NOTES
(UNLESS OTHERWISE NOTED ON DRAWINGS OR IN SPECIFICATIONS)

GENERAL

G1. STRUCTURAL WORK SHALL CONFORM TO REQUIREMENTS OF "THE INTERNATIONAL BUILDING CODE 2003"

G2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND SHOP DRAWINGS AND SPECIFICATIONS.

G3. EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

G4. SHOP DRAWINGS FOR REINFORCING STEEL, STRUCTURAL STEEL, STEEL JOISTS, AND METAL DECK, SHALL BE SUBMITTED TO THE ARCHITECT AND A STAMPED APPROVAL RECEIVED BEFORE FABRICATION CAN PROCEED. FABRICATION AND ERECTION SHALL BE MADE FROM APPROVED SHOP DRAWINGS ONLY.

G5. NOTES AND DETAILS SHOWN ON ANY DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED.

G6. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.

STRUCTURAL LOADS

L1. BUILDING CLASSIFICATION – TABLE 1604.5	CATEGORY II
L2. DEAD LOADS	
A. WEIGHT OF BUILDING MATERIALS	PARA. 1606.1
B. WEIGHTS OF FIXED SERVICE EQUIPMENT	PARA. 1606.2
L3. ROOF SNOW LOADS	
A. GROUND SNOW LOAD – FIG. 1608.2	P(g) = 60 PSF
B. FLAT ROOF SNOW LOAD	P(f) = 42 PSF
C. SNOW EXPOSURE FACTOR – TABLE 1608.3.1	C(E) = 1.0
D. SNOW IMPORTANCE FACTOR – TABLE 1604.5	I(s) = 1.0
E. THERMAL FACTOR – TABLE 1608.3.2	C(T) = 1.0
F. SNOW DRIFT AND SLIDING SNOW	PARA. 1608.7 TO 1608.9
L4. FLOOR LIVE LOADS	
A. ROOMS	40 PSF + 10 PSF PARTITIONS
B. CORRIDORS	80 PSF
C. OPEN PLAN AREAS	100 PSF
L5. WIND LOADS – MAIN WIND FORCE RESISTING SYSTEM (MWFRS)	IBC 2003 (SECTION 6, ASCE 7-02)
A. BASIC WIND SPEED (3-SECOND GUST) – FIG. 1609	V(3s) = 100 MPH
B. WIND IMPORTANCE FACTOR – TABLE 1604.5	I(w) = 1.00
C. WIND EXPOSURE CATEGORY	EXPOSURE B
D. REFERENCE WIND PRESSURE	Ps = (LAMBDA) x I x Ps_{30}
E. ADJUSTMENT FACTOR – TABLE 1609.6.2.1(4)	LAMBDA = 1.00
F. COMPONENTS AND CLADDING	PARA. 1609.6.2.2
L6. SEISMIC LOADS	
A. SEISMIC USE GROUP	I
B. MAPPED SPECTRAL RESPONSE ACCELERATION FOR SHORT PERIODS	S(s) = 0.37g
C. MAPPED SPECTRAL RESPONSE ACCELERATION AT 1-SEC. PERIOD	S(1) = 0.10g
D. SPECTRAL RESPONSE COEFFICIENT FOR SHORT PERIODS	S(DS) = 0.37g
E. SPECTRAL RESPONSE COEFFICIENT FOR 1-SECOND PERIOD	S(D1) = 0.16g
F. SITE CLASS – TABLE 1615.1.1	SITE CLASS D
G. SEISMIC DESIGN CATEGORY	CATEGORY C
H. BASIC SEISMIC-FORCE-RESISTING SYSTEM	BEARING WALL SYSTEM LIGHT FRAMED WALLS W/WOOD SHEAR PANELS
I. RESPONSE MODIFICATION FACTOR	R = 6.5
J. DEFLECTION AMPLIFICATION FACTOR	C(d) = 4.0
K. SYSTEM OVERSTRENGTH FACTOR	OMEGA o = 3.0
L. SEISMIC IMPORTANCE FACTOR – TABLE 1604.5	I(E) = 1.0
M. DESIGN BASE SHEAR	V = C(s) W = {S(DS)/[R/I(E)]} W
N. ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE

FOUNDATION (SECTION 02200)

F1. THE BOTTOM SURFACE OF ALL SPREAD FOOTINGS SHALL REST ON UNDISTURBED MATERIAL OR COMPACTED STRUCTURAL FILL, WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 2.0 TONS PER SQUARE FOOT. EXCEPT FOOTINGS WHICH REST ON SOUND, INTACT BEDROCK WHICH SHALL HAVE A ALLOWABLE BEARING BEARING PRESSURE OF 7.5 TONS PER SQUARE FOOT.

F2. THE ESTIMATED ELEVATION OF BOTTOM OF EACH FOOTING IS INDICATED THUS [0'-0"] ON PLAN. BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-6" BELOW FINISH GRADE.

F3. NO FOOTING SHALL BE PLACED UNDER WATER OR ON FROZEN SUBGRADE. PROTECT IN-PLACE FOUNDATIONS AND SLABS FROM FROST PENETRATION UNTIL PROJECT IS COMPLETED.

F4. PROVIDE 6" MINIMUM COMPACTED DRAINAGE FILL AND A 6 MIL. POLYETHYLENE VAPOR BARRIER UNDER INTERIOR SLABS ON GRADE UNLESS OTHERWISE NOTED.

F5. NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS RETAINING EARTH UNTIL PERMANENT FLOOR SYSTEM IS IN PLACE AND OF FULL DESIGN STRENGTH UNLESS OTHERWISE NOTED.

F6. FOUNDATION WORK SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY HALEY & ALDRICH DATED 13 JANUARY, 2006.

CONCRETE (SECTION 03300)

C1. CONCRETE WORK SHALL CONFORM TO ACI STANDARD 318 -95 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

C2. CONCRETE SHALL BE CONTROLLED CONCRETE (PROPORTIONED, MIXED AND PLACED IN PRESENCE OF APPROVED TESTING AGENCY).

C3. CONCRETE MINIMUM 28 DAY STRENGTH, UNLESS OTHERWISE NOTED, SHALL CONFORM TO FOLLOWING

A. FOOTINGS, PIERS, FOUNDATION WALLS:	3,000 PSI (NORMAL WEIGHT)
B. STRUCTURAL SLABS ON GRADE:	4,000 PSI (NORMAL WEIGHT)
C. TOPPING ON METAL DECK OR FORMS:	4,000 PSI (NORMAL WEIGHT)
D. SLABS ON GRADE:	3.000 PSI (NORMAL WEIGHT)

C4. CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A NOMINAL DENSITY OF 145 PCF.

C5. REINFORCING BARS SHALL CONFORM TO ASTM A 615 GRADE 60, AND SHALL BE DEFORMED. LAP ALL CONTINUOUS BARS A MINIMUM OF 40 DIAMETERS UNLESS OTHERWISE NOTED. PROVIDE MATCHING CORNER AND INTERSECTION WALL BARS.

C6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 IN FLAT SHEETS. LAP ONE AND ONE-HALF SQUARES AT ALL JOINTS AND TIE AT 3'-0" o.c.

C7. CLEAR CONCRETE PROTECTION FOR REINFORCING:

A. FOOTINGS:	3"
B. FOUNDATION WALLS:	1½"
C. CANTILEVERED RETAINING WALLS:	2"
D. SLABS ON GRADE:	1" FROM TOP
E. TOPPING ON METAL DECK OR FORMS:	1" FROM TOP

C8. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD BECAUSE OF SLEEVES, DUCT OPENINGS OR RECESSES. BARS MAY BE MOVED ASIDE WITHOUT CHANGE IN LEVEL, WITH THE APPROVAL OF THE ARCHITECT.

C9. NO CHASES, RECESSES, OPENINGS OR SLEEVES SHALL BE INSTALLED IN CONCRETE WITHOUT APPROVAL OF THE ARCHITECT.

C10. NO CONDUIT SHALL BE INSTALLED IN CONCRETE TOPPINGS ON METAL DECK OR FORMS.

C11. KEYS SHALL BE A MINIMUM OF 2" X 4" WITH BEVELED SIDES.

C12. DOWELS AND ANCHOR RODS SHALL BE SET BY TEMPLATE.

C13. HORIZONTAL CONSTRUCTION JOINTS SHALL BE AS INDICATED ON THE DRAWINGS. VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT. CONSTRUCTION JOINTS SHALL BE FORMED WITH A STANDARD KEY AND ALL REINFORCING EXTENDED A MINIMUM OF 40 DIAMETERS UNLESS OTHERWISE NOTED.

C14. FLOOR SLABS SHALL BE POURED TO THE REQUIRED ELEVATION. SLAB THICKNESSES INDICATED ARE MINIMUM.

C15. DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL.

STRUCTURAL MASONRY (SECTION 04200)

M1. MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530 / ASCF 5 / TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" LATEST EDITION.

M2. MASONRY STRENGTH, f'm, FOR MASONRY CONSTRUCTION SHALL NOT BE LESS THAN 1350 PSI WITH SPECIAL INSPECTION.

M3. REQUIREMENTS FOR LOAD BEARING BLOCK. STRENGTH SHALL BE AS REQUIRED FOR SPECIFIED MASONRY STRENGTH (f'm) BUT SHALL NOT BE LESS THAN 2000 PSI ON THE NET AREA OF THE BLOCK.

M4. GROUT SHALL CONFORM TO ASTM C 476, TYPE FINE, AND SHALL BE OF STRENGTH REQUIRED FOR SPECIFIED MASONRY STRENGTH (f'm) BUT NOT LESS THAN 2000 PSI.

M5. MORTAR FOR REINFORCED MASONRY SHALL CONFORM TO ASTM C 270 TYPE S AND SHALL BE OF STRENGTH REQUIRED FOR SPECIFIED MASONRY STRENGTH (f'm) BUT NOT LESS THAN 1800 PSI.

M6. REINFORCING BARS SHALL CONFORM TO ASTM A 615 GRADE 60 DEFORMED BARS. LAP ALL CONTINUOUS BARS 48 DIAMETERS.

M7. JOINT REINFORCEMENTS SHALL BE OF 9 GAUGE LADDER TYPE CONFORMING TO ASTM A 82. PROVIDE PREFABRICATED CORNERS AND TEES.

M8. WALLS AND PARTITIONS SHALL BE REINFORCED HORIZONTALLY WITH JOINT REINFORCING AT 16 INCHES ON CENTER UNLESS OTHERWISE NOTED.

M9. ELEVATOR SHAFT WALLS SHALL BE REINFORCED VERTICALLY WITH #5 @ 2'-8" o.c. AND ALL CMU CELLS GROUTED 100%.

STRUCTURAL STEEL (SECTION 05120)

S1. STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE NOTED:

A. SHAPES	ASTM A 572, GRADE 50	Fy = 50 KSI
B. PLATES	ASTM A 36	Fy = 36 KSI
C. TUBES	ASTM A 500, GRADE B	Fy = 46 KSI
D. PIPES	ASTM A 53, GRADE B OR	Fy = 35 KSI
	ASTM A 501	Fy = 36 KSI

S2. SHOP CONNECTIONS SHALL BE WELDED TO CONFORM TO ASTM A 233, E70 SERIES OR BOLTED TO CONFORM TO ASTM A 325.

S3. UNLESS OTHERWISE NOTED, FIELD CONNECTIONS SHALL BE BOLTED TO CONFORM TO ASTM A 325, TYPE N BOLTS,

S4. PROVIDE ¾" DIAMETER ANCHOR RODS AT COLUMNS AS INDICATED ON THE DRAWINGS. RODS SHALL CONFORM TO ASTM F1554, UNLESS OTHERWISE NOTED. ANCHOR RODS SHALL BE HEADED TYPE.

METAL DECK (SECTION 05300)

D1. METAL FLOOR FORMS SHALL BE MADE FROM STEEL CONFROMING TO ASTM A611 GRADE D (Fy=50 KSI), AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A653, G60. FORM DEPTH AND GAUGE SHALL BE AS NOTED ON THE DRAWINGS.

D2. PROVIDE CONTINUOUS POUR STOP ANGLES WITH RETURN LIP AT BUILDING PERIMETER AND AT FLOOR OPENINGS. REFER TO SCHEDULE FOR GAUGE.

D3. METAL FLOOR FORMS SHALL BE ATTACHED TO THE SUPPORTING STRUCTURE (MINIMUM REQUIREMENTS) AS FOLLOWS:

A. PANEL ENDS AND END LAPS:	5/8"ø PUDDLE WELD AT 15"o.c.
B. INTERMEDIATE SUPPORTS:	5/8"ø. PUDDLE WELD AT 15"o.c.
C. LONGITUDINAL EDGES OF MARGINAL SUPPORTS:	5/8"ø PUDDLE WELD AT 12"o.c.

ROUGH CARPENTRY (SECTION 06100)

RC1. STRUCTURAL LUMBER SHALL CONFORM TO THE NFPA, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND SUPPLEMENT, "DESIGN VALUES FOR WOOD CONSTRUCTION" LATEST EDITION. MAXIMUM MOISTURE CONTENT SHALL BE 19%.

RC2. WOOD SHALL BE SPRUCE-PINE-FIR NO. 2 OR BETTER, INCLUDING JOISTS, RAFTERS, BEAMS, STUDS, POSTS AND PLATES.

RC3. FOUNDATION SILLS SHALL BE PRESERVATIVE PRESSURE TREATED SOUTHERN PINE NO. 2 OR BETTER.

RC4. WOOD EXPOSED TO WEATHER SHALL BE PRESERVATIVE PRESSURE TREATED SOUTHERN PINE NO. 2 OR BETTER.

RC5. LAMINATED VENEER LUMBER (LVL) SHALL BE MICRO-LAM, PARALLAM OR EQUAL.

RC6. FLUSH FRAMED CONNECTIONS SHALL HAVE BEAM OR JOIST HANGERS.

RC7. ROOF SHEATHING SHALL BE 5/8" (42/20) EXTERIOR APA PLYWOOD WITH 10d NAILS 6" o.c. AT EDGES AND 12" o.c. AT INTERMEDIATE SUPPORTS. PROVIDE "H" CLIPS AT PANEL EDGES WHERE SUPPORT MEMBERS ARE 24" o.c.

RC8. WALL SHEATHING SHALL BE ½" EXTERIOR APA PLYWOOD WITH 8d NAILS 6" o.c. AT EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.

RC9. FLOOR SHEATHING SHALL BE ¾", EXTERNAL APA PLYWOOD TONGUE AND GROOVE, GLUED AND NAILED WITH 10d NAILS AT 6" o.c. AT ENDS AND 12" o.c. AT INTERMEDIATE SUPPORTS.

RC10. PLYWOOD SHALL HAVE STAGGERED JOINTS AND NAILS SHALL BE THREADED.

RC11. NAILING SHALL BE IN ACCORDANCE WITH THE BOCA BUILDING CODE, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

RC12. FLOOR JOISTS SHALL BE BRIDGED AT 8'-0" o.c. MAX.

RC13. WALL STUDS SHALL BE BLOCKED AT 4'-0" o.c. MAX.

RC14. NOTCHING OF JOISTS, RAFTERS, BEAMS, STUDS OR PLATES SHALL NOT BE PERMITTED.

PREFABRICATED WOOD TRUSSES (SECTION 06190)

WT1. ROOF AND FLOOR TRUSSES SHALL CONFORM TO TPI, "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES" LATEST EDITION AND SHALL BE DESIGNED FOR THE LOADINGS INDICATED ON THE DRAWINGS. TOTAL AND LIVE LOAD DEFLECTIONS SHALL BE LIMITED AS FOLLOWS (UNLESS OTHERWISE INDICATED ON THE DRAWINGS):

LIVE LOAD DEFLECTION: < L/480 (ROOF) < L/480 (FLOOR)
TOTAL LOAD DEFLECTION: < L/360 (ROOF) < L/360 (FLOOR)

WT2. SUBMIT COMPLETE SHOP DRAWINGS AND CALCULATIONS FOR ROOF AND FLOOR TRUSSES. CALCULATIONS SHALL BE PREPARED BY AND BEAR THE STAMP OF A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF MAINE.

WT3. ROOF AND FLOOR TRUSSES SHALL BE BRACED AS REQUIRED ON SHOP DRAWINGS.

WT4. ROOF TRUSSES SHALL BE ANCHORED WITH HURRICANE ANCHORS.

N

SEE DRAWING S-6 FOR TYPICAL DETAILS

Revisions	No.	Date
GENERAL REVISIONS	1	3/20/2006
	2	
HUD FIRM COMMITMENT	3	11/22/2006

Project:

THE INN
AT CEDARS

PORTLAND, MAINE

Drawing Title

GENERAL NOTES AND TYPICAL DETAILS

Tsomides Associates Architects and Planners
389 Elliot Street
Newton Upper Falls, MA 02464
(617) 969-4774 Fax (617) 969-4793
e-mail: info@tsomides.com www.tsomides.com

STATE OF MAINE
JONATHAN DEERARD BUHL
#4246
REGISTERED PROFESSIONAL ENGINEER

DRAWN BY	REB
DATE ISSUED	11/22/2006
SCALE	AS NOTED
DRAWING NUMBER	S-0

Foley Buhl Roberts & Associates, Inc.
structural engineers
2150 WASHINGTON ST. - SUITE 150
NEWTON, MASSACHUSETTS 02462
(617) 527-9900 TEL
(617) 527-9906 FAX

2004388