

GENERAL STRUCTURAL NOTES

A. CONTRACTOR NOTES

- THE CONTRACT DRAWINGS REPRESENT THE DESIRED RESULT OF CONSTRUCTION. THE METHODS OF CONSTRUCTION & THE RISKS INVOLVED DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE STRUCTURAL INTEGRITY OF THE BUILDING AT ALL STAGES OF CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS & ELEVATIONS PRIOR TO CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER BEFORE COMMENCING ANY WORK.
- THE CONTRACTOR'S PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY THE ARCHITECT/ENGINEER PRIOR TO COMMENCING ANY PERTINENT WORK.
- CONTRACTOR & ALL SUBCONTRACTORS SHALL COORDINATE ALL DRAWINGS DURING BIDDING & SHALL REPORT ANY DISCREPANCIES, IF DISCREPANCIES ARE FOUND DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY MEANS (MATERIAL & LABOR) TO RESOLVE THE DISCREPANCIES.

B. DESIGN CRITERIA

THE NEW PARAPET AND TOWER STRUCTURE HAS BEEN CHECKED ACCORDING TO THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE AND FOR SPECIFIC LOADS AS LISTED BELOW ON CONTRACT DOCUMENT.

1. NEW ROOF LOADS

- D.L. = 10 P.S.F.
- L.L. = 20 P.S.F.
- ROOF SNOW LOAD
 - GROUND SNOW LOAD $P_g = 10$ P.S.F.
 - FLAT ROOF SNOW LOAD $P_f = 10$ P.S.F.
 - SNOW EXPOSURE FACTOR $C_e = 1.0$
 - SNOW IMPORTANCE FACTOR $I_s = 1.0$
 - THERMAL FACTOR $C_t = 1.0$

2. NEW WALL LOADS

- D.L. = 10 P.S.F.

3. LATERAL LOADS (WIND)

- ULTIMATE DESIGN WIND SPEED, $V-U = 115$ MPH
- NOMINAL DESIGN WIND SPEED $V-ASD = 90$ MPH
- WIND EXPOSURE = C
- RISK CATEGORY = II
- THE APPLICABLE INTERNAL PRESSURE COEFFICIENT = +/- 0.18

C. STRUCTURAL STEEL

- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36, $F_y = 36$ K.S.I., UNLESS NOTED OTHERWISE.
- ALL WELDS SHALL BE MADE WITH E70XX RODS AND WELDING SHALL CONFORM TO THE LATEST AWS CODE.

D. FRAMING LUMBER (AND PLYWOOD)

- ALL LUMBER SHALL BE GRADED IN ACCORDANCE WITH NFPA STANDARDS.
 - 2X12 STUD SHALL BE SOUTHERN PINE, GRADE NO. 2 AT 19% MOISTURE CONTENT WITH ALLOWABLE SINGLE MEMBER BENDING STRESS, F_b OF 750 P.S.I. AND A MODULUS OF ELASTICITY, E , OF 1,400,000 P.S.I.
 - 2X10 RAFTERS SHALL BE SOUTHERN PINE, GRADE NO. 2 AT 19% MOISTURE CONTENT WITH ALLOWABLE SINGLE MEMBER BENDING STRESS, F_b OF 800 P.S.I. AND A MODULUS OF ELASTICITY, E , OF 1,400,000 P.S.I.
 - GLUED-LAMINATED MEMBERS SHALL BE DOUGLAS FIR INDUSTRIAL GRADE (24F-V8) OR APPROVED EQUAL U.N.O., MEMBER SIZES ARE BASED ON CURRENT NDS WESTERN SPECIES, GRADE 24F-V4 MAY BE SUBSTITUTED FOR SIMPLY SUPPORTED SPANS ONLY.
- WOOD CONNECTORS SHOWN ON THE DRAWINGS SHALL BE SIMPSON STRONG-TIE CONNECTORS AS MANUFACTURED BY THE SIMPSON CO. OR APPROVED EQUAL.
 - ALL JOIST HANGERS SHALL BE TYPE U AND ALL WIND ANCHORS SHALL BE TYPE H2.5 OR H3.
 - USE LARGEST SIZE HANGER OR ANCHORS AS POSSIBLE WITH MAXIMUM NUMBER OF NAILS.
- PROVIDE X-BRACING OR SOLID BLOCKING AT END SPAN OF JOIST/RAFTER AND EQUALLY SPACED AT 4'-0" O.C., MAXIMUM ALONG THE JOIST/RAFTER.
- ALL PLYWOOD SHALL BE STRESS RATED AT (32/16) EXTERIOR GRADE, (C-DX), WITH THICKNESS AS INDICATED ON THE DRAWINGS.
- PLYWOOD ON ROOF SHALL BE PLACED WITH FACE GRAIN ACROSS TRUSSES AND STAGGERED SO CONTIGUOUS PANEL JOINTS OCCUR ONLY IN ONE DIRECTION, PERPENDICULAR TO THE SPAN OF THE TRUSSES. NAIL PLYWOOD WITH 10d COMMON NAILS, NAILS SHALL BE SPACED AT 6" O.C. AT SUPPORTED EDGES OF PANEL AND AT 12" O.C. AT INTERMEDIATE SUPPORT MEMBERS, UNLESS NOTED OTHERWISE.
- PLYWOOD SHALL BE NAILED TO STUD WITH 8d COMMON NAIL @ 6" O.C. @ PANEL EDGES (BLOCK ALL EDGES) & 12" O.C. @ ALL INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE.

E. CAST IN PLACE CONCRETE

- ALL CONCRETE SHALL DEVELOP 4,000 P.S.I. COMPRESSIVE STRENGTH IN 28 DAYS.
- REINFORCING BARS SHALL BE DEFORMED AND SHALL CONFORM TO ASTM A615, $F_y = 60$ K.S.I. REINFORCING BARS INDICATED TO BE WELDED SHALL CONFORM TO ASTM A706. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- SPLICES IN CONTINUOUS VERTICAL OR HORIZONTAL REINFORCING BARS SHALL BE PER LATEST ACI 318-14 OR (40) BAR DIAMETERS LAP SPLICE, WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE AND SHALL BE EITHER CONTINUOUS OR SPICED WITH DOWELS AT CORNERS.
- CLEARANCES BETWEEN REINFORCING BARS AND CONCRETE SURFACES SHALL BE AS FOLLOWS:

COVER (INCHES)	
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 THROUGH #18 BARS	1 1/2
#5 BAR AND SMALLER	1 1/4
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS, #11 BAR AND SMALLER	3/4
BEAMS, COLUMNS, PRIMARY MEMBERS	1 1/2
TIES AND STIRRUPS	1 1/4

F. FOUNDATION, FILLING AND EXCAVATION

- SOL BEARING CAPACITY = 10 P.S.F. (PER EXISTING DRAWING)
- ALL INFORMATION ON FILLING, EXCAVATION, BACKFILLING AND SPECIAL SOIL INFORMATION SEE REPORT OF TECHNICAL EXPLORATION DATED JAN. 20, 1988 & D.C. 16, 1988 PREPARED BY GILES ENGINEERING ASSOCIATES INC. OF WALKIRIA, WI PROJECT NO. 190112 & 861

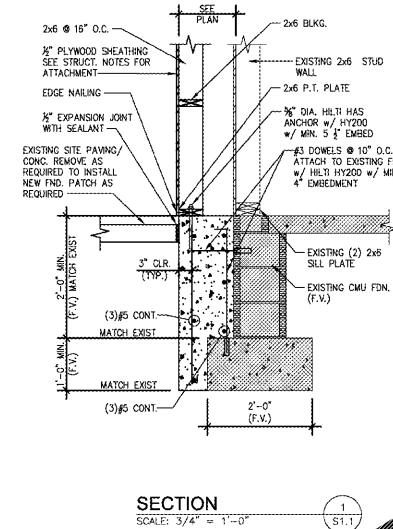
Effective Wind Area (SF.)	INTERNATIONAL BUILDING CODE 2012 Location per ASCE 7-10				
	1	2	3	4	5
10-20	17.7	17.7	17.7	30.7	30.7
20-50	-28.1	-48.8	-72.2	-33.3	-41.2
50-100	18.1	18.1	18.1	29.3	29.3
	-27.3	-45.0	-67.6	-31.9	-38.3
	18.0	18.0	18.0	27.5	27.5
	-28.3	-39.8	-61.4	-30.1	-34.8

1. $a = NA$ [$0.1 \times h$ (THE LEAST HORIZONTAL DIMENSION) OR $0.4 \times h$ ($h =$ MEAN ROOF HEIGHT) WHICHEVER IS SMALLER]

2. POSITIVE PRESSURE VALUES REFER TO FORCES ACTING TOWARDS BUILDING. NEGATIVE PRESSURE VALUES REFER TO FORCES ACTING AWAY FROM BUILDING.

3. EACH COMPONENT MUST BE DESIGNED FOR MAXIMUM POSITIVE AND NEGATIVE FORCES.

4. FOR COMPONENTS HAVING EFFECTIVE AREAS IN BETWEEN TABULATED VALUES, DESIGN LOADS MAY BE INTERPOLATED. OTHERWISE DESIGN LOAD MUST BE TAKEN FROM THE NEXT LOWEST EFFECTIVE AREA.



SYMBOL LEGEND		ABBREVIATION	
(1)	CALLOUT TAG	(E)	EXISTING
(1)	DETAIL SECTION TAG	A.B.	ANCHOR BOLT
(1)	COLUMN GRID DESIGNATION FOR NEW CONSTRUCTION	A.F.F.	ABOVE FINISHED FLOOR
(1)	COLUMN GRID DESIGNATION FOR EXISTING CONSTRUCTION	ANCH.	ANCHOR
(1)	MOMENT CONNECTION	ARCH.	ARCHITECT/ARCHITECTURAL
(1)	CENTERLINE SYMBOL	B.F.E.	BOTTOM OF FOOTING ELEV.
(1)	PLATE SYMBOL	B.L.E.	BRICK LEDGE ELEVATION
(1)	COLUMN FOOTING TAG	B.L.D.	BUILDING
(1)	ROOF FRAMING NOTE TAG	BLKG.	BLOCKING
(1)	FLOOR FRAMING NOTE TAG	BM.	BEAM
(1)	BEARING PLATE TAG	BOT.	BOTTOM
(1)	ROOF TRUSS PROFILE TAG	BRNG.	BEARING
(1)	SPAN DIRECTION - 9/16" METAL FLOOR DECK	B.S.E.	BRICK/BLOCK SEAT ELEV.
(1)	SPAN DIRECTION - 1" METAL ROOF DECK	C.M.U.	CONCRETE MASONRY UNIT
(1)	SPAN DIRECTION - 5/8" PLYWOOD ROOF DECK	CB.	CONCRETE BLOCK
(1)	SPAN SECTION SPECIAL JOIST ELEV.	CJ.	CONTROL JOINT/CONSTRUCTION JOINT
(1)	SPAN DIRECTION - METAL FLOOR DECK	CL.	CENTER LINE
(1)	TOP OF FOOTING ELEV. TAG	COL.	COLUMN
(1)	SHEAR WALL TAG	CONC.	CONCRETE
		CONT.	CONTINUOUS
		CRW.	CONCRETE RETAINING WALL
		CTRD.	CENTER
		CWP.	CONCRETE WALL PANEL
		D.L.	DEAD LOAD
		DBL.	DOUBLE
		DA.	DIAMETER
		DP.	DRILLED PIER (CAST-IN)
		DWG.	DRAWING(S)
		E.F.	EACH FACE
		E.J.	EXPANSION JOINT
		ED.	EDGE NAILING
		EW.	EACH WAY
		ELV.	ELEVATION
		EXST.	EXISTING
		EXP.	EXPANSION
		EXT.	EXTERIOR
		F.F.M.	FOOTING FRAMING MARK
		F.F.E.	FINISHED FLOOR ELEVATION
		FIN.	FINISH NAILING
		F.V.	FIELD VERIFY
		FDN.	FOUNDATION
		FR.	FRAMING
		FS.	FOOTING SQUARE
		FTG.	FOOTING
		G.L.B.	GLUELAM BEAM
		GA.	GAUGE
		GB.	GRADE BEAM
		H.C.	HOLLOWCORE
		HORIZ.	HORIZONTAL
		J.B.E.	JOIST BEARING ELEVATION
		JT.	JOINT
		L.G.M.F.	LIGHT GAUGE METAL FRMG.
		LL.	LIVE LOAD
		LLH.	LONG LEG HORIZONTAL
		LLV.	LONG LEG VERTICAL
		M.O.	MASONRY OPENING
		MAX.	MAXIMUM
		MFG.	MANUFACTURER
		MIN.	MINIMUM
		MTL.	METAL
		ON CENTER	
		OPNG.	OPENING
		P.	PLATE
		P.L.	POUNDS PER LINEAL FOOT
		P.S.F.	POUNDS PER SQUARE FOOT
		P.T.	PRESSURE TREATED
		R.	ROOF FRAMING MARK
		REN.	REINFORCED
		REC'D.	RECORDED
		RET.	RETAINING
		S.P.	SOUTHERN YELLOW PINE
		SCHED.	SCHEDULE
		SECT.	SECTION
		SM.	SMALLER
		STL.	STEEL
		STIFF.	STIFFENER
		ELV.	ELEVATION
		STRUCT.	STRUCTURAL
		T.B.E.	TRUSS BEARING ELEVATION
		T.F.E.	TOP OF FOOTING ELEVATION
		T.L.	TOTAL LOAD
		T.S.E.	TOP OF STEEL ELEVATION
		T.W.E.	TOP OF WALL ELEVATION
		TYP.	TYPICAL
		U.N.O.	UNLESS NOTED OTHERWISE
		VERT.	VERTICAL
		WB.	WOOD BEAM
		W/.	WITH
		WWF.	WELDED WIRE FABRIC

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Olive Garden
 ITALIAN KITCHEN

Issue Date: 04-12-2018

REVISION INFORMATION	
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Restaurant #: 1173

P1-B
 (HIGH)
 1711 GALLATIN RD.
 NORTH

MADISON, TN

STRUCTURAL NOTES
 AND FOUNDATION
 DETAILS

S1.1

Order Plans

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