### **GENERAL NOTES**

- 1. THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- 2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- 3. ALL DIMENSIONS, EXISTING CONDITIONS, AND AS—BUILT CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- 4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE ONLY AFTER THE STRUCTURAL WORK CONTAINED IN THE S— DRAWINGS IS COMPLETED. 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 AS DETERMINED BY THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER RESERVES THE RIGHT TO INTERPRET DETAILS TO ADDRESS OTHER PROJECT CONDITIONS.
- 6. PROVIDE AND INSTALL NECESSARY MATERIAL TO CONNECT ELEVATOR
  SUPPORT BEAMS AND GUIDE RAILS. LOCATION AND SIZE OF MEMBERS AND
  ANY INSERTS REQUIRED SHALL BE DETERMINED BY THE ELEVATOR
  MANUFACTURER.
- 7. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHORING, AND CONSTRUCTION METHODS AND SEQUENCING WHERE APPLICABLE. NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO, DEMOLITION OF EXISTING STRUCTURE, OR FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ARCHITECT AND ENGINEER. SUBMIT ONE COPY AND ONE SEPIA. COPY WILL BE REVIEWED AND SEPIA WILL BE RETURNED. FOR SHOP DRAWINGS AND SUBMITTALS REQUIRED, REFERENCE THE PROJECT SPECIFICATION.
- 8. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
- 9. IN ACCORDANCE WITH THE MAINE UNIFORM BUILDING AND ENERGY CODE/INTERNATIONAL BUILDING CODE (2009 EDITION, SECTION 1704.1), A STATEMENT OF SPECIAL INSPECTIONS IS REQUIRED AS A CONDITION FOR PERMIT ISSUANCE BY THE LOCAL CODE OFFICIAL. THIS STATEMENT SHALL INCLUDE A COMPLETE LIST OF MATERIALS AND WORK REQUIRING SPECIAL INSPECTIONS, THE INSPECTIONS TO BE PERFORMED AND A LIST OF THE INDIVIDUALS, APPROVED AGENCIES AND FIRMS INTENDED TO BE RETAINED FOR CONDUCTING SUCH INSPECTIONS.
- 10. REFERENCE THE PROJECT SPECIFICATIONS FOR ALL TESTING REQUIREMENTS.

## <u>DESIGN LOADS</u>

1. BUILDING CODE:

MAINE UNIFORM BUILDING AND ENERGY CODE

INTERNATIONAL BUILDING CODE, 2009 EDITION

ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

80 PSF

80 PSF

100 PSF

100 PSF

2. DESIGN FLOOR LIVE LOADS:

OFFICES:
CORRIDORS ABOVE THE FIRST FLOOR:
FIRST FLOOR CORRIDORS AND PUBLIC AREAS:

3. DESIGN ROOF SNOW LOAD:
GROUND SNOW LOAD (Pg):
SNOW EXPOSURE FACTOR (Ce):
SNOW LOAD IMPORTANCE FACTOR (Is):
SNOW LOAD THERMAL FACTOR (Ct):
1.1

FLAT ROOF SNOW LOAD (Pf): 46 PSF + DRIFT

4. DESIGN WIND LOAD:
BASIC WIND SPEED:
WIND LOAD IMPORTANCE FACTOR (Iw): 1.0
WIND EXPOSURE:
INTERNAL PRESSURE COEFFICIENT: ±0.18

5. DESIGN SEISMIC LOADS:

EQUIVALENT LATERAL FORCE PROCEDURE

SEISMIC OCCUPANCY CATEGORY: II

SEISMIC IMPORTANCE FACTOR (Ie): 1.0

MAPPED SPECTRAL RESPONSE ACCELERATIONS:

Ss: 0.321

COMPONENTS & CLADDING PER ASCE 7-05

S1: 0.078

SEISMIC SITE CLASS: D

SPECTRAL RESPONSE COEFFICIENTS:

Sds: 0.330

Sd1: 0.124

SEISMIC DESIGN CATEGORY: C BASIC STRUCTURAL SYSTEM: BUILDING FRAME SYSTEM (LONGITUDINAL & TRANSVERSE DIR)

TIMBER FRAMES W/STEEL ROD BRACES (LONGITUDINAL DIR). SEE NOTE 6.
BASIC SEISMIC FORCE RESISTING SYSTEM:
TRANSVERSE: LIGHT—FRAMED WALLS SHEATHED W/WOOD STRUCTURAL PANELS

LONGITUDINAL: TIMBER FRAMES

RESPONSE MODIFICATION FACTOR (R): 7.0 (TRANSVERSE)

3.0 (LONGITUDINAL)

SEISMIC RESPONSE COEFFICIENT (Cs): 0.0471 (TRANSVERSE)

6. AS AUTHORITY HAVING JURISDICTION (AHJ) PER IBC SECT. 104.11 "ALTERNATE MATERIALS, DESIGN AND METHODS OF CONSTRUCTION", CITY OF PORTLAND, MAINE ACCEPTS USE OF SEISMIC FORCE RESISTING SYSTEM AS IDENTIFIED IN NOTE 5. DOCUMENTATION OF THIS ACCEPTANCE IS PROVIDED IN DIVISION 1 OF THE PROJECT SPECIFICATIONS.

0.107 (LONGITUDINAL)

## FOUNDATION NOTES (SOIL SUPPORTED)

- 1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH A REPORT ENTITLED GEOTECHNICAL ENGINEERING SERVICES FOR PROPOSED PATRONS OXFORD INSURANCE COMPANY OFFICE BUILDING, PORTLAND, MAINE, PREPARED BY R.W. GILLESPIE & ASSOCIATES, DATED OCT 6. 2015. THE RECOMMENDATIONS OF THE REPORT ARE PART OF THIS WORK. REFER TO THIS REPORT FOR SPECIFIC RECOMMENDATIONS.
- 2. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON LIGHT-WEIGHT, CELLULAR CONCRETE FILL OF A 3'-O" MINIMUM THICKNESS EXTENDING TO UNDISTURBED NATIVE SOILS PER THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. REFER TO THIS REPORT FOR SPECIFIC BEARING RECOMMENDATIONS.
- 3. PER THE GEOTECH REPORT, ALL FOUNDATIONS SHALL BE BACKFILLED W/AN INITIAL 2'-0" THICK LAYER OF LIGHT-WEIGHT, CELLULAR CONCRETE FILL, FOLLOWED BY A FINAL LAYER OF COMPACTED STRUCT FILL. REFER TO THIS REPORT FOR ADDITIONAL REQUIREMENTS.
- 4. ALLOWABLE BEARING CAPACITY 3,000 PSF AT BASE OF FOOTING.
- 5. FOUNDATIONS SHALL BE INSULATED AS SHOWN ON THE ARCHITECTURAL DWGS.
- 6. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- 7. REFERENCE THE GEOTECHNICAL REPORT FOR ALL EXCAVATION, BACKFILL, COMPACTION, CONSTRUCTION DEWATERING AND PERMANENT DRAINAGE REQUIREMENTS.
- 8. SOILS EXPOSED AT THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHALL BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHALL BE ADEQUATELY PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. GROUNDWATER SHOULD BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.
- 9. EXCAVATIONS FOR BUILDING CONSTRUCTION SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. DO NOT UNDERMINE EXISTING FOUNDATIONS OF ANY ADJACENT STRUCTURES. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL AND/OR MORE SPECIFIC REQUIREMENTS.

### CONCRETE NOTES

- 1. CONCRETE WORK SHALL CONFORM TO "ACI MANUAL OF CONCRETE PRACTICE", LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.
- 2. CONCRETE FOUNDATIONS SHALL HAVE A MINIMUM 28—DAY COMPRESSIVE STRENGTH OF 3,500 PSI. CONCRETE SLABS SHALL HAVE A MINIMUM 28—DAY COMPRESSIVE STRENGTH OF 3,000 PSI, U.N.O. EXTERIOR SLAB—ON—GRADE SHALL HAVE A MINIMUM 28—DAY COMPRESSIVE STRENGTH OF 5,000 PSI. ADDITIONAL CONCRETE MIX PERFORMANCE DATA INCLUDING AIR CONTENT, WATER—CEMENT RATIO, AGGREGATE SIZE, SLUMP, ETC. HAS BEEN INCLUDED IN THE PROJECT SPECIFICATIONS. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- 4. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE, OR SLABS.
- 5. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION.
- 6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.
- 7. FIBER REINFORCEMENT SHALL BE TYPE III SYNTHETIC VIRGIN HOMOPOLYMER POLYPROPYLENE FIBERS CONFORMING TO ASTM C1116.
- 8. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:

A.SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH, 3.0"
B.FORMED SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER
#5 BARS, 5/8" DIAMETER WIRE AND SMALLER, 1.5"
#6 THROUGH #11 BARS, 2.0"

C.SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER WALLS, SLABS, JOISTS #11 BARS AND SMALLER, 1.0"
BEAMS, GIRDERS, AND COLUMNS; ALL REINFORCEMENT, 1.5"

- 9. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPLICES PER THE SCHEDULE DRAWING S2.1, FOR ALL REINFORCING UNLESS OTHERWISE SHOWN ON PLAN.
- 10. WELDING OF REINFORCEMENT IS NOT PERMITTED
- 11. FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS TYPICAL DETAILS. NO PENETRATIONS SHALL BE MADE THROUGH FOOTINGS WITHOUT WRITTEN PERMISSION FROM ENGINEER.
- 12. CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY. OMISSIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMITTAL OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATIONS FOR APPROVAL OF THE STRUCTURAL ENGINEER. WHERE CONSTRUCTION JOINTS ARE NOT SHOWN, OR WHEN ALTERNATE LOCATIONS ARE PROPOSED, DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND CONCRETE PLACING SEQUENCE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO PREPARATION OF THE REINFORCEMENT SHOP DRAWINGS. CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS IN CONCRETE BEAMS/ GRADE BEAMS SHALL BE MADE AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR, UNLESS NOTED OTHERWISE.
- 13. SPACING OF CONSTRUCTION JOINTS, UNLESS NOTED OTHERWISE SHALL BE AS FOLLOWS:
  A.FOOTINGS AND WALLS
  MAX LENGTH 40'-0" OR 15'-0" FROM ANY CORNER\*\*
  B.SLABS ON GRADE
  SEE FOUNDATION PLAN
- \*\* EXCEED ONLY WHERE INTERMEDIATE CONTRACTION JOINTS ARE PROVIDED. MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS.
- 14. ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554, GRADE 36 KSI WELDABLE STEEL, UNLESS NOTED OTHERWISE ON DRAWINGS. ANCHOR RODS THAT ARE TO BE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT—DIPPED GALVANIZED.
- 15. ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "5-STAR" 5000-PSI NON-SHRINK GROUT BY U.S. GROUT CORP.
- 16. SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR STRUCTURE DEFLECTION, SUBGRADE FLUCTUATIONS, AND TO OBTAIN THE SPECIFIED SLAB ELEVATION AT THE FLATNESS AND LEVELNESS INDICATED.
- 17. INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED COMPLETION OF THE INSTALLATION OF REINFORCEMENT.
- 18. ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED TO ENSURE THE CORRECT POSITIONS OF EMBEDMENTS. "WET SETTING" OF EMBEDMENTS INTO CONCRETE IS STRICTLY PROHIBITED. EMBEDMENTS INCLUDE, BUT NOT BY LIMITATION, REINFORCEMENT, REINFORCING DOWELS, EMBEDDED PLATES, ANCHOR RODS, ANCHOR INSERTS, SLEEVES, LOAD TRANSFER PLATES, DIAMOND DOWELS, AND SHELF BULK HEADS.

## STRUCTURAL STEEL NOTES

- 1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATIONS, AND ERECTION OF STRUCTURAL STEEL" LATEST EDITION, AND THE "CODE OF STANDARD PRACTICE", LATEST EDITION.
- 2. STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, CONFORM TO ASTM A36
  UNLESS NOTED OTHER WISE (U.N.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON
  THE DRAWINGS FOR WIDE—FLANGE SECTIONS: ASTM A992 (ASTM A572 GRADE 50
  WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH,
  1997)
- 3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
- 4. FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.N.O.) EXCEPT WHERE SLIP CRITICAL CONNECTIONS ARE REQUIRED AND NOTED BY A325 (SC) ON THE DRAWINGS. PROVIDE SLIP CRITICAL (SC) CONNECTIONS AT ALL MOMENT CONNECTIONS, BRACED FRAMES, RELIEVING ANGLES AND AS OTHERWISE NOTED. USE A490 BOLTS WHERE INDICATED.
- 5. WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1—LATEST EDITION. ELECTRODES SHALL CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN)
- 6. SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
- 7. PROVIDE 3/8" MINIMUM STIFFENER PLATES EACH SIDE OF BEAM WEB AT BEAMS FRAMING OVER COLUMNS AND AT BEAMS SUPPORTING COLUMNS ABOVE.
- 8. PROVIDE 1/4" THICK LEVELING PLATE UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED. LEVELING PLATES SHALL BE SET AND GROUTED PRIOR TO ERECTING COLUMNS.
- 9. PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHOR BLOTS ETC., SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BLOCKING, PARAPETS, FINISHES, ETC. COORDINATE WITH MISCELLANEOUS METAL FABRICATOR TO ENSURE COMPLETE COVERAGE OF ALL ITEMS.

## TIMBER NOTES

- 1. ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL— LATEST EDITION, AND THE AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) LATEST EDITION.
- 2. INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED. MINIMUM GRADE NO1/NO2 SPRUCE—PINE—FIR KILN DRIED TO 19% MAXIMUM MOISTURE CONTENT UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 3. ENGINEERED WOOD PRODUCTS SHALL BE AS SPECIFIED ON THE DRAWINGS. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES. MANUFACTURER AND PRODUCT SHALL BE:

I-LEVEL: I-JOIST (TJI), PARALLAM (PSL), MICROLAM (LVL), TIMBERSTRAND (LSL)

BOISE: I-JOIST (BCI), VERSALAM (LVL)

- 4. PRESSURE TREATED LUMBER SHALL BE USED FOR SILL MEMBERS, EXTERIOR EXPOSURE, OR WHERE SHOWN ON THE DRAWINGS. TIMBER SHALL BE SOUTHERN YELLOW PINE TREATED WITH CCA OR ACQ TO 0.4 #/CF IN ACCORDANCE WITH AWPA C-18. ACZA IS STRICTLY PROHIBITED.
- 5. ALL ROOF AND WALL SHEATHING SHALL BE APA PERFORMANCE—RATED. SHEATHING SHALL BE NAILED TO THE FRAMING AS FOLLOWS, U.N.O.:
  - A. ROOFS: 8d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12"O.C. AT
  - INTERMEDIATE SUPPORTS.

    B. WALLS: 8d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
- 6. FLOOR SHEATHING SHALL BE 3/4", APA RATED TONGUE AND GROOVE PANELS. GLUE AND NAIL TO FLOOR FRAMING WITH 8d RING SHANK NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. HUBER ADVANTECH TONGUE AND GROOVE PANELS MAY BE SUBSTITUTED ONLY WITH WRITTEN PERMISSION FROM THE ARCHITECT.
- 7. ALL BUILT—UP BEAMS AND COLUMNS SHALL BE NAILED AS FOLLOWS (FASTENING IN EACH PLY):

# UNIFORMLY LOADED BEAMS:

BEAM DEPTH <16" — 2 ROWS OF 16d NAILS AT 12" O.C., STAGGERED BEAM DEPTH >=16" — 3 ROWS OF 16d NAILS AT 12" O.C. STAGGERED NOTE: SIDE LOADED BEAMS REQUIRE ADDITIONAL FASTENING. SEE DETAILS.

COLUMNS: 2-10d NAILS AT 6" O.C.

8. FASTENING NOT SPECIFIED SHALL CONFORM WITH IBC 2009 TABLE 2304.9.1. NAIL FASTENERS SHALL MEET THE REQUIREMENTS OF ASTM F1667. UNLESS NOTED OTHERWISE, NAILS REFERENCED ON DRAWINGS ARE TO BE COMMON NAILS WITH DIMENSIONS AS FOLLOWS.

- 8d: 2 1/2" LONG BY 0.131" DIAMETER SHANK WITH 0.281" DIAMETER HEAD 10d: 3" LONG BY 0.148" DIAMETER SHANK WITH 0.312" DIAMETER HEAD 12d: 3 1/4" LONG BY 0.148" DIAMETER SHANK WITH 0.312" DIAMETER HEAD 16d: 3 1/2" LONG BY 0.162" DIAMETER SHANK WITH 0.344" DIAMETER HEAD
- 9. ALL TIMBER CONNECTION HARDWARE (JOIST HANGERS, POST BASES, SHEARWALL HOLDOWNS, ETC) SHALL BE AS INDICATED ON THE DRAWINGS AND MANUFACTURED BY SIMPSON STRONG—TIE. ALL CONNECTION HARDWARE SHALL BE HOT—DIPPED GALVANIZED G—90 (U.N.O.). CONNECTION HARDWARE USED IN CONJUNCTION WITH PRESERVATIVE TREATMENT SHALL BE GALVANIZED G185 (ZMAX) USE FASTENERS AND HANGERS OF SAME MATERIAL & COATING. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES.
- 10. FASTENERS USED IN CONJUNCTION WITH PT LUMBER, BUT NOT AT TIMBER CONNECTION HARDWARE REFERENCED IN NOTE ABOVE, SHALL BE POST HOT—DIPPED GALVANIZED (ASTM A153).

# GLUED-LAMINATED (GLU LAM) TIMBER NOTES

- 1. ALL GLU LAM TIMBER SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL, LASTEST EDITION, AND THE AF&PA NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS), LATEST EDITION.
- 2. SUBMIT ALL PRODUCT INFORMATION FOR REVIEW. FRAMING MEMBERS SHALL BE PROVIDED AS FOLLOWS U.N.O.:
  - <u>BEAMS:</u> SOUTHERN PINE 24F-V3, E=1800 ksi OR BETTER. <u>COLUMNS:</u> SOUTHERN PINE 48 SOG 1/10 OR BETTER TYP U.N.O.
- 3. FOR ALL CANTILEVERED BEAMS AND BEAMS CONTINUOUS OVER SUPPORTS, PROVIDE BALANCED LAYUP OF LAMINATIONS TO ACHIEVE 2400 psi BENDING STRENGTH AT THE TENSION AND COMPRESSION FACES.
- 4. AT ALL BEAMS AND COLUMNS EXPOSED TO VIEW, PROVIDE GLU LAM OF ARCHITECTURAL GRADE U.N.O.

# WOOD TRUSS NOTES

### <u>GENERAL</u>

- TRUSSES SHALL BE DESIGNED, FABRICATED, ERECTED, AND BRACED IN ACCORDANCE WITH LATEST EDITION OF THE WTCA/TPI BCSI 1 BOOKLET AS NOTED IN THE NOTES AND SPECIFICATIONS AND ALL OTHER APPLICABLE CODES.
- 2. ERECTION AND TEMPORARY BRACING SHALL CONFORM TO WTCA/TPI BCSI 1-LATEST EDITION.

#### <u>DESIGN</u>

- 1. SEE FRAMING PLANS FOR TRUSS ORIENTATION AND LOCATIONS
- 2. SEE ARCHITECT FOR ALL TRUSS PROFILES AND DIMENSIONS.
- 3. TEMPORARY BRACING SHALL BE LEFT IN PLACE AND SERVE AS PART OF THE PERMANENT BRACING SYSTEM.
- 4. PERMANENT CONTINUOUS LATERAL BRACING, INDICATED BY THE TRUSS DESIGNER, WILL BE REVIEWED DURING THE SHOP DRAWING PHASE. DIAGONAL STRUTS AND CONNECTIONS INDICATED ON SHOP DRAWINGS SHALL BE APPLIED UNLESS NOTIFIED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD.
- 5. TRUSS DESIGNER SHALL DESIGN TRUSS TO MINIMIZE CONTINUOUS LATERAL BRACING REQUIRED TO BE INSTALLED IN THE FIELD.
- 6. TRUSS DESIGNER SHALL PROVIDE ALL CONNECTION DESIGN FOR TRUSS TO TRUSS CONNECTIONS.
- 7. PROVIDE GABLE END TRUSSES WITH VERTICALS AT 16" O.C. CALCULATE WIND LOADS PER CRITERIA INDICATED IN THE DRAWINGS & NOTES.
- 8. ALL TRUSSES SHALL BE DESIGNED FOR UNBALANCED LOADS.

## <u>SUBMITTALS</u>

1. TRUSS MANUFACTURER SHALL SUBMIT A TRUSS PLACEMENT DRAWING INDICATING THE FOLLOWING.

A.SLOPE B.SPAN

C.SPACING
D.TRUSS NUMBER THAT CORRESPONDS TO TRUSS DESIGN DRAWING.
E.LOCATION OF PERMANENT LATERAL BRACING. (ALTERNATIVE: LOCATION OF BRACING SHALL BE INDICATED ON THE TRUSSES BY EITHER A TAG OR A PAINT MARK.)

- 2. TRUSS DESIGN DRAWINGS/CALCULATIONS STAMPED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MAINE.
- 3. TRUSS DESIGN DRAWINGS SHALL INCLUDE THE FOLLOWING:

A.SLOPE, SPAN, AND SPACING. B.LOCATIONS OF ALL JOINTS.

C.REQUIRED BEARING WIDTHS.

D.CHORD AND WEB MEMBER SIZE, GRADE, AND SPECIES.

E.CALCULATED HORIZONTAL DEFLECTION AND VERTICAL DEFLECTION.

F.MAXIMUM AXIAL AND COMPRESSION FORCES IN EA OF THE TRUSS

MEMBERS TO ENABLE THE BUILDING DESIGNER TO REVIEW THE SIZE,

CONNECTIONS, AND ANCHORAGE OF PERMANENT CONTINUOUS LATERAL

BRACING. G.REQUIRED PERMANENT TRUSS BEARING LOCATIONS.



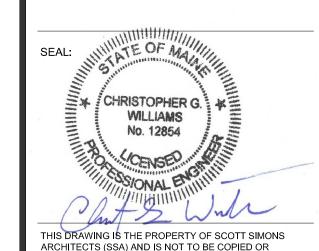
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PROJECT NAME:

# PATRONS OXFORD OFFICES

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GENERAL NOTES

**S1.0**