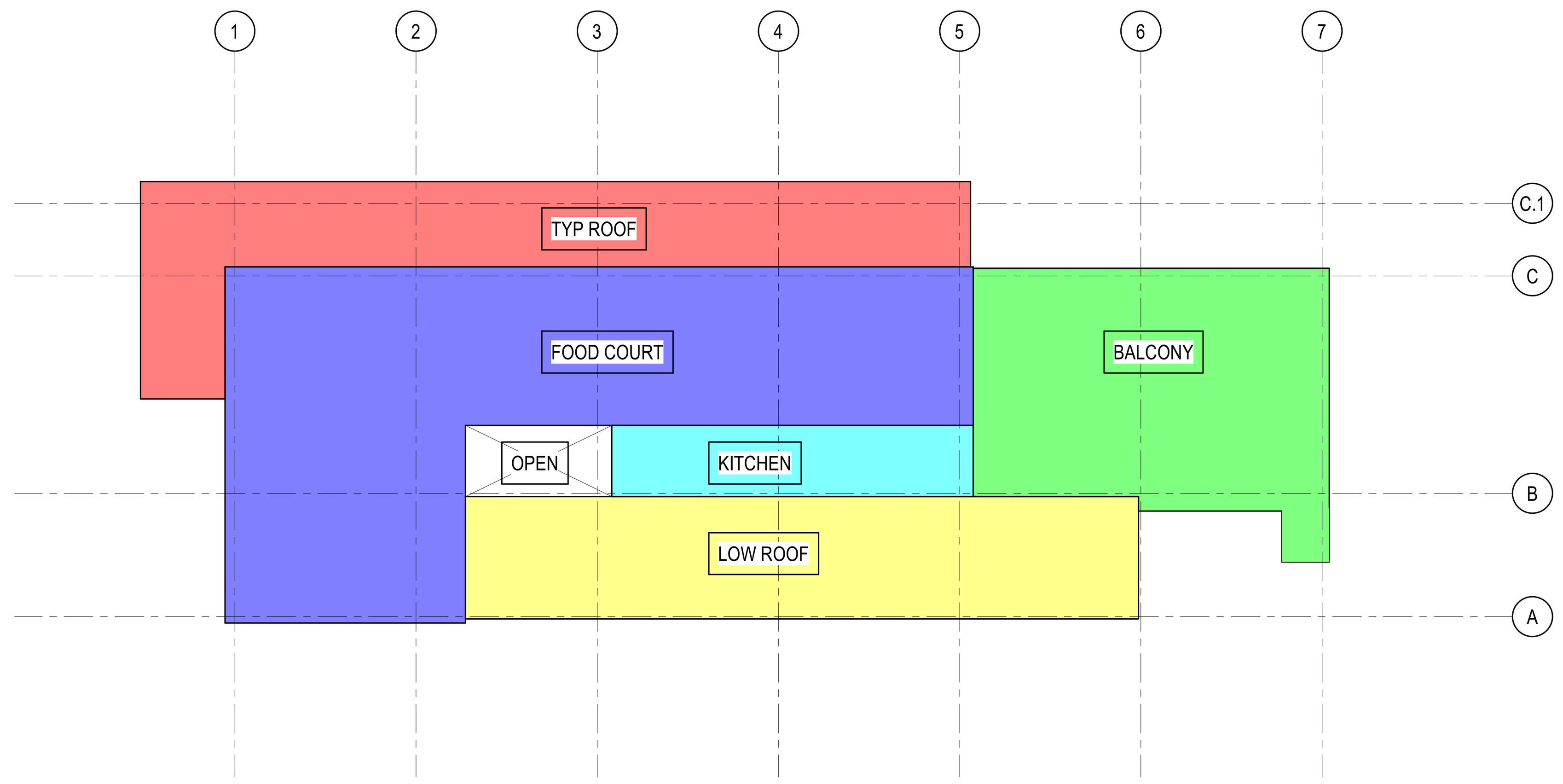


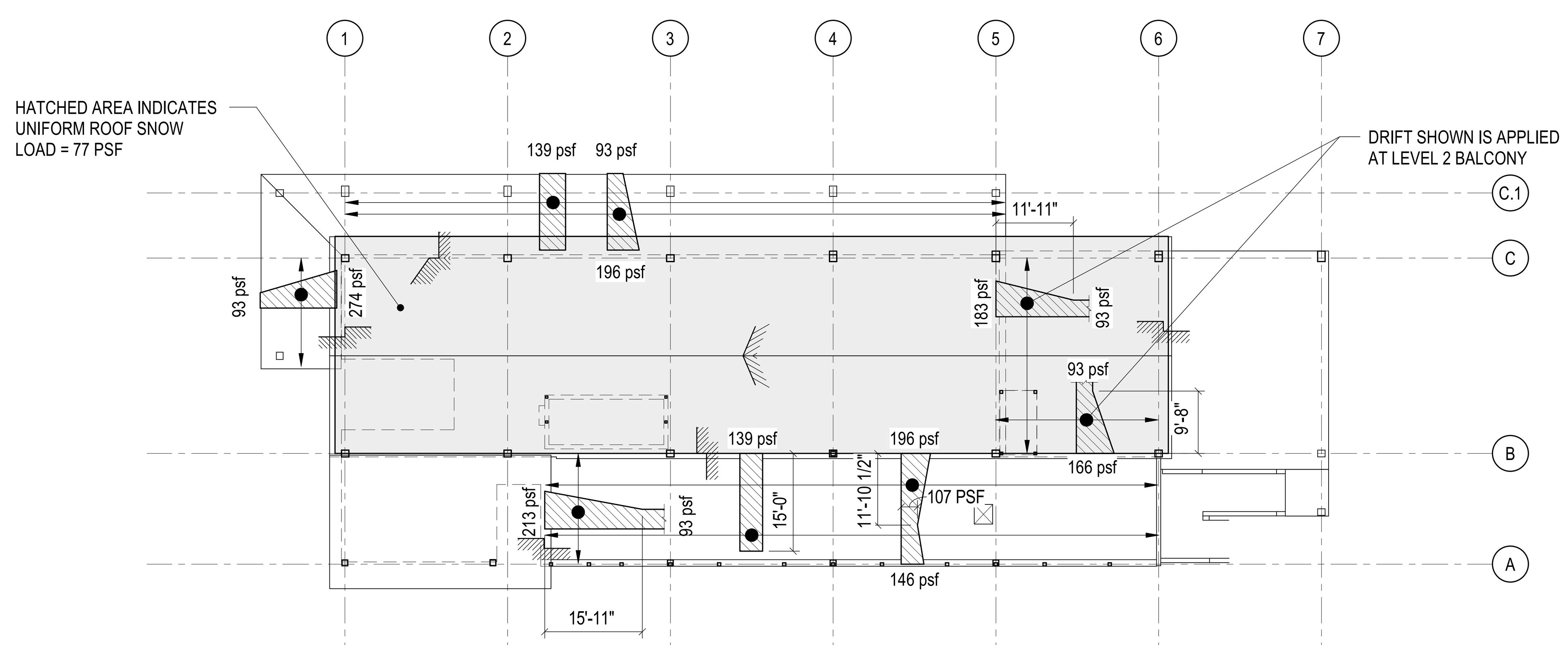
GRAVITY LOADS

LOCATION	HATCH PATTERN	SUPERIMPOSED DEAD LOAD (PSF) [1]	LIVE LOAD (PSF)	LIVE LOAD REDUCTION	POINT LOAD (LB)
FOOD COURT		24	100	NO	2,000
KITCHEN		27	100	NO	2,000
BALCONY		72 [2]	100	NO	2,000
TYP ROOF		15	93 MIN FLAT ROOF SNOW LOAD, SEE 2/2A-S0.02 FOR SNOW DRIFT LOADS	NO	300
LOW ROOF		59	93 MIN FLAT ROOF SNOW LOAD, SEE 2/2A-S0.02 FOR SNOW DRIFT LOADS	NO	2,000
STAGE ROOF		8	111 PSF SNOW, 31 PSF MAX WIND UPLIFT PER ASCE 7-16 TABLE 27.3-4 LOAD CASES	NO	STAGE RIGGING LOADS PER PLAN 3/2A-S1.10

NOTE:
1. LOADS ARE SERVICE LEVEL.
2. ASSUMED 4" THICK CONCRETE TOPPING SLAB INCLUDED.

1 LEVEL 2 / LOW ROOF LOAD PLAN

1/16" = 1'-0"



2 SNOW LOAD PLAN

1/16" = 1'-0"

NOTE:
1. ROOF SNOW LOAD = 93 PSF UNO

WOOD NOTES

1) GLUED LAMINATED MEMBERS:
1A) SEE 'MASS TIMBER MATERIAL TABLE' FOR MINIMUM GRADES.

1B) MINIMUM DESIGN VALUES ARE BASED ON THE 2018 NDS.

2) FRAMING LUMBER:
2A) DRY (19% MAXIMUM MOISTURE CONTENT AT THE TIME OF INSTALLATION), DOUGLAS FIR-LARCH WITH MAXIMUM DESIGN VALUES BASED ON THE 2018 NDS. SEE 'FRAMING LUMBER TABLE' FOR MINIMUM GRADES.

2B) BEAMS AND STRINGERS USED WITH CANTILEVERED OR CONTINUOUS SPANS SHALL BE GRADED TO PROVIDE THE SPECIFIED ALLOWABLE STRESSES OVER THE ENTIRE MEMBER LENGTH.

3) METAL CONNECTORS:
2A) FRAMING CONNECTORS SHALL CONFORM TO IBC 2018 SECTION 2303.5. SEE DETAILS FOR REQUIREMENTS.

3B) ALL CONNECTOR HOLES SHALL BE FILLED WITH PROPER NAILS/BOLTS INCLUDING OPTIONAL NAIL LOCATIONS FOR UPLIFT. ALL BOLT HOLES SHALL BE DRILLED INTO FRAMING MEMBERS. MAXIMUM HOLE DIAMETER IS 1/16" LARGER THAN THE BOLT DIAMETER.

4) OPENINGS:
4A) OPENINGS, POCKETS, ETC., SHALL NOT BE PLACED IN BEAMS, RAFTERS OR COLUMNS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS.

5) SHEATHING:
5A) PLYWOOD:
- CONFORM TO U.S. DEPARTMENT OF COMMERCE STANDARD PS 1-10.

6) NAILING:
6A) UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BOX NAILS WITH SIZES SHOWN IN THE TABLE BELOW. MINIMUM NAILING SHALL BE IN ACCORDANCE WITH THE TYPICAL WOOD CONNECTION SCHEDULE AND IBC 2018 TABLE 2304.10.1

6B) WHERE COMMON NAILS ARE SPECIFIED, BOX NAILS OF EQUAL LENGTH MAY BE SUBSTITUTED PROVIDED ONE BOX NAIL IS ADDED FOR EVERY THREE COMMON NAILS SPECIFIED.

7) OPENINGS:
7A) OPENING, POCKETS, ETC, SHALL NOT BE PLACED IN BEAMS, JOISTS, RAFTERS, STUDS, POSTS, COLUMNS, TIMBER AND OTHER STRUCTURAL MEMBERS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS.

MASS TIMBER MATERIAL TABLE

WOOD ELEMENT	SPECIES/ GRADE	Fb TOP/BOT (PSI)	Fv (PSI)	E (PSI)	REMARKS
GLULAMS - SINGLE SPAN	24F-V4	1850/2400	265	1,800,000	-
GLULAMS - MULTI-SPAN	24F-V8	2400/2400	265	1,800,000	SEE NOTE 2
GLULAMS - COLUMNS	2 (DF L2)	1800/1700	230	1,700,000	Fc = 1950 PSI

NOTES:
1. PROPERTIES LISTED SHALL BE MET OR EXCEEDED.
2. MULTI-SPAN CONDITIONS INCLUDE GLULAM MEMBERS WITH CANTILEVERS.

FRAMING LUMBER SCHEDULE - DOUGLAS FIR-LARCH

TYPE OF USE	GRADE	Fb (PSI)	Fv (PSI)	E (PSI)
DECKING	SELECT DEX	1,750	-	1,800,000
ALL OTHER	NO. 1	1,000	180	1,700,000

GENERAL NOTES

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

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

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

1D) STRUCTURAL ELEMENTS ARE CENTERED ON GRID LINES AND GRID LINE INTERSECTIONS UNLESS DIMENSIONED OTHERWISE.

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

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

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

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

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

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

3C) PREPARE DIMENSIONAL DRAWINGS OF ALL DISCOVERED ITEMS.

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

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

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

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

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

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

5) SUBMITTALS AND SUBSTITUTIONS:
5A) SUBMITTALS: REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
- IF THE CONTRACTOR REQUESTS A CHANGE FROM THE STRUCTURAL DRAWINGS, IT SHALL BE APPROVED BY THE ARCHITECT AND DESIGNED BY MARTIN/MARTIN, INC. PRIOR TO SUBMITTING SHOP DRAWINGS. VARIATION SHALL BE INDICATED ON THE SHOP DRAWINGS. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR MAKING THE CHANGE.
- CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE IN SUBMITTALS
- ALL SHOP DRAWINGS SHALL REFERENCE THE STRUCTURAL DRAWING NUMBER AND DETAIL USED TO PREPARE THE SUBMITTAL
- SUBMIT A STATEMENT OF RESPONSIBILITY FOR CONSTRUCTION OF THE LATERAL LOAD RESISTING SYSTEM IDENTIFIED IN THE DESIGN CRITERIA IN ACCORDANCE WITH IBC 2018 SECTION 1704

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

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

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

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

6C) NOTHING SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSTRUED AS ELIMINATING THE NEED FOR THE CONTRACTOR TO COMPLY WITH ALL OSHA REQUIREMENTS. WHERE THE STRUCTURAL DRAWINGS APPEAR TO CONFLICT WITH OSHA REQUIREMENTS, THE STRUCTURAL DRAWINGS REPRESENT FINAL CONDITIONS ONLY.
- THE CONTRACTOR SHALL ADD ALL ERECTION FRAMING NECESSARY TO COMPLY WITH OSHA.
- THE CONTRACTOR SHALL ADD ALL NECESSARY BOLTS, ANCHOR BOLTS, PLATES, STIFFENER PLATES, STABILIZER PLATES, BRIDGING, BRACING, BEARING SEATS, COLUMN SPLICES, ETC., AS WELL AS CLOSURES FOR OPENINGS. IN ADDITION, FIELD WELD ANYTHING THAT MAY BE CONSIDERED A TRIP HAZARD, SUCH AS SHEAR STUDS, AFTER PROTECTIVE DECKING IS INSTALLED.

Steamboat
ALTERRA MOUNTAIN COMPANY
east west partners
2305 Mount Werner Circle
Steamboat Springs, CO 80487

Gensler
1225 17th Street
Suite 150
Denver, CO 80202
United States
Tel 303.595.8585
Fax 303.825.6823

LANDMARK CONSULTANTS, INC.
141 9th Street
PO Box 774943
Steamboat Springs, CO 80477
Tel 970.871.9494

DESIGNWORKSHOP
1390 Lawrence Street
Suite 100
Denver, CO 80204
Tel 303.623.5186

MARTIN/MARTIN CONSULTING ENGINEERS
12499 West Colfax Ave.
Lakewood, CO 80215
United States
Tel 303.431.6100

me engineers
14143 Denver West Pkwy
Suite 300
Golden, CO
United States
Tel 303.421.6655

COLORADO REGISTERED PROFESSIONAL ENGINEER KELLY G. KNOWLES 38107

FEBRUARY 04, 2022

Seal / Signature

Date	Description
2021.12.03	100% DESIGN DEVELOPMENT - PLAZA BUILDING
2022.02.04	BP5: IFC

REVIEWED FOR CODE COMPLIANCE 04/12/2022

Project Name
SSRC | BASE AREA IMPROVEMENTS

Project Number
20.1411.S.01

Description
NOTES / LOAD MAPS

Scale
As indicated

Ref North

2A-S0.02

MM JOB #: 20.1411.S.01
PRINCIPAL: KELLY KNOWLES
EOR:KELLY KNOWLES
PROJECT MANAGER: C. A. CHEN
DESIGNERS: NICK DEPLATO, NIC MARTIN
LEAD REVIT TECH:COLIN MONNES
DATE PRINTED:2/4/2022 11:44:20 AM
FILE PATH:BIM 360://003.7835.000 - Steamboat Redev/03.7835.000_Structural_SBR_Promenade Building 2021_V2021.rvt