GENERAL STRUCTURAL SPECIFICATIONS

959 C0NGRESS STREET
PORTLAND, MAINE
May 9, 2005

GENERAL REQUIREMENTS

1. Work and materials shall conform to the 2003 International Building Code, State of Maine Building Codes, and other applicable codes and standards and shall meet the requirements of local authorities having jurisdiction.

2. See project drawings, specifications and other construction documents prepared by CWS Architects for additional requirements.

3. Reference to "Engineer" within these specifications refers to Price Structural Engineers, Inc.

4. Coordinate work schedule, daily hours of construction, location of material storage, access to utilities, security measures and final cleanup requirements with owner prior to construction.

5. Notify CWS Architects immediately after steel lintel construction has been completed (prior to applying wall finishes) so that lintel installation can be inspected by the engineer.

6. See attached page labeled "Abbreviations" for description of abbreviations used on sketches.

7. Structural drawings and specifications do not include provisions for site-work, ventilation, plumbing, water-tightness of building, NFPA fire code requirements, Americans with Disabilities Act (ADA) requirements, handrails, lighting, egress requirements, flashing, finishes, hazardous waste, or other architectural and environmental features. Coordinate these requirements with others as necessary.

8. The following list of drawings and sketches form a part of this specification:

   SK-1 through SK-5

9. The structural design is based on the full interaction of all its connected parts. No provisions have been made for any temporary conditions that may arise during construction prior to the completion of the structure. The Contractor shall be responsible for adequate design and construction of all forms, shoring and temporary bracing during the progress of the project.

10. All work, including demolition, shall be performed by experienced workman and coordinated with adequate supervision by the contractor's project supervisor.

11. Alternate details may be used only if such details are submitted in writing to the Structural Engineer for review and written acceptance is granted prior to construction. However, the Structural Engineer shall be the sole judge of acceptability and the Contractor's Bid shall anticipate the use of those specific details shown on the Drawings.

12. The Contractor shall be completely responsible for the safety of adjacent structures, property, and the public. The Contractor shall comply with all federal, state and local safety requirements.

13. Do not scale from Drawings.

14. All materials shall be new except those labeled "EXIST." (existing).

15. Work not indicated on a part of the Drawings but reasonably implied to be similar to that shown at corresponding places shall be included.

16. These structural documents shall be used for this project only and not for any other purpose. The Contractor shall not modify these documents or make changes in construction from the intent of these documents without written approval from the engineer. Use of part but not all of these documents is not permitted.

17. The Contractor is required to examine the Drawings and Specifications carefully, visit the site and fully inform themselves as to all existing conditions and limitations, prior to submitting their Bid. Failure to visit the site and familiarize themselves with the existing conditions, interferences and other limitations will in no way relieve the successful Bidder from furnishing any materials or performing any work in accordance with Drawings and specifications (at no additional cost to the Owner).

18. Details indicating existing conditions are based on assumptions, some of which have not yet been field verified. It is critical that the contractor verify actual existing conditions prior to purchasing or fabricating new materials and notify

the engineer immediately if actual conditions differ from those indicated on the structural details.

19. Remove and legally dispose of demolished materials.

20. Contractor shall take all necessary precautions to ensure that existing building components are not damaged during construction. All damaged areas shall be completely restored to the full satisfaction of the Owner at no additional cost to the Owner.

21. Stored materials shall be kept under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack materials in such a manner that prevents warping or crushing.

22. Pre-manufactured materials shall be installed in accordance with manufacturer's requirements and recommendations. Substitutions for specified pre-manufactured materials may be made but only after specific written approval has been provided by the owner's engineer prior to installation.

23. Except where slope is specified, new materials shall be installed plumb, level, and square. Contractor shall not fabricate materials until interferences have been identified and resolved.

24. At areas where existing structural components are uncovered and found to be inadequate, the contractor shall either properly reinforce the components or contact the Engineer (PSE) for the structural design of the modifications.

MASONRY

1. All masonry construction shall conform to the requirements of ACI 530.1-95/ASCE 6-95/TMS-95 ("Specification for Masonry Structures") and the project specifications. In case of conflict, the more stringent requirements shall apply. Clean and re-use existing sound brick as much as possible.

2. All joints shall be tooled concave. Masonry shall be laid in "running bond". New brick, if needed, shall conform to ASTM C216, grade SW, 3000 psi compressive strength and match existing brick as much as possible.

3. Mortar shall comply with ASTM C270 type N, minimum compressive strength shall be 1900 psi using Portland/Cement Line, Cementitious Material and Proportion Specifications. Lime shall be hydrated line, ASTM C207. Brick ties shall be hot dip galvanized.

4. Masonry walls shall be adequately braced and supported throughout construction. New brick construction shall be mortared solid without voids.

STRUCTURAL STEEL

1. All structural steel work shall conform to the recommendations and requirements contained in the "Manual of Steel Construction, Allowable Stress Design," AISC Ninth Edition (including AISC Code of Standard Practice for Steel Buildings and Bridges), and "Structural Steel Welding Code – Steel," (AWS D1.1, latest edition).

2. No change in size or position of the structural elements shall be made without prior written approval of the Structural Engineer.

3. All holes in steel components shall be drilled. Use of cutting torches for holes is not permitted.

4. Holes for bolts shall be drilled to a diameter that is 1/16" larger than the nominal diameter of the bolt (uon).

5. All shop and field welds shall be made by certified welders, and shall conform to the American Welding Society Code, AWS D1.1, latest edition, using E70-18 electrodes. Carefully control welding technique to avoid distortion, including clamping prior to welding. Minimum weld size shall be 3/16" fillet.

6. Structural steel components shall be shop primed with fabricator's standard primer. Provide field touch-up as necessary.

7. Structural steel rolled shapes, plates, bars and tubes shall conform to the following:

ASTM A-572, Grade 50:	All wide flange sections ("W" shapes), Fy = 50 ksi
ASTM A-36:	Other rolled shapes, plates and bars, Fy = 36 ksi
ASTM A-500, Grade B:	Steel Tubes ("TS" shapes), Fy = 46 ksi
ASTM A-53, Grade B:	Steel pipe, Fy = 35 ksi
ASTM A-36:	Threaded rods
ASTM A-307:	Anchor bolts in concrete (unless otherwise noted)

   Note: Bolts and rods exposed to weather shall be galvanized.

8. Non-shrink grout shall be 5000 psi (minimum) compression strength.

ABBREVIATIONS

AB	Anchor Bolts
BO	By Others
BS	Both Sides
CL	Centerline
CLR	Clear Distance
COL	Column
CONC	Concrete
CONT	Continuous
CIP	Cast-In-Place
DIA	Diameter
EB	Expansion Bolt
EMBT	Embedment
EA	Each
EQ	Equal
EXG	Existing
FB	Flat Bar
FDN	Foundation
FF	Finish Floor
FT	Feet
FTG	Footing
GA	Gauge
GC	General Contractor
GALV	Hot-Dip Galvanized
HORIZ	Horizontal
IN.	Inches
MAX	Maximum
MIN	Minimum
MO	Masonry Opening
NTS	Not To Scale
N&W	Nut and Washer
O.C.	On Center
OPNG	Opening
OH	Opposite Hand
PL	Plate
PT	Pressure Treated
RO	Rough Opening
REQ'D	Required
SCH	Schedule
SIM	Similar
SPECS	Specifications
SS	Stainless Steel
SYP	Southern Yellow Pine
TOF	Top of Footing Elevatin
TOW	Top of Wall Elevation
T & B	Top and Bottom
TYP	Typical
UON	Unless otherwise noted
VERT	Vertical
W/	With
VIF	Verify in Field
VLAM	Versalam
@	At
&	And