NO CONCRETE SHALL BE PLACED UNDER WATER OR ON FROZEN SUBGRADE. PROTECT IN-PLACE FOUNDATIONS AND SLABS RESPECTIVE TRADES BEFORE PLACING CONCRETE. VERIFY LOCATIONS AND REQUIREMENTS FOR INSERTS, SLEEVES, CONDUITS, EMBEDMENTS, AND PENETRATIONS WITH EARTHWORK SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

TO 95 PERCENT OF MAXIMUM DENSITY, UNLESS OTHERWISE INDICATED OR SPECIFIED. REFER TO GEOTECHNICAL REPORT AND BACKFILL UNDER STRUCTURAL SLABS, MATS, AND FOOTINGS SHALL BE ENGINEERED BACKFILL COMPACTED IN SPECIFIED LIFTS REPORT FOR BASE COURSE SPECIFICATION.

WIND LOADS - MAIN WIND FORCE RESISTING SYSTEM (MWFRS)

LIVE LOADS

SHOP DRAWINGS FOR REINFORCING STEEL, STRUCTURAL STEEL, STEEL JOISTS AND STEEL DECK SHALL BE SUBMITTED TO THE REFER TO ARCHITECTURAL, SITE, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR VERIFICATION SHOWN INCIDENTALLY ONLY AND NOT COMPLETELY.

BASIC SEISMIC-FORCE-RESISTING SYSTEM - ASCE 7-05 - TABLE 12.2-1

SEISMIC DESIGN CATEGORY - ASCE 7-05 - TABLES 11.6-1 & 11.6-2

HORIZONTAL WALL PRESSURES:

EFFECTIVE WIND AREA ASSUMED:

2. AT SALIENT AREA:

WIND IMPORTANCE FACTOR - ASCE 7-05 - TABLE 6-1

C(e) = 1.0

P(g) = 70 PSF

CONCENTRICALLY BRACED FRAMES

S(1)

OCCUPANCY CATEGORY II

= 0.36g

ACCURATELY.

BUILDING HAS BEEN PLumbed.

WELD, 2 1/2" MINIMUM LENGTH, EACH SIDE OF JOIST SEAT.

ON ALL BEAMS SUPPORTING CONCRETE SLABS.

REQUIRED FOR STABILITY OF THE STEEL FRAME ARE COMPLETED.

STRUCTURAL STEEL EXPOSED TO THE WEATHER IN THE FINISHED PROJECT SHALL BE HOT DIP GALVANIZED TO CONFORM TO MORE STRINGENT REQUIREMENTS ARE NOTED ON THE DRAWINGS.

STEEL DECK

STEEL ROOF DECK SHALL BE MADE FROM STEEL CONFORMING TO ASTM A653 - GRADE 33 (Fy = 33 KSI) AND GALVANIZED IN "STRUCTURAL STEEL WELDING CODE - STEEL (AWS D1.1); AND "STRUCTURAL WELDING CODE - SHEET STEEL (AWS D1.3)".

ALL STRUCTURAL STEEL SHALL BE PRIMED. SEE SPECIFICATION.

ALL JOISTS SHALL BE CAMBERED WITH A STANDARD CAMBER IN ACCORDANCE WITH THE SJI STANDARD SPECIFICATIONS.
NOTED OTHERWISE ON PLANS SIDES OF SHAFTS UNLESS C6x8.2 BEAMS ON ALL SIDES OF OPENINGS INDICATED ON THE DETAIL ABOVE. FRAMING SHOWN ON THE PLANS GOVERN OVER THAT WHICH IS PROVIDED FOR ROOF DRAINS, FANS, M.E.P. SHAFTS, ETC. DETAIL ABOVE APPLIES TO OPENINGS IN ROOF STRUCTURE TO BE STEEL CONSTRUCTION 3/4" = 1'-0" "L" DIMENSION = 5'-0" MAX. TOP FLUSH SUSPENSION RODS (BY MOVABLE PARTITION PLATE - TYP. 3/8" CONNECTION) BETWEEN JOIST CHORDS CONTRACTOR FIELD WELDED L1-1/2x1-1/2x1/4 BY JOIST ON INTERIOR BEAM DETAIL (2)-#4 ON ALL SIDES OF OPENING, JOIST REINFORCING AT LOAD DETAIL REFER TO ARCHITECTURAL AND M.E.P. DRAWINGS FOR SIZE AND LOCATION OF OPENINGS. COORDINATE WITH EQUIPMENT REQUIREMENTS. SEE ARCHITECTURAL AND M.E.P. DRAWINGS FOR SIZE AND LOCATION DWGS. FOR OPENING DECK OBSTRUCTION PIPE OR OTHER FRAME IS REQ'D. REQUIRED THEN THE TYPICAL FLOOR OPENING IF MORE THAN 2 CONSECUTIVE PENETRATIONS ARE WT. STEEL SLEEVES ARE REQ'D. MUST BE ONE SIDE OF BEAM ONLY OTHERWISE STANDARD MAY BE WITHIN 1" OF BEAM & GIRDER EDGES. NO ADDITIONAL REINFORCING REQUIRED. DECK PENETRATION GUIDELINES STEEL CONSTRUCTION 3/4" = 1'-0" "L" DIMENSION = 5'-0" MAX. TOP FLUSH SUSPENSION RODS (BY MOVABLE PARTITION PLATE - TYP. 3/8" CONNECTION) BETWEEN JOIST CHORDS CONTRACTOR FIELD WELDED L1-1/2x1-1/2x1/4 BY JOIST ON INTERIOR BEAM DETAIL (2)-#4 ON ALL SIDES OF OPENING, JOIST REINFORCING AT LOAD DETAIL REFER TO ARCHITECTURAL AND M.E.P. DRAWINGS FOR SIZE AND LOCATION OF OPENINGS. COORDINATE WITH EQUIPMENT REQUIREMENTS. SEE ARCHITECTURAL AND M.E.P. DRAWINGS FOR SIZE AND LOCATION DWGS. FOR OPENING DECK OBSTRUCTION PIPE OR OTHER FRAME IS REQ'D. REQUIRED THEN THE TYPICAL FLOOR OPENING IF MORE THAN 2 CONSECUTIVE PENETRATIONS ARE WT. STEEL SLEEVES ARE REQ'D. MUST BE ONE SIDE OF BEAM ONLY OTHERWISE STANDARD MAY BE WITHIN 1" OF BEAM & GIRDER EDGES. NO ADDITIONAL REINFORCING REQUIRED. TYPICAL ROOF CURB SUPPORT TYPICAL ROOF CURB SUPPORT
ANCHOR ROD DETAILS

PIER AND PILASTER DETAILS

PLASTER AND BASE PLATE DETAILS

PIER

PILASTER

CORNER PILASTER

BASE PLATE DETAILS

ANCHO ROD DETAILS

THRU PLATE - TYP.

NOTES:

1. PROVIDE "AB-1" ANCHOR RODS AT ALL BASE PLATES UNLESS NOTED OTHERWISE.

2. PROVIDE "AB-2" ANCHOR RODS WITH PLATE WASHERS UNDER NUTS ON TOP OF COLUMN BASE PLATES AT ALL BRACED COLUMNS (BASE PLATES NOTED WITH "BR" SUFFIX) UNLESS NOTED OTHERWISE.

3. PROVIDE 1/4" LEVELING PLATE AND 3/4" NON-SHRINK GROUT UNDER ALL BASE PLATES.

4. ANY OVERSIZED HOLES IN TYPE "BR" BASE PLATES TO BE GROUTED SOLID PRIOR TO INSTALLING NUTS AND PLATE WASHERS.

5. WELD PLATE WASHERS ALL AROUND TO BASE PLATES AT BRACED BAYS.

6. BASE PLATE TYPE NOTED ON PLAN AS BP-"X".
LOW ROOF AND THIRD FLOOR FRAMING PLAN

TYPICAL LAB ROOF EDGE

MECHANICAL FLOOR FRAMING PLAN
Advanced HVAC & Electrical Technology Building

1301 Front Street, Manchester, New Hampshire 03102

**High Roof Framing Plan**

**Sectional View**

1. For reference, orientation has been sorted by the manufacturer to ensure the most effective use of space.
3. Refer to the architectural and structural drawings for more detailed information.
4. Sectional views are in accordance with the architectural drawings.
5. All dimensions are approximate and subject to change. Final dimensions shall be confirmed by the architect and engineer.
6. Refer to the construction specifications for more detailed information.
7. All materials and finishes are subject to change and shall be confirmed by the architect and engineer.
8. All work shall be performed in accordance with the approved plans and specifications.

**Notes**

- All work shall be performed in accordance with the approved plans and specifications.
- All materials and finishes are subject to change and shall be confirmed by the architect and engineer.
- Final dimensions shall be confirmed by the architect and engineer.
- Refer to the architectural and structural drawings for more detailed information.
- Sectional views are in accordance with the architectural drawings.
- For reference, orientation has been sorted by the manufacturer to ensure the most effective use of space.
DETAIL NOTES

WELD A: WELD SIZE TO FULLY DEVELOP THE HORIZONTAL COMPONENT OF THE BRACE FORCE SHOWN.

WELD B: WELD SIZE TO FULLY DEVELOP THE VERTICAL COMPONENT OF THE BRACE FORCE SHOWN.

WELD C: WELD SIZE TO FULLY DEVELOP THE BRACE FORCE SHOWN.

HSS COLUMN BASE AT BRACE DETAIL

STEEL BRACE CONSTRUCTION

HSS BRACE BASE DETAIL

STEEL BRACE CONSTRUCTION

HSS COLUMN TO W BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION

W BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION

W ROOF BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION

HSS X BRACE DETAIL

STEEL BRACE CONSTRUCTION

GRADE BEAM ELEVATION

GRADE BEAM SECTIONS

BRACE FRAME DETAILS

HSS COLUMN BASE AT BRACE DETAIL

STEEL BRACE CONSTRUCTION

HSS BRACE BASE DETAIL

STEEL BRACE CONSTRUCTION

HSS COLUMN TO W BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION

W BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION

W ROOF BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION

HSS X BRACE DETAIL

STEEL BRACE CONSTRUCTION

GRADE BEAM ELEVATION

GRADE BEAM SECTIONS

BRACE FRAME DETAILS