ANTHROPOLOGIE
PORTLAND, ME

DRAWING SYMBOLS

ABBREVIATIONS

A	
A.B.	ANCHOR BOLT
ADD'L	ADDITIONAL
ALT	ALTERNATE
ARCH.	ARCHITECT(URAL)
B	
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
BRG.	BEARING
BTWN.	BETWEEN
C	
C.I.P.	CAST IN PLACE
C.J.	CONTROL JOINT
CL.	CENTER LINE
CLR.	CLEAR(ANCE)
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
COMP.	COMPOSITE
CONC.	CONCRETE
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
COORD.	COORDINATE
CTRD.	CENTERED
D	
DBL.	DOUBLE
DIA.	DIAMETER
DIAG.	DIAGONAL
D.L.	DEAD LOAD
DO.	DITTO
DTL.	DETAIL
DWG.	DRAWING
E	
E	EAST
EA.	EACH
ELEV.	ELEVATION
EMBED.	EMBEDMENT
EQ.	EQUAL
EXIST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
F	
FAB.	FABRICATE(OR)
FD.	FLOOR DRAIN
FNDN.	FOUNDATION
FTG.	FOOTING
G	
GA.	GAGE, GAUGE
GALV.	GALVANIZED
G.C.	GENERAL CONTRAT(OR)
H	
HORIZ.	HORIZONTAL
HK.	HOOK
H.S.	HEADED STUDS
H.S.S.	HOLLOW STRUCT. STEEL
I	
INFO.	INFORMATION
J	
JBE.	JOIST BEARING ELEVATION
JST.	JOIST
JT.	JOINT
K	
K	KIP
K.O.	KNOCK-OUT
K.S.I.	KIPS PER SQ. INCH
L	
L.L.	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M	
MAS.	MASONRY
MATL.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MEZZ.	MEZZANINE
MFG.	MANUFACTURE(R)
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
N	
N	NORTH
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
O	
o.c.	ON CENTER(S)
O.H.	OVERHEAD
OPNG.	OPENING
OPP.	OPPOSITE
P	
P.C.	PRECAST CONCRETE
PERIM.	PERIMETER
PL.	PLATE
PLF	POUNDS PER LINEAR FOOT
PROJ.	PROJECT
PSF.	POUNDS PER SQ. FOOT
PSI.	POUNDS PER SQ. INCH
Q	
QTY.	QUANTITY
R	
RAD.	RADIUS
R.D.	ROOF DRAIN
REINF.	REINFORCE(D), (ING)
REQ'D.	REQUIRED
REV.	REVISION, REVISE(D)
S	
S	SOUTH
SCHED.	SCHEDULE
SIM.	SIMILAR
SJI	STEEL JOIST INSTITUTE
SPA.	SPACE(S)
SQ.	SQUARE
STD.	STANDARD
STL.	STEEL
STRUCT.	STRUCTURAL
T	
TBE.	TOP OF BEAM ELEVATION
TDE.	TOP OF DECK ELEVATION
TEMP.	TEMPORARY
TFE.	TOP OF FOOTING ELEVATION
TPE.	TOP OF PIER ELEVATION
TSE.	TOP OF SLAB ELEVATION
TYP.	TYPICAL
U	
U.N.O.	UNLESS NOTED OTHERWISE
V	
VERT.	VERTICAL
W	
W	WEST
w/	WITH
W.P.	WORK POINT
W.W.F.	WELDED WIRE FABRIC

DRAWING INDEX

Sheet Number	Sheet Name
S001	TITLE SHEET/ STRUCTURAL NOTES
S002	SPECIAL INSPECTIONS/ TESTING/ REQUIRED SUBMITTALS
S100	FLOOR PLAN
S110	PARTIAL FRAMING PLANS
S300	SECTIONS AND DETAILS

STRUCTURAL NOTES

I. DESIGN DATA

A. BUILDING CODE

i. INTERNATIONAL BUILDING CODE 2009

B. DESIGN LOADS/DESIGN CRITERIA (ASCE-7 2010)

i. SEISMIC DESIGN DATA

SEISMIC IMPORTANCE FACTOR---------- 1.0
OCCUPANCY CATEGORY---------- II
MAPPED SPECTRAL RESPONSE ACCELERATIONS
S_S------0.314 S_1------0.077
SPECTRAL RESPONSE COEFFICIENTS
S_{DS}------0.324 S_{D1}------0.123
SITE CLASS (ASSUMED)---------- D
SEISMIC DESIGN CATEGORY---------- B

C. ALTERNATE DESIGNS

ALTERNATE STRUCTURAL SYSTEMS & DETAILS WILL ONLY BE CONSIDERED PROVIDED THEY ARE SUBMITTED WITH CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT. THE CALCULATIONS MUST SHOW THE EQUIVALENCY OF THE ALTERNATE. ACCEPTANCE OF THE ALTERNATE BY THE ENGINEER OF RECORD MUST BE IN WRITING.

D. GENERAL NOTES

1. IN ALL CASES WHERE A CONFLICT MAY OCCUR, SUCH AS BETWEEN REQUIREMENTS IN THE SPECIFICATION AND REQUIREMENTS ON THE DRAWINGS, THE STRUCTURAL ENGINEER OF RECORD SHALL BE IMMEDIATELY NOTIFIED IN WRITING AND THE STRUCTURAL ENGINEER OF RECORD SHALL INTERPRET THE INTENT OF THE CONTRACT DOCUMENT.

2. IN NO CASE, SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE STRUCTURAL DRAWINGS.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE AND TO CROSS CHECK ALL DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND CIVIL DRAWINGS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

E. REFERENCE STANDARDS – SEE IBC CHAPTER 35 FOR ALL REFERENCE STANDARDS

II. STEEL

A. STEEL MATERIAL PROPERTIES

i. STEEL PROPERTIES: FY,PSI ASTM

A. STRUCTURAL WIDE FLANGE SHAPES----------50,000 A992
B. OTHER STRUCT. SHAPES & PLATES, ETC----------36,000 A36
C. HIGH STRENGTH BOLTS, U.N.O.----------74,000 A325
D. ANCHOR BOLTS----------36,000 F1554
E. WELDING ELECTRODES----------E70XX A233
F. DECK WELDING ELECTRODES----------36OXX A233
G. STRUCTURAL PIPES----------35,000 A53 GRADE B
H. STRUCTURAL TUBES----------46,000 A500 GRADE B
I. HEADED STUDS, TYPE B (Fu=65,000)----------51,000 AWS D1.1 CHAPTER 7
J. EXPANSION BOLTS SHALL BE HILTI KWIK BOLT 3 OR PRE-APPROVED EQUAL.

B. STRUCTURAL STEEL

1. STRUCTURAL STEEL DESIGN & CONSTRUCTION SHALL CONFORM TO IBC CHAPTER 22, SECTION 2201, AISC "LOAD & RESISTANCE FACTOR DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" & AISC "CODE OF STANDARD PRACTICE," APPLY U.N.O.

2. STRUCTURAL STEEL SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR ALL MATERIAL SUPPLIED.

3. THIS STRUCTURE IS A NON-SELF SUPPORTING STEEL FRAME REQUIRING INTERACTION WITH OTHER ELEMENTS TO PROVIDE THE REQUIRED STABILITY. THE STEEL ERECTOR SHALL PROVIDE TEMPORARY BRACING UNTIL FINAL STABILITY IS PROVIDED.

III. LIGHT GAGE METAL STUD FRAMING

A. LIGHT GAGE FRAMING

1. LIGHT GAGE FRAMING SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 22, SECTION 2205 – COLD FORMED STEEL.

2. STUD DESIGNATION & RELATED ACCESSORIES ON DRAWINGS ARE BASED ON AISI/SFIA/SSMA (STEEL STUD MANUFACTURERS ASSOCIATION) STANDARD SHAPES. OTHER MANUFACTURERS SHALL FURNISH ELEMENTS OF EQUAL OR GREATER SECTION PROPERTIES, MATERIAL STRENGTHS & STIFFNESS.
Fy = 33,000 psi (STUDS = 18 GA & THINNER).
Fy = 50,000 psi (STUDS = 16 GA & THICKER).
Fy = 33,000 psi (TRACK).

3. STEEL THICKNESS

REFERENCE GAGE	MINIMUM (MILS)	MINIMUM DELIVERED THICKNESS (IN.)
20	33	0.0329
18	43	0.0428
16	54	0.0538
14	68	0.0677
12	97	0.0966

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Date: 09/22/14

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SHEET TITLE :
TITLE SHEET/ STRUCTURAL NOTES

SHEET NO :
S001