A1 | ROOF FRAMING PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. THE NOTES ON THESE DRAWINGS ARE INTENDED TO BE THE SPECIFICATIONS. INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND SITE DRAWINGS. G.C. SHALL COORDINATE LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, ETC.
3. ALL DIMENSIONS AND COORDINATES SHALL BE FIELD VERIFIED. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS.
6. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS.

DESIGN NOTES:

1. THIS BUILDING IS DESIGNED TO COMPLY W/ THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE AND ASCE 7-05 "MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES.
2. LIVE LOADS ARE AS FOLLOWS:
   A. FLOOR = 40 PSF
   B. ROOF = 20 PSF
3. DEAD LOADS = ACTUAL WEIGHTS OF COMPONENTS PLUS 5 PSF ALLOWANCE FOR MISCELLANEIOUS DUCTWORK, SPRINKLER PIPING AND OTHER HUNG ITEMS. PROVIDE ADDITIONAL 10 PSF ALLOWANCE FOR AREAS ABOVE MECHANICAL ROOMS AND PUMP ROOMS.
4. DESIGN FOR SNOW LOAD IS IN ACCORDANCE WITH ASCE 7.
   A. GROUND SNOW LOAD PG = 50 PSF
   B. FLAT ROOF SNOW LOAD PF = 35 PSF
   C. SNOW LOAD IMPORTANCE FACTOR I =1.0
   D. SNOW EXPOSURE FACTOR CE = 1.0
   E. SNOW THERMAL FACTOR CT = 1.0
   F. SNOW DRIFTING IN ACCORDANCE WITH ASCE 7
5. DESIGN FOR WIND LOAD IS IN ACCORDANCE WITH ASCE 7.
   A. BASIC WIND SPEED = 100 MPH
   B. WIND LOAD IMPORTANCE FACTOR I = 1.0
   C. WIND EXPOSURE = EXPOSURE C
   D. WIND INTERNAL PRESSURE COEFFICIENT GCPI = ±.18
   E. DESIGN WIND LOADS:
      1. COMPONENTS AND CLADDING IN WALL CONSTRUCTION (ASSUMING EFFECTIVE WIND AREA > 20 SQUARE FEET)
         A. WITHIN 4' FROM CORNERS:
            (1) WALL WIND LOAD = ±32.4 PSF
         B. AT ALL OTHER WALL SURFACES
            (1) WALL WIND LOAD = ± 28.1 PSF
      2. COMPONENTS AND CLADDING IN ROOF CONSTRUCTION. (ASSUMING EFFECTIVE WIND AREA > 40 SQUARE FEET)
         A. OVERHANGS = -51 PSF
         B. ALL OTHER ROOF SURFACES = - 33 PSF
      3. MAIN WIND FORCE RESISTING SYSTEM P = ± 21 PSF
6. EARTHQUAKE LOAD: DESIGN FOR EARTHQUAKE LOAD IS IN ACCORDANCE WITH ASCE 7.
   A. SEISMIC IMPORTANCE FACTOR
      I = 1.0
   B. MAPPED SPECTRAL RESPONSE ACCELERATION
      SS = 0.315 G
   C. MAPPED SPECTRAL RESPONSE ACCELERATION
      S1 = 0.077 G
   D. SITE CLASS = CLASS D
   E. SPECTRAL RESPONSE COEFFICIENT
      SDS = 0.325
   F. SPECTRAL RESPONSE COEFFICIENT
      SD1 = 0.123
   G. SEISMIC DESIGN CATEGORY = CATEGORY B
   H. RESPONSE MODIFICATION COEFFICIENT
      R = 4
   I. ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

TIMBER FRAMING NOTES:

1. INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED, MINIMUM GRADE NO.2 SPRUCE-PINE-FIR, U.O.N. MAXIMUM MOISTURE CONTENT SHALL BE 15% FOR MEMBERS W/ NOMINAL THICKNESS 2" OR LESS & 19% FOR THICKER MEMBERS.
2. ENGINEERED LUMBER BEAMS SHALL BE "VERSALAM" BY BOISE CASCADE, IN THE SIZE SHOWN ON THE DRAWINGS. UNITS BUILT UP WITH MULTIPLE PLIES SHALL BE INTERCONNECTED ACCORDING TO MANUFACTURER'S REQUIREMENTS.
3. ROOF SHEATHING SHALL BE 5/8" APA RATED SHEATHING, PANEL SPAN RATING 40/20 FOR PITCHED ROOFS AND 7/8" APA RATED SHEATHING, PANEL SPAN RATING 40/20 FOR FLAT ROOFS, EXPOSURE 1, NAILED WITH MINIMUM OF 10D NAILS AT 4" OC AT BLDG PERIMETER (EDGE OF ROOF AT OVERHANGS), AT 6" O.C. AT OTHER SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. A 1/8" GAP IS REQUIRED BETWEEN ROOF PANELS AT ALL END JOINTS.
4. END JOINTS FOR ROOF SHEATHING SHALL BE STAGGERED. LONG DIMENSION OF UNCUT SHEATHING PANELS SHALL BE PERPENDICULAR TO SUPPORTS.
5. THE QUANTITY AND SIZE OF FASTENERS CONNECTING WOOD FRAME MEMBERS SHALL BE NOT LESS THAN SPECIFIED IN IBC 2009 TABLE 2304.9.1 FASTENING SCHEDULE.
6. HOLES FOR BOLTS SHALL BE DRILLED TO A DIAMETER THAT IS 1/16" LARGER THAN THE NOMINAL DIAMETER OF THE BOLT. HOLES FOR THE UNTHREADED PORTION OF LAG SCREWS SHALL BE DRILLED TO A DIAMETER THAT IS THE SAME AS THE NOMINAL DIAMETER OF THE LAG SCREW SHANK. A PILOT HOLE FOR THE THREADED PORTION OF THE LAG SCREW SHALL BE DRILLED AND SHALL HAVE A DIAMETER THAT IS HALF THE NOMINAL DIAMETER OF THE LAG SCREW SHANK.
7. ALL MISCELLANEOUS METAL HARDWARE (HANGERS, TIES, ETC.) SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE OR APPROVED EQUAL.
8. PRE-MANUFACTURED MATERIALS, INCLUDING ANCHOR BOLTS AND SIMPSON HANGERS, SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
9. WALL SHEATHING SHALL BE 1/2" MIN. 32/12 SPAN RATED SHEATHING. INSTALL PANELS W/ LONG DIMENSION PERPENDICULAR TO SUPPORTS & END JOINTS STAGGERED. FASTEN TO SUPPORTS AS NOTED IN SCHEDULE.
10. ALL TOP PLATE SPLICES SHALL BE OVER A STUD OR HEADER, WITH A 4'-0" OVERLAP EACH WAY WITH SECOND TOP PLATE.
11. ATTACH ALL BOTTOM PLATES TO MUD SILL PLATES W/ MIN. OF 6 12D NAILS PER 16" OF PLATE.

COLD FORM METAL FRAMING NOTES:

1. THE EXTENT OF THE WORK FOR THE EXTERIOR METAL STUD WALL SYSTEM IS DETAILED ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS. THESE NOTES SHALL BE WORKED IN CONJUNCTION WITH THOSE DRAWINGS AND THE SPECIFICATIONS.
2. THE FOLLOWING SPECIFICATIONS AND PUBLICATIONS (LATEST EDITION) SHALL BE FOLLOWED:
   A. AMERICAN IRON AND STEEL INSTITUTE COLD FORM DESIGN MANUAL, SPECIFICATION FOR THE DESIGN OF COLD FORM STEEL STRUCTURAL MEMBERS.
   B. AMERICAN SOCIETY FOR TESTING AND MATERIALS A446.
   C. AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION 13TH EDITION.
3. PROVIDE CHANNEL SHAPED STUDS, JOISTS, RUNNERS, TRACKS, BLOCKING, CLIP ANGLES, SHOES, REINFORCEMENTS, FASTENERS, AND OTHER ACCESSORIES RECOMMENDED BY THE MANUFACTURER FOR A COMPLETE FRAMING SYSTEM.
4. FABRICATION OF LIGHT GAGE STEEL SHALL CONFORM WITH REQUIREMENTS OF ASTM A446 WITH THE FOLLOWING MINIMUM YIELD POINTS (FY):
   A. 16 GA. AND HEAVIER - FY = 50,000 PSI (GRADE D)
   B. 18 GA. - FY =33,000 PSI (GRADE B)
   C. ALL WALL FRAMING MEMBERS AND COMPONENTS SHALL BE 18 GAGE MINIMUM.
5. ALL FASTENERS CONNECTING LIGHT GAGE MEMBERS AND ACCESSORIES SHALL BE A MINIMUM OF NO. 10 SIZE SCREWS SPACED NOT CLOSER THAN ONE-HALF INCH ON CENTER. NUMBER OF FASTENERS SHALL BE AS SHOWN ON DETAILS. ALL FASTENERS SHALL BE GALVANIZED OR CADMIUM PLATED.
6. ALL FASTENERS CONNECTING LIGHT GAGE MEMBERS TO STRUCTURAL STEEL SHALL BE POWDER ACTUATED FASTENERS OF 0.157" DIAMETER MINIMUM.

144 Fore Street, PO Box 618
Portland, Maine 04104
tel. (207) 772-3846
fax. (207) 772-1070
www.smrinc.com

ARCHITECTURE
ENGINEERING
PLANNING
INTERIORS
ENERGY

SMRI

Inspection Division
Date: 10/05/15

STATE OF MAINE
ANDREW D. BRADLEY
No. 9840
LICENSED
PROFESSIONAL ENGINEER

322 DANFORTH STREET
LOCATION

ISSUED FOR CONSTRUCTION
9-4-15
CURRENT ISSUE STATUS:

REV	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	9-4-15

GRAPHIC SCALE: 0" 1"

SCALE:	AS NOTED
PROJECT MANAGER:	XX
JC/DRAWN BY:	DSF
A/E OF RECORD:	ADB
CAD FILE:	SG001-15055
PROJECT NO:	15055
DATE:	08/25/15

SHEET TITLE:
STRUCTURAL GENERAL NOTES

SHEET No. SG001

© COPYRIGHT 2015 SMRI INC.