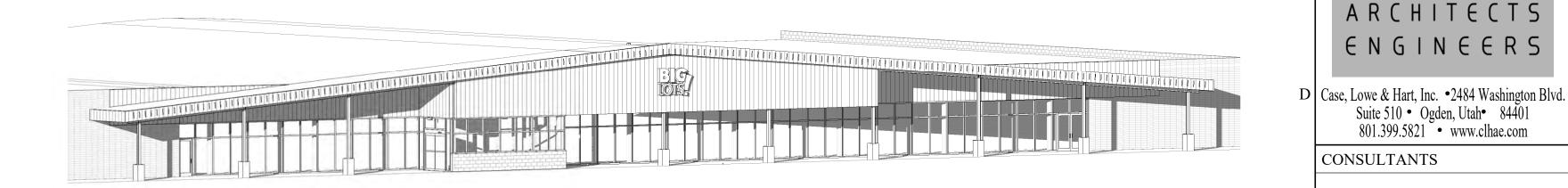
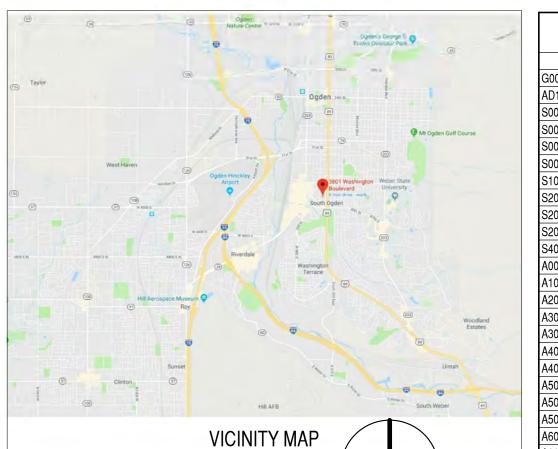
# New Canopy

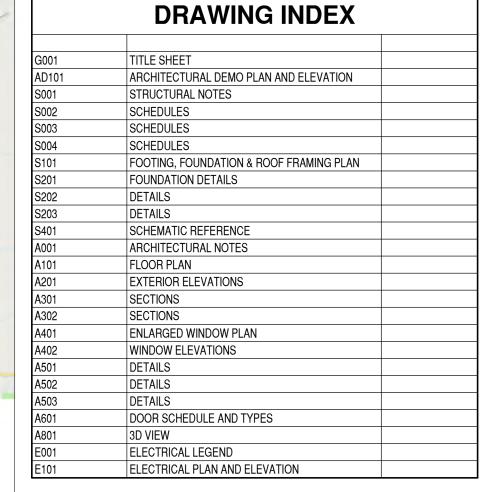
3801 Washington Blvd. Ogden, Utah 84403

Case, Lowe and Hart, Inc. 2484 Washington Blvd. Ste 510 Ogden, Utah 84401

> ARW Engineers 1594 W. Park Cir. Ogden, Utah 84404









## **CODE INFORMATION**

DESCRIPTION- EXISTING TYPE Vb BUILDING AND M OCCUPANCY. REMOVE EXISTING WOOD CANOPY

**BUILDING TYPE-**FIRE SUPPRESSION SYSTEM- YES EXISTING BUILDING ALLOWABLE AREA-

3801 Washington Blvd. South Ogden, Utah MARK DATE DESCRIPTION

> CHK'D BY: **REVIEW SET**

12/23/2020

19060

KDL

SJP

**New Canopy** 

ARCHITECTS

ENGINEERS

**CONSULTANTS** 

**STAMP** 

23 DEC 2020

SHEET TITLE

**ISSUE DATE:** 

PROJECT NO: CAD DWG FILE:

DRAWN BY:

TITLE SHEET

SHEET NO:

G001

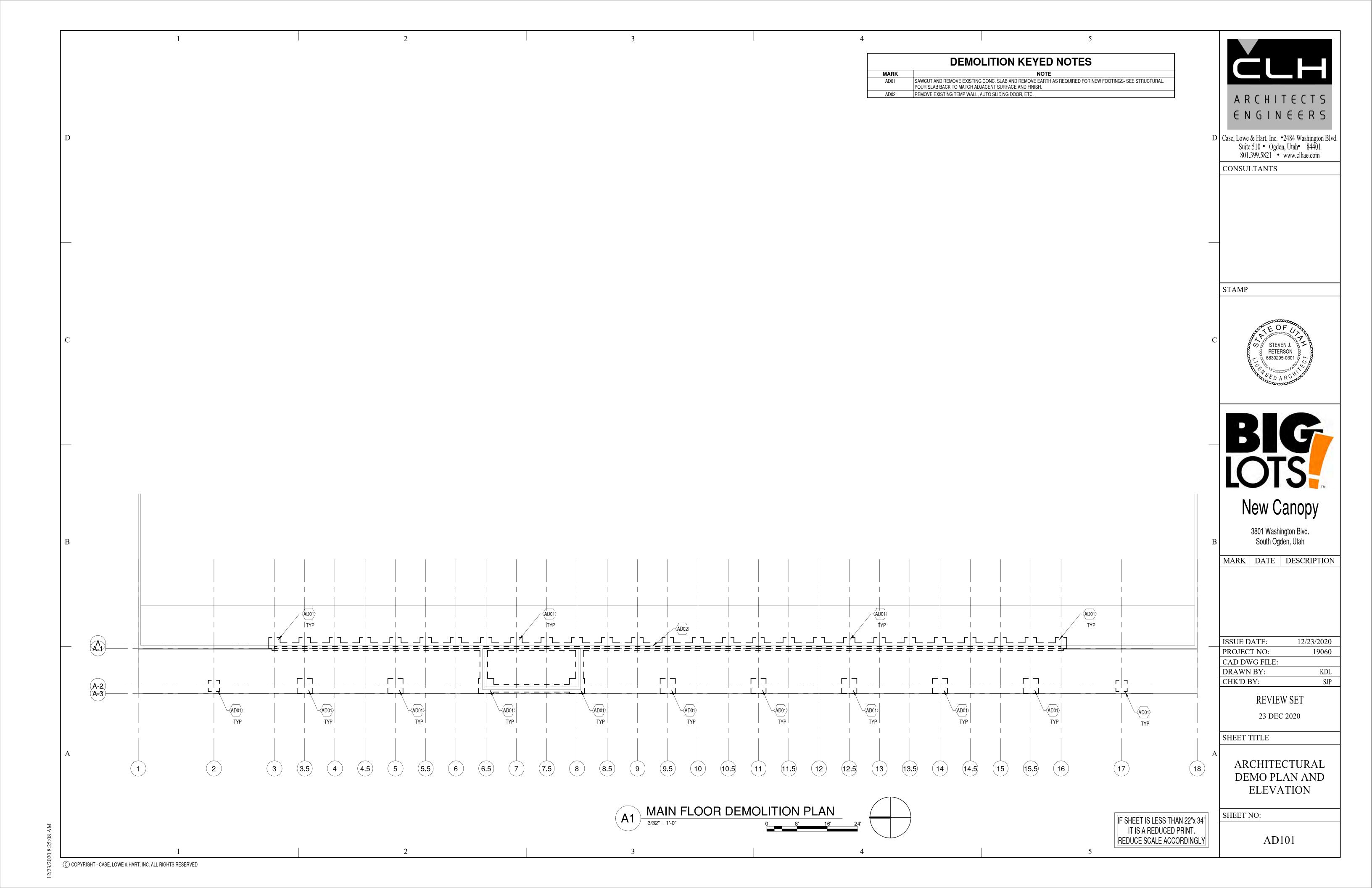
**DEFERRED SUBMITTALS** 

AND DETAILED BY GC AND SUB CONTRACTOR.

2- PROVIDE METAL STUD DESIGN, CONNECTIONS

IF SHEET IS LESS THAN 22"x 34" IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY





SUBSTITUTIONS.

**STRUCTURAL NOTES:** 

A. GENERAL

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.

1. THE STRUCTURAL NOTES ARE INTENDED TO COMPLEMENT THE PROJECT SPECIFICATIONS

THE ONLY CONTRACT DOCUMENTS PROVIDED BY ARW ENGINEERS FOR THE PROJECT

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

STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF

4. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS. SUBMITTALS SHALL BE MADE IN A TIMELY

FOR GENERAL COMPLIANCE ONLY AND IS NOT INTENDED AS APPROVAL. CONTRACTOR IS

RELATED TO DESIGN DOCUMENTS. PREPARATION OF SHOP DRAWINGS FOR STRUCTURAL

5. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. IF ACTUAL

MECHANICAL EQUIPMENT OR OTHER EQUIPMENT BEFORE FABRICATING AND ERECTING

7. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ARCHITECT FOR ARCHITECT

8. OBSERVATION VISITS TO THE SITE BY ARW ENGINEERS FIELD REPRESENTATIVES SHALL

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

NECESSARILY DETAILS LABELED "TYPICAL" OR "SIMILAR" IN THE PLANS AND DOCUMENTS.

SHOWN. TYPICAL OR SIMILAR DETAILS REFER TO THE CONDITION ADDRESSED AND ARE NOT

NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.

MANNER AS INDICATED IN SPECIFICATIONS. REVIEW OF SUBMITTALS BY ARW ENGINEERS IS

RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND ELEVATIONS ON SUBMITTALS AS

CONDITIONS DIFFER FROM THOSE SHOWN ON CONTRACT DOCUMENTS, CONTRACTOR SHALL

NOTIFY ARCHITECT PRIOR TO FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS

STRUCTURAL ELEMENTS. SIZES AND LOCATIONS THAT DIFFER FROM THOSE SHOWN ON THE

AND/OR ENGINEER APPROVAL BEFORE PROCEEDING WITH ANY CHANGES, MODIFICATIONS, OR

CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY THE ARCHITECT AT

SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND

ELEMENTS WILL REQUIRE INFORMATION (I.E. DIMENSIONS, ETC.) FOUND IN THE

6. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL LOCATIONS AND SIZES OF

ARCHITECTURAL, STRUCTURAL, AND OTHER CONSULTANTS DRAWINGS.

CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT.

DRAWINGS SHALL GOVERN OVER THE STRUCTURAL NOTES AND TYPICAL DETAILS.

(INCLUDING, BUT NOT LIMITED TO, DIMENSIONS, SIZES, ETC).

NO ADDITIONAL COST TO THE OWNER.

WHICH ARE PART OF THE CONSTRUCTION DOCUMENTS. SPECIFIC NOTES AND DETAILS ON THE

2. THESE DRAWINGS (AND, WHERE APPLICABLE, ACCOMPANYING WRITTEN SPECIFICATIONS) ARE

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

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. ALL ITEMS REQUIRING SPECIAL INSPECTION ARE IDENTIFIED IN THE SPECIAL INSPECTION
- 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
- ALL TESTING AND SPECIAL INSPECTION SHALL BE PROVIDED BY A QUALIFIED INDEPENDEN 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
- 4. 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 CONSTRUCTION.
- 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 CONSTRUCTION.

## C. BASIS OF DESIGN

- 1. GOVERNING BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC) 2018
- 2. ROOF LOADS
- RISK CATEGORY: II
- a. FLAT-ROOF SNOW LOAD, Pf: 36 PSF (FOR CANOPY) 30 PSF (MAIN BUILDING)
- GROUND SNOW LOAD, Pg: 43 PSF SNOW EXPOSURE FACTOR, Ce: 1.0
- SNOW LOAD IMPORTANCE FACTOR, Is: 1.0 4. THERMAL FACTOR, Ct: 1.2 (CANOPY) 1.0 (MAIN BUILDING)
- SLOPE FACTOR, C<sub>S</sub>: 1.0 6. SNOW DRIFT: SHOWN ON PLANS WHERE APPLICABLE.
- b. LIVE LOAD = 20 PSF c. DEAD LOAD = 20 PSF
- d. RAIN INTENSITY, i: 1.5 IN/HR
- 3. WIND DESIGN
- a. BASIC WIND SPEED (3 SECOND GUST): 103 MPH b. ALLOWABLE STRESS DESIGN WIND SPEED, V<sub>ASD</sub>: 80 MPH
- c. WIND EXPOSURE : C
- d. INTERNAL PRESSURE COEFFICIENT, GCPI: 0.18 e. COMPONENT AND CLADDING DESIGN WIND PRESSURE SHALL BE AS REQUIRED PER ASCE
- 4. SEISMIC DESIGN
- a. SEISMIC IMPORTANCE FACTOR, I<sub>E</sub>: 1.0 b. SITE CLASS: D (ASSUMED)
- c. MAPPED SPECTRAL RESPONSE ACCELERATIONS: S<sub>S</sub> = 1.359, S<sub>1</sub> = 0.492
- d. SPECTRAL RESPONSE COEFFICIENTS: S<sub>DS</sub> = 1.087,
- e. SEISMIC DESIGN CATEGORY: D BASIC SEISMIC-FORCE-RESISTING SYSTEM: REPLACING EXITING CANOPY. FORCES TRANSFERED INTO EXISTING BUILDING. EXISTING IS ORDINARY REINFORCED MASONRY
- g. DESIGN BASE SHEAR:  $V_{N-S} = CsW$  or Fp,  $V_{E-W} = CsW$  or Fp
- SEISMIC RESPONSE COEFFICIENT, Cs: 0.544, Fp=0.133SdsW = 0.145W
- RESPONSE MODIFICATION FACTOR, R: 2 ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

## IF SHEET IS LESS THAN 22"x 34"| IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

## 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 INCHES 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
- 2. 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.

### E. CONCRETE

- 1. ALL CONCRETE MIX DESIGNS SHALL COMPLY WITH THE REQUIREMENTS LISTED BELOW
- a. FOOTINGS, GRADE BEAMS, FOUNDATION WALLS 1. WHERE THE TOP OF THE ELEMENT IS EXPOSED (EXPOSURE CATEGORY F2)
- a. 28 DAY COMPRESSIVE STRENGTH: 4500 PSI b. MAXIMUM W/C RATIO:
- c. MAXIMUM AGGREGATE SIZE: d. AIR CONTENT: SEE SCHEDULE BELOW 2. WHERE THE TOP OF THE ELEMENT IS NOT EXPOSED (EXPOSURE CATEGORY F0)
- a. 28 DAY COMPRESSIVE STRENGTH: 3000 PSI b. INTERIOR SLABS ON GRADE (EXPOSURE CATEGORY F0)
- 28 DAY COMPRESSIVE STRENGTH: 3000 PSI c. EXTERIOR SLABS (DOCKS, ETC.) (EXPOSURE CATEGORY F2)
- 28 DAY COMPRESSIVE STRENGTH: 4500 PSI MAXIMUM W/C RATIO :
- 3. MAXIMUM AGGREGATE SIZE MINIMUM AIR CONTENT: SEE SCHEDULE BELOW
- d. 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 TARGET AIR CONTENT, PERCENT
  - AGGREGATE SIZE, IN F2 AND F3
- WATER USED IN MIXING CONCRETE SHALL CONFORM TO ASTM C1602 3. NO 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 PLACEMENT.
- 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 FOLLOWS:
- TOP & BOTTOM BARS #4 AT 18"O.C. #4 AT 12"O.C. (2) #5 6. UNLESS NOTED OTHERWISE, CONCRETE SLABS ON EARTH SHALL BE REINFORCED AS
- FOLLOWS: 4" THICK - #3 AT 18"O.C. EACH WAY 6" THICK - #4 AT 18"O.C. EACH WAY
- REINFORCING SHALL BE CONTINUOUSLY SUPPORTED AT 36"O.C. MAXIMUM SPACING. UNLESS NOTED OTHERWISE, FOR NON-DETAILED OPENINGS IN CONCRETE WALLS LARGER THAN 12" 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 NO 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 GRADE.
- 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.) SEE TYPICAL ANCHOR BOLT DETAIL FOR DEFINITIONS OF EMBEDMENT LENGTH, ETC.
- FURNISH TEMPLATES AND OTHER DEVICES AS NECESSARY FOR PRESETTING ALL BOLTS PRIOR
- TO PLACING CONCRETE AND/OR GROUT. 4. IF THREADED RODS ARE USED AS PERMITTED ABOVE, THEY SHALL BE CLEAR OF SOIL AND

- 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.

## G. ADHESIVE/MECHANICAL ANCHORS

- WITHOUT WRITTEN APPROVAL OF THE ENGINEER, CONTRACTOR SHALL NOT SUBSTITUTE POST-INSTALLED ANCHORS WHERE CAST-IN-PLACE ANCHORS ARE SPECIFIED IN THE
- 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 INTENT.
- 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. 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.
- 6. UNLESS APPROVED BY THE ENGINEER OF RECORD, CONCRETE AND DRILLED ANCHOR HOLES SHALL BE DRY AND FREE OF WATER FOR 24 HOURS PRIOR TO ADHESIVE INSTALLATION. CONTACT THE ENGINEER OF RECORD FOR GUIDANCE IF THE CONTRACTOR CHOOSES TO
- INSTALL IN WET OR DAMP 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.
- 8. 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 318-11 D.9.2.2. PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. CONTINUOUS SPECIAL INSPECTION SHALL BE PROVIDED FOR THESE **ANCHORS**
- 9. UNLESS NOTED OTHERWISE, ALL ADHESIVE ANCHORS INTO CONCRETE SHALL BE: a. HILTI HIT-RE 500V3 (ESR-3814), OR HILTI HIT-HY 200-A (ESR-3187). SIMPSON SET-3G (ESR-4057), OR AT-XP (ER-0263).
- DEWALT PURE 110+ (ESR-3298), OR AC200+ GOLD (ESR-4027-COLD WEATHER). 10. UNLESS NOTED OTHERWISE, ALL ADHESIVE ANCHORS INTO MASONRY SHALL BE:
- a. HILTI HIT-HY 270 (ESR-4143). SIMPSON SET-XP (ER-0265), OR AT-XP (ER-0281).
- DEWALT AC100+ GOLD (ESR-3200). 11. UNLESS NOTED OTHER WISE, ALL MECHANICAL ANCHORS INTO CONCRETE SHALL BE:
- a. HILTI KWIK BOLT TZ (ESR-1917). b. SIMPSON STRONG-BOLT 2 (ESR-3037).
- 12. UNLESS NOTED OTHERWISE, ALL MECHANICAL ANCHORS INTO MASONRY SHALL BE: a. HILTI KWIK HUS-EZ (ESR-3056).
- SIMPSON STRONG BOLT 2 WEDGE ANCHOR (ER-0240). DEWALT SCREWBOLT+ (ESR-4042).
- 13. UNLESS NOTED OTHERWISE, ALL SCREW ANCHORS INTO CONCRETE SHALL BE: SIMPSON TITEN HD (ESR-2713).
- DEWALT SCREWBOLT+ (ESR-3889). c. HILTI KWIK HUS-EZ (ESR-3027).
- 14. UNLESS NOTED OTHERWISE, ALL SCREW ANCHORS INTO MASONRY SHALL BE:
- a. SIMPSON TITEN HD (ESR-1056).
- DEWALT SCREWBOLT+ (ESR-1678). c. HILTI KWIK HUS EZ (ESR-3056).
- 15. ALL MASONRY CELLS WITHIN 8" OF THE ANCHOR SHALL BE SOLID GROUTED. 16. 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. 17. 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 1 INCH, WHICH EVER IS LARGER, OF SOUND
- CONCRETE/MASONRY BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. AT CONTRACTORS OPTION, LOCATE EXISTING REINFORCEMENT PRIOR TO DRILLING/CORING. IF THE ANCHOR OR DOWEL CANNOT BE SHIFTED AS NOTED ABOVE, THE ENGINEER WILL DETERMINE A NEW LOCATION. 18. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.

## H. REINFORCING STEEL

- REINFORCING BAR STRENGTH REQUIREMENTS: a. ALL REINFORCING BARS SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60. ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 117, TO
- MAINTAIN EXACT REQUIRED POSITION. 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 BEARING FACE OF THE HEAD.
- 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.
- ALL FIELD BENT DOWELS SHALL BE GRADE 40 WITH SPACING INDICATED REDUCED BY 1/3. UNLESS NOTED OTHERWISE, REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE
- a. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ..... 3"
- b. EXPOSED TO EARTH OR WEATHER: . #6 & LARGER ..... 2"
- 2. #5 & SMALLER .....1-1/2"
- c. NOT EXPOSED TO WEATHER OR EARTH:
- SLABS, WALLS, JOISTS, #11 & SMALLER ..... 3/4"
- BEAMS, COLUMNS: MAIN REINFORCING OR TIES ..... 1-1/2" d. SLAB ON GRADE:
- 1. PLACE REINFORCING AT CENTER OF SLAB UNLESS INDICATED OTHERWISE EXCEPT WHERE NOTED ON PLANS OR DETAILS CONTINUOUS REINFORCEMENT SHALL BE
- SPLICED AT POINTS OF MINIMUM STRESS BY LAPPING PER THE REBAR LAP SCHEDULE. 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-14. 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

- 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 ASTM A325 OR A490 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:

ACCORDANCE WITH ANSI/AWS D1.1 (LATEST EDITION).

- a. WIDE FLANGE SHAPES AND WT SHAPES ASTM A992
- b. OTHER SHAPES AND PLATES ASTM A-36 (UNO) c. HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A-500, GRADE C FOR SQUARE. RECTANGULAR AND ROUND SHAPES (FY = 50 KSI FOR SQUARE AND RECTANGULAR
- SHAPES AND 46 KSI FOR ROUND SHAPES) d. THREADED ROD - ASTM A-449.
- e. NON-SHRINK GROUT ASTM C110. 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. a. ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS QUALIFIED WELDERS IN
- b. USE E-70XX ELECTRODES UNLESS NOTED OTHERWISE 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. 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 CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE. TIGHTEN BOLTS TO A SNUG TIGHT 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 HOLE. 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.
- 7. PROVIDE FULL DEPTH WEB STIFFENER PLATES AT EACH SIDE OF STEEL BEAMS AT ALL BEARING (EXCEPT SECONDARY FRAMING) POINTS. STIFFENER PLATES SHALL BE THICKNESS SHOWN UNLESS NOTED OTHERWISE AND SHALL BE WELDED BOTH SIDES WITH FILLET WELDS ALL AROUND.
  - FLANGE WIDTH STIFFENER THICKNESS WELD THICKNESS < 8 1/4" 3/16" 8 1/4" < BF < 12 1/2" 1/4" 12 1/2" < BF < 18"

ARE CONSIDERED RESTRAINED.

BY THE ENGINEER OF RECORD.

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

8. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR

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

CONSTRUCTION

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594 W. Park Gir. Ogden, Utah 84404

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STAMP

New Canopy 3801 Washington Blvd.

MARK DATE DESCRIPTION

South Ogden, Utah

SSUE DATE: 2020.11.20 ARW PROJECT NO: 19394.A CAD DWG FILE: DRAWN BY: D.Bartelson

Not For Construction

2020.11.20

S. Porter

SHEET TITLE

CHK'D BY:

STRUCTURAL NOTES

SHEET NO:

S001

SHEET **NUMBER** SHEET NAME S001 STRUCTURAL NOTES SCHEDULES S002 S003 SCHEDULES S004 SCHEDULES FOOTING, FOUNDATION & ROOF FRAMING PLAN S101 S201 FOUNDATION DETAILS S202 DETAILS S203 DETAILS SCHEMATIC REFERENCE

Structural Sheet Index

REMARKS

STAMP

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CONSTRUCTION

SET

PROGRI

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3801 Washington Blvd.

South Ogden, Utah

Not For Construction

2020.11.20

SHEET TITLE

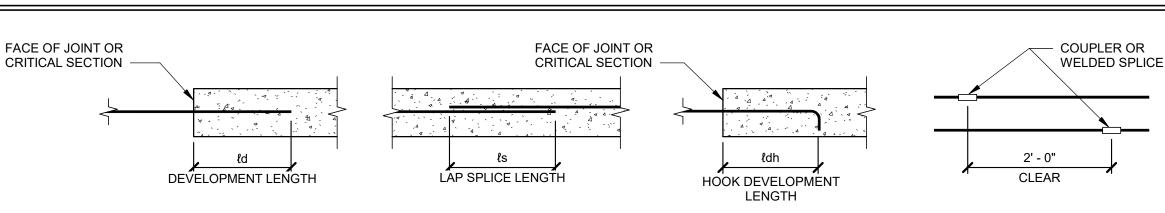
SCHEDULES

SHEET NO:

S002

## 2018 IBC CONCRETE REBAR LAP SPLICE SCHEDULE

FOR CONCRETE APPLICATIONS (ACI 318 - 14)



														CON	ICRET	E REIN	IFORG	CING 8	& SPLI	CE LE	NGTH	S (IN)								
DAD LOCATION	СО	NCRETE															В	AR SIZ	ZE											
BAR LOCATION	TYPE	STRENGTH		#3			#4			#5			#6			#7			#8			#9			#10			#11		COMMENTS
	'''	JINLINOIII	ℓd	ls	ldh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	ℓd	ls	ldh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	
VERT. WALL BARS, FILL ON METAL DECK	NWC	3000 PSI	17	22	8	22	29	8	28	36	10	33	43	12	48	62	13	55	72	15	62	81	17	69	90	19	76	99	30	
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	3000 PSI	17	22	8	22	29	8	28	36	10	33	43	12	48	62	13	55	72	15	62	81	17	69	90	19	76	99	30	
BEAM BOTTOM BARS, COLUMN BARS	NWC	3000 PSI	17	22	8	22	29	11	28	36	14	33	43	16	48	62	19	55	72	22	62	81	25	69	90	27	76	99	30	
FOOTING BOTTOM BARS	NWC	3000 PSI	12	16	8	14	18	8	17	22	10	20	26	12	29	38	13	33	43	15	37	48	17	42	55	19	46	60	30	
BEAM TOP BARS	NWC	3000 PSI	22	29	8	29	38	11	36	47	14	43	56	16	63	82	19	72	94	22	81	105	25	90	117	27	98	127	30	
SLAB ON GRADE	NWC	3000 PSI	12	16	8	14	18	8	17	22	10	20	26	12	32	42	13	42	55	15	53	69	17	69	90	19	76	99	30	

SLAB ON GRADE	NWC	3000 PSI	12	16	8	14	18	8	17	22	10	20	26	12	32	42	13	42	55	15	53	69	17	69	90	19	76	99	30	
														CON	CRET	E REIN	NFORG	CING 8	& SPLI	CE LEI	NGTH	S (IN)								
	СО	NCRETE															В	AR SIZ	ZE											
BAR LOCATION	TYPE	STRENGTH		#3			#4			#5			#6			#7			#8			#9			#10			#11		COMMENTS
	'''	JINLINOTTI	ℓd	ls	ℓdh	ℓd	ls	ldh	ℓd	ls	ldh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	ℓd	ls	ldh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	ℓd	ls	ℓdh	
VERT. WALL BARS, FILL ON METAL DECK	NWC	4500 PSI	14	18	7	18	23	6	23	30	8	27	35	9	40	52	11	45	59	13	51	66	14	56	73	16	62	81	25	
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	4500 PSI	14	18	7	18	23	6	23	30	8	27	35	9	40	52	11	45	59	13	51	66	14	56	73	16	62	81	25	
BEAM BOTTOM BARS, COLUMN BARS	NWC	4500 PSI	14	18	7	18	23	9	23	30	11	27	35	13	40	52	16	45	59	18	51	66	20	56	73	22	62	81	25	
FOOTING BOTTOM BARS	NWC	4500 PSI	12	16	7	12	16	6	14	18	8	17	22	9	24	31	11	27	35	13	31	40	14	34	44	16	37	48	25	
BEAM TOP BARS	NWC	4500 PSI	18	23	7	24	31	9	30	39	11	35	46	13	51	66	16	59	77	18	66	86	20	73	95	22	80	104	25	
SLAB ON GRADE	NWC	4500 PSI	12	16	7	12	16	6	14	18	8	17	22	9	27	35	11	34	44	13	44	57	14	56	73	16	62	81	25	

THICKNESS

- 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
- DEVELOPMENT LENGTHS SHALL BE INCREASED BY 50% FOR STRAIGHT BAR DEVELOPMENT AND 20% FOR HOOKED BARS WHERE EPOXY COATING IS USED.
- WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS UNO.

SPLICE BARS LARGER THAN #11 USING MECHANICAL COUPLERS.

## K. TIMBER

LOCATION

- 1. WOOD GRADES (UNLESS NOTED OTHERWISE) a. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR/LARCH CLEARLY MARKED WITH A STAMP BY WWPA APPROVED AGENCY AND SHALL BE GRADED AS FOLLOWS: 1. HORIZONTAL MEMBERS: JOISTS & RAFTERS: NO. 2, BEAMS & STRINGERS: NO. 2.
- 2. VERTICAL MEMBERS: POST & TRIMMERS: NO. 1. STUDS: NO. 2. SHEATHING SHALL BE APA RATED SHEATHING, EXPOSURE I, EXTERIOR GLUE AND PANEL INDEX RATING AS NOTED BELOW UNLESS NOTED OTHERWISE:

3. INDIVIDUAL PIECES OF SHEATHING AT ROOF, FLOOR, AND SHEAR WALLS SHALL NOT BE SMALLER THAN 24" IN EITHER DIRECTION AND SHALL SPAN A MINIMUM OF TWO FRAMING

SPACES, UNO. 4. CONNECTIONS, FASTENERS, AND ADHESIVE a. UNLESS NOTED OTHERWISE, 8d COMMON (0.131) NAILS SHALL BE USED TO FASTEN

PANEL INDEX

- ALL PLYWOOD ROOF SHEATHING TO SUPPORTING TRUSSES, JOISTS, LEDGERS OR **BLOCKING AS FOLLOWS:** 
  - 1. BOUNDARY NAILING "BN": 6" O.C. AT ALL BEARING WALLS, SHEAR WALLS, OTHERWISE INDICATED IN THE BLOCKING, AND WHERE STRUCTURAL DRAWINGS.
- 2. PANEL EDGE NAILING "EN": 6"O.C. AT ALL OTHER PLYWOOD PANEL EDGES. 3. PANEL FIELD NAILING "FN": 12"O.C. AT INTERIOR SUPPORTS IN FIELD OF PANEL. b. UNLESS NOTED OTHERWISE, ALL NAILS SHALL HAVE THE FOLLOWING MINIMUM

PROPERTIES	:			
COMMON	SHANK	HEAD	LENGTH	MIN. PENETRATION
NAIL SIZE	DIAMETER	DIAMETER		INTO SUPPORT MEMBER
6d	0.113"	0.266"	2"	1.25"
8d	0.131"	0.281"	2-1/2"	1.375"
10d	0.148"	0.312"	3"	1.50"
12d	0.148"	0.312"	3-1/4"	1.50"
16d	0.162"	0.344"	3-1/2"	1.62"

- c. A CONTINUOUS BEAD OF PERMANENT BOND TIMBER/WOOD ADHESIVE COMPOUND SHALL BE USED TO FASTEN ALL PLYWOOD FLOOR SHEATHING TO FLOOR JOISTS IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.
- d. ALL FRAMING ANCHORS, POST CAPS, HOLD DOWNS, COLUMN BASES ETC. TO BE PROVIDED BY SIMPSON OR APPROVED EQUAL AND SHALL BE ATTACHED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED DATA, UNLESS NOTED OTHERWISE
- e. EXCEPT WHERE NOTED OTHERWISE, THE NUMBER AND SIZE OF NAILS CONNECTING WOOD MEMBERS SHALL NOT BE LESS THAN THAT SET FORTH IN IBC TABLE 2304.10.1. CONNECTIONS FOR MULTIPLE PIECES OF ENGINEERED LUMBER PIECES SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

## L. NON-STRUCTURAL DELEGATED DESIGNS AND DEFERRED SUBMITTALS

- 1. 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. COLD FORMED STEEL STUDS / JOISTS / HEADERS / JAMBS / TRUSSES. 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.

## M. EXISTING BUILDING NOTES

- 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.
- 3. 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.

## N. MASONRY

- f'm (MINIMUM, FACTORED) 2,000 PSI
- ACCEPTABLE RANGE OF UNIT WEIGHT: 105 PCF TO 125 PCF ALL GROUT (SITE MIXED OR PRE-MIXED) SHALL CONFORM TO ASTM C-476 OR SECTION 2.2A OF TMS 602-16. GROUT SHALL BE PLACED WITH SUFFICIENT WATER FOR POURING WITHOUT SEGREGATION. DO NOT USE MORTAR FOR
- 3. GROUT STOPS SHALL BE AN APPROVED PRODUCT DESIGNED AND MANUFACTURED FOR USE AS A GROUT STOP, GROUT STOP SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW.
- ALL MASONRY WORK SHALL CONFORM TO CHAPTER 21 OF THE IBC.
- a. VERTICAL: #5 BARS IN CELLS ADJACENT TO ALL OPENINGS, AT CORNERS AND AT A MAXIMUM SPACING OF 32" THROUGHOUT THE WALL. ALL VERTICAL REINFORCEMENT INCLUDING, BUT NOT LIMITED TO JAMBS, COLUMNS, AND WALL REINFORCING SHALL BE DOWELED INTO AND
- UNLESS SPECIFICALLY DETAILED OTHERWISE b. HORIZONTAL: (2) #4 BARS IN 8" DEEP "H" BLOCK BOND BEAM UNITS AT 48"O.C. AND AT FLOORS, ROOF AND TOP OF WALL. BOND BEAMS AT ROOF
- 8. PROVIDE (1) #5 (MINIMUM), IN GROUTED SPACE, ON ALL SIDES AND ADJACENT TO EVERY OPENING WHICH EXCEEDS 24" IN EITHER DIRECTION. HORIZONTAL BARS SHALL EXTEND 24" BEYOND THE CORNERS OF THE OPENING AND VERTICAL BARS SHALL EXTEND TO TOP OF WALL. VERTICAL REINFORCING SHALL BE PROVIDED AT ENDS, CORNERS AND EACH SIDE OF CONTROL JOINTS. SEE TYPICAL DETAILS FOR OPENINGS WHICH EXCEED 32"
- 9. SOLID GROUTING OF MASONRY IS UNACCEPTABLE EXCEPT AS SPECIFICALLY
- 10. WHERE WALLS ARE NOT GROUTED SOLID, EACH GROUT POUR SHALL TERMINATE FLUSH WITH THE TOP OF THE UPPERMOST UNIT EXCEPT AT CELLS WITH VERTICAL REINFORCING WHERE GROUT SHALL BE 1-1/2" BELOW TOP OF UNIT TO PROVIDE CONSTRUCTION KEY. WHERE WALLS ARE GROUTED SOLID, EACH GROUT POUR SHALL TERMINATE 1-1/2" BELOW TOP
- PROCEDURES ARE FOLLOWED.

- ALL HOLLOW MASONRY UNITS SHALL CONFORM TO ASTM C-90. MINIMUM UNIT STRENGTH 2,000 PSI (TESTED IN ACCORDANCE WITH ASTM
- GROUT. MECHANICALLY VIBRATE ALL GROUT. OTHER GROUT STOP MATERIALS SUCH AS ASPHALT IMPREGNATED
- MATERIALS ARE NOT PERMITTED. MORTAR SHALL BE TYPE S AND SHALL CONFORM TO ASTM C 270.
- UNLESS NOTED OTHERWISE, MINIMUM REINFORCING IN ALL 8" MASONRY WALLS SHALL BE AS FOLLOWS:
- THROUGH THE FOUNDATION WALL AND INTO THE FOOTING BELOW
- WILL SLOPE TO MATCH SLOPING ROOF.
- ALL BLOCK CELLS CONTAINING REINFORCING, BOLTS, OR ANCHORS SHALL BE GROUTED SOLID.
- IN EITHER DIRECTION.
- NOTED ON PLANS AND SCHEDULES.
- 11. GROUT POURS SHALL NOT EXCEED 5'-0" UNLESS HIGH LIFT GROUTING

FC2 | 2'-0" | CONT. | 3'-0" 3'-0" #5 (3) #5 12" #5 **REINF. TOP AND BOTTOM** 3" CLEAR TYPICAL FOOTING REINFORCING TYP. FOOTING SECTION TYP. FOOTING SECTION W/TOP & BOTTOM REINF

FOOTING SCHEDULE

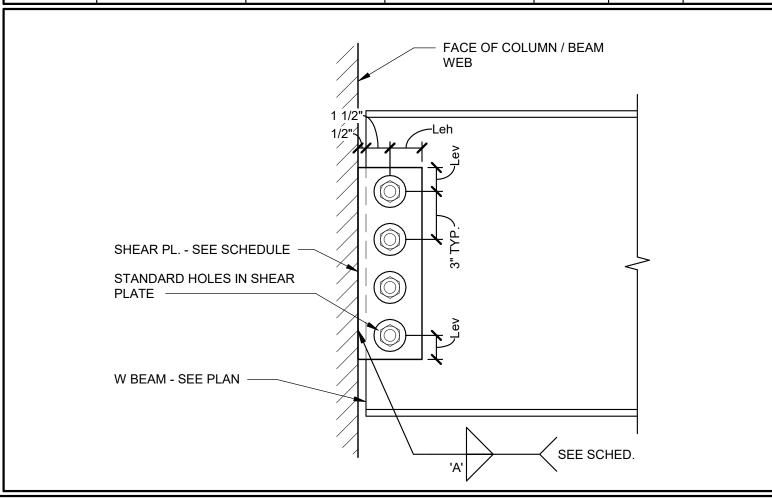
SIZE

MARK | WIDTH | LENGTH | THICK

LENGTHWISE REINF. CROSSWISE REINF.

# BEAM CONNECTION SCHEDULE

	SHEAF	R PLATE INFORMATION	ON	BOLTS W/	STANDARD	
BEAM DEPTH	PL. DIMENSIONS W/ STANDARD	Lev	Leh		HERS	WELD 'A'
	HOLES			No.	SIZE	
W8, W10	PL. 1/4" x 4"	1 1/2"	2"	2	3/4" Ø	3/16"
W12, W14	PL. 5/16" x 4"	1 1/2"	2"	3	3/4" Ø	1/4"
W16	PL. 5/16" x 4"	1 1/2"	2"	4	3/4" Ø	1/4"
W18	PL. 5/16" x 4"	1 1/2"	2"	5	3/4" Ø	1/4"
W21	PL. 5/16" x 4"	1 1/2"	2"	6	3/4" Ø	1/4"
W24	PL. 3/8" x 4"	1 1/2"	2"	7	7/8" Ø	1/4"



- 12. THE USE OF HIGH LIFT GROUTING PROCEDURES REQUIRE THE APPROVAL OF THE ARCHITECT AND ENGINEER AND SHALL NOT EXCEED THE MAXIMUM HEIGHTS GIVEN IN TABLE 3.2.1 OF TMS 402-16. GROUT DEMONSTRATION PANELS, AS PRESCRIBED BY THE ARCHITECT AND ENGINEER, SHALL BE REQUIRED WHERE REQUESTED GROUTING PROCEDURES DO NOT MEET THE LIMITS OF TABLE 3.2.1. ADDITIONALLY, ALL HIGH LIFT GROUTING SHALL REQUIRE SPECIAL INSPECTION PROCEDURES NEEDED TO VERIFY GROUT PLACEMENT DURING CONSTRUCTION. DURING THE SUBMITTAL FOR APPROVAL PROCESS, SUBMITTAL SHALL INCLUDE, BUT NOT BE LIMITED TO: STATEMENT OF PROCEDURE FOR MECHANICAL VIBRATION OF HIGH LIFT GROUT; NEW MIX DESIGNS FOR HIGH SLUMP, HIGH LIFT GROUT; FOR SELF-CONSOLIDATING GROUT, SUBMIT MIX DESIGNS, SLUMP FLOW RATES, VISUAL STABILITY INDEX (VSI), AND QUANTITIES OF ADMIXTURES BEING USED. SUPPORT NON-BEARING, NON-STRUCTURAL WALLS AT TOP OF MASONRY AS PER TYPICAL DETAILS AT LOCATIONS WHERE INTERSECTING OR PERPENDICULAR WALLS ARE 12'-0" OR MORE APART OR WHERE END OF WALL OCCURS 6'-0" OR MORE FROM INTERSECTING WALL
- 13. EMBED CHANNELS AND PLATES TO BE PLACED SO AS TO CREATE FLUSH SURFACE WITH FACE OF MASONRY. FLANGES ON CHANNEL EMBEDS SHALL BE HORIZONTAL
- 14. ALL VERTICAL REINFORCING SHALL BE SECURED IN PLACE PRIOR TO GROUTING USING WIRE POSITIONERS OR OTHER ACCEPTABLE DEVICES. REINFORCING SHALL BE SECURED AT BAR-SPLICE LOCATIONS AND AT A SPACING NOT MORE THAN 120 BAR

15. UNLESS NOTED OTHERWISE, MASONRY WALLS SHALL BE CONSTRUCTED UTILIZING

- COMMON RUNNING-BOND WITH FULLY MORTARED BED JOINTS AROUND GROUTED 16. ELECTRICAL CONDUIT SHALL NOT BE PLACED IN CELLS THAT CONTAIN REBAR. CONDUIT IS ALLOWED TO PASS THROUGH REINFORCED CELLS WHEN IT OCCURS PERPENDICULAR TO THE REBAR. CONDUIT SHALL NOT CONTACT REBAR AS IT PASSES.
- 17. ALL MASONRY BELOW GRADE SHALL HAVE ONE END WEB REMOVED FROM EACH UNIT AND THE MASONRY SHALL BE GROUTED SOLID UP TO FINISHED GRADE OR FINISHED FLOOR, WHICHEVER IS HIGHER. SEE TYPICAL DETAIL FOR MORE INFORMATION.

THERE SHALL BE 1" CLEAR BETWEEN CONDUIT AND REBAR.

F SHEET IS LESS THAN 22"x 34" IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

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## STRUCTURAL STEEL SPECIAL INSPECTION SCHEDULE

ESTABLISHED PER 2018 IBC SECTION 1705.2.1

INSPECTION TASKS PRIOR TO WELDING (TABLE N5.4-1)	FABRICA QUALITY CO		SPECIAL INS		NOTES
,	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC	
WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	•			•	
WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE	•		•		
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	•		•		<ol> <li>PERIODIC - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE</li> </ol>
MATERIAL IDENTIFICATION (TYPE / GRADE)		•		•	INSPECTIONS.
WELDER IDENTIFICATION SYSTEM <sup>1</sup>		•		•	<ol><li>CONTINUOUS - PERFORM THESE TASKS FOR EACH WELDED J OR MEMBER.</li></ol>
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY)					3. QUALITY CONTROL (QC) SHALL BE PROVIDED BY THE FABRICA
* JOINT PREPARATION					AND ERECTOR. 4. QUALITY ASSURANCE (QA) SHALL BE PROVIDED BY OTHERS V
* DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)					REQUIRED BY THE AUTHORITY HAVING JURISDICTION (AHJ),
* CLEANLINESS (CONDITION OF STEEL SURFACES)		•		•	APPLICABLE BUILDING CODE (ABC), PURCHASER, OWNER, OR ENGINEER OF RECORD (EOR). NONDESTRUCTIVE TESTING (N
* TACKING (TACK WELD QUALITY AND LOCATION)					SHALL BE PERFORMED BY THE AGENCY OR FIRM RESPONSIB
* BACKING TYPE AND FIT (IF APPLICABLE)					FOR QUALITY ASSURANCE, EXCEPT AS PERMITTED IN ACCORDANCE WITH SECTION N6.
FIT-UP OF CJP GROOVE WELDS OFHSS T-, Y-, AND K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY)					<ul> <li>QC AND QA INSPECTORS SHALL BE QUALIFIED IN ACCORDANGE</li> <li>WITH AISC 360-16 CHAPTER N4.</li> <li>NONDESTRUCTIVE TESTING PERSONNEL SHALL BE QUALIFIED</li> </ul>
* JOINT PREPARATIONS					ACCORDANCE WITH AISC 360-16 CHAPTER N4.3.
* DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)	•			•	<ol> <li>NONDESTRUCTIVE TESTING OF WELDED JOINTS SHALL COMF WITH AISC 360-16 CHAPTER N5.5a AND b.</li> </ol>
* CLEANLINESS (CONDITION OF STEEL SURFACES)					8. OBSERVATION OF WELDING OPERATIONS AND VISUAL INSPEC
* TACKING (TACK WELD QUALITY AND LOCATION)					OF IN-PROCESS AND COMPLETED WELDS SHALL BE THE PRIM METHOD TO CONFIRM THAT THE MATERIALS, PROCEDURES A
CONFIGURATION AND FINISH OF ACCESS HOLES		•		•	WORKMANSHIP ARE IN CONFORMANCE WITH THE CONSTRUC
FIT-UP OF FILLET WELDS		-			DOCUMENTS. FOR STRUCTURAL STEEL, ALL PROVISIONS OF D1.1 / D1.1M STRUCTURAL WELDING CODE - STEEL FOR
* DIMENSIONS (ALIGNMENT, GAPS AT ROOT)					STATICALLY LOADED STRUCTURES SHALL APPLY.  9. THERMALLY CUT SURFACES OF ACCESS HOLES SHALL BE TE
* CLEANLINESS (CONDITION OF STEEL SURFACES)		•		•	BY QA USING MT OR PT, WHEN THE FLANGE THICKNESS EXCE
* TACKING (TACK WELD QUALITY AND LOCATION)					2 IN. (50mm) FOR ROLLED SHAPES, OR WHEN THE WEB THICK EXCEEDS 2 IN. (50mm) FOR BUILT-UP SHAPES. ANY CRACK SH
CHECK WELDING EQUIPMENT		•			BE DEEMED UNACCEPTABLE REGARDLESS OF SIZE OR LOCA
<sup>1</sup> THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE THE LOW			I IO HAS WELDEL	) A	10. WHEN REQUIRED BY APPENDIX 3, TABLE A-3.1, WELDED JOIN REQUIRING WELD SOUNDNESS TO BE ESTABLISHED BY RADIOGRAPHICS OR ULTRASONIC INSPECTION SHALL BE TES BY QA AS PRESCRIBED. REDUCTION IN THE RATE OF UT IS
INSPECTION TASKS DURING WELDING (TABLE N5.4-2)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC	PROHIBITED.
CONTROL AND HANDLING OF WELDING CONSUMABLES					11. REDUCTION OF RATE OF ULTRASONIC TESTING - THE RATE O IS ONLY PERMITTED TO BE REDUCED IF APPROVED BY THE E
					AND THE ALL DED AND ON 10 CHAPTED ALS

NSPECTION TASKS DURING WELDING (TABLE N5.4-2)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODI
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	•		•	
NSPECTION TASKS AFTER WELDING (TABLE N5.4-3)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODI
WELDS CLEANED		•		•
SIZE, LENGTH AND LOCATION OF WELDS	•		•	
WELDS MEET VISUAL ACCEPTANCE CRITERIA				
* CRACK PROHIBITION				
* WELD / BASE-METAL FUSION				
* CRATER CROSS SECTION				
* WELD PROFILES	•		•	
* WELD SIZE				
* UNDERCUT				
* POROSITY				
ARC STRIKES	•		•	
K-AREA <sup>1</sup>				

1WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA,

<sup>2</sup>AFTER ROLLED HEAVY SHAPES (SEE SECTION A3.1c) AND BUILT-UP HEAVY SHAPES (SEE SECTION A3.1d) ARE WELDED,

IC		NOTES
	1.	PERIODIC - OBSERVE THESE ITEMS ON A RANDOM BASIS.
		OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
	2.	CONTINUOUS - PERFORM THESE TASKS FOR EACH WELDED JOINT
		OR MEMBER.
	3.	QUALITY CONTROL (QC) SHALL BE PROVIDED BY THE FABRICATOR
	4.	AND ERECTOR.  QUALITY ASSURANCE (QA) SHALL BE PROVIDED BY OTHERS WHEN
	-T.	REQUIRED BY THE AUTHORITY HAVING JURISDICTION (AHJ),
		APPLICABLE BUILDING CODE (ABC), PURCHASER, OWNER, OR
		ENGINEER OF RECORD (EOR). NONDESTRUCTIVE TESTING (NDT) SHALL BE PERFORMED BY THE AGENCY OR FIRM RESPONSIBLE
		FOR QUALITY ASSURANCE, EXCEPT AS PERMITTED IN
		ACCORDANCE WITH SECTION N6.
	5.	QC AND QA INSPECTORS SHALL BE QUALIFIED IN ACCORDANCE
	6.	WITH AISC 360-16 CHAPTER N4.  NONDESTRUCTIVE TESTING PERSONNEL SHALL BE QUALIFIED IN
	0.	ACCORDANCE WITH AISC 360-16 CHAPTER N4.3.
	7.	NONDESTRUCTIVE TESTING OF WELDED JOINTS SHALL COMPLY
		WITH AISC 360-16 CHAPTER N5.5a AND b. OBSERVATION OF WELDING OPERATIONS AND VISUAL INSPECTION
	8.	OF IN-PROCESS AND COMPLETED WELDS SHALL BE THE PRIMARY
		METHOD TO CONFIRM THAT THE MATERIALS, PROCEDURES AND
		WORKMANSHIP ARE IN CONFORMANCE WITH THE CONSTRUCTION
		DOCUMENTS. FOR STRUCTURAL STEEL, ALL PROVISIONS OF AWS D1.1 / D1.1M STRUCTURAL WELDING CODE - STEEL FOR
		STATICALLY LOADED STRUCTURES SHALL APPLY.
	9.	THERMALLY CUT SURFACES OF ACCESS HOLES SHALL BE TESTED
		BY QA USING MT OR PT, WHEN THE FLANGE THICKNESS EXCEEDS
		2 IN. (50mm) FOR ROLLED SHAPES, OR WHEN THE WEB THICKNESS EXCEEDS 2 IN. (50mm) FOR BUILT-UP SHAPES. ANY CRACK SHALL
		BE DEEMED UNACCEPTABLE REGARDLESS OF SIZE OR LOCATION.
-	10.	WHEN REQUIRED BY APPENDIX 3, TABLE A-3.1, WELDED JOINTS
		REQUIRING WELD SOUNDNESS TO BE ESTABLISHED BY RADIOGRAPHICS OR ULTRASONIC INSPECTION SHALL BE TESTED
	ĺ	RADIOGRAPHICO UK ULTRAOUNIC INOPECTION SHALL BE TESTED

REDUCTION OF RATE OF ULTRASONIC TESTING - THE RATE OF UT IS ONLY PERMITTED TO BE REDUCED IF APPROVED BY THE EOR AND THE AHJ PER AISC 360-16 CHAPTER N5.5e. 12. FOR STRUCTURES IN RISK CATEGORY II, WHERE THE INITIAL RATE FOR UT IS 10%, THE NDT RATE FOR AN INDIVIDUAL WELDER OR WELDING OPERATOR SHALL BE INCREASED TO 100% SHOULD THE REJECT RATE, THE NUMBER OF WELDS CONTAINING 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 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 IN. (300mm) INCREMENT OR FRACTION THEREOF SHALL BE 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. (150mm) OF LENGTH OR FRACTION THEREOF SHALL BE CONSIDERED ON WELD.

13. ALL NDT PERFORMED SHALL BE DOCUMENTED. FOR SHOP 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 LOCATION IN THE STRUCTURE, PIECE MARK, AND LOCATION IN THE PIECE. WHEN A WELD IS REJECTED ON THE BASIS OF NDT, THE NDT RECORD SHALL INDICATE THE LOCATION OF THE DEFECT AND THE BASIS OF REJECTION 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

PREHEAT AND INTER-PASS REQUIREMENTS AS OUTLINED IN SECTION 3.5. UNREPAIRED CRACKS, GOUGES, AND NOTCHES WILL NOT BE

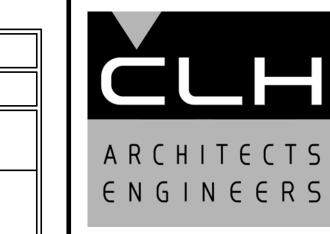
PERMITTED IN THE JOINT AREA. d. USE ELECTRODES WITH CHARPY V-NOTCH ABSORBED ENERGY EQUAL TO OR GREATER THAN 20 FT-LBS AT 20 DEGREES FAHRENHEIT UNDER AWS A5 CLASSIFICATION TEST METHODS, AND 40 FT-LBS AT 70 DEGREES FAHRENHEIT USING TEST PROCEDURES PRESCRIBED IN APPENDIX X OF AISC 358. ACCEPTABLE ELECTRODES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

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.
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
PROPER BOLTING PROCEDURES SELECTED FOR JOINT DETAIL		•		•	AND ERECTOR.
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)
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.
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
INSPECTION TASKS DURING BOLTING (TABLE N5.6-2)	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC	NOT APPLICABLE. THE QCI AND QAI NEED NOT BE PRESENT  DURING THE INSTALLATION OF FASTENERS IN SNUG-TIGHT JOINTS.
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
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
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.
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
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
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 AND WORKMANSHIP INCORPORATED IN CONSTRUCTION ARE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND THE PROVISIONS OF THE RCSC SPECIFICATION.
				<u> </u>	

## **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 REQUIRED.
- 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.
- 8. 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. 10. NONCONFORMING MATERIAL OR WORKMANSHIP SHALL BE BROUGHT INTO CONFORMANCE, OR MADE SUITABLE FOR ITS INTENDED PURPOSE AS DETERMINED BY THE ENGINEER OF RECORD.
- 11. 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.



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Not For Construction

S. Porter

2020.11.20

**SCHEDULES** 

SHEET NO:

CHK'D BY:

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REPAIR ACTIVITIES

APPROVAL OF THE EOR

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BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)

NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE

VISUALLY INSPECT THE WELD ACCESS HOLE FOR CRACKS.

DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER

VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 IN. (75mm) OF THE WELD)

SHEET TITLE

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95%

ENGINEERS

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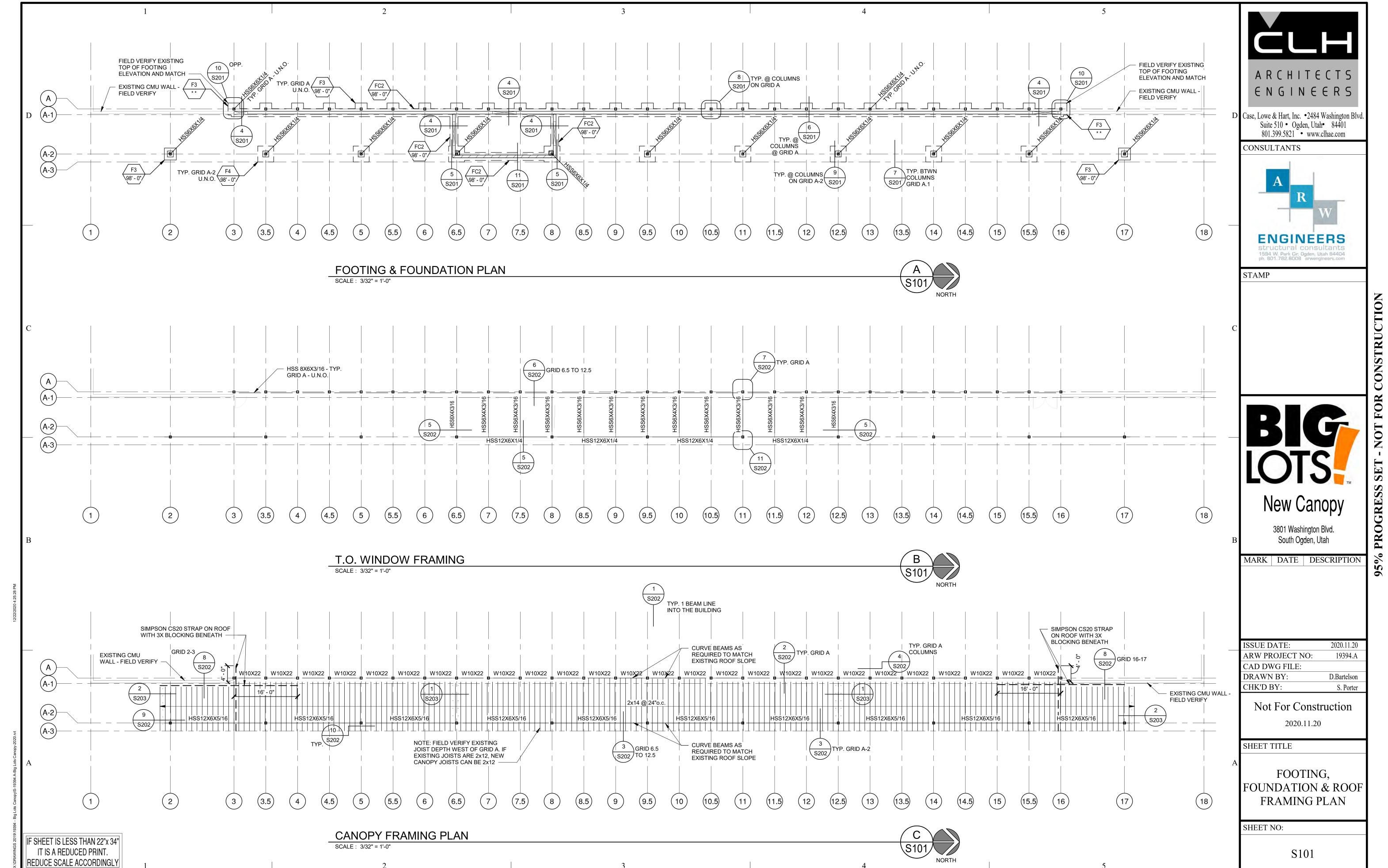
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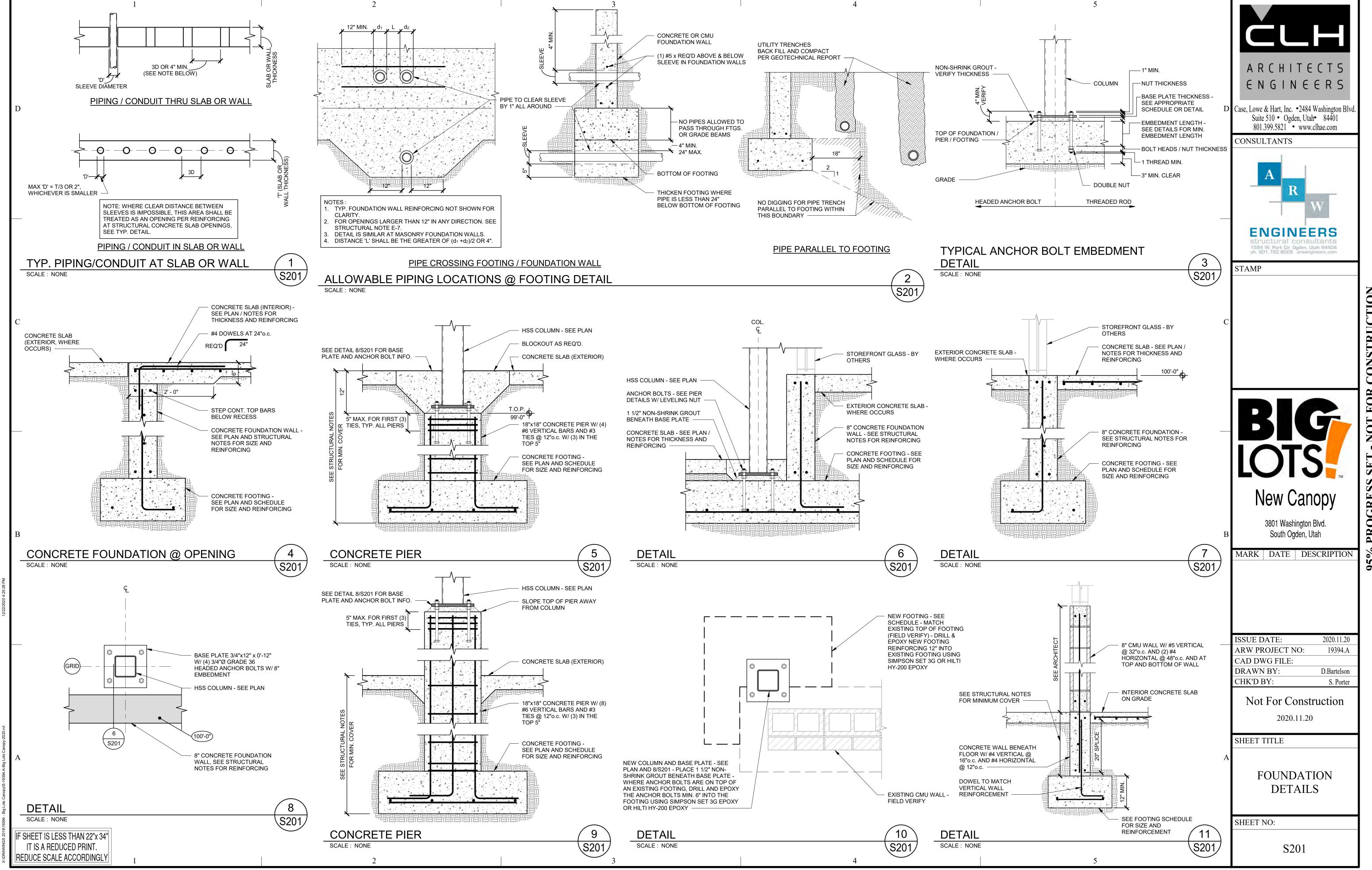
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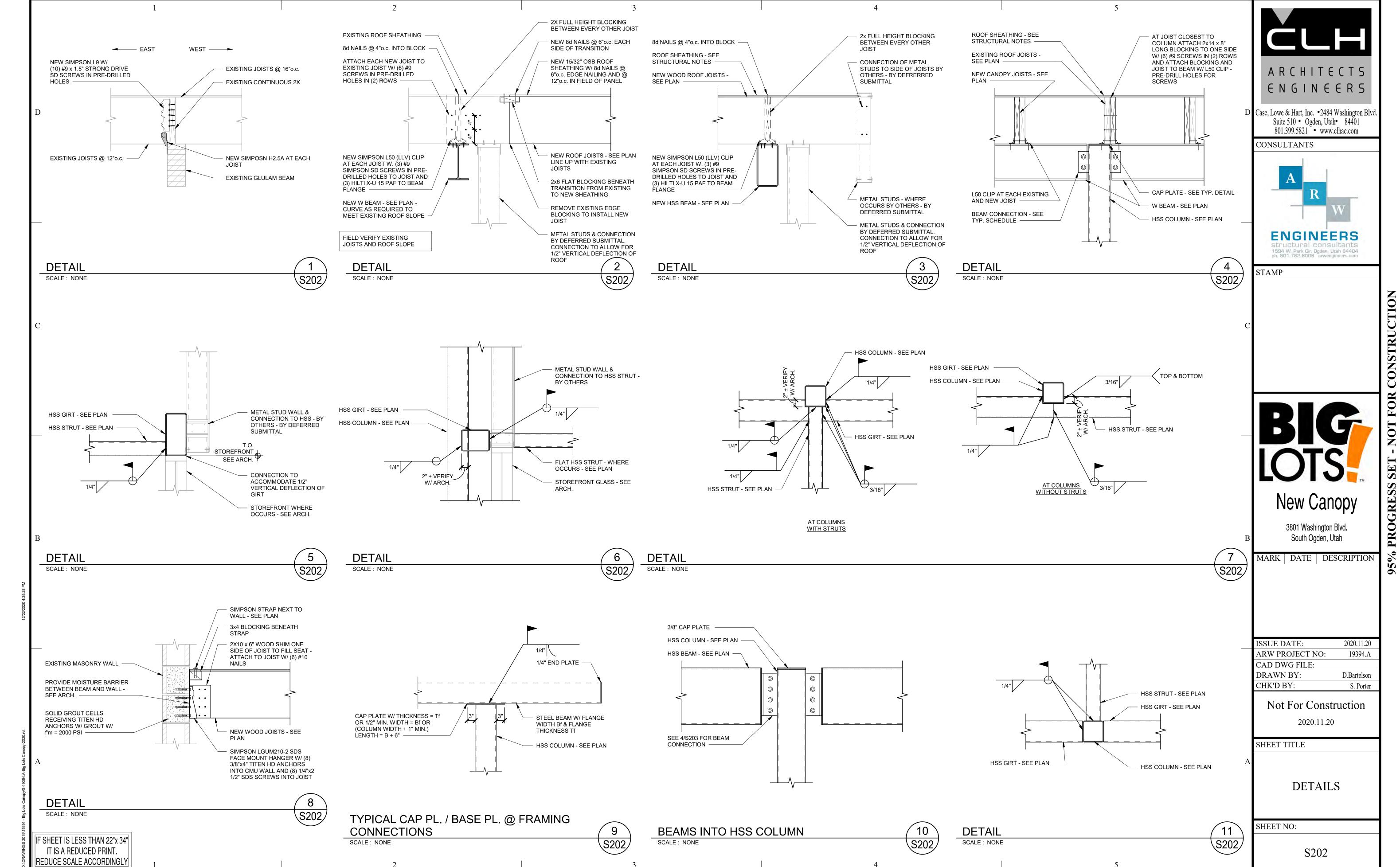
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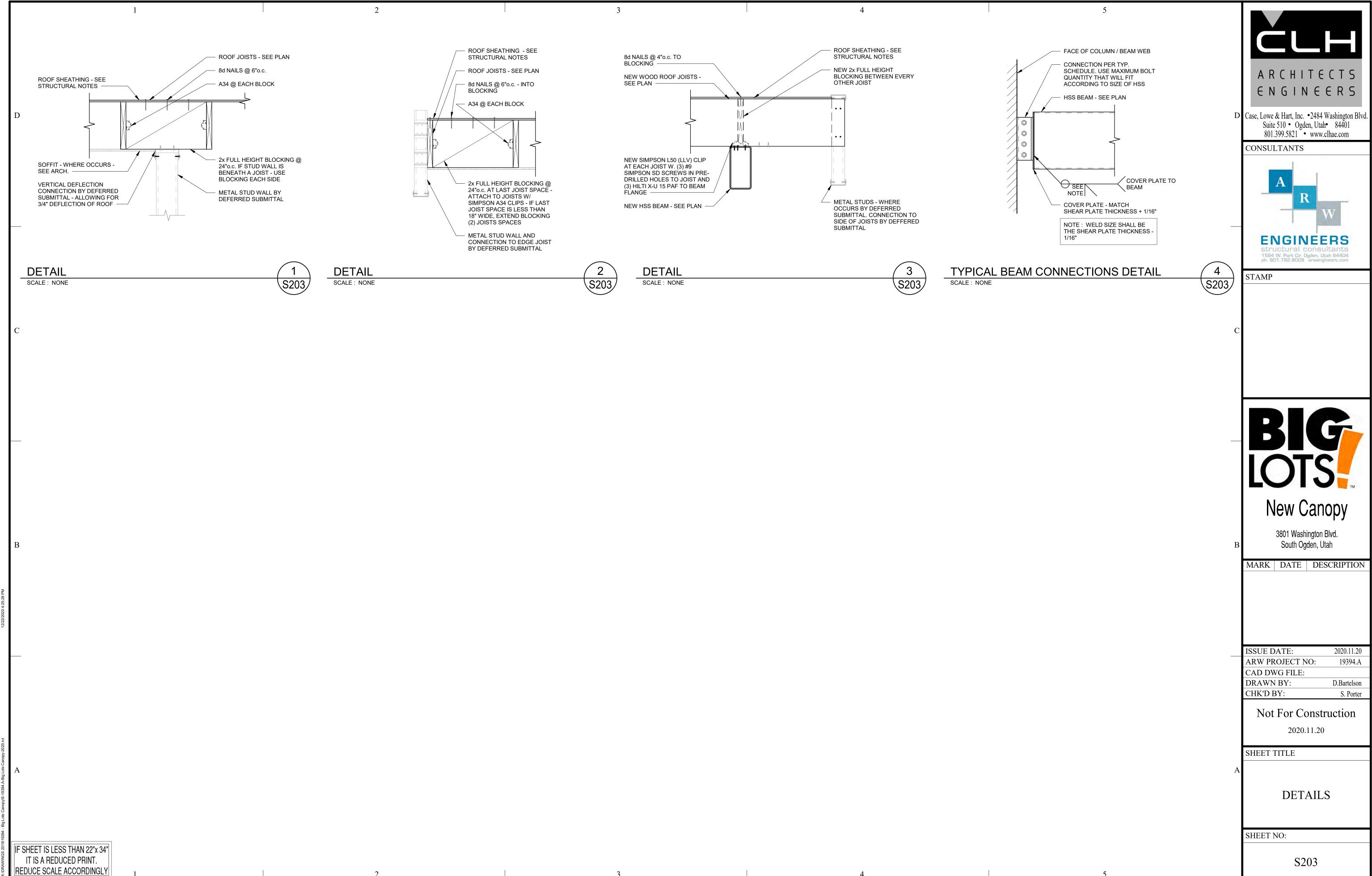
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NOTE: THIS VIEW REPRESENTS A SCHEMATIC SPECIFIC NOTES AND DETAILS WITHIN THE STRUCTURAL DRAWINGS.

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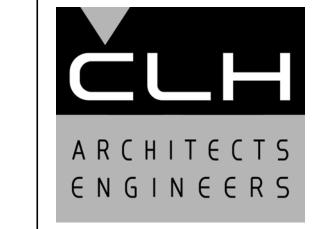
## ARCHITECTURAL NOTES

- 1. THE ARCHITECTURAL DRAWINGS ARE THE PRIMARY CONTRACT DOCUMENTS.
  ANY CONFLICTS BETWEEN ARCHITECTURAL DRAWINGS AND EXISTING
  CONDITIONS AND/OR DRAWINGS OF OTHER DISCIPLINES SHALL BE IMMEDIATELY
  REPORTED TO THE ARCHITECT.
- 2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO AY WORK. ITEMS AND DIMENSIONS BETWEEN EXISTING AND NEW PORTIONS OF THE PROJECT SHALL BE VERIFIED TO ENSURE COORDINATION.
- 3. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES OR MODIFICATIONS OF THE CONTRACT DOCUMENTS, IN WRITING, TO THE ARCHITECT BEFORE PROCEEDING WITH ANY ACTION.
- 4. WHERE SPECIFIC DETAILS ARE NOT PROVIDED, TYPICAL OR SIMILAR INDUSTRY STANDARD DETAILS SHALL APPLY. IF FURTHER DETAIL IS REQUIRED CONTACT ARCHITECT.
- 5. DETAILS ARE PROVIDED FOR VISUAL REPRESENTATION OF DESIGN INTENT. OFTEN THE DETAILS ARE BASED ON A BASIS-OF-DESIGN PRODUCT AND/OR MATERIAL AND MAY BE DIAGRAMMATIC IN NATURE.
- 6. IF A DIFFERENT PRODUCT OR MATERIAL FROM THAT INDICATED ON THE DRAWINGS OR SPECIFICATIONS IS SUBSTITUTED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALTERNATE DETAILS AS REQUIRED FOR THE ARCHITECT TO REVIEW.
- GENERALLY, DIMENSIONS SHOWN OF ARCHITECTURAL DRAWINGS ARE TAKEN FROM THE CORE STRUCTURE FACE (IE. CONCRETE WALL=FACE OF WALL; STUD WALL=FACE OF STUD).
- ANY ADDITIONAL BLOCKING, BRACING, TRIM, FLASHING, SEALANTS, ETC. REQUIRED FOR INSTALLATION OF COMPLETE SYSTEMS\_ PERTAINING TO DOORS, WINDOWS, OPENINGS, PENETRATIONS, ETC. ARE EXPECTED TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
- ASSUME ALL GYP. BD. WALLS TO HAVE TOPSET RUBBER BASE INSTALLED UNLESS NOTED OTHERWISE.
- PROVIDE SEALANT OR TRIM AS APPROPRIATE WHERE DISSIMILAR MATERIALS COME IN CONTACT.
- PROVIDE FLOORING TRANSITION WHERE DISSIMILAR FLOORING MATERIALS 12. OCCUR.

PAINT ALL MISCELLANEOUS SURFACES, SUPPORTS, METALS, ETC. IF PERMANENTLY ATTACHED TO PAINTED SURFACE OR EXPOSED TO THE ELEMENTS.

SYMBOLS	
View Name  1/8" = 1'-0"	VIEW TITLE
0 1" 2"	GRAPHIC SCALE
	NORTH ARROW w/ TRUE NORTH
0	GRID INDICATOR
SIM A101	SECTION CALLOUT
1 SIM	DETAIL CALLOUT
1 SIM A101	DETAIL CALLOUT
1 A101 TO 1	ELEVATION CALLOUT
Name Elevation	LEVEL / ELEVATION CALLOUT
100'-0"	SPOT ELEVATION CALLOUT
1:12	ROOF SLOPE INDICATOR
Room name 101	ROOM TAG
101A	DOOR TAG
А	WALL TAG
1t	WINDOW TAG
A	DEMOLITION KEYNOTE
Æ	FIRE RISER

		ABBREVIA	TIONS	
	& L @ #	AND ANGLE AT POUND OR NUMBER	JAN JST JT	JANITOR JOIST JOINT
	AC A.F.F. ALUM APPROX ARCH ASPH	ACOUSTICAL ABOVE FINISH FLOOR ALUMINUM APPROXIMATE ARCHITECTURAL ASPHALT	LAM LAV MAX MAS	KNOCK OUT  LAMINATE LAVATORY  MAXIMUM MASONRY
	BD BITUM BLDG BLKG BRG BTM	BOARD BITUMINOUS BUILDING BLOCKING BEARING BOTTOM	MECH MEMB MTL MFTR MH MIN MISC M.O.	MECHANICAL MEMBRANE METAL MANUFACTURER MANHOLE MINIMUM MISCELLANEOUS MASONRY OPENING
	C C.J. C.L. CLG CLR C.M.U. C.O. C.O.T.G. COL	TOP OF FINISH CONCRETE CAST IRON CONTROL JOINT CENTER LINE CEILING CLEAR CONCRETE MASONRY UNIT CLEAN OUT CLEAN OUT GRADE COLUMN CONCRETE	MTD  N N.I.C. NO or # NOM N.T.S.  O.C. O.D. OFF	MOUNTED  NORTH NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE  ON CENTER OUTSIDE DIAMETER (DIM) OFFICE
	CONN CONSTR CONT C.T. CTR	CONNECTION CONSTRUCTION CONTINUOUS CERAMIC TILE CENTER	OH OPNG OPP	OVERHEAD OPENING OPPOSITE PLATE
	D.C.W. D.H.W. D.F. DTL DIA DIM DISP	DOMESTIC COLD WATER DOMESTIC HOT WATER DRINKING FOUNTAIN DETAIL DIAMETER DIMENSION DISPENSER	PLAM PLYWD P.O.C. PNL PR PT	PLASTIC LAMINATE PLYWOOD POINT OF CONNECTION PANEL PAIR POINT
•	DN DRN DS DWG	DOWN DRAIN DOWNSPOUT DRAWING	RAD R.D. REF REINF	RADIUS ROOF DRAIN REFERENCE REINFORCED
	E EA E.I.F.S. E.J. EL ELEC ENGR EQ EQUIP (E) EXP	EAST EACH EXTERIOR INSULATION FINISH SYSTEM EXPANSION JOINT ELEVATION ELECTRICAL ENGINEER EQUAL EQUIPMENT EXISTING EXPANSION	REQD RESIL RFG RM RS R.O. S SCH SECT SHT	REQUIRED RESILIENT ROOFING ROOM RESINOUS FLOORING ROUGH OPENING  SOUTH SCHEDULE SECTION SHEET
	EXT F.A. F.D. FDN F.E. F.E.C. FIN FLR FLASH FLUOR F.O. F.R. FT FTG FUT	EXTERIOR  FIRE ALARM FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FINISH FLOOR FLASHING FLUORESCENT FACE OF FIRE RATED FOOR OR FEET FOOTING FUTURE	SIM SPECS SQ S.S. S.ST STD STL STOR STR SUSP SYM SYS  TLT TRTD T & B	SIMILAR SPECIFICATION SQUARE SANITARY SEWER STAINLESS STEEL STANDARD STEEL STORAGE STRUCTURAL SUSPENDED SYMMETRICAL SYSTEM  TOILET (ROOM) TREATED (PRESERVATIVE TOP & BOTTOM
	GA GALV GND GR G.W.B. GYP	GAUGE GALVANIZED GROUND GRADE GYPSUM WALL BOARD GYPSUM	T.O. TRANS TYP U.N.O. UT	TOP OF TRANSFORMER TYPICAL UNLESS NOTED OTHERWISE URINAL
	H.B. HC H.M. HORIZ HGT	HOSE BIBB HANDICAP HOLLOW METAL HORIZONTAL HEIGHT	VERT VEST W w/ WC	VERTICAL VESTIBULE  WEST WITH WATER CLOSET
	I.D. IN INSUL INT	INSIDE DIAMETER (DIM) INCH, INCHES INSULATION INTERIOR	WD W/O WP	WOOD WITHOUT WATERPROOF



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ISSUE DATE: 12/23/2020
PROJECT NO: 19060
CAD DWG FILE:
DRAWN BY: KDL

REVIEW SET

23 DEC 2020

SJP

SHEET TITLE

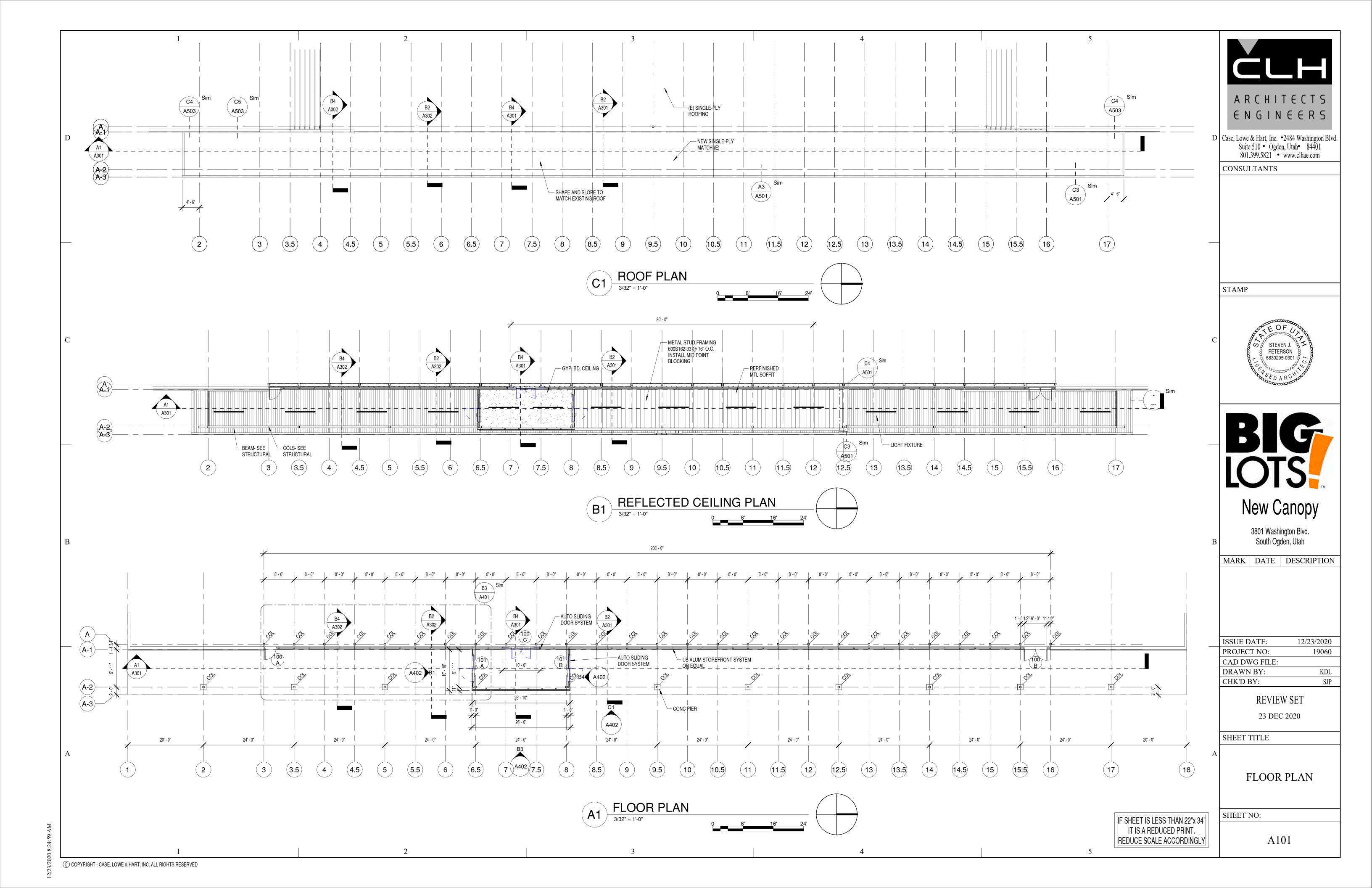
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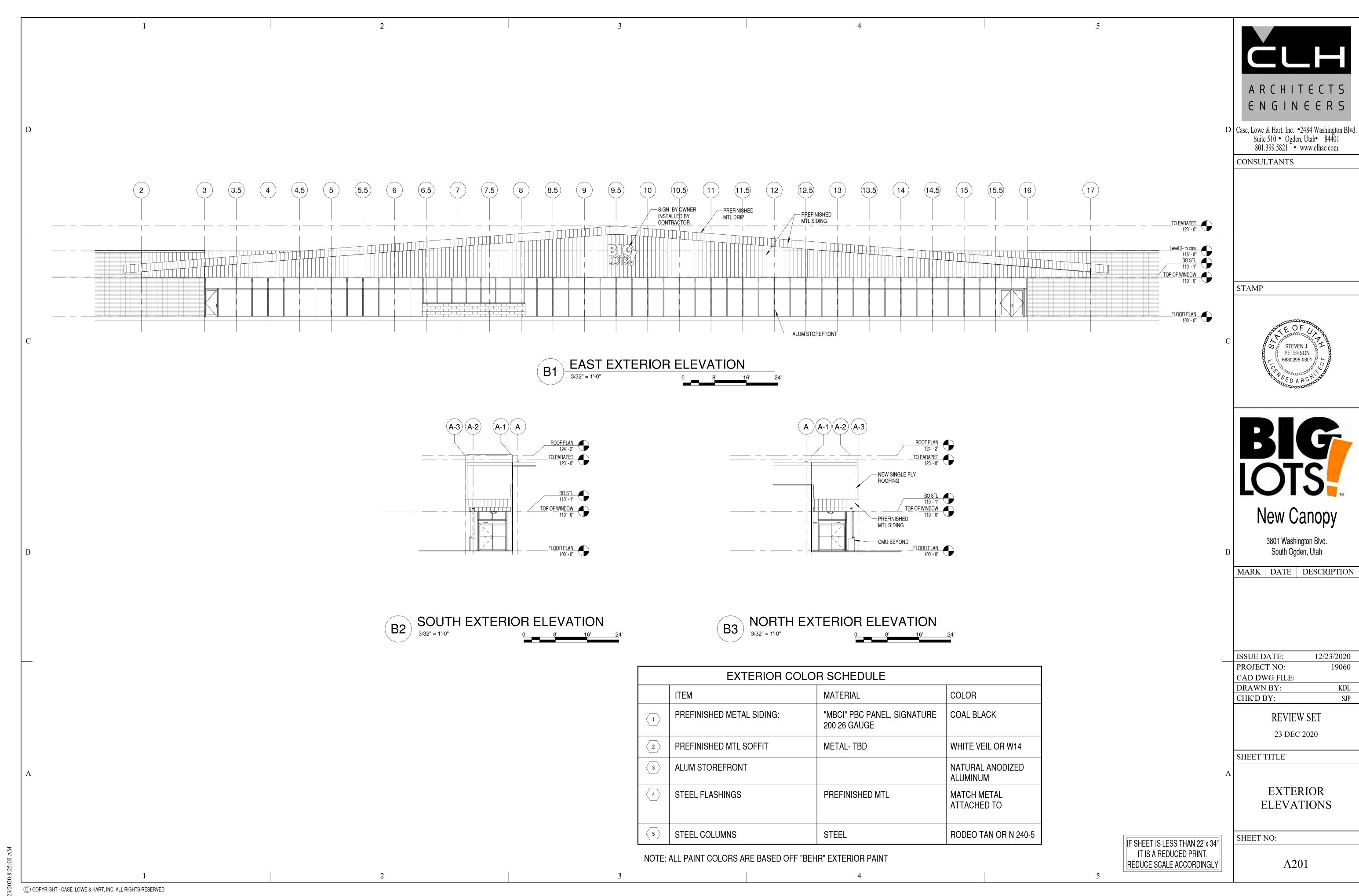
ARCHITECTURAL NOTES

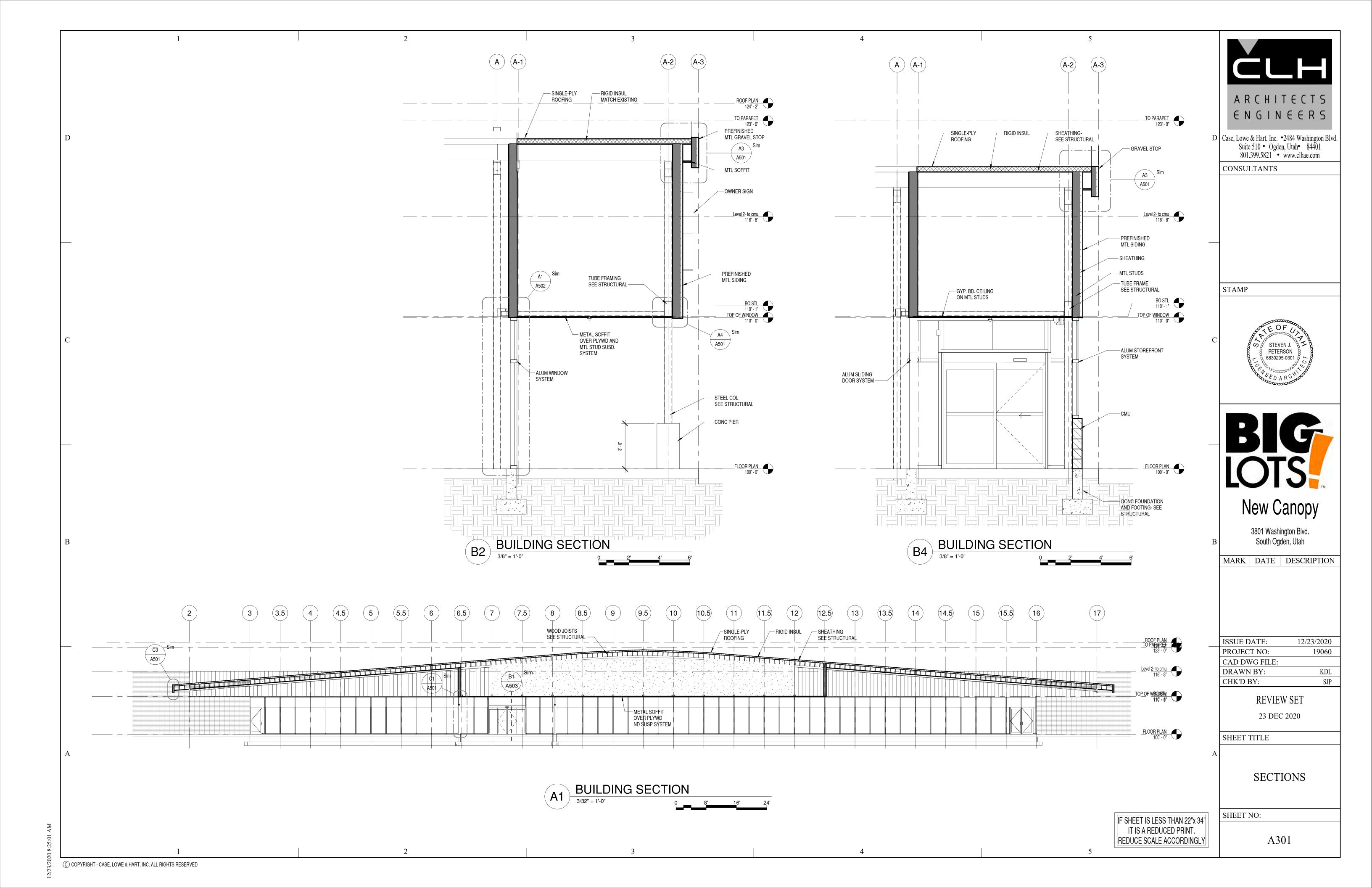
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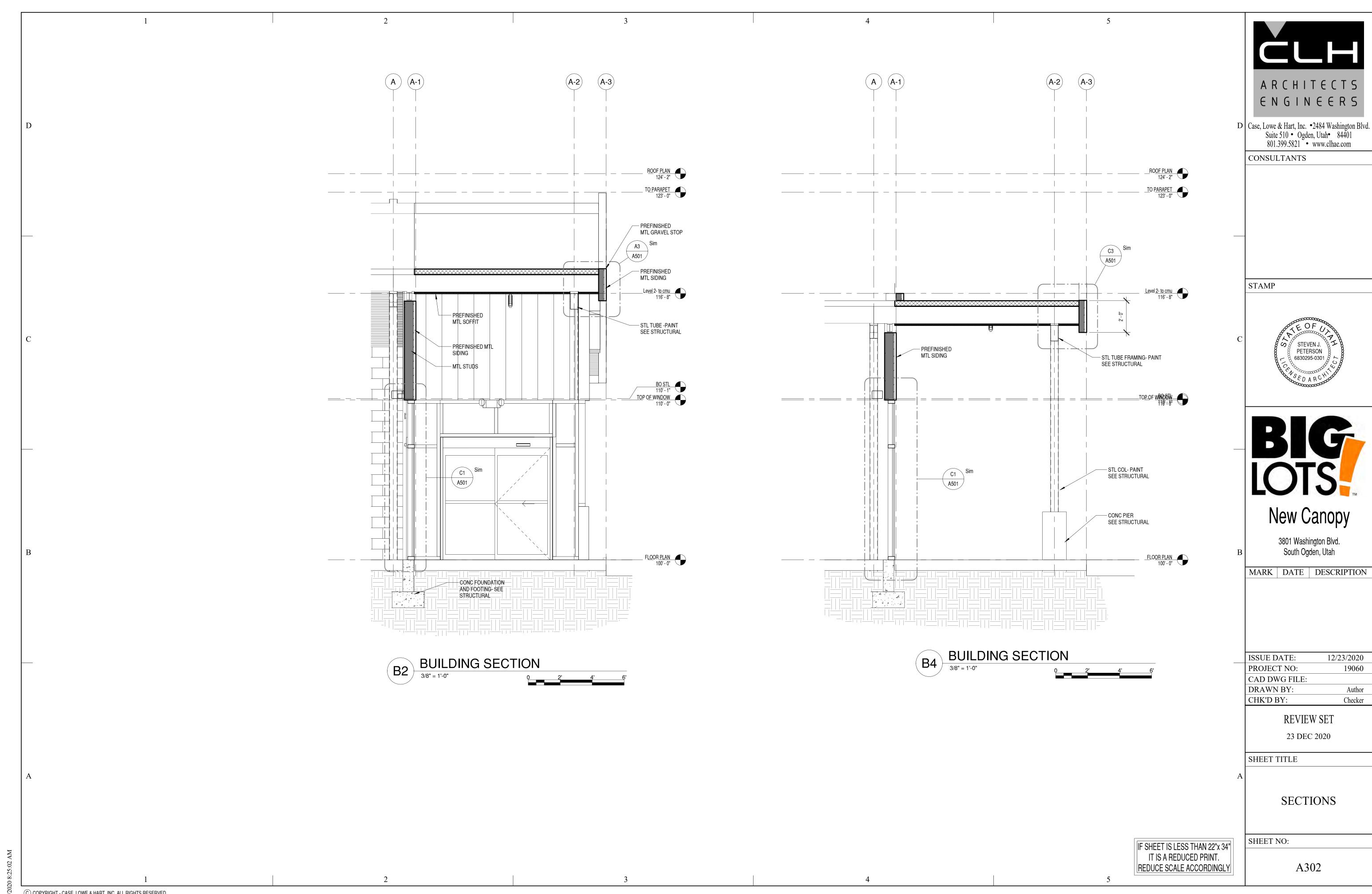
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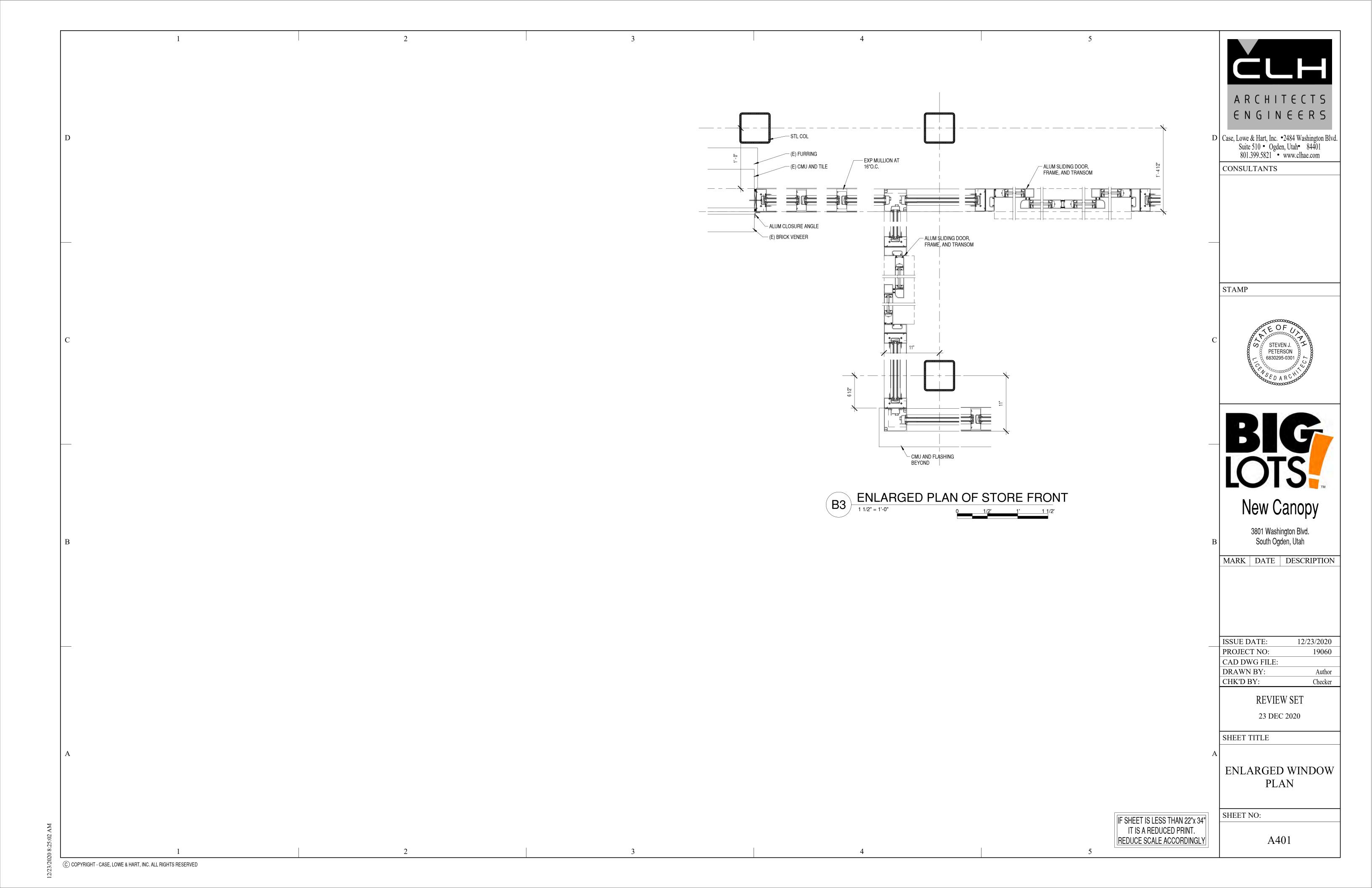


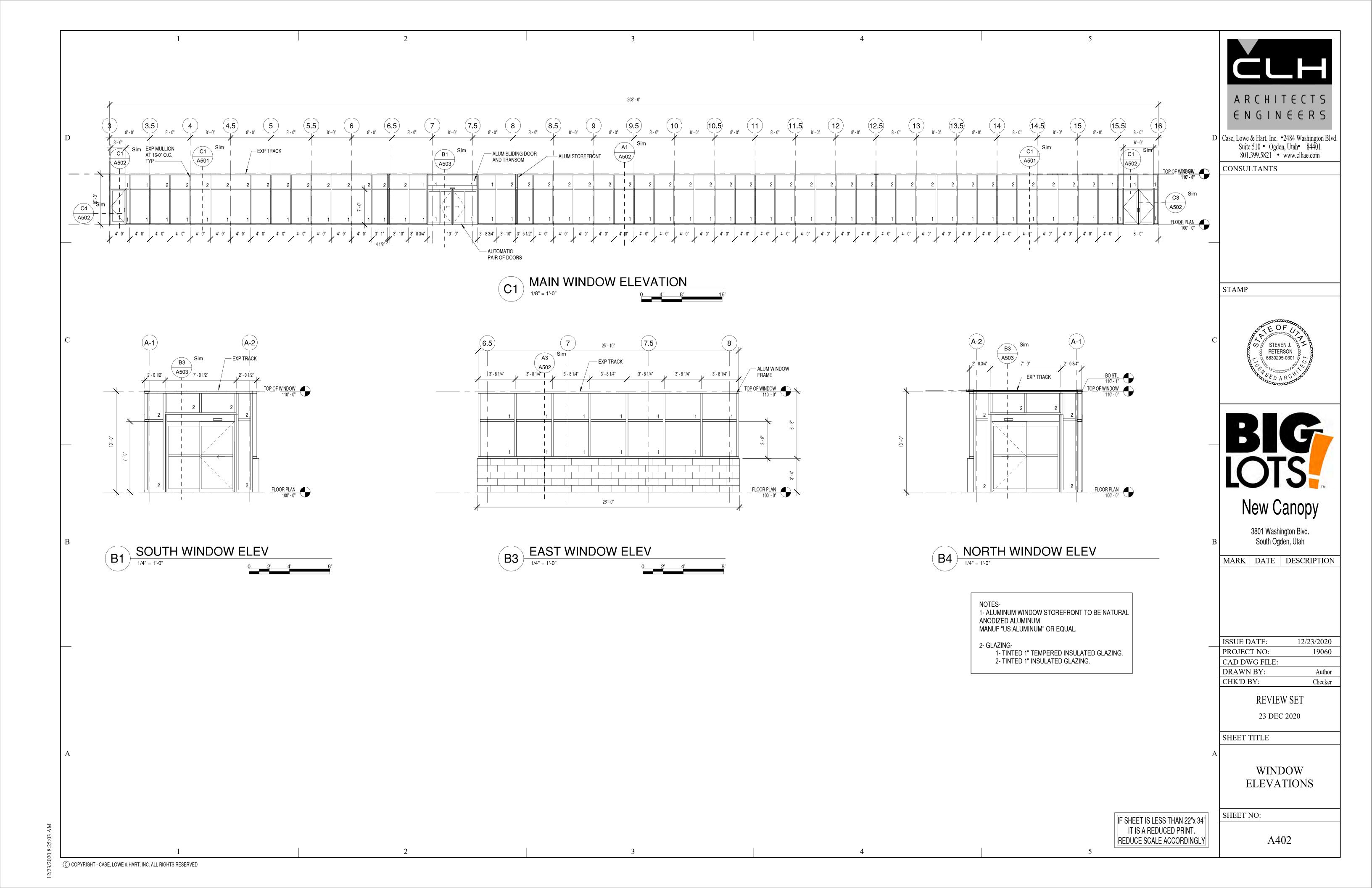


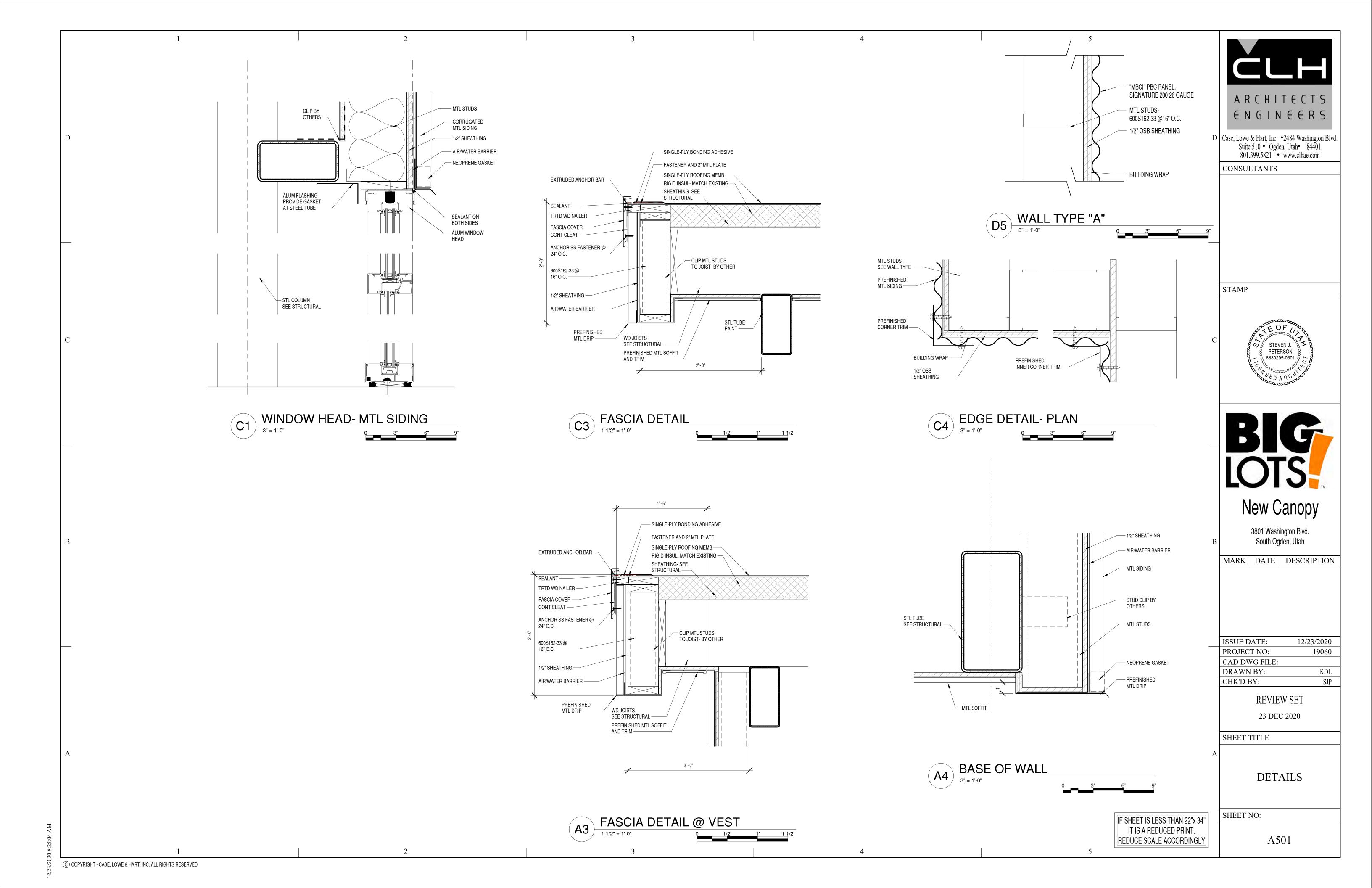


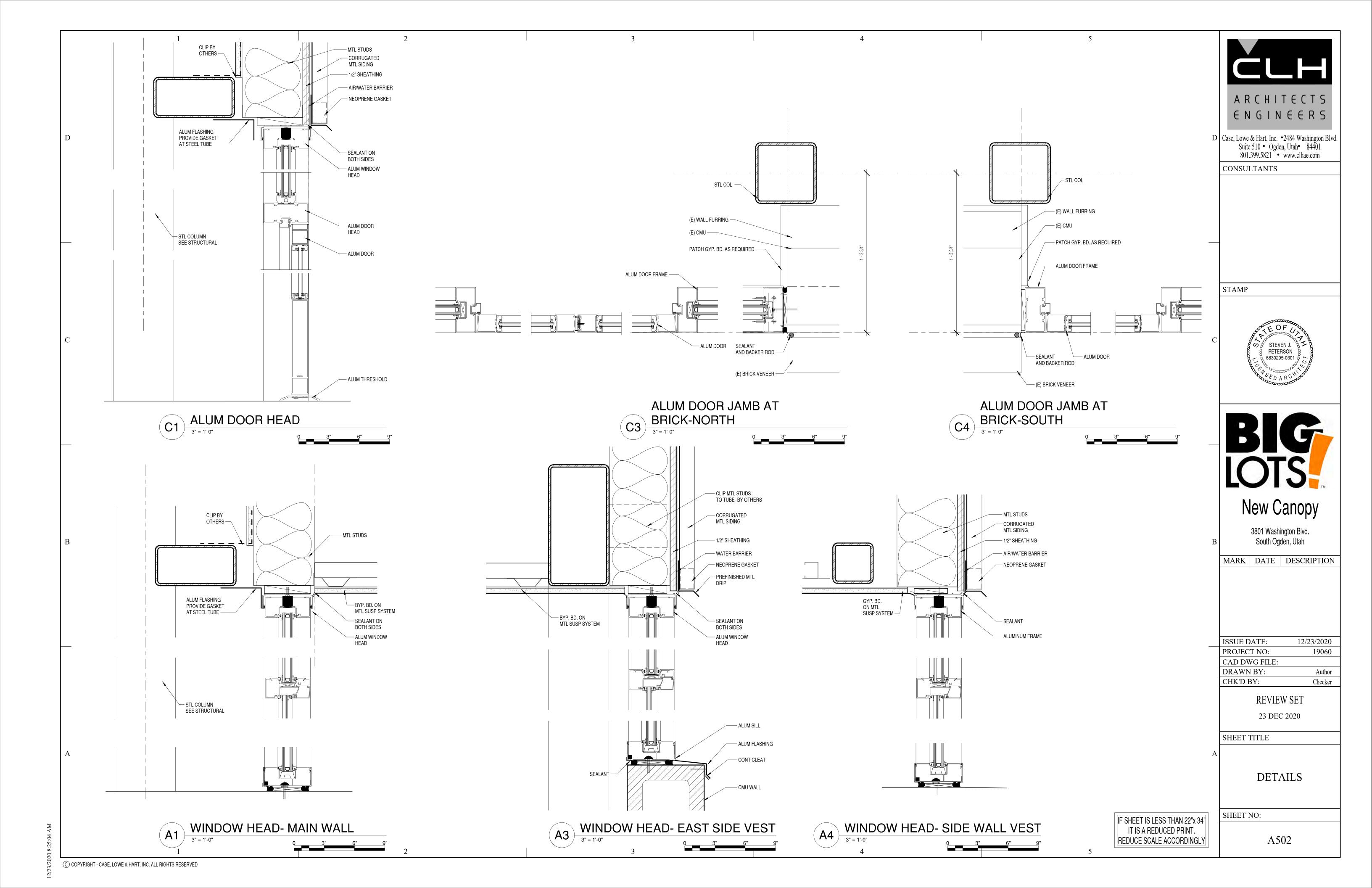
ARCHITECTS ENGINEERS

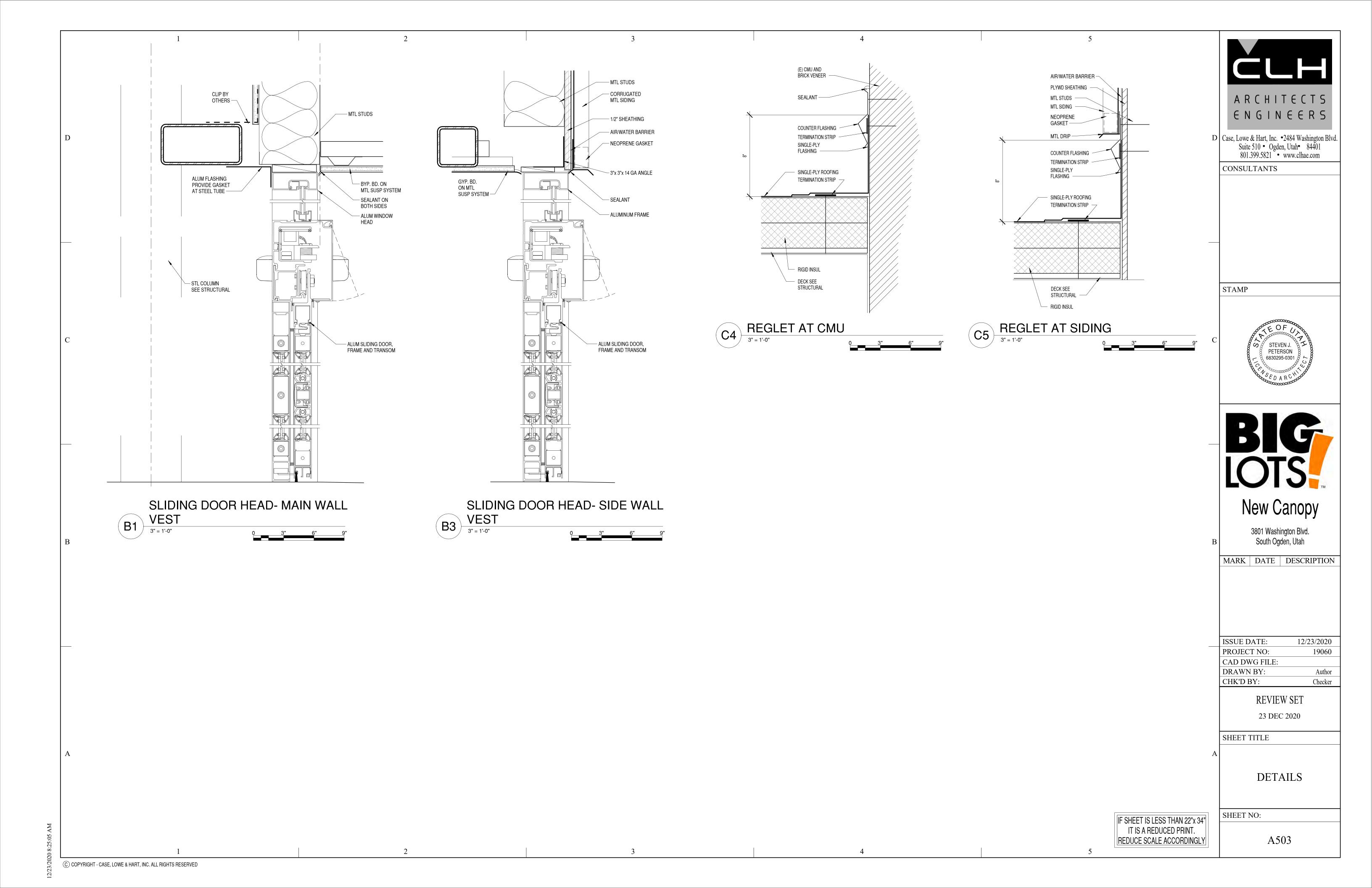
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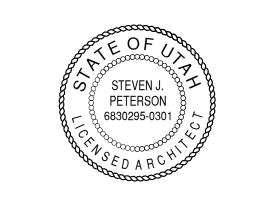
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													DC	OR SCHEDU	JLE																				
					DOOR			FRAME		DETAILS							HINGES				LO	CKSETS				STOPS		D	OOR SEAL				MISC.		
	DOOR NUMBER	TYPE	MATERIAL	WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	HEAD	ЛАМВ	THRESHOLD	GLAZING	FIRE RATING	COMMENTS	NUMBER	PIVOTS	BALL BEARING BRONZE/BRASS	STAINLESS STEEL	ENTRANCE	EXIT DEVICE	OFFICE PASSAGE	PRIVACY	STORE ROOM	FLUSH BOLTS	SURFACE BOLTS	WALL SIOP	SMOKE STRIP	WEATHER STRIP	ASTRAGAL	SWEEP	THRESHOLD	CLUSEN PUSH/PULL	COORDINATOR	KICK PLATE ARMOR PLATE	
	100 A	AL	ALUM	3' - 0"	7' - 0"	2"	SEE A402	ALUM	C1/A502	C4/A502		INSUL TEMP				Х		Х	Х	Х					Х			Х	X	X	X	X	X		
	100 B	AL	ALUM	6' - 0"	7' - 0"	2"	SEE A402	ALUM	C1/A502 B1/A503	C3/A502		INSUL TEMP				Х			Χ	Х				Х		Χ		Х	X	X	Х	X	X X		
D	100 C		ALUM	9' - 8 1/2"	7' - 0"	1 3/4"	SEE A402	ALUM	B1/A503	B3/A401		INSUL TEMP	None	STANLEY DURA-GUIDE																					
	101 A		ALUM	6' - 8 1/2"	7' - 0"	1 3/4"	SEE A402	ALUM	B3/A503	B3/A401		INSUL TEMP		STANLEY DURA-GUIDE																					
	101 B		ALUM	6' - 8 1/2"	7' - 0"	1 3/4"	SEE A402	ALUM	B3/A503	B3/A401		INSUL TEMP	None	STANLEY DURA-GUIDE																					



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12/23/2020 ISSUE DATE: 19060 PROJECT NO:

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CAD DWG FILE: DRAWN BY: CHK'D BY:

**REVIEW SET** 

23 DEC 2020

SHEET TITLE

DOOR SCHEDULE AND **TYPES** 

SHEET NO:

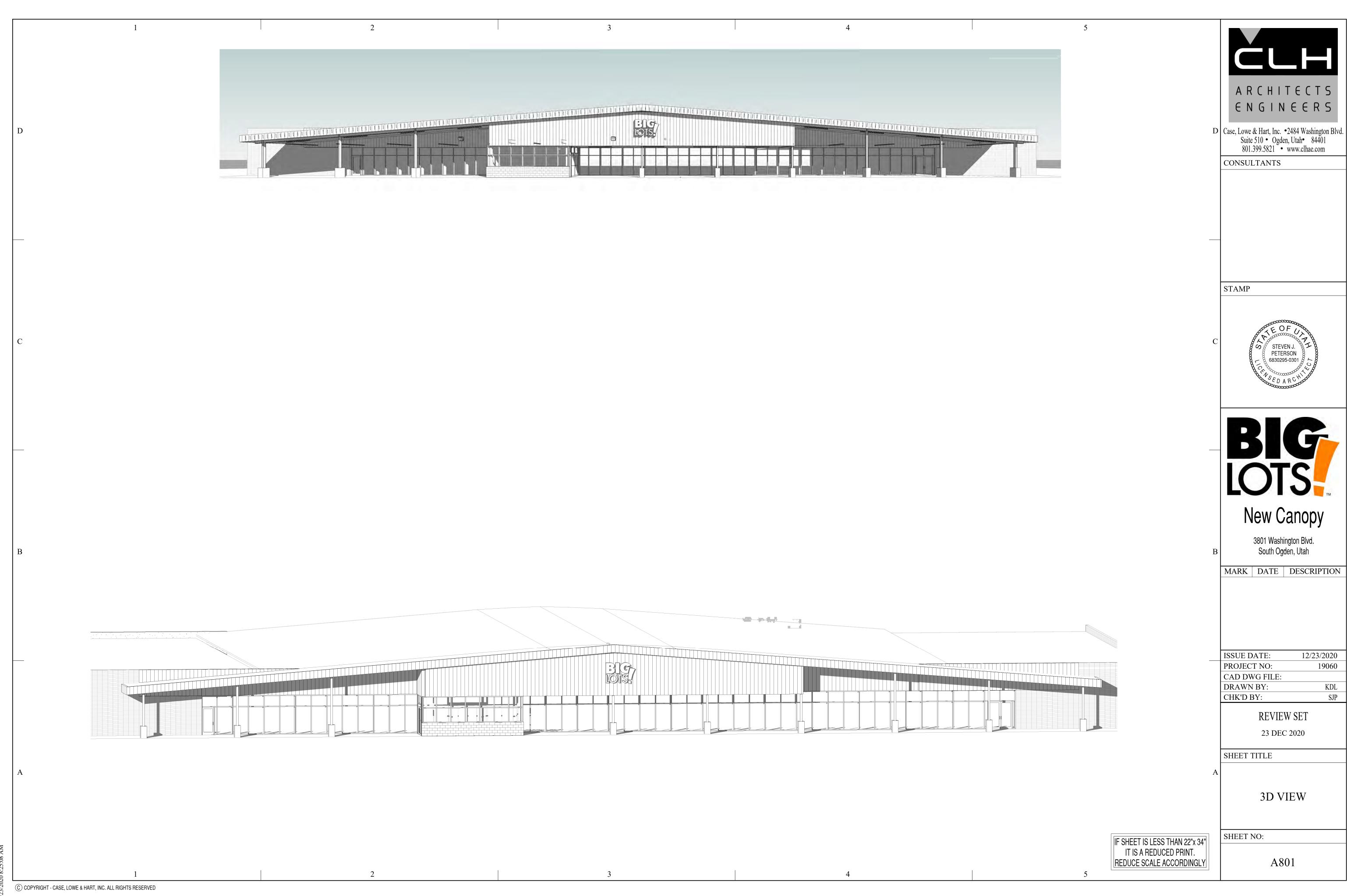
A601

- GLAZING SEE SCHEDULE OPERABLE PARTS — - ALUM. ENT. DOOR MEDIUM STILE FULL GLASS DOOR TYPE AL ADA MOUNTING HEIGHT

C1 DOOR TYPES

1/4" = 1'-0"

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KDL

2 <u>LIGHTING</u> **ABBREVIATIONS** RELOCATED EXISTING FIXTURE KEYED NOTE CALLOUT - NUMBER AS INDICATED NEMA 3R ENCLOSURE EMERGENCY LIGHT, 1 OR 2 HEAD, NUMBER INDICATES FIXTURE TYPE NEMA 12 ENCLOSURE JUNCTION BOX NEMA 4 ENCLOSURE NEMA 4X ENCLOSURE **CIRCUITING** ABOVE FINISHED FLOOR WIRING CONCEALED IN CEILING OR WALL AMPERES INTERRUPTING CAPACITY APPROX APPROXIMATELY WIRING CONCEALED IN FLOOR \_ \_ \_ BARE COPPER \_ \_ \_ \_ \_ WIRING EXISTING CONDUIT CROSSLINES INDICATE NUMBER OF #12 THHN/THWN CONDUCTORS. CB CIRCUIT BREAKER GROUND IS REPRESENTED BY CROSSLINE WITH DOT CKT CIRCUIT ON TOP. OTHER CONDUCTORS AND CONDUIT AS CO CONDUIT ONLY CONC CONCRETE BRANCH CIRCUIT HOMERUN TO PANELBOARD; NUMBER OF ARROWS COPPER INDICATE NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATION IDENTIFIES PANEL AND CIRCUIT NUMBER(S). **EXISTING** ELECTRICAL METALLIC TUBING FA FIRE ALARM PANELBOARDS AND POWER EQUIPMENT FLR **FLOOR** FEET GROUND FAULT CIRCUIT-INTERRUPTER (E) FLUSH MOUNTED PANELBOARD AND CABINET GND or GRD GROUND (E) SURFACE MOUNTED PANELBOARD AND CABINET HIGH INTENSITY DISCHARGE IMC INTERMEDIATE METAL CONDUIT INCHES SECURITY SYSTEMS KILOVOLT AMPERE KVAR KILOVOLT CAPACITANCE (E) GLASS BREAK SENSOR KILOWATTHOUR LOCAL AREA NETWORK MAXIMUM METAL HALIDE MINIMUM NATIONAL ELECTRICAL CODE NEC NATIONAL ELECTRICAL MANUFACTURING NEMA ASSOCIATION NOT IN CONTRACT NIGHT LIGHT ON UNSWITCHED CIRCUIT OFOI OWNER FURNISHED OWNER INSTALLED OWNER FURNISHED CONTRACTOR INSTALLED O.C. ON CENTER O.H. OVERHEAD RM ROOM RGC RIGID GALVANIZED CONDUIT TTB TELEPHONE TERMINAL BOARD TYP TYPICAL UNLESS OTHERWISE NOTED VOLT WATT WITH WEATHERPROOF MOUNTING HEIGHT ABOVE FINISHED FLOOR OR GRADE **GENERAL NOTES:** 1. ALL CONDUCTORS TO BE THHN/THWN COPPER. 2. NOT ALL SYMBOLS APPEAR ON THESE PLANS.

									LAMP	3			BA	LLAST/DRIVER	1		
NO	DESCRIPTION	VOLTS	MTG.	LENS	FINISH		TYP	Έ	NO. OF			TYPE	<b>.</b>	NO. PER	INPUT	MANUFACTURER & CATALOG NUMBER	DETAILS
110	BESSIAII NOI	VOLIG	MT G.	LLING	Tillion	F	н	L	LAMPS	LAMP TYPE	S	E	0	LUMINAIRE	WATTS	NOTE COMMISSION ALL LIGHTING CONTROLS	DETAILO
T-1	LED STRIP DAMP LABEL	120	CEILING SURFACE	ACRYLIC	WHITE			*	1	LED 4000K		*		1	38.15	LITHONIA CLX L96 6000LM SEF RDL WD MVOLT GZ10 40k 80CRI WH THCLXWH OR EQUIVALENT	RATED -40 TO +10 DEG F
T-2	LED EMERGENCY BUG EYE	120/277	CEILING SURFACE	ACRYLIC	WHITE			*	1	LED 4000K		*		1	0.56	LITHONIA EU2CM6 OR EQUIVALENT	
T-3	LED EXTERIOR EMERGENCY	120	WALL MOUNT	ACRYLIC	WHITE			*	1	LED 4000K		*		1	30	LITHONIA AFO W MVOLT N SD CWOR EQUIVALENT	RATED -30 TO +5 DEG C



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> **REVIEW SET** 23 DEC 2020

SHEET TITLE

ELECTRICAL LEGEND

SHEET NO:

E001

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