAL AND
- WORKMANSHIP SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE FABRICATOR OR ERECTOR, AS APPLICABLE. NONCONFORMING MATERIAL OR WORKMANSHIP SHALL BE BROUGHT INTO CONFORMANCE, OR MADE SUITABLE FOR ITS INTENDED PURPOSE AS DETERMINED BY THE ENGINEER OF RECORD.
- . CONCURRENT WITH THE SUBMITTAL OF SUCH REPORTS TO THE AHJ, EOR OR OWNER, THE QA AGENCY SHALL SUBMIT TO THE FABRICATOR AND ERECTOR:
- (1) NONCONFORMANCE REPORTS (2) REPORTS OF REPAIR, REPLACEMENT OR ACCEPTANCE OF NONCONFORMING ITEMS.



PROVISIONS OF THE RCSC SPECIFICATION.





1594 W. Park Circle

Ш

Ш

Ш  $\mathbf{\Omega}$ 

No. Date Description 4-15-2025 DFCM PLAN REVIEW Revision Description

DFCM Project No 25394240 A | SAA Project No. 2023-34

**SCHEDULES** 

Drawing Title

Sheet Number

**REVIEWED FOR CODE COMPLIANCE** Tom Peterson THOMAS PETERSON 06/16/2025 **DIVISION OF FACILITIES** 

DFCM approval

WHERE GEOTECHNICAL REPORT IS NOT PROVIDED SPECIAL INSPECTIONS ARE REQUIRED TO VERIFY THAT THE IN-PLACE DRY

DENSITY OF THE COMPACTED FILL IS NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE

PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND

CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING FILL PLACEMENT. VERIFY USE OF PROPER MATERIALS AND

CONTENT DETERMINED IN ACCORDANCE WITH ASTM D1557.

LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.

		ES	STABLISHED PER 2021 IE	BC SECTION	110 AND CHAPTER 17
ITEM	CONTINUOUS <sup>3</sup>	PERIODIC <sup>3</sup>	REFERENCE		COMMENTS
PRE-FAB CONSTRUCTION (IBC 1704.2)			REFERENCE NOTES P1 & P2	P2.	SPECIAL INSPECTION IS NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION, PROVIDED THE FABRICATOR COMPLIES WITH IBC. INSPECTION FOR PREFABRICATED CONSTRUCTION SHALL BE THE SAME AS IF THE MATERIAL USED IN THE CONSTRUCTION TOOK PLACE ON SITE. SPECIAL INSPECTION WILL NOT BE REQUIRED DURING PREFABRICATION IF THE APPROVED AGENCY CERTIFIES THE CONSTRUCTION AND FURNISHES EVIDENCE OF COMPLIANCE. (SEE NOTE 2).
CONCRETE CONSTRUCTION (IBC 1705.3)			SEE IBC TABLE 1705.3 - REF. NOTE C1	C 1.	SPECIAL INSPECTION IS NOT REQUIRED FOR CONC. ISOLATED SPREAD FOOTINGS, CONTINUOUS FOOTINGS, NON-STRUCTURAL SLABS,
REINFORCING STEEL PLACEMENT		•			FOUNDATION WALLS, PATIOS, DRIVEWAYS, AND SIDEWALKS PROVIDED THE REQUIREMENTS OF IBC 1705.3 ARE MET. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR VERIFICATION OF THE WELDABILITY OF REINFORCING STEEL RESISTING FLEXURAL
WELDING OF REINFORCING STEEL	•	•	REFERENCE NOTE C2		AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE
ANCHORS CAST IN CONCRETE	•				SHEAR WALLS, AND SHEAR REINFORCEMENT. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR WELDING OF OTHER ASTM A 706 REINFORCING STEEL NOT INCLUDED IN THE CONTINUOUS SPECIAL INSPECTION REQUIREMENTS NOTED ABOVE.
VERIFYING REQUIRED DESIGN MIX		•		C 3.	PERFORM AIR, SLUMP AND TEMP. TESTS WHEN CONCRETE SAMPLES ARE CAST.
CONCRETE PLACEMENT / SAMPLING	•		REFERENCE NOTE C3		PERIODIC SPECIAL INSPECTION IS REQUIRED FOR VERIFICATION OF IN-SITU CONCRETE STRENGTH PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.
CURING TEMPERATURE / TECHNIQUES		•		C 5.	EPOXY AND EXPANSION ANCHORS INTO MASONRY OR CONCRETE MAY BE USED ONLY WHEN APPROVED BY ARCHITECT AND/OR
CONCRETE AND SHOTCRETE PLACEMENT / APPLICATION TECHNIQUES	•			C 6.	ENGINEER USING AN APPROVED PRODUCT WITH CURRENT PUBLISHED ICC RESEARCH REPORT NUMBERS. COORDINATE CONTINUOUS/PERIODIC SPECIAL INSPECTION REQUIREMENTS WITH ICC REPORT AND ACI 318: 17.8.2.4.  PERIODIC SPECIAL INSPECTION IS REQUIRED FOR FORMWORK SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING
VERIFICATION OF IN-SITU STRENGTH		•	REFERENCE NOTE C4		FORMED.
POST-INSTALLED ANCHOR PLACEMENT	•	•	REFERENCE NOTE C5		
FORMWORK		•	REFERENCE NOTE C6		
SOILS (IBC 1705.6)			REFERENCE NOTE F1		SPECIAL INSPECTION OF SOILS SHALL REFERENCE THE APPROVED GEOTECHNICAL REPORT TO DETERMINE COMPLIANCE.

- GENERAL SPECIAL INSPECTION NOTES:

  THE ITEMS MARKED WITH A "O" IN THE SPECIAL INSPECTION SCHEDULE SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO THE MATERIAL SAMPLING AND TESTING SECTION, THE PROJECT SPECIFICATIONS, AND THE SPECIFIC GENERAL NOTES SECTIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL. ANY ITEMS WHICH FAIL TO COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL, ARCHITECT, AND ENGINEER PRIOR TO COMPLETION OF THAT PHASE OF WORK. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS. ANY CONSTRUCTION OR MATERIAL THAT HAS FAILED INSPECTION SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT.
- CONTINUOUS SPECIAL INSPECTION MEANS THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. PERIODIC SPECIAL INSPECTION MEANS THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK. (IBC SECTION 202)

REFERENCE NOTE F1

REFERENCE NOTE F2

REFERENCE NOTE F2

REFERENCE NOTE F3

REFERENCE NOTE F1

•

VERIFY ADEQUATE MATERIALS BELOW FOOTINGS

EXCAVATIONS EXTEND TO PROPER DEPTH AND

CLASSIFY & TEST CONTROLLED FILL MATERIALS

PROPERLY PREPARED SITE AND SUB-GRADE PRIOR

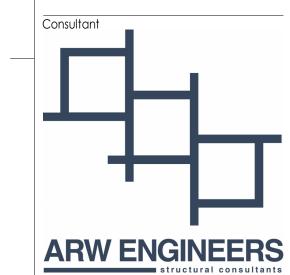
REACH PROPER MATERIAL

TO FILL.

FILL MATERIAL AND PLACEMENT

SANDERS ASSOCIATES ARCHITEC<sup>-</sup>





structural consultants
1594 W. Park Circle
+1 801 782 6008

structural consultants
Ogden, Utah 84404
arwengineers.com

ш

I-WEBER

Description

2023-34

	4-15-2025	DFCM PLAN REVIEW
Revisi	ion /#	
No.	Date	Description
 DFCN	л Project No	D. 25394240

No. Date

Drawing Title

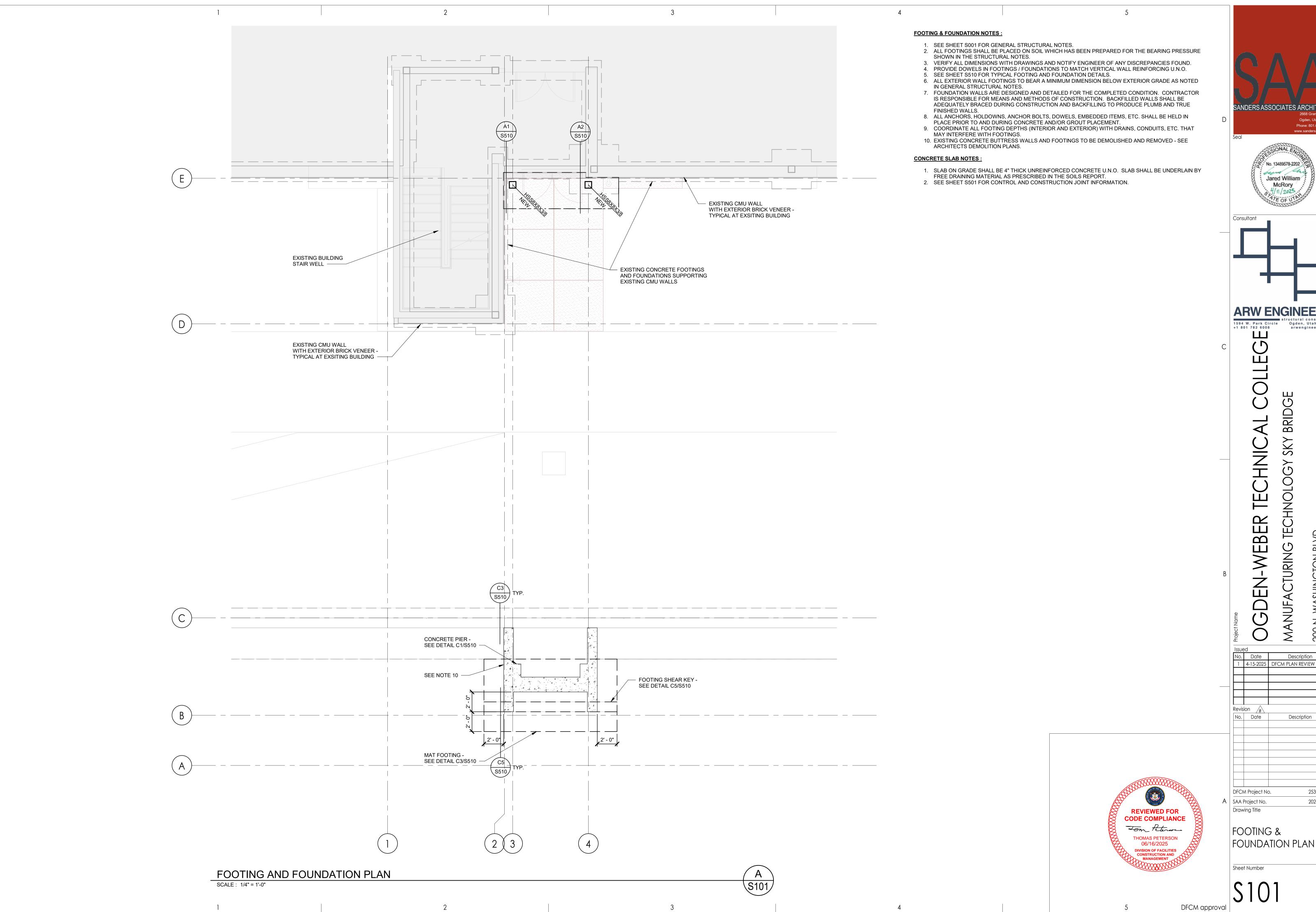
Sheet Number

SCHEDULES

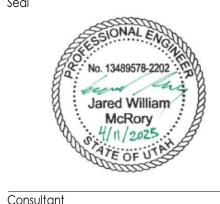
A SAA Project No.

REVIEWED FOR CODE COMPLIANCE THOMAS PETERSON
06/16/2025
DIVISION OF FACILITIES
CONSTRUCTION AND
MANAGEMENT

DFCM approval



SANDERS ASSOCIATES ARCHITEC<sup>\*</sup>



structural consultants
1594 W. Park Circle
+1 801 782 6008

structural consultants
Ogden, Utah 84404
arwengineers.com ш

I-WEBER

Description 1 4-15-2025 DFCM PLAN REVIEW

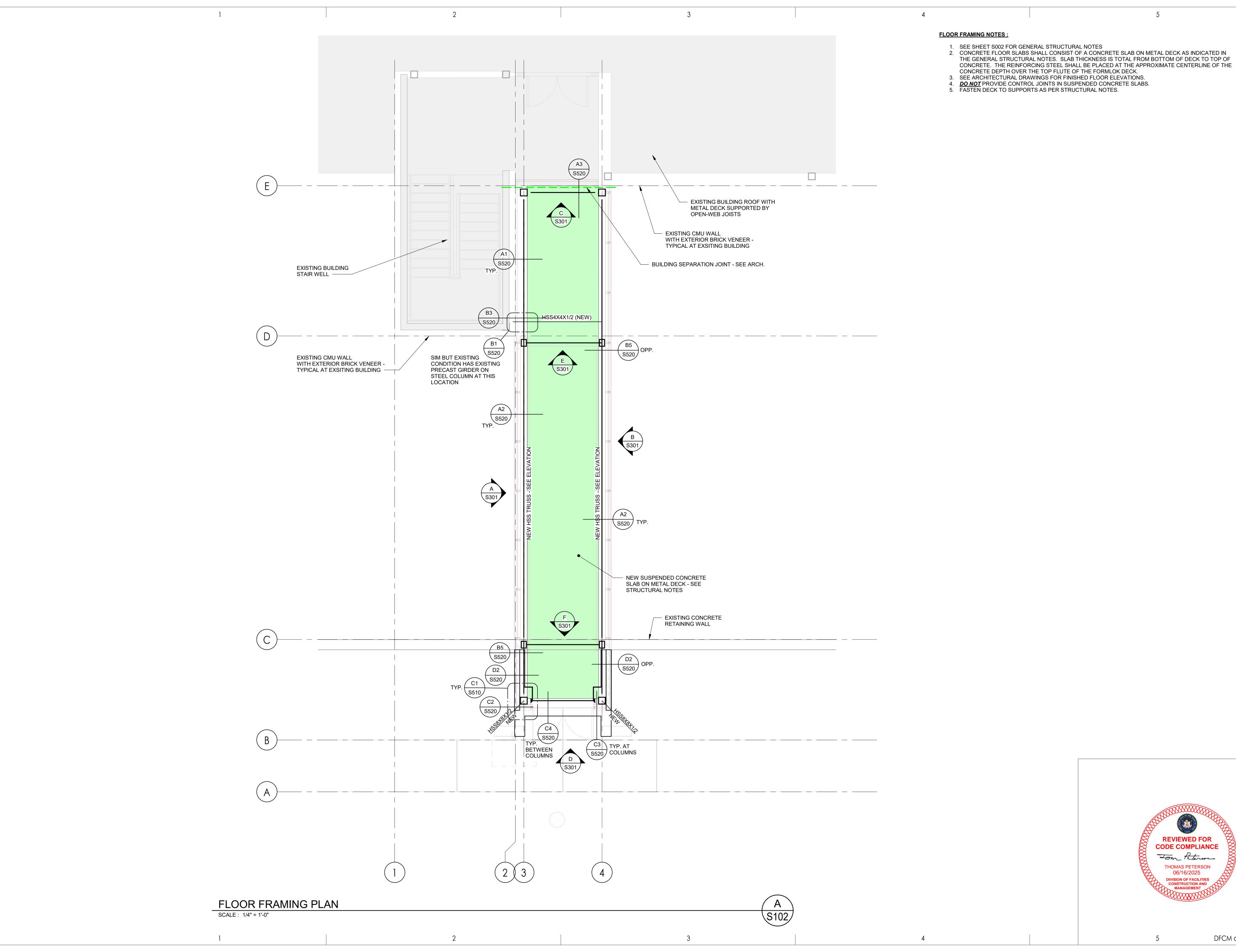
25394240

Revision Description

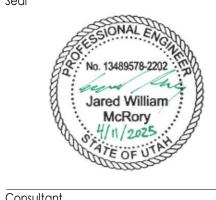
DFCM Project No. A SAA Project No. Drawing Title

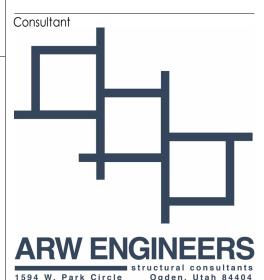
2023-34 FOOTING &

Sheet Number



2. CONCRETE FLOOR SLABS SHALL CONSIST OF A CONCRETE SLAB ON METAL DECK AS INDICATED IN THE GENERAL STRUCTURAL NOTES. SLAB THICKNESS IS TOTAL FROM BOTTOM OF DECK TO TOP OF SANDERS ASSOCIATES ARCHITEC<sup>\*</sup>





structural consultants
1594 W. Park Circle
+1 801 782 6008

structural consultants
Ogden, Utah 84404
arwengineers.com

ш

OGDEN-WEBER

No. Date Description
1 4-15-2025 DFCM PLAN REVIEW Revision Description

DFCM Project No. 25394240 A SAA Project No. 2023-34 Drawing Title

FLOOR FRAMING PLAN

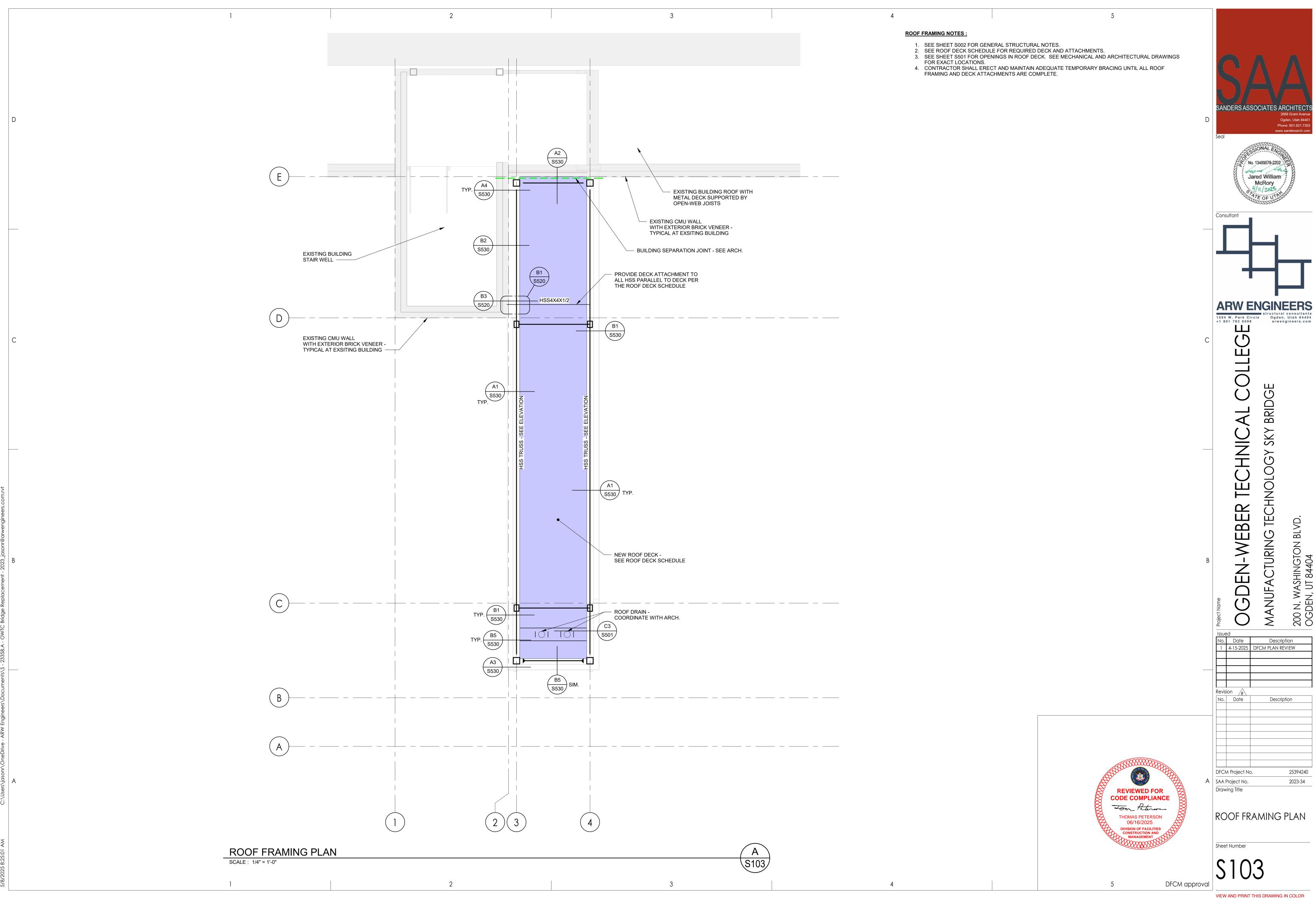
Sheet Number

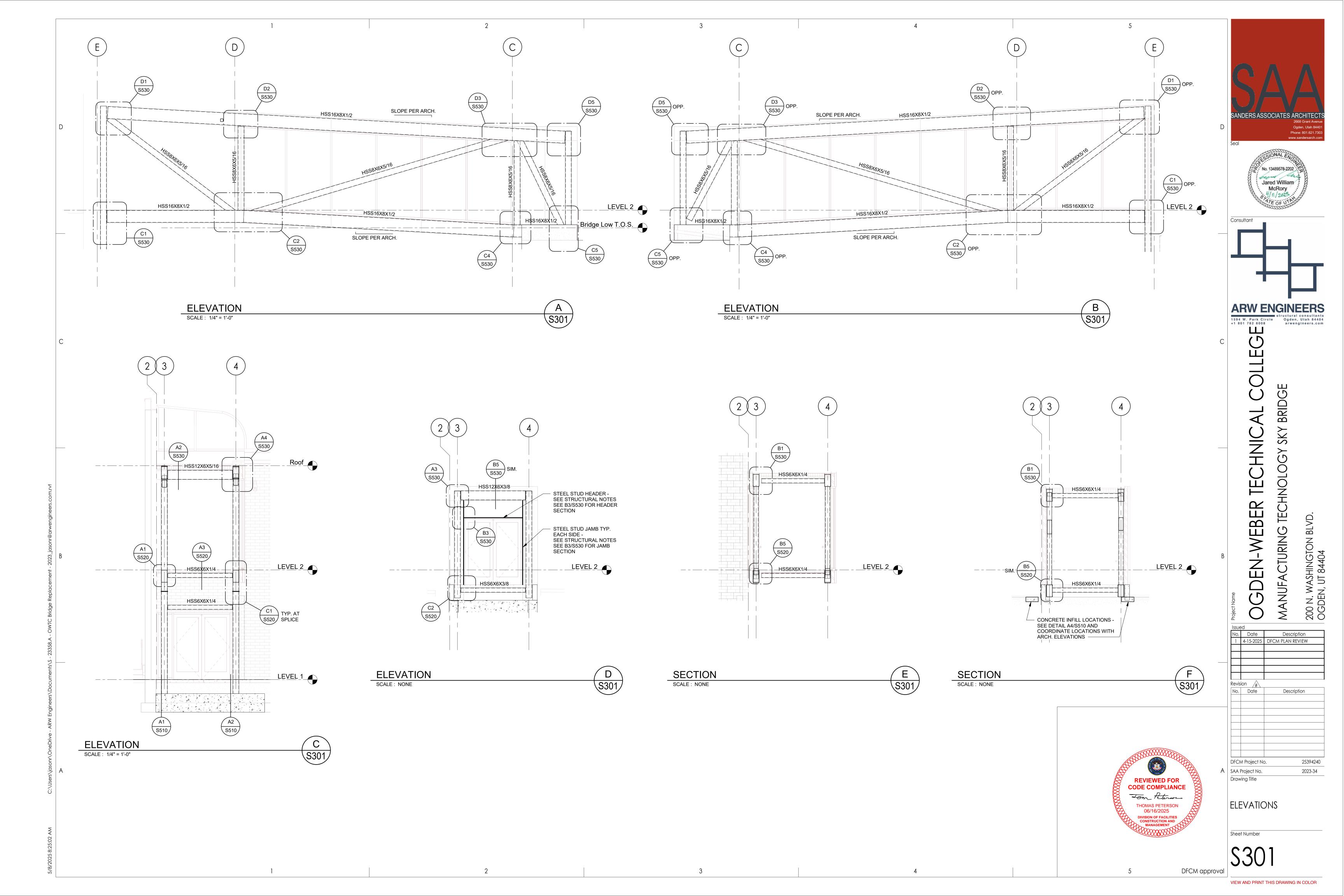
REVIEWED FOR CODE COMPLIANCE

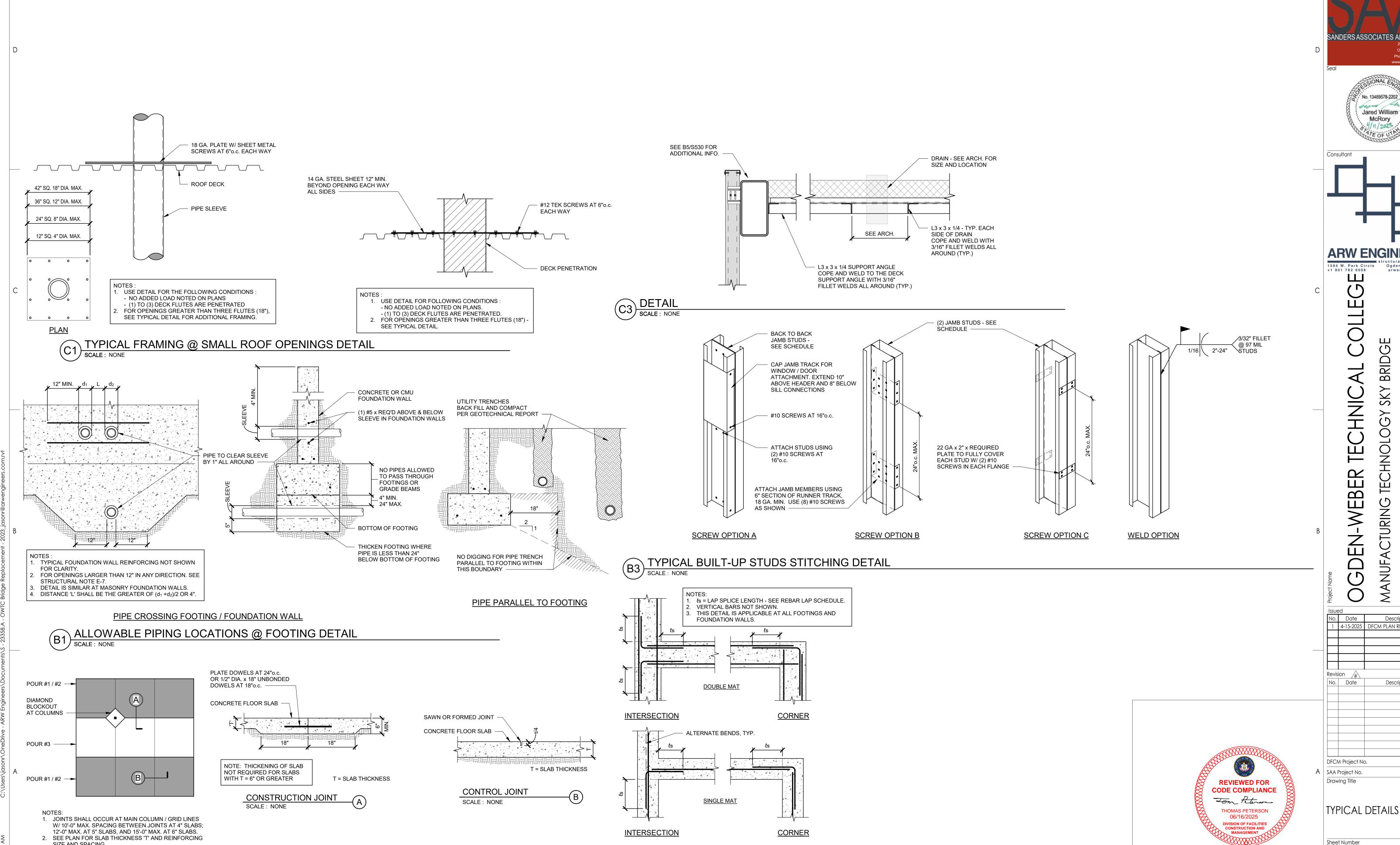
Tom Peterson

THOMAS PETERSON
06/16/2025
DIVISION OF FACILITIES
CONSTRUCTION AND
MANAGEMENT

DFCM approval







TYPICAL REINFORCING @

SCALE: NONE

**TYPICAL CONCRETE SLAB JOINTS** 

(A1) I I I SCALE: NONE

(A3) INTERSECTIONS IN CONCRETE DETAIL
SCALE: NONE

SANDERS ASSOCIATES ARCHITEC



**ARW ENGINEERS** 

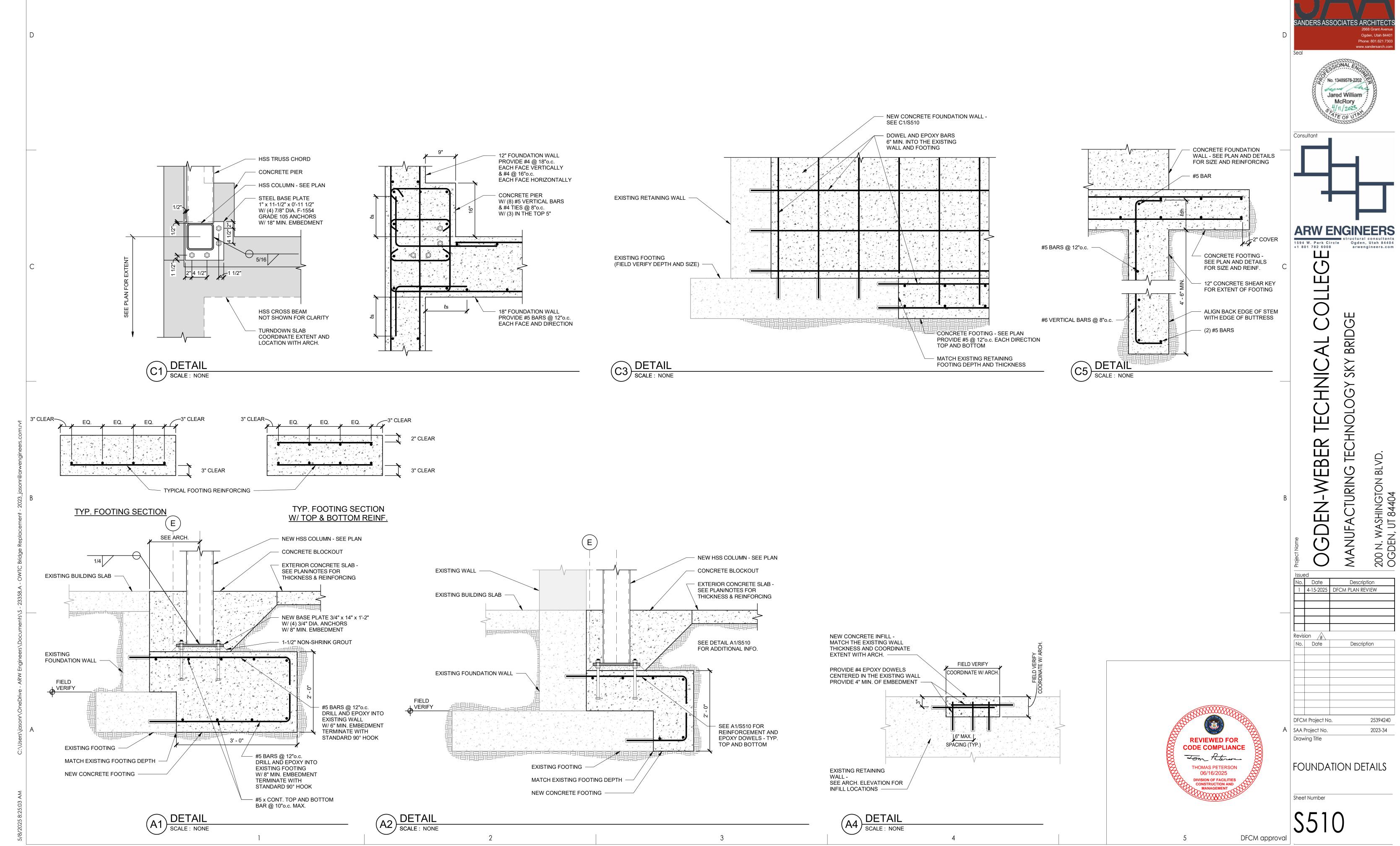
1594 W. Park Circle Ogden, Utah 84404 +1 801 782 6008 arwengineers.com

Description 1 4-15-2025 DFCM PLAN REVIEW

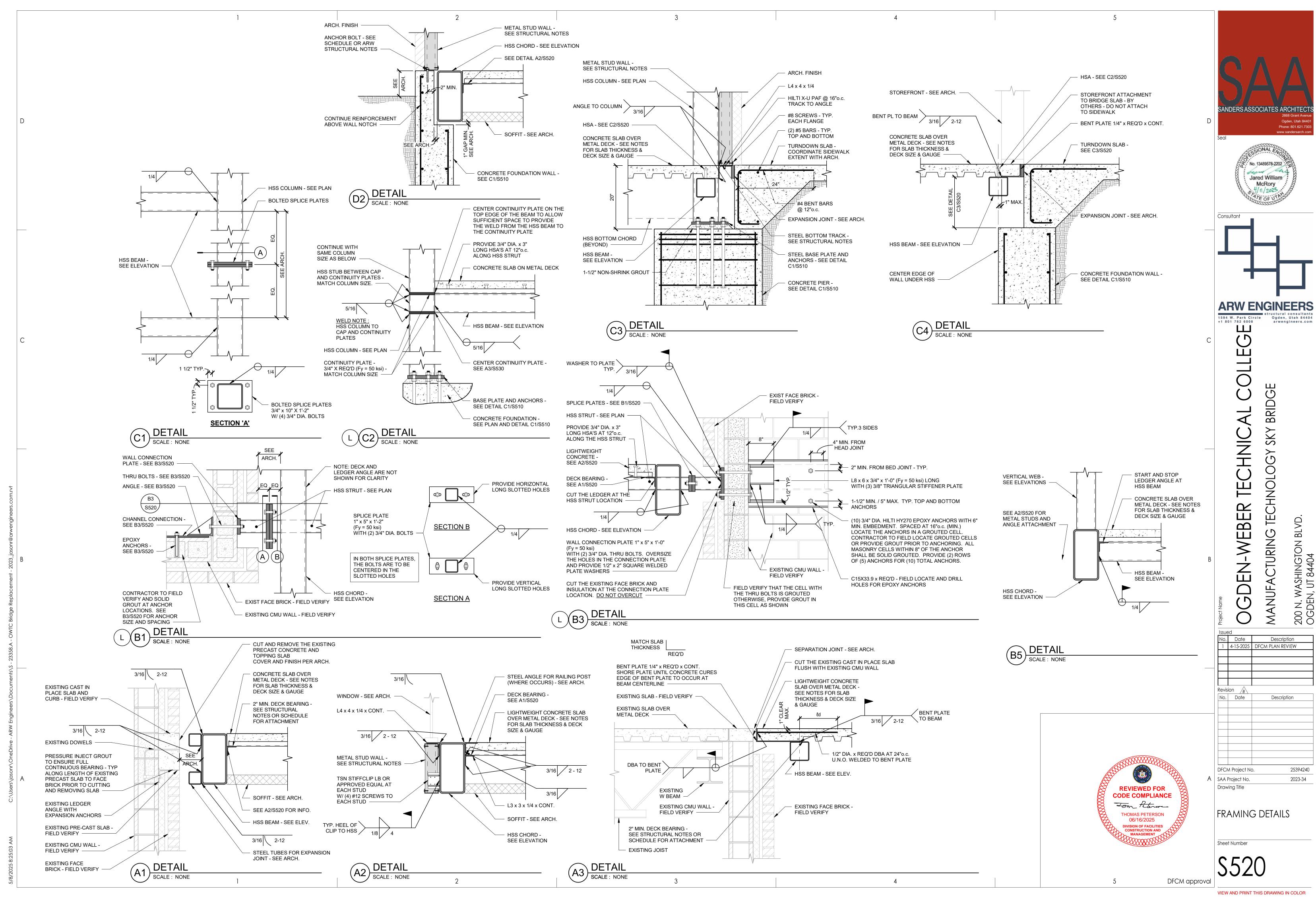
Description

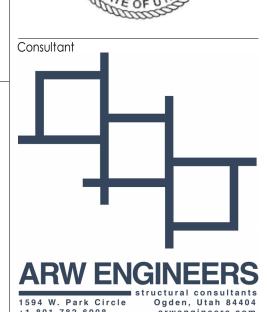
25394240 2023-34

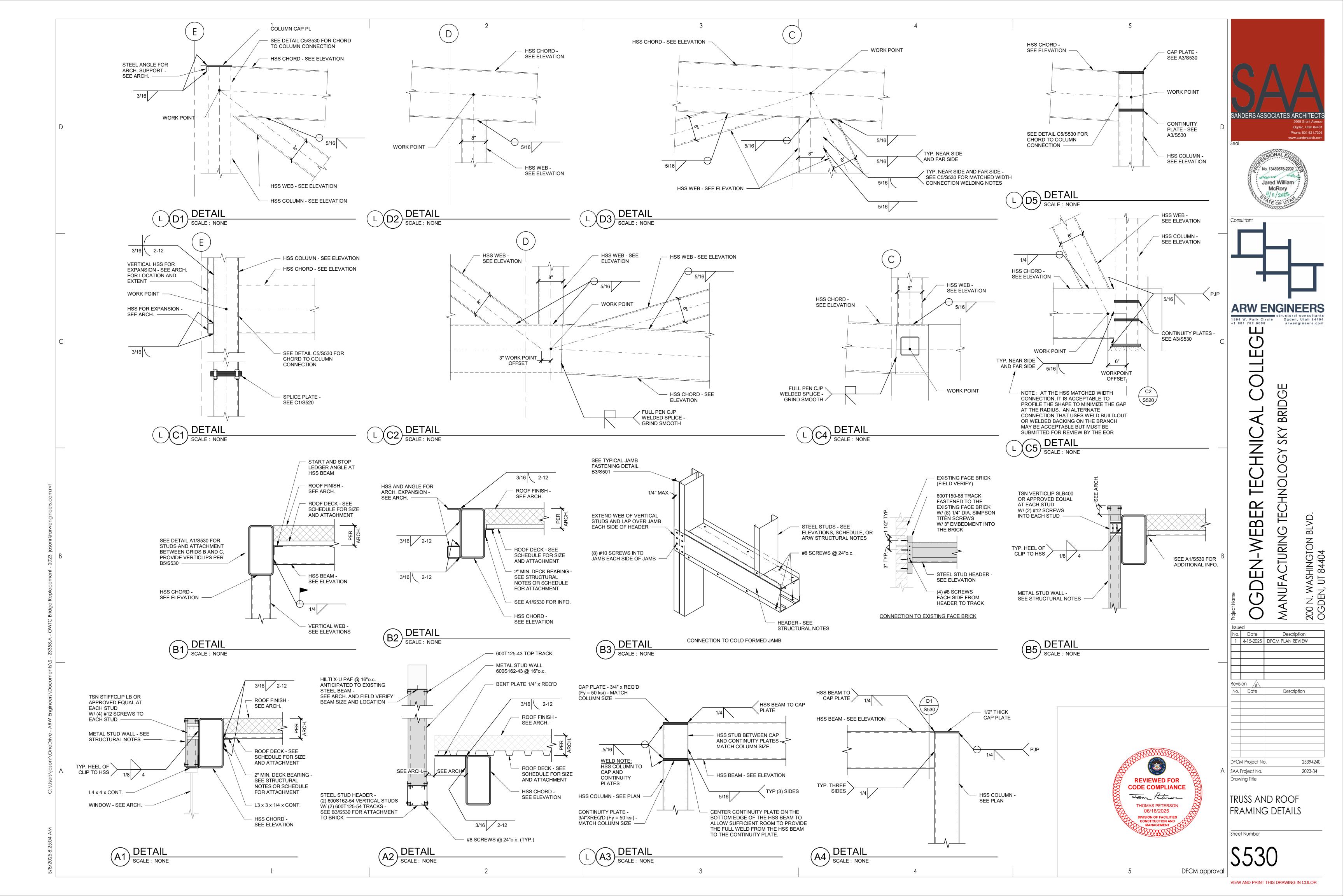
DFCM approval

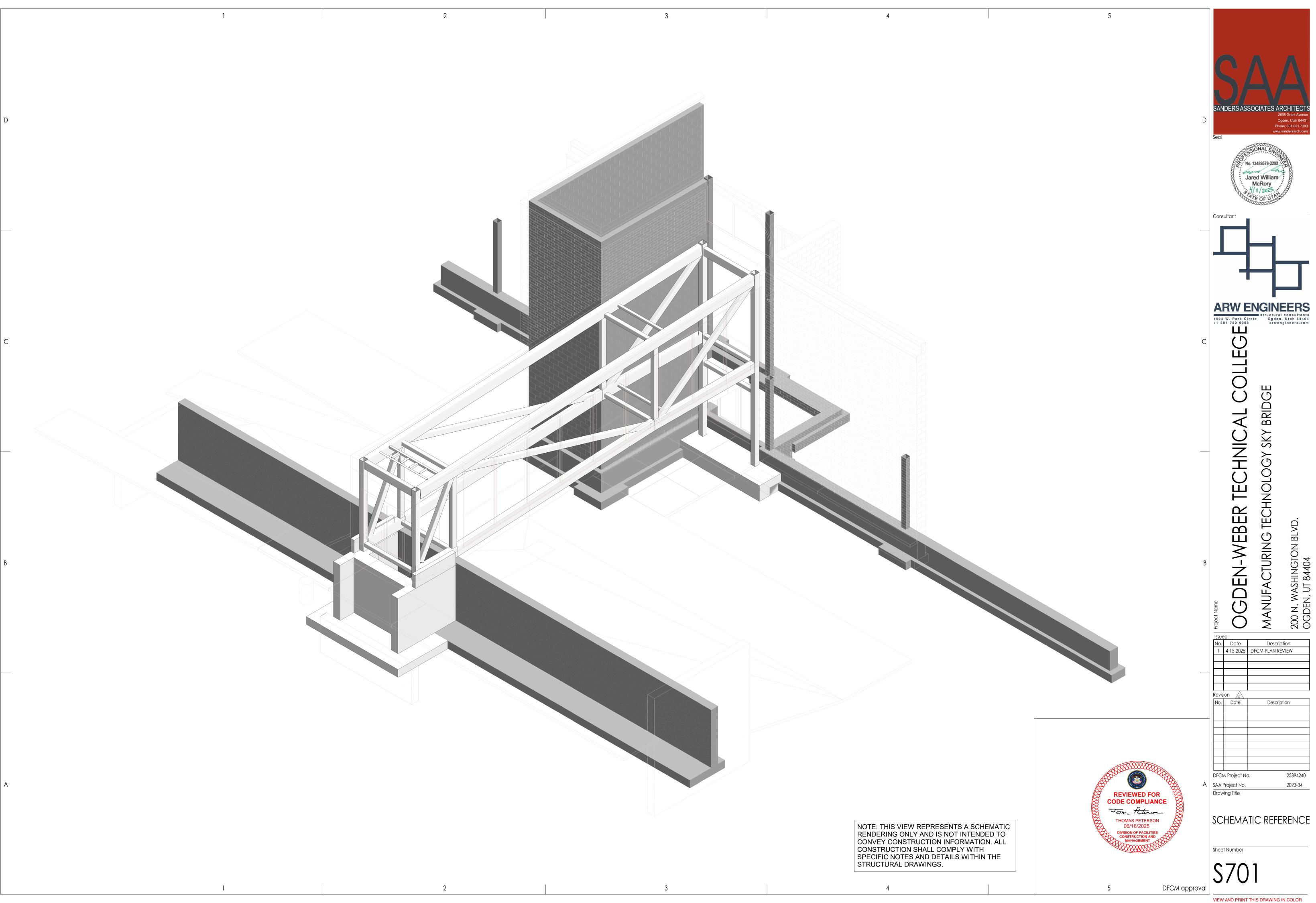


**ARW ENGINEERS** 





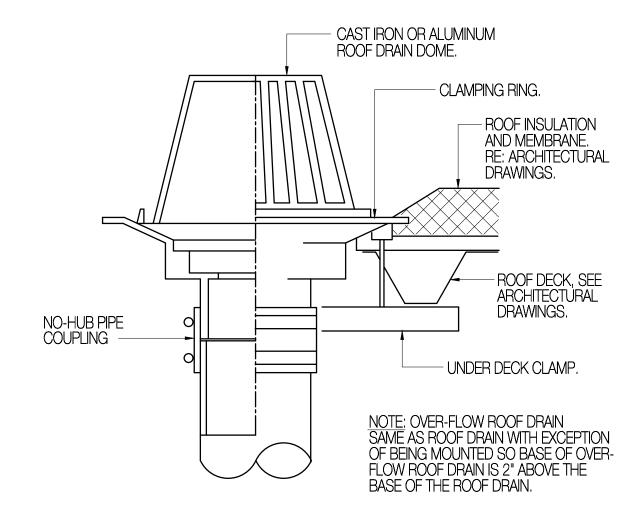




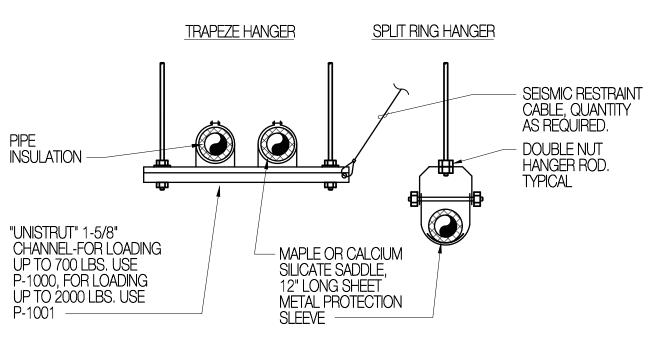
	PIPING MATERIALS SCHEDULE									
SERVICE	MATERIAL	REMARKS								
ROOF DRAIN / OVERFLOW	SOLID CORE ABS OR PVC WITH DWV FITTINGS ABOVE AND BELOW GRADE									

EXTERIOR WALL, SEE ARCHITECTURAL DRAWINGS  CAULK WEATHER TIGHT  DOWNSPOUT NOZZLE	DRAIN LEADER, ANCHORED TO WALL
DOWNSPOUT WALL FLANGE BOLTED TO WALL	ANCHOR FLANGE TO WALL

# 6 DOWNSPOUT NOZZLE DETAIL MP000 SCALE: NONE



# 7 ROOF DRAIN DETAIL MP000 SCALE: NONE



PIPE SIZE	MAX. SPACING	PIPE LOAD WEIGHT/FT. TOTAL	ROD SIZE
1" AND SMALLER	8	2.5/20	3/8"
1-1/4" - 2"	10	6/60	3/8"

HANGERS SIZES AND SPACING ARE FOR SINGLE PIPES. HANGER ROD LOADING FOR TRAPEZE HANGERS SHALL NOT EXCEED THE TOTAL LOADING INDICATED. IF SMALLER ROD SIZE IS USED, DECREASE MAXIMUM SPACING SO THAT TOTAL LOADING IS NOT EXCEEDED.

# PIPE HANGER DETAIL B SCALE: NONE

SYMBOL LEGEND											
	SUPPLY AIR DIRECTION	S	WIRELESS TEMPERATURE SENSOR	——	DROP IN PIPE						
—N— <b>—</b>	RETURN AIR DIRECTION	R.D.	ROOF DRAIN	7	ELBOW IN PIPE						
A.F.F.	ABOVE FINISHED FLOOR	D.N.	DOWNSPOUT NOZZLE		RISE IN PIPE						

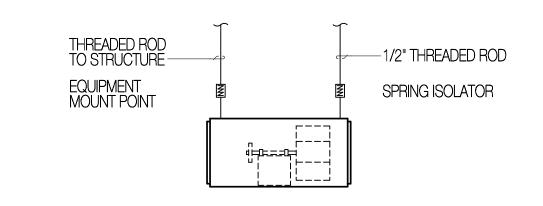
# SPLIT AIR CONDITIONING / HEAT PUMP UNITS

	INDOOR SECTION (FCU)											
SYMBOL	COOLING CAPACITY			ELECT	TRICAL F	REQUIRE	EMENTS	MITSUBISHI	REMARKS			
STIVIDOL	(BTUH)	(BTUH)	SPEED	VOLTS	PH.	HZ.	AMPS	MODEL	N□IVIAN\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
FCU-1	24,000	26,000	500	208	1	60	1.7	PCA-A24KA7	12			
1 CAPAC	1 CAPACITIES AT JOB SITE ELEVATION OF 4,500 FEET ABOVE SEA LEVEL. 2 PROVIDE WITH MANUFACTURER'S INLINE CONDENSATE PUMP.											

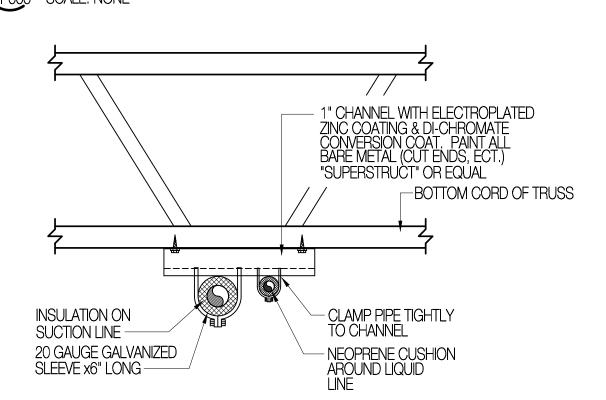
	OUTDOOR SECTION (CU)									
SYMBOL	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	ENTERING OUTSIDE AIR DB <sup>®</sup> F	ELE VOLTS	ECTRICA PH.	AL REQUIREMENTS  HZ. MCA MOCP		MITSUBISHI MODEL	REMARKS	
HP-1	18,000	24,700	95 <b>°</b> F	208	1	60	17	27	PUZ-HA24NHA1	-
(1) CAPAC	1) CAPACITIES AT JOB SITE ELEVATION OF 4,500 FEET ABOVE SEA LEVEL.									

SEE SPECIFICATION SECTION 236500 FOR ADDITIONAL INFORMATION.

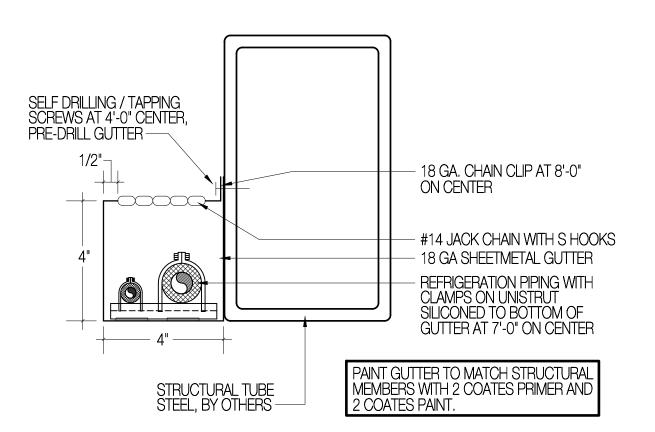
	PLUME	BING	FI	XTU	JRE	SCI	HEDULE
SYMBOL	DESCRIPTION	COLD	НОТ	TRAP	WASTE	VENT	REMARKS
RD	ROOF DRAIN	-	-	-	-	-	ZURN MODEL Z100



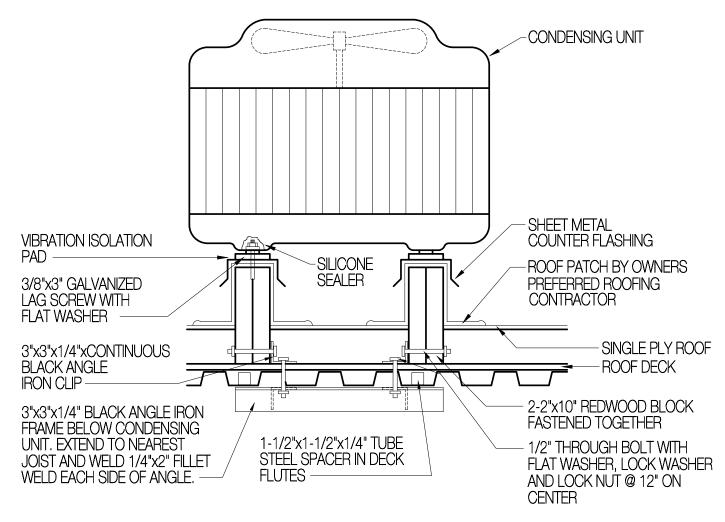
# EQUIPMENT SUPPORT DETAIL MPOOD' SCALE: NONE



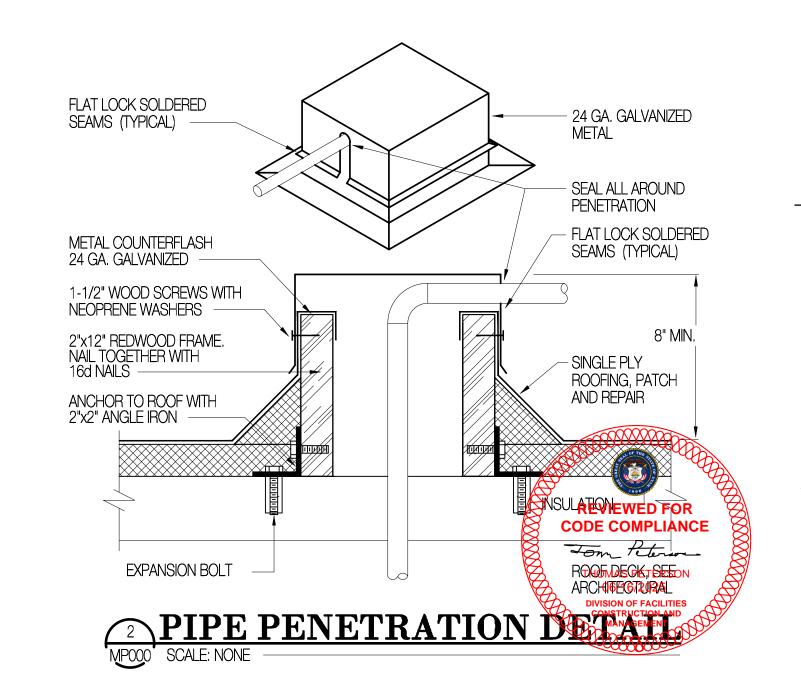
# REFRIGERANT PIPING SUPPORT FROM JOIST DETAIL MPOOD SCALE: NONE



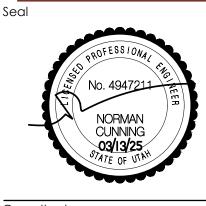
# HVAC GUTTER DETAIL MP000 SCALE: NONE



# ROOFTOP COND. UNIT MPOOD MOUNTING DETAIL SCALE: NONE







Consultant

# TECHNICAL COLLEGE ANOLOGY SKY BRIDGE

EB

200 N. WASHINGTON BLVD. OGDEN, UT 84404

CTURING TEC

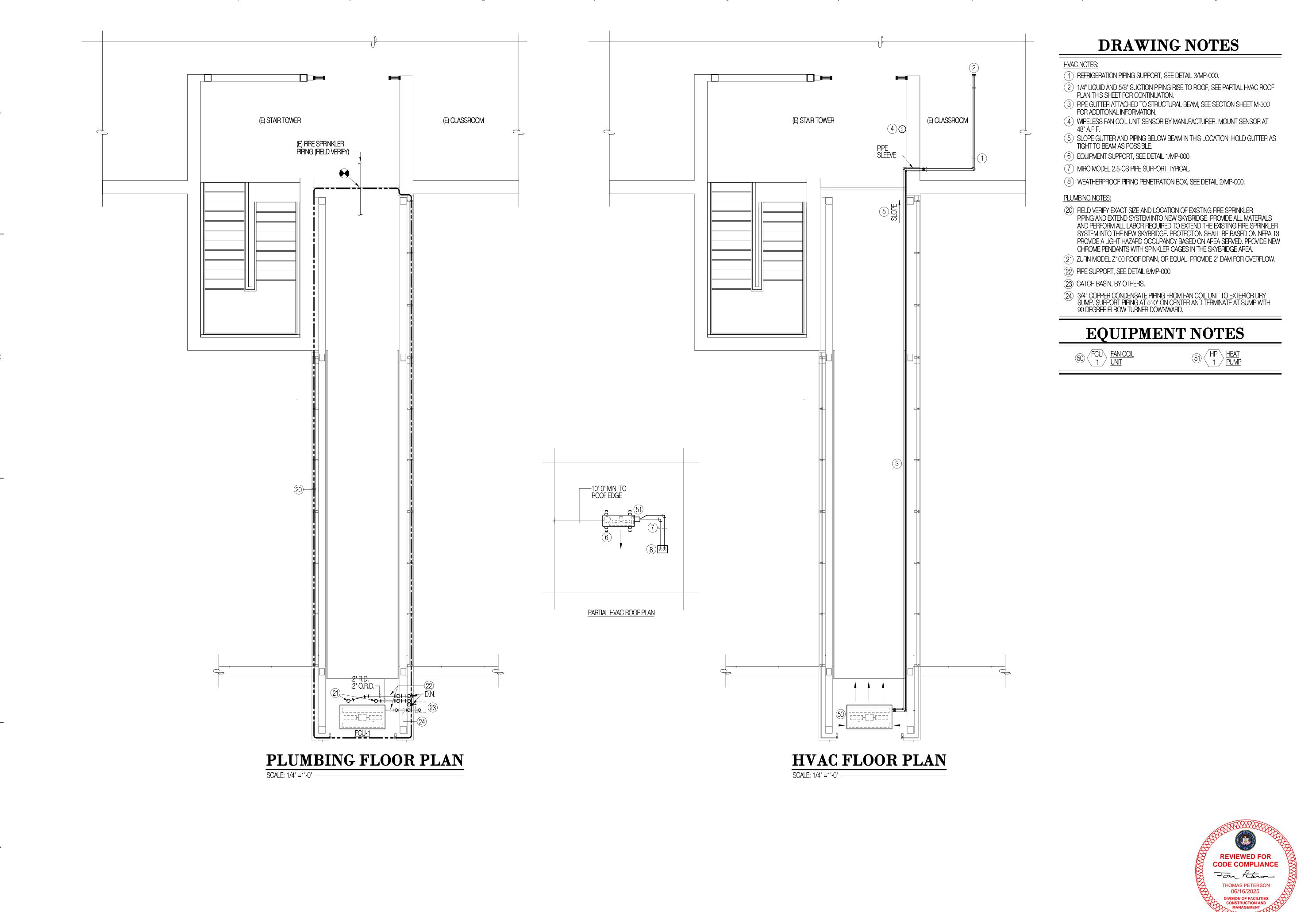
Project Name	OGDE	MANUFA	200 N. WASH OGDEN, UT
Issue			
No.	Date	Descri	ption
$\parallel$			
┤├┼			
Revisi	<del></del>		
No.	Date	Descri	otion
+			
$\parallel$			
$\parallel$			
SAAF	Project No.		218034

MECH. / PLUMBING SYM. LGND., SCHED AND DETAILS

Sheet Number

Drawing Title

MP-000







Consultant

OGDEN-WEBER TECHI

sued

lo. Date Description

evision #

lo. Date Description

A Project No. 2180

A SAA Project No. 218034
Drawing Title

HVAC / PLUMBING

neet Number

PLANS

MP-100

**GENERAL CONDITIONS** 

<u>DESCRIPTION OF PROJECT</u>: The mechanical work described in these mechanical specifications is for a project located in Ogden, Utah. Design weather conditions are: 95° db, 62° wb, and winter 8°F. Altitude readings, unless otherwise noted, are for an elevation of 4,500 feet above sea level. Make adjustment to manufacturer's performance data as needed.

CODES AND PERMITS, AUTHORITIES HAVING JURISDICTION:
2021 International Mechanical Code - (with Utah amendments)
2021 International Building Code - (with Utah amendments)
2021 International Plumbing Code - (with Utah amendments)
2021 International Energy Code - (with Utah amendments)
SMACNA Duct Design Standards
Locally enforced NFPA Codes
Local Fuel Utility Regulations
Local Power Utility Regulations
American Gas Association
ASTM B31.1 Piping

<u>DEFINITION OF PLANS AND SPECIFICATIONS</u>: The mechanical drawings at reduced scale show the general arrangement of piping, ductwork, equipment, etc., and shall be followed as closely as the actual building construction and the work of other trades will permit. The architectural and structural drawings shall be considered as part of the work insofar as these drawings furnish the Contractor with information relating to design and construction of the building. Architectural drawings shall take precedence over mechanical drawings. Request clarification and participate in resolution in the event of conflict.

- A. Because of the small scale of the mechanical drawings, it is not possible to indicate all offsets, fittings and accessories which may be required. Investigate the structural and finish conditions affecting the work and arrange the work accordingly, providing such extensions, fittings, valves and accessories to meet the conditions as may be required. Some small scale work is not shown such as control conduit and piping, incidental piping, specialties. Provide as directed by note or specification.
- B. Examine the actual construction site prior to bidding and obtain an understanding of the conditions under which the work will be performed. No allowances will be made for failure to make such examination.
- During construction, verify the dimensions governing the mechanical work at the building. No extra compensation shall be claimed or allowed because of differences between actual dimensions and those indicated on the drawings. Examine adjoining work on which mechanical work is dependent for perfect efficiency, and report any work of other trades which must be corrected. No waiver of responsibility for defective work shall be claimed nor allowed due to failure to report unfavorable conditions affecting the mechanical work.

ALTERNATIVE CONSTRUCTION/SUBSTITUTION: The contract documents outline a way in which the Owner may be delivered a functional and reliable facility. Drawings and specifications describe reasonable

- engineering practice for the Contractor to follow.

  A. Coordination between trades may result in periodic needs to adjust the installation from that indicated, but in no case shall the intended function be compromised.
- B. The Contractor may perceive some work methods which differ from those specified which could save time and effort. These may be presented to the Architect with a breakdown of possible cost savings for review. Implement only with authorization.
- C. Materials substitutions will generally be covered in a review process prior to bidding. After bidding, substitutions shall be proposed only on the basis of definitive cost accounting and implemented only with authorization.

QUALITY OF MATERIALS AND EQUIPMENT:

- All equipment and materials shall be new, and shall be the standard products of manufacturers regularly engaged in the production of plumbing, heating, ventilating and air conditioning equipment, and shall be the manufacturer's latest design. Specific equipment shown in schedules on drawings and specified herein is to be the basis for the Contractor's bid. Provisions for substitute equipment are outlined in the General Conditions. All materials shall be produced by manufacturing plants located in the United States of
- B. Furnish and install all major items of equipment specified in the equipment schedules on the drawings complete with all accessories normally supplied with catalog items listed, and all other accessories necessary for a complete and satisfactory installation.

MANUFACTURER'S DIRECTIONS: Install all equipment in strict accordance with directions and recommendations furnished by the manufacturer. Where such directions are in conflict with the plans and specifications, report such conflicts to the Architect who shall direct adjustments as deemed necessary and decirable.

<u>INSULATION</u>: Flexible, Unicellular Pipe Insulation: Closed-cell elastometric, preformed, with heat fusion or contact cement joining system. Insulation may be compressed but not stretched. By Armaflex II or Rubatex. Protect all exterior insulation with manufacturer protected coatings.

# EQUIPMENT SELECTION

The contractors shall select equipment based on the manufacturers and models indicated on the drawing schedules. Equipment shall be provided with all required accessories to provide a fully functional system. Any and all substitutions shall be presented during submittals for approval and implemented only after authorization.

<u>FIXTURES AND TRIM</u>: The model numbers listed below have been carefully selected to help bidders in the submittal process of selecting fixtures and trim. The completeness and accuracy of these numbers must be verified during the bidding process. Any discrepancies between the model numbers and the fixture, or trim descriptions noted by a manufacturer during the bidding process will be reported to the Architect / Engineer for clarification. Clarifications will be made a part of the contract through an addendum only. The contractor is responsible for reporting any clarifications before the bid date as required in this specification.

A. Roof Drain:

- (RD) Fixture:
   a. Cast iron body, bottom outlet, aluminum or cast iron dome with locking screws, roof sump receiver, bearing pan, under deck clamp, extension as required, 4 lb. lead pan for installation by roofer. See plumbing plan for outlet sizes.
  - Approved Manufacturers:

Wade

- Zurn No. Z-100
- (2) Josam(3) J.R. Smith

refrigerant and oil during the first year of operation shall be made good at the contractor's expense.

PIPING MATERIALS: Piping materials shall be as follows unless otherwise indicated on the applicable contract drawing:

A. Pipe: "ACR" Type L, hard drawing, degreased, sealed at mill copper tubing, ASTM B88-62, cleaned and sealed at the mill. Pre-charged refrigerant lines shall not be used.

B. Fittings: Long radius, wrought copper type equal to Mueller Streamline, ASME B16.22.1963.

VALVES, SPECIALTIES, ETC:

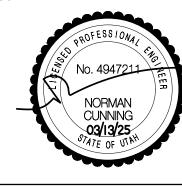
- A. Filter-Dryer: On lines smaller than 3/4" O.D. filter-dryer shall be a sealed type using male flare fittings. Size shall be full line size. Filter-dryer shall be Sporlan, Mueller or Alco.
- B. Sight Glass: Shall be a combination moisture and liquid indicator with protection cap. Sight glass shall be Alco, Mueller, Sporlan or Henry. Size shall be full line size.
- C. Flexible Connection: Corrugated bronze hose with single layer of stainless steel exterior braiding, minimum 9 inches long with copper tube ends; for system working pressure.

REFRIGERANT AND LUBRICATING OIL: The Contractor furnish and install all of the refrigerant required to develop the system to its full rating, and in addition to the initial charge, he shall be required to provide, without cost to the Owner, all required refrigerant for the proper operation of the refrigeration apparatus during the first year's operation. The contractor

shall be required to provide the initial charge of lubricating oil for all refrigeration apparatus and related equipment. Loss of

HVAC SECTION





Consultant

IL COLLEGE RIDGE

# OGDEN-WEBER TECHNICAL COMANUFACTURING TECHNOLOGY SKY BRIDGE

Issued

No. Date Description

Revision #

No. Date Description

218034

/ASHINGTON E UT 84404

HVAC SECTIONS & SPECIFICATIONS

eet Number

A SAA Project No.

Drawing Title

MP-300

REVIEWED FOR CODE COMPLIANCE

THOMAS PETERSON
06/16/2025
DIVISION OF FACILITIES
CONSTRUCTION AND
MANAGEMENT

# ALL ELECTRICAL INSTALLATIONS TO CONFORM TO THE LATEST NEC AND LOCAL CODES.

- ELECTRICAL CONTRACTOR'S PROJECT MANAGER AND ON-SITE PROJECT FOREMAN SHALL REVIEW VENDOR SUBMITTALS FOR ACCURACY PRIOR TO SUBMITTING TO ENGINEER. INACCURACIES SHALL BE CORRECTED PRIOR TO ENGINEER SUBMITTAL.
- THE CLARITY OF RECORD DRAWING CHANGES MADE BY THE CONTRACTOR SHALL BE EQUAL TO THE ORIGINAL DRAWINGS AS JUDGED BY THE ARCHITECT OR THE RECORD SET WILL BE RETURNED TO THE CONTRACTOR FOR CLARIFICATION.
- WHEN THE GENERAL CONTRACT CALLS FOR "RECORD" OR "AS-BUILT" DRAWINGS TO BE FURNISHED BY THE CONTRACTOR AT JOB COMPLETION, THE ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO FURNISH A COMPLETE SET OF "BLUE-PRINT READY" AUTOCAD ELECTRICAL DRAWINGS FOR ALL CONTRACTOR GENERATED CHANGES FROM THE DRAWINGS OF A CLARITY EQUAL TO THE ORIGINAL DRAWINGS AS JUDGED BY THE ENGINEER. CONTACT ARCHITECT FOR DISKS OR REPRODUCIBLE ORIGINAL MEDIA. PROVIDE DRAWINGS ON CD IN AUTOCAD FORMAT.
- DO NOT SCALE ELECTRICAL FLOOR PLANS. SEE ARCHITECTURAL DRAWINGS FOR ACCURATE DIMENSIONS AND FLOOR PLANS.
- ELECTRICAL DEVICES CANNOT BE SHOWN TO SCALE AND SOMETIMES OVERLAP BUILDING ELEMENTS. REFER TO ARCHITECTURAL ELEVATIONS FOR ACCURATE MOUNTING LOCATIONS
- PANEL INDEXES SHALL INCLUDE ALL PERTINENT INFORMATION ON THE PANEL SCHEDULES INCLUDING DISTINCT NAMES FOR EACH CIRCUIT AND INFORMATION ON LIGHTS, OUTLETS, EQUIPMENT, ETC. DO NOT SIMPLY COPY THE CIRCUIT DESCRIPTION COLUMN. INDEXES TO BE TYPEWRITTEN.
- . UPDATE PANEL SCHEDULES TO REFLECT CHANGES MADE AS PART OF THIS PROJECT.
- COORDINATE MOUNTING HEIGHT AND LOCATION OF ALL OUTLETS, SWITCHES, AUXILIARY EQUIPMENT, AND OTHER DEVICES WITH THE ARCHITECTURAL DRAWINGS. PRIOR TO INSTALLATION, REVIEW WITH THE GENERAL CONTRACTOR THE LOCATION OF MILLWORK AS A FINAL CHECK TO PREVENT COVERING OF ELECTRICAL ITEMS.
- 0. MOUNTING HEIGHT OF GENERAL PURPOSE OUTLETS AND SWITCHES SHALL BE 16 " TO BOTTOM AND 48" TO TOP RESPECTIVELY UNLESS OTHERWISE NOTED.
- 1. ALL ELECTRICAL EQUIPMENT SHALL BE LOCATED SO AS NOT TO INTERFERE WITH WOOD TRIM AND MOLDINGS. THE ELECTRICAL CONTRACTOR SHALL REVIEW FINISH SCHEDULES AND ARCHITECTURAL DETAILS BEFORE ROUGH-IN OF OUTLET OR SWITCH BOXES TO PREVENT BOXES AND PLATES FROM BEING PLACED BEHIND OR IN TRIMS AND MOLDINGS. REFER SPECIAL CONDITIONS TO ARCHITECT PRIOR TO ROUGH-IN.
- 12. EMT IS NOT ALLOWED OUT OF DOORS.
- 13. DO NOT INSTALL FEEDERS OR CIRCUITING EXPOSED ON ROOFTOPS OR RUNNING HORIZONTALLY WITHIN 36 " OF ROOFTOPS.
- 4. CIRCUIT WIRE SIZES MUST, AT MINIMUM, MATCH NEC REQUIRED CONDUUCTOR SIZES FOR CORRESPONDING OVERCURRENT PROCTECTIVE DEVICES. VERIFY WITH PANEL SCHEDULES BEFORE PULLING WIRE.
- 5. HOME RUNS MUST BE RUN EXACTLY AS SHOWN ON PLANS UNLESS OTHERWISE NOTED. DO NOT COMBINE HOME RUNS INTO ONE CONDUIT THAT ARE NOT SHOWN COMBINED ON THE DRAWINGS.
- 6. THE ELECTRICAL CONTRACTOR SHALL RUN BRANCH CIRCUIT CONDUITS IN ATTIC SPACES IN A NEAT AND WORKMANLIKE MANNER SO AS TO CONSERVE OPEN SPACES AS MUCH AS POSSIBLE. HVAC DUCTWORK AND PLUMBING SHALL HAVE LOCATION PRIORITY OVER BRANCH CIRCUIT CONDUIT RUNS.
- 7. CIRCUIT WIRING SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. ANY DEVIATIONS SHALL BE INITIATED BY A CHANGE ORDER FROM THE ARCHITECT. OTHERWISE THE RECORD SET SHALL MATCH THE CONSTRUCTION SET.
- 8. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR, PULLED INTO THE CONDUIT WITH THE PHASE CONDUCTOR, IN ALL SERVICE, FEEDER, AND BRANCH CIRCUITS.
- 19. PROVIDE A NEUTRAL CONDUCTOR FOR EACH BREAKER TRIP HANDLE. NEUTRALS SHALL NOT BE SHARED BETWEEN BRANCH CIRCUITS.
- 20. ALL CIRCUITS TO BE MINIMUM #12 CU IN MINIMUM 3/4 " CONDUIT UNLESS OTHERWISE NOTED.
- 1. WHERE ALLOWED BY CODE, MC CABLE IS AN APPROVED ALTERNATE TO CONDUCTORS IN CONDUIT FOR CONCEALED BRANCH CIRCUIT WIRING BETWEEN DEVICES, BUT NOT FOR HOME-RUNS. HOME RUNS TO BE RAN IN CONDUIT COMPLETE FROM PANEL TO FIRST DEVICE OR FIXTURE ON CIRCUIT.
- 22. DO NOT INSTALL MORE THAN THREE PHASE CONDUCTORS IN ANY HOME-RUN CONDUITS UNLESS SPECIFICALLY INDICATED ON DRAWINGS.
- 23. IDENTIFY ALL OUTLET COVER PLATES WITH THE PANEL AND CIRCUIT NUMBER.
- 24. A GFI OUTLET SHALL BE INSTALLED AT EACH LOCATION DESIGNATED BY "GFI" ON THE DRAWINGS. DOWNSTREAM PROTECTION BY A GFI OUTLET UPSTREAM IS NOT ALLOWED.
- 25. OUTLETS, SWITCHES, AND COVER PLATES TO BE COLOR CODED (BROWN, WHITE, IVORY, OR GRAY) TO THE WALL THEY ARE MOUNTED ON AS DIRECTED BY THE ARCHITECT.
- 26. ALL CONVENIENCE OUTLETS MUST BE MOUNTED FLUSH WITH THE COVER PLATE AND SECURED FIRMLY TO THE OUTLET BOX.
- 7. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO MAKE SURE OUTLET BOXES ARE SET FLUSH WITH FINISH WALL SURFACES WHERE WALL PANELING OR ACOUSTICAL WALLS ARE INSTALLED OR WHERE OUTLETS ARE INSTALLED ON CARPETED RISERS.
- 28. GFI OUTLETS SHALL BE INSTALLED AND/OR CIRCUITED SO THAT THE TRIPPING OF A GFI OUTLET IN A STUDENT ACCESSED AREA WILL NOT SHUT OF ANY DOWN-STREAM OUTLETS.
- 29. REMOVE ALL OLD AND/OR UNUSED EXISTING CONDUIT AND ELECTRICAL APPARATUS FROM EXTERIOR OR INTERIOR EXPOSED SURFACES.
- 30. WHERE EXISTING ELECTRICAL EQUIPMENT IS TO REMAIN BUT THE SURFACE THAT IT IS MOUNTED ON IS TO BE REWORKED UNDER OTHER CONTRACTS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND INSTALL OR MODIFY THE EXISTING EQUIPMENT AS REQUIRED TO MEET THE DESIGN INTENT SEE ARCHITECTURAL DRAWINGS FOR ROOF, CEILINGS, WALLS, SOFFITS, FLOORS, ETC.

# 31. REMOVE ALL UNUSED CONDUITS AND CIRCUITS IN THE DEMOLTIONED AREA AS THEY ARE IDENTIFIED AS UNUSED OR ABANDONED.

**ANNOTAT** 

XXX

**#-#** 

- xCDy -

 $\bigcirc$ 

RTS

**SECURITY** 

HORN AND STROBE;"X" = MINIMUM CANDELA RATING

CEILING MOUNTED HORN AND STROBE;"X" = MINIMUM

SECURITY SYSTEM HEAD END EQUIPMENT

CCTV CAMERA : DOME TYPE CEILING MOUNT

STUB INTO DOOR FRAME)

CONDUIT BETWEEN BOXES)

MOTION SENSOR: INFRARED

CCTV CAMERA: WALL MOUNT

CONDUIT STUB INTO DOOR FRAME)

1/2" CONDUIT BETWEEN BOXES)

DETECTOR REMOTE TEST SWITCH WITH INDICATING LIGHT

ELECTRIC STRIKE, (4SD J-BOX ABOVE CEILING; 1/2" CONDUIT

CARD READER (4SD J-BOX WALL; 4SD J-BOX ABOVE CEILING; 1/2"

ELECTRIC POWER TRANSFER (4SD J-BOX ABOVE CEILING; 1/2"

KEYPAD (4SD J-BOX WALL: 4SD J-BOX ABOVE CEILING:

CANDELA RATING

LIGHTING FIXTURES

EXIT LIGHT: CEILING - FACE(S) AS SHOWN

EXIT LIGHT: DIRECTIONAL ARROWS, DOUBLE FACE

EXIT LIGHT: WALL - FACE(S) AS SHOWN

EXIT LIGHT: FACE SIDE

RECESSED FIXTURE

FLUORESCENT FIXTURE

EMERGENCY FIXTURE

WALL MOUNT FIXTURE

CEILING FIXTURE

RECESSED FIXTURE

- 32. REMOVE ALL EXISITING ELECTRICAL DEVICES, EQUIPMENT, AND APPARATUS AS THEY ARE IDENTIFIED AS UNUSED OR ABANDONED.
- 33. RELOCATE EXISTING CONDUITS AND CIRCUITS AS REQUIRED THAT ARE PRESENTLY SERVING EQUIPMENT THAT IS INTENDED TO REMAIN IN SERVICE BUT SAID CONDUITS ARE CURRENTLY RUNNING THROUGH AREAS TO BE DEMOLITIONED.
- 34. WHERE EXISTING CONDUIT RUNS ARE RE-USED BY SPECIAL PERMISSION FROM THE ARCHITECT, A SEPARATE GREEN, INSULATED GROUND WIRE SHALL BE PULLED IN THE CONDUIT AND BONDED AT EACH END AS REQUIRED.
- 35. RE-ROUTE EXISTING CIRCUIT CONDUITS AS REQUIRED AT ALL AREAS WHERE EXISTING WALLS ARE TO BE DEMOLITIONED OR HAVE DOORWAYS CUT IN THEM. PLAN ON AN AVERAGE OF ONE, 3/4 " CONDUIT RELOCATION FOR EACH PENETRATION OR WALL REMOVAL.
- 36. FIELD VERIFY CONDITIONS FOR NEW WIRING. SURFACE RACEWAYS MUST RECEIVE PRIOR APPROVAL FROM THE ARCHITECT AND OWNER AND WILL BE EVALUATED ON A CASE BY CASE BASIS DURING CONSTRUCTION. APPROVED RACEWAYS MUST BE PAINTED TO MATCH THE SURFACE ON WHICH THEY ARE MOUNTED.
- 37. ALL PATCH, REPAIR, REPAINT AND COVER UP REQUIRED AS A RESULT OF ELECTRICAL REMODEL IS TO BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, BUT ACTUAL WORK IS TO BE PERFORMED BY QUALIFIED PERSONNEL.
- 38. ALL RECESSED LIGHT FIXTURES MUST CONFORM TO NEC 410

**GENERAL PROJECT NOTES** 

- 39. ALL RECESSED LIGHT FIXTURES THAT PENETRATE THE BUILDING THERMAL ENVELOPE SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND INTERIOR WALL OR CEILING COVERING
- 40. COORDINATE LOCATION OF CEILING LIGHT FIXTURES WITH THE REFLECTED CEILING PLAN.
- 41. FIXTURE COUNTS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE TO VERIFY FIXTURE COUNTS AS PART OF BIDDING PROCESS.
- 42. ELECTRICAL CONTRACTOR SHALL VERIFY CEILING THICKNESSES AND USE CEILING TRIM EXTENDERS ON DOWNLIGHTS AS REQUIRED.
- 43. WHERE LIGHT FIXTURES AS SPECIFIED AS COLOR PER ARCHITECT, THIS SHALL BE INTERPRETED AS A NON-STANDARD COLOR
- 44. THE CONTRACTOR SHALL PROVIDE A WIRE MESH COVER OVER ALL RECESSED LIGHTS TO KEEP BLOWN IN INSULATION AT LEAST THREE INCHES AWAY FROM THE FIXTURE HOUSING.
- 45. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW ALL SWITCH LOCATIONS WITH THE GENERAL CONTRACTOR PRIOR TO ROUGH-IN TO PREVENT ANY SWITCHES FROM BEING LOCATED ON THE WRONG SIDE OF THE DOOR.
- 46. COORDINATE LOCATION OF EXIT LIGHTS WITH ARCHITECT.

EQUIPMENT CLEARANCES.

- 47. VERIFY FIXTURE COUNT WITH REFLECTED CEILING PLAN.
- 48. THE BOTTOM OF WALL MOUNTED FIXTURES MUST BE A MINIMUM OF 6 '-8" AFF UNLESS FIXTURES ARE ADA COMPLIANT.
- 49. REFER TO MECHANICAL PLANS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT.
- 50. ELECTRICAL CONTRACTOR SHALL FURNISH ALL MOTOR DISCONNECTS, STARTERS, AND CONTROL STATIONS FOR MECHANICAL EQUIPMENT UNLESS THE SAME IS FURNISHED AS AN INTEGRAL PART OF THE EQUIPMENT. VERIFY WITH MECHANICAL CONTRACTOR PRIOR TO BID.
- 51. THERMOSTAT AND CONTROL WIRING FOR MECHANICAL EQUIPMENT BY MECHANICAL CONTRACTOR.
- 52. PROVIDE SAFETY DISCONNECTS AS REQUIRED AT ALL CONNECTIONS TO MECHANICAL EQUIPMENT.
- PROVIDE FUSING AND RATINGS PER NAMEPLATE INFORMATION OF EQUIPMENT SERVED. 53. DISCONNECT SWITCHES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL ELECTRICAL SWITCHES AND MOTOR CONTROL FOR PROPER CODE CLEARANCES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS WITH OTHER TRADES REGARDING PROPER
- 54. ALL DISCONNECT SWITCHES FOR MOTORS SHALL BE RATED A MINIMUM OF 22000 AIC UNLESS OTHERWISE
- 55. COORDINATE LOCATION OF THERMOSTATS, SENSORS, AND ATC JUNCTION BOXES WITH MECHANICAL CONTRACTOR BEFORE INSTALLATION.
- 56. BEFORE RUNNING CONDUITS, PLACING OUTLETS OR ORDERING EQUIPMENT, THE CONTRACTOR SHALL REVIEW THE SPECIFICATIONS AND DESIGN AND SHOP DRAWINGS OF THE OTHER TRADES SERVED BY THE CONDUIT, OUTLETS, AND/OR EQUIPMENT.
- 57. PROVIDE NEUTRAL CONNECTION TO 208/240/480V, SINGLE-PHASE EQUIPMENT. RUN SEPARATE GROUND WIRE TO ALL OUTDOOR UNITS AND BOND TO THE EQUIPMENT GROUND LUG.
- 58. ELECTRICAL CONTRACTOR SHALL INSTALL A PULL STRING IN ALL COMMUNICATIONS, SECURITY, AND OTHER LOW VOLTAGE CONDUITS FOR USE BY LOW VOLTAGE SYSTEM CONTRACTOR.
- 59. ELECTRICAL CONTRACTOR SHALL INSTALL A PULL STRING IN ALL UNUSED POWER AND LIGHTING CONDUITS.
- 60. REVIEW THE STATE DESIGN REQUIREMENTS MANUAL PRIOR TO BID
- 61. WHERE THERE ARE CONFLICTS IN THE DRAWINGS AND/OR SPECIFICATIONS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO BID. WHERE NO NOTIFICATION IS GIVEN THE MORE STRINGENT INTERPRETATION (GENERALLY INTERPRETED TO BE THE MORE COSTLY) WILL BE ENFORCED.

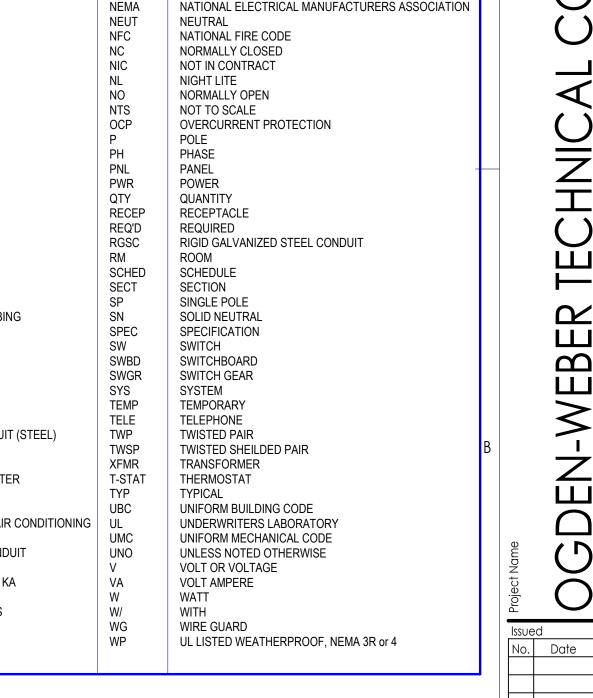
	4
	ELECTRICAL LEGEND
	NC
<u></u>	NS
	DETAIL CALL-OUT; TOP "X" REFERS TO DETAIL NUMBER &
	BOTTOM
	"XXX" REFERS TO SHEET NUMBER
	KEYED NOTE CALLOUT
	EQUIPMENT CALLOUT
_	COMMUNICATIONS RACEWAY: "x" CONDUITS OF "y" DIAMETER

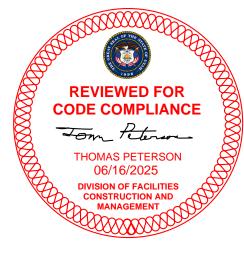
SHEET INDEX								
Sheet Number	Sheet Name							
EE001	ABBREVIATIONS, G.P.N., LEGEND & SHEET INDEX							
ED101	ELECTRICAL DEMOLITION PLANS							
EL201	LIGHTING PLANS							
EP301	POWER PLANS							
EP501	ELECTRICAL DETAILS & SCHEDULES							



GENERAL WALL MOUNTED BOX HEIGHT DETAIL +XX = TOP OF BOX -BAR STRAPS XX = MIDDLE OF BOX -XX = BOTTOM OF BOX

LIGHTING C	CONTROL					
\$ <sup>X</sup>	SINGLE POLE SWITCH; "x" INDICATES SWITCH GROUP		ELECTRICA	\L ABBRE\	/IATIONS	
\$ <sub>LV</sub>	LOW VOLTAGE SWITCH; ACUITY N-LIGHT SYSTEM OR EQUIVALENT	A AMPERI AF AMP FU		MAX MCB	MAXIMUM MAIN CIRCUIT BREAKER	1
\$4	FOUR WAY SWITCH	AFF ABOVE	FINISHED FLOOR FINISHED GRADE	MECH MFR	MAIN CIRCUIT BREAKER MECHANICAL MANUFACTURER	С
¥xs Lv	WALL MOUNT OCCUPANCY SENSOR; ADAPTIVE TECHNOLOGY; LOW-VOLTAGE; ACUITY N-LIGHT SYSTEM OR EQUIVALENT VS = VACANCY SENSOR SETTING OS = OCCUPANCY SENSOR SETTING	AFI ARC-FA AIC AMPERI AL ALUMIN	ULT CIRCUIT-INTERRUPTER E INTERRUPTING CAPACITY UM ECT(URAL)	MIN MLO MTD NEC NECA	MINIMUM MAIN LUGS ONLY MOUNTED NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION	
(S) <sub>XS</sub>	OCCUPANCY/VACANCY SENSOR: DUAL TECHNOLOGY VS = VACANCY SENSOR SETTING OS = OCCUPANCY SENSOR SETTING	AWG AMERIC BLDG BUILDIN BKBD BACKBO C CONDU	AN WIRE GAUGE IG DARD IT	NEMA NEUT NFC NC	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NEUTRAL NATIONAL FIRE CODE NORMALLY CLOSED	
(S) <sub>DT</sub>	OCCUPANCY/VACANCY SENSOR: DUAL TECHNOLOGY	C/B CIRCUIT CKT CIRCUIT	OG/CATEGORY FBREAKER F	NIC NL NO NTS	NOT IN CONTRACT NIGHT LITE NORMALLY OPEN NOT TO SCALE	
BRANCH CI	RCUITING		IT ONLY INICATION	OCP P PH	OVERCURRENT PROTECTION POLE PHASE	
$\ominus$	DUPLEX OUTLET	CONN CONNEC	₹	PNL PWR	PANEL POWER	t
$\bigcirc$	FACELESS GFCI PROTECTION DEVICE	DEMO DEMOLI DISC DISCON DN DOWN	ITION/DEMOLISH INECT	QTY RECEP REQ'D	QUANTITY RECEPTACLE REQUIRED	
$\bigoplus$	DUPLEX OUTLET: GROUND FAULT INTERRUPTER	DWG DRAWIN EA EACH	NG	RGSC RM	RIGID GALVANIZED STEEL CONDUIT ROOM	
WP	DUPLEX OUTLET: WEATHERPROOF	ELEC ELECTR ELEV ELEVAT EMER, EM EMERG	OR	SCHED SECT	SCHEDULE SECTION SINGLE POLE	
J	JUNCTION BOX	EMT ELECTR	RICAL METALLIC TUBING LINE RESISTOR	SP SN SPEC	SOLID NEUTRAL SPECIFICATION	
	DISCONNECT; NO OVER-CURRENT PROTECTION	EQUIP EQUIPM EX, EXIST EXISTIN	IG	SW SWBD	SWITCH SWITCHBOARD	
\$ <sub>m</sub>	MOTOR PROTECTIVE THERMAL SWITCH	FCU FAN CO	HED BY OTHERS IL UNIT ED FLOOR	SWGR SYS TEMP	SWITCH GEAR SYSTEM TEMPORARY	
	QUANTITY OF CONDUCTORS: SHORT LINES = NEUTRAL/GROUND LONG LINES = PHASE /SWITCH	FIXT FIXTURI FLEX FLEXIBL		TELE TWP	TELEPHONE TWISTED PAIR	
	HOME-RUN	FLUOR FLUORE FT FEET O	R FOOT	TWSP XFMR	TWISTED SHEILDED PAIR TRANSFORMER	В
	CIRCUITING: NORMAL SOURCE	GND GROUN HP HORSEI		T-STAT TYP UBC UL	THERMOSTAT TYPICAL UNIFORM BUILDING CODE UNDERWRITERS LABORATORY	
	M AND NOTIFICATIONS	IG ISOLATI IMC INTERM IN INCH(ES ISC SHORT	ED GROUND IEDIATE METAL CONDUIT S) CIRCUIT AMPERES, KA	UMC UNO V VA	UNIFORM MECHANICAL CODE UNLESS NOTED OTHERWISE VOLT OR VOLTAGE VOLT AMPERE	
CM	CONTROL/RELAY MODULE	• · · · · · · · · · · · · · · · · · · ·	AND CIRCULAR MILS	W W/	WATT WITH WIDE CHARD	
x	STROBE;"X" = MINIMUM CANDELA RATING	KVA KILOVO KW KILOWA LTG LIGHTIN	l l	WG WP	WIRE GUARD UL LISTED WEATHERPROOF, NEMA 3R or 4	
$\overline{\boxtimes}_{x}$	CEILING MOUNTED STROBE;"X" = MINIMUM CANDELA RATING	LIGHTIN	iO			





DFCM Project No. 25394240 SAA Project No. 2023-34 Drawing Title

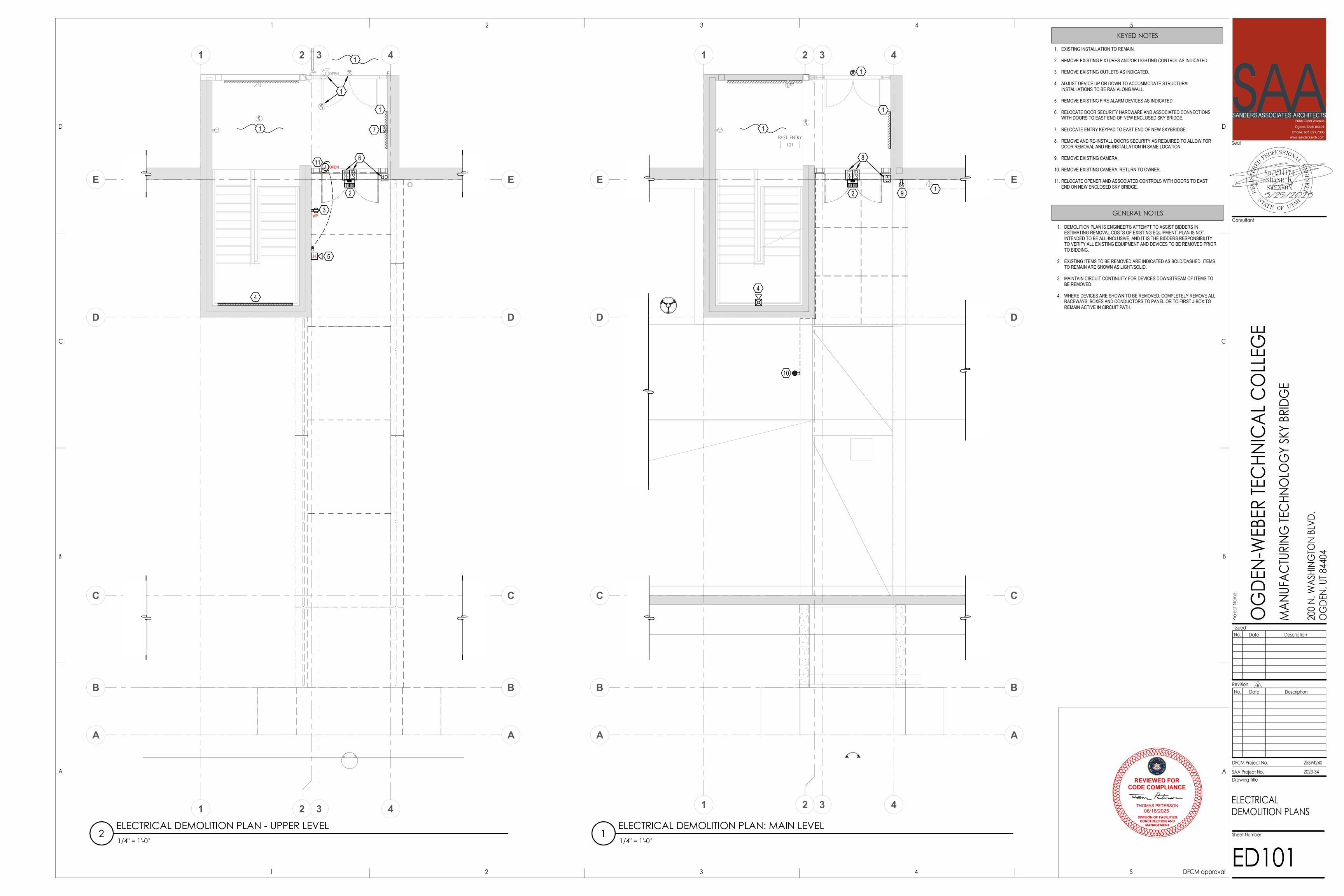
No. Date

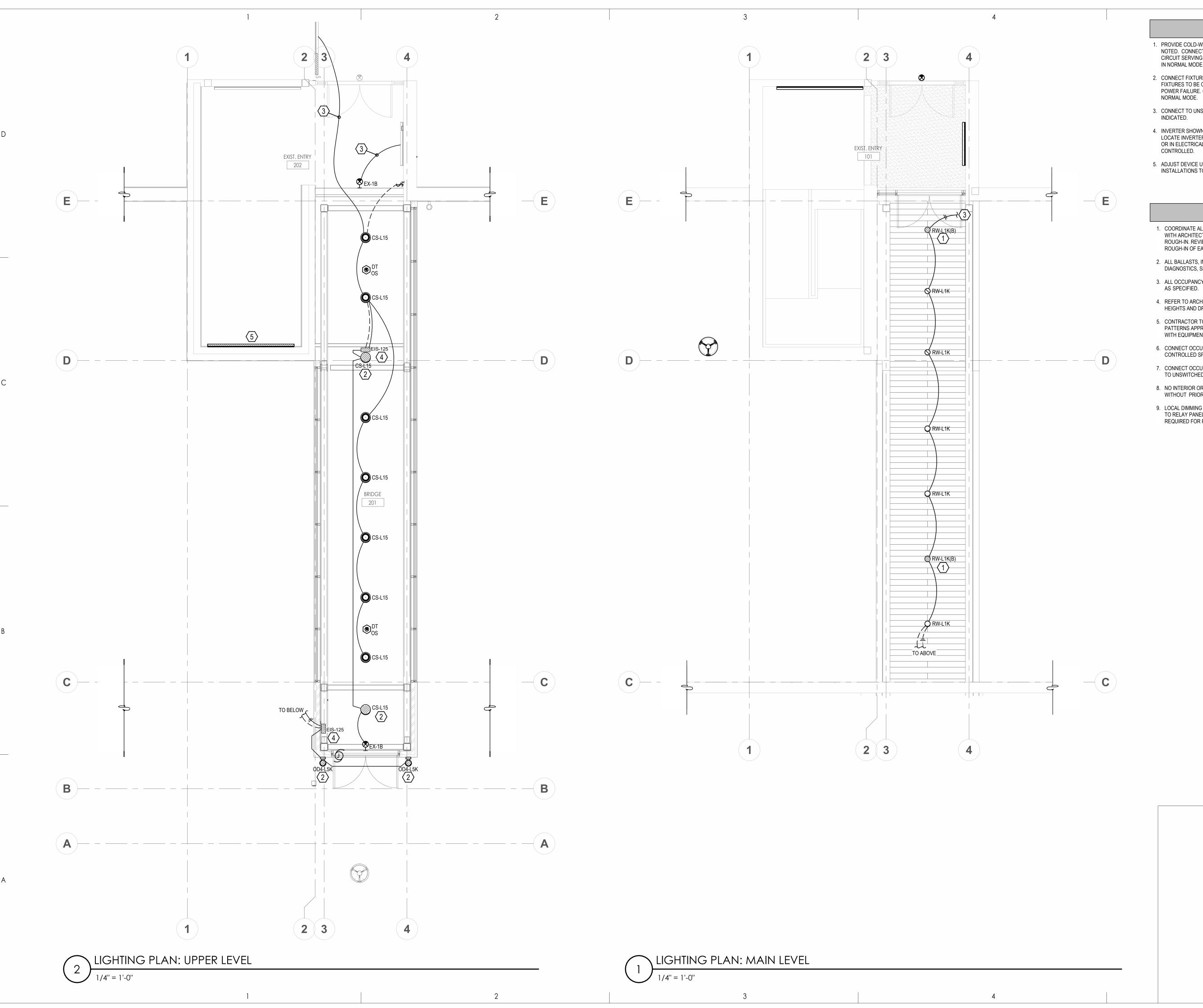
Description

Description

ABBREVIATIONS, G.P.N., LEGEND & SHEET INDEX

Sheet Number





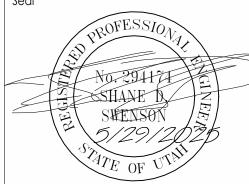
# KEYED NOTES

- 1. PROVIDE COLD-WEATHER OR REMOTE EM BATTERY BACKUP FOR FIXTURES NOTED. CONNECT BATTERY TO UNSWITCHED CIRCUIT CONDUCTOR OF CIRCUIT SERVING FIXTURE. CONNECT LAMPS TO OPERATE WITH SWITCH(S) IN NORMAL MODE.
- 2. CONNECT FIXTURE TO OUTPUT OF INVERTER INDICATED. CONNECT FOR FIXTURES TO BE ON IN NORMAL MODE AND OVERRIDE ON WITH NORMAL POWER FAILURE. CONNECT FIXTURES TO OPERATE WITH SWITCH(S) IN
- 3. CONNECT TO UNSWITCH SOURCE CONDUCTOR OF EXISTING CIRCUIT
- 4. INVERTER SHOWN AT LOCATION INDICATED FOR DRAWING CLARITY. LOCATE INVERTER TO BE CONCEALED NEAR FIRST CONTROLLED FIXTURE OR IN ELECTRICAL ROOM SERVING CIRCUIT. LABEL INVERTERS FOR LOAD
- 5. ADJUST DEVICE UP OR DOWN TO ACCOMMODATE STRUCTURAL INSTALLATIONS TO BE RAN ALONG WALL.

# GENERAL NOTES

- 1. COORDINATE ALL SWITCH, OUTLET, LIGHT AND OTHER DEVICE LOCATIONS WITH ARCHITECTURAL ELEMENTS (CABINETS, WINDOWS ETC.) PRIOR TO ROUGH-IN. REVIEW ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO ROUGH-IN OF EACH AREA FOR ADDITIONALINFORMATION.
- 2. ALL BALLASTS, INCLUDING BATTERY BACKUP AND ASSOCIATED SELF-DIAGNOSTICS, SHALL BE FACTORY MOUNTED.
- 3. ALL OCCUPANCY SENSORS SHALL HAVE INTEGRAL PHOTOCELL CONTROL
- 4. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING HEIGHTS AND DROPPED DECORATIVE CEILING ELEMENTS.
- PATTERNS APPROPRIATE FOR THEIR INSTALLED LOCATIONS. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO BID.
- CONTROLLED SPACE.
- TO UNSWITCHED SOURCE CONDUCTOR.
- 8. NO INTERIOR OR EXTERIOR RACEWAYS SHALL BE SURFACE MOUNTED
- TO RELAY PANEL NOT EXPLICITLY SHOWN. CONTRACTOR WIRING AS REQUIRED FOR PROPER SYSTEM OPERATION.





5. CONTRACTOR TO FURNISH OCCUPANCY SENSORS WITH COVERAGE

- 6. CONNECT OCCUPANCY SENSORS TO ENABLE ALL SWITCHES IN
- 7. CONNECT OCCUPANCY SENSORS, BATTERY BALLASTS, EXIT SIGNS, ETC.
- WITHOUT PRIOR WRITTEN APPROVAL FROM OWNER AND ARCHITECT.
- 9. LOCAL DIMMING CONTROL WIRING IN INDIVIDUAL ROOMS NOT CONNECTED

Ш OGDEN-WEBER

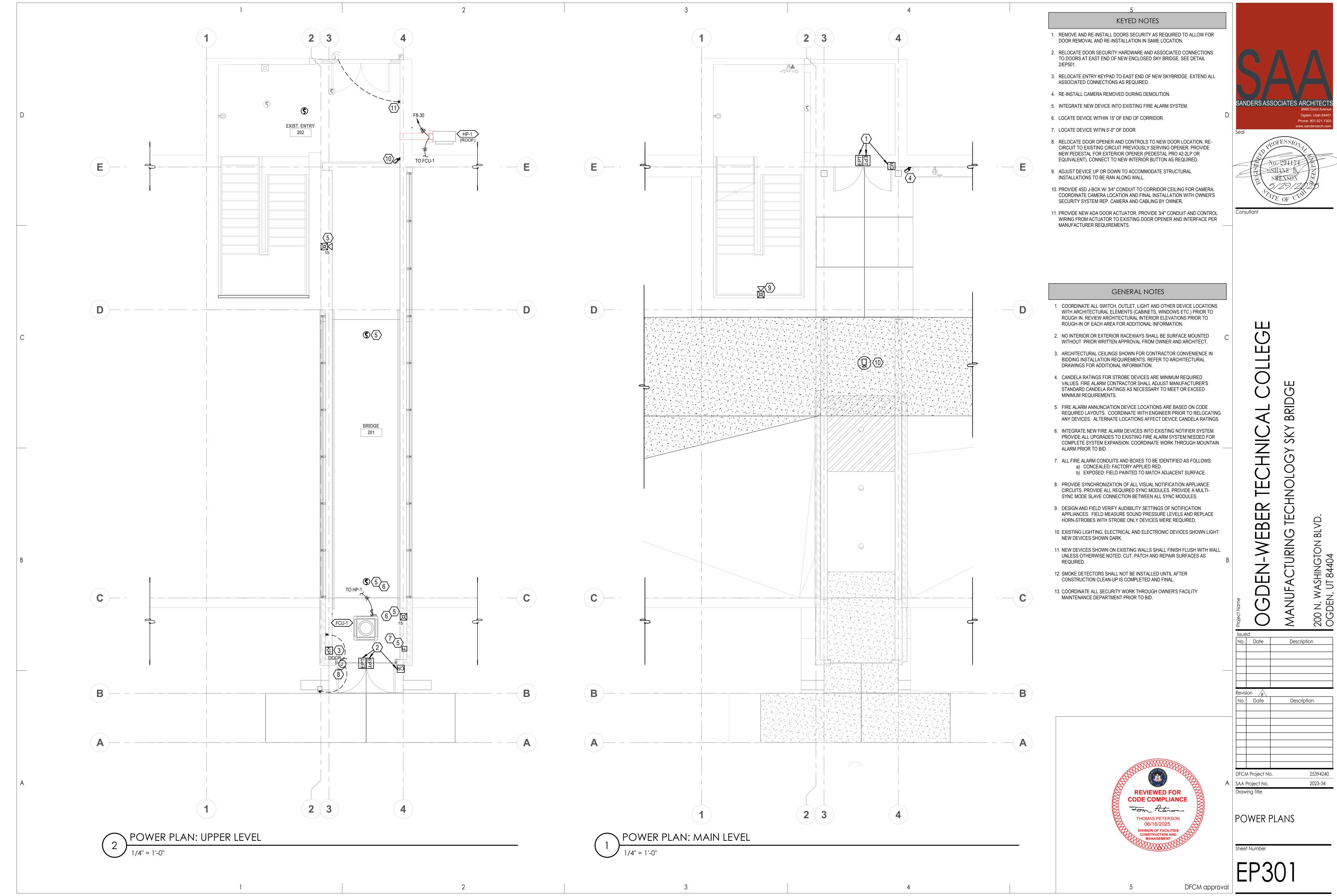
Description

DFCM Project No. A SAA Project No.
Drawing Title 2023-34

LIGHTING PLANS

THOMAS PETERSON
06/16/2025
DIVISION OF FACILITIES
CONSTRUCTION AND
MANAGEMENT

REVIEWED FOR CODE COMPLIANCE



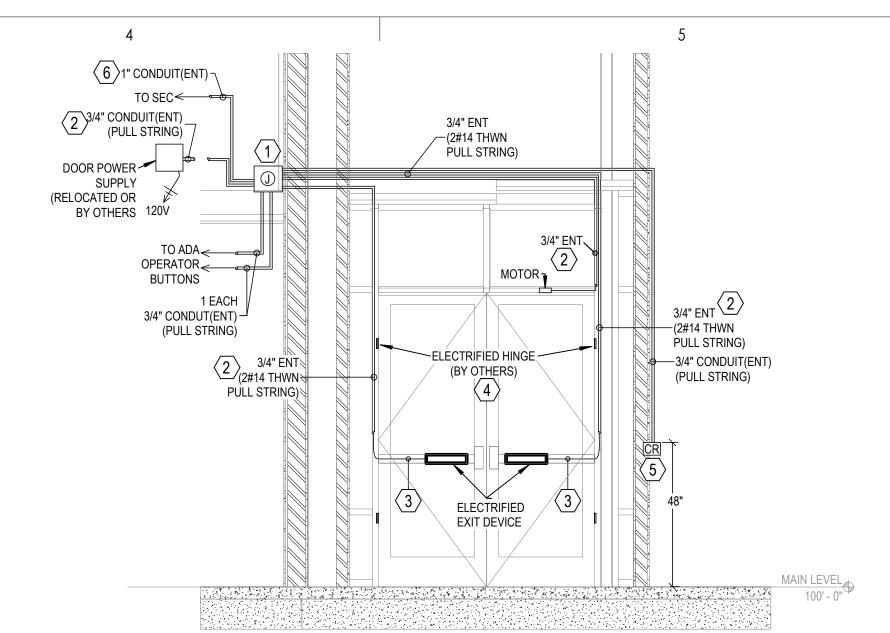
25394240 2023-34

	MECHANICAL EQUIPMENT SCHEDULE											
SYM	SYM DESCRIPTION LOAD VOLTS PHASE SHUTDOWN BY BY BY BY REMARKS											
FCU- 1	FAN COIL UNIT	17 MCA 27 MOCP	208	1	NO	ELEC	ELEC	ELEC	INTERCONNECT WITH OUTDOOR UNIT HP-1 PER MANUFACTURER REQUIREMENTS			
HP- 1	HEAT PUMP	17 MCA 27 MOCP	208	1	NO	ELEC	ELEC	ELEC	INTERCONNECT WITH INDOOR UNIT FCU-1 PER MANUFACTURER REQUIREMENTS			
	* ELECTRICAL CONTRACTOR VERIFY SINGLE SPEED OR TWO SPEED STARTERS WITH MECHANICAL DRAWINGS.											

NEL _	L	L8		TYPE				SQ D I	NQOD				3	Ø	4	WIRE		120	/208	VOLTS			LOCATION L2 ELEC	M	IOUNT	
		NEW EXIST	ING	REMARKS	-AI	I CIRO	CUIT	S CON	ISIDEF	RED EX	ISTING	UNLESS O	THERWISE	INDICATE	D IN THES	F DRAWING	as						ROOM	Х	SURF	
	AS N	NEMA BOLT SOLA	A RATING ON BREAKERS ATED GROUND BUS BE PROTECT (SPD)		-*=\	/ERIF	Y WI	ITH EQ	UIPME	NT NA	MEPLA	TE AND/OR G PANEL													AMP LUGS BREA	
No.	BRKI	R	CIRCUIT DES	CRIPTION	L	0	М			/CND		CIRC. LOAD				CIRC. LOAD			/CND		М	CIRCUIT DE	SCRIPTION	BRI	KR	N
	Α	Р						PH	N	G	С		Α	В	С		PH	N	G	С				Α	Р	┷
1	20		EX FAN					EX	EX		EX		0				EX	EX		EX		LUGMOLD 205		20	1	
3	20	1	PLUGS: 201					EX	EX		EX			0			EX	EX		EX		LUGMOLD 205		20	1	_
5			PLUGS: 201					EX	EX		EX		0		0		EX	EX		EX		PLUGMOLD 205		20	1	_
7 9	20	1 1	PLUGS: 201 PLUGS: 201					EX	EX	EX	EX		0	0			EX	EX	EX	EX EX		PLUGS: 219 PLUG: 201		20	1	
1			PLUGS: 201					EX	EX		EX				0		EX	EX		EX		PLUGS: 203,205		20	1	
3	20		PLUGS: 201					EX	EX		EX		0		0		EX	EX		EX		PLUGS: 204		20	1	_
5	20	1	PLUGS: 201					EX	EX		EX		0	0			EX	EX	EX	EX		PLUGS: HALL		20	1	+
7			PLUGS: 201					EX	EX		EX				0		EX	EX		EX		LUGS: HALL		20	1	
9	20	1	PLUGS: 201					EX	EX		EX		0				EX	EX		EX		X FANS 2, 3		20	1	_
11	20	1	PLUGS: 201					EX	EX		EX		-	0							s	PARE		20	1	
3		1	PLUGS: 205					EX	EX		EX				0							PARE		20	1	_
:5	20	1	PLUGS: 205					EX	EX	EX	EX		0								S	PARE		20	1	
7	20	1	PLUGS: 205					EX	EX	EX	EX			0							s	PARE		20	1	
9	20	1	DROP CORD #1					EX	EX	EX	EX				2040	2040	10	10	10	3/4	2 S	PLIT A/C: BRIDGE		+30H*	2	
1	20	1	DROP CORD #2					EX	EX	EX	EX		2040			2040	10				2 -			-	-	
3	20	1	DROP CORD #3					EX	EX	EX	EX			0			EX	EX	EX	EX	3	D PRINTER		50	2	
5	20	1	SPARE												0		EX				-			-	-	
7	40	3	SPARE										0									PARE		20	1	
9	-	-	-											0								PARE		20	1	
11	-	-	-												0						S	PACE		20	1	
	FEE	DER	EXISTI	NG							AM	TOTALS PS/PHASE	<u>2040</u> <u>17</u>	<u>0</u> <u>0</u>	<u>2040</u> <u>17</u>						1	AIC SCCR PARALLEL RUNS	EX 10K EX 10K SEE ONE-LII	NE	-	

GENERAL CODES

1LIN=SEE ONE-LINE DIAGRAM; AS=AS SPECIFIED



# DETAIL GENERAL NOTES

# 1. CABLING BY OTHERS UNLESS OTHERWISE NOTED.

- 2. COORDINATE ALL CONDUIT, BOX TYPES AND LOCATIONS WITH
- OWNER'S SECURITY SYSTEM REP PRIOR TO ROUGH-IN.

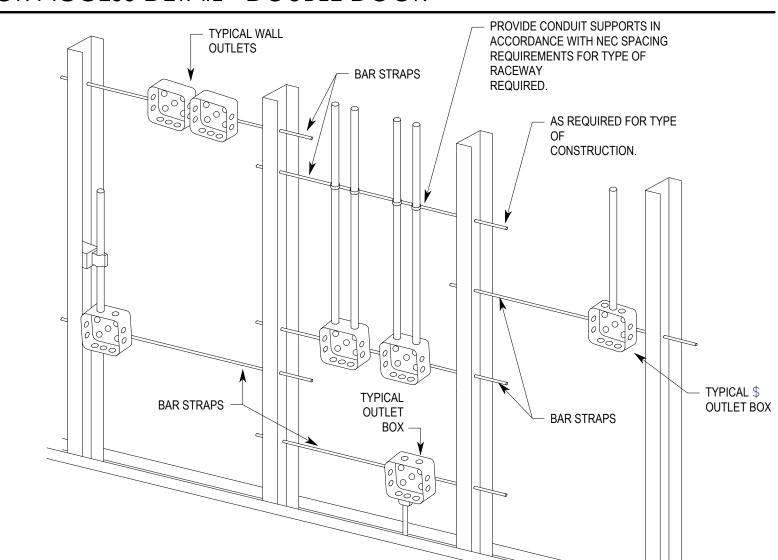
  3. PROVIDE INSULATED THROAT CONNECTORS ON BOTH ENDS OF ALL
- CONDUITS.

  4. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR HARDWARE
- 5. ENT ONLY ALLOWED ON PROJECT AS NOTED IN THIS DETAIL

# **DETAIL KEYED NOTES**

- PROVIDE J-BOX ABOVE ACCESSIBLE CEILING ON CONTROLLED SIDE OF DOOR. ROUTE ALL DOOR SECURITY CONDUITS FOR DOOR TO J-BOX.
- PROVIDE 3/4" ENT WITH CONDUCTORS AS REQUIRED, ROUTED TRHOUGH STOREFRONT/WINDOW MULLIONS FOR CONNECTIONS TO POWER DOOR OPERATORS AND CONTROLS. SEE POWER PLAN FOR LOCATION WITH POWER DOORS.
- 3. WIRING THROUGH HINGE TO ELECTRIFIED HARDWARE WITH INTEGRAL REX AND DOOR STATUS.
- 4. VERIFY HEIGHT WITH DOOR HARDWARE SUPPLIER.
- 5. PROVIDE 1-GANG BOX WITH CONDUIT TO ABOVE CEILING J-BOX FOR EXTERIOR DOOR CARD READER. VERIFY MOUNTING HEIGHT AND LOCATION WITH OWNER'S SECURITY SYSTEM REP PRIOR TO ROUGH-IN.
- 6. PROVIDE HOME-RUN TO SECURITY SYSTEM HEAD-END LOCATION.

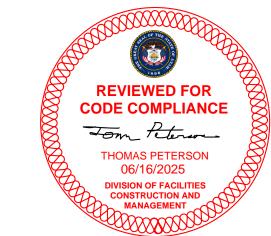
# ENTRY DOOR ACCESS DETAIL - DOUBLE DOOR



# GENERAL DETAIL NOTES

- 1. TYPICAL FOR WOOD AND METAL STUD ROUGH-IN.
- 2. PLASTER RINGS NOT SHOWN.
- 3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND WITH ALL APPLICABLE SHOP
- 4. OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE IN A RATED FIRE SEPARATION WALL MUST BE SEPARATED BY A MINIMUM OF 24" HORIZONTAL DISTANCE.
- 5. IN NON-RATED WALLS, OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY 16" FOR SOUND ATTENUATION.





FCHNICAL COLLEGI

ER

 $\Delta$ 

1. WASHINGTON BLVD.

evis	ion /#\	
lo.	Date	Description

A DFCM Project No. 25394240

SAA Project No. 2023-34

Drawing Title

ELECTRICAL DETAILS & SCHEDULES