

## GENERAL STRUCTURAL NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO:
  - IBC BUILDING CODE 2009 ED
  - ANSI/ASSE 7.45
  - ACI REINFORCED CONCRETE
  - ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS\*
  - AISC STEEL CONSTRUCTION MANUAL 9TH ED ASD
  - ANSI/AISC 360-10
  - ANSI/AISC 360-10
- ROOF DESIGN LOADS:
 

DECK LOAD	42 PSF + DRIFT
DECK LOAD	15 PSF
TOTAL ROOF LOAD	57 PSF + DRIFT
- WIND LOADS:
  - BASED ON WIND SPEED OF 100 MPH, EXP. B, 1 = 1.0, SIMPLIFIED PROCEDURE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE ATTENTION OF THE ENGINEER AND ARCHITECT ON THE DRAWINGS AND ALSO ANY CONDITIONS THAT PREVENT THE CONTRACTOR'S COMPLETION OF THE WORK AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE SUCH TRADE IN THE STATE IN WHICH THE PROJECT IS LOCATED.
- THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS, IN ADDITION TO SPECIFICATIONS AND ANY SHOP DRAWINGS PROVIDED BY SUBCONTRACTORS AND SUPPLIERS.
- ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHALL BE VERIFIED IN THE FIELD BY GENERAL CONTRACTOR (G.C.) AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- UNLESS OTHERWISE NOTED, DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR DETAILS.
- THESE DRAWINGS DO NOT SHOW SIZE, LOCATION OR TYPE OF OPENING IN THE FOUNDATION SYSTEM FOR ELECTRICAL, PLUMBING OR MECHANICAL EQUIPMENT. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THESE ITEMS.
- ALL SHOP DRAWINGS PROVIDED BY OTHERS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION OF MATERIAL OR THE PURCHASE OF MATERIAL. THE ENGINEER'S APPROVAL OR DISAPPROVAL OF CONTRACTOR'S RESPONSIBILITY.

## STRUCTURAL STEEL NOTES

- GENERAL
    - STANDARD SPECIFICATIONS
    - FABRICATION, ERECTION, AND WELDING, IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN ADOPTED JUNE 1989, INCLUDING ALL PUBLISHED SUPPLEMENTS, A1.1.3.C.
    - WELDING--IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE\*, AWS D1.1, LATEST EDITION.
    - BOLTING OF STRUCTURAL JOINTS SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS\*, LATEST EDITION.
  - QUALIFICATIONS
    - WELDING PROCEDURES, WELDERS, WELDING OPERATIONS AND TACKLING, QUALIFIED IN ACCORDANCE WITH AWS CODE.
  - SUBMITTALS
    - INTENTIONALLY LEFT BLANK
  - PRODUCT HANDLING
    - STORE STRUCTURAL STEEL MEMBERS AT THE PROJECT SITE ABOVE GROUND ON PLATFORMS, SKIDS, OR OTHER SUPPORTS.
    - PROTECT STEEL FROM CORROSION.
- PART 2 - PRODUCTS**
- MATERIALS
    - STEEL W AND C SHAPES - ASTM A992
    - STRUCTURAL ANGLES - ASTM A36
    - STRUCTURAL TUBES AND COLUMNS - ASTM A500, GRADE B.
    - STRUCTURAL PIPE - ASTM A53, TYPE F, GRADE B, SCHEDULE 40.
    - HIGH STRENGTH BOLTS 7/8" - ASTM A-325, TYPE 1 OR 2.
    - ANCHOR BOLTS - ASTM A-307, GRADE A.
    - ANCHORED ROD - ASTM A36.
    - WELDING TO BE PERFORMED WITH 70 ksi WIRE OR ELECTRODES.
  - FABRICATION
    - FABRICATE STRUCTURAL STEEL IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS AND THIS SECTION OF THE SPECIFICATIONS.

## NOTES

## STRUCTURAL STEEL CONT.

- ERECTOR
  - THE STRUCTURAL METAL SHALL BE ERECTED PLUMB AND TRUE TO THE LINES AND EVALUATIONS INDICATED ON THE DRAWINGS.
  - ERECTOR TOLERANCES SHALL BE WITHIN THE LIMITS SPECIFIED IN SECTION 7.1.1 OF THE AISC CODE OF STANDARD PRACTICE.
  - TEMPORARY BRACING SHALL BE PROVIDED WHEREVER NECESSARY TO HOLD THE STEEL IN A HORIZONTAL AND VERTICAL PLANE UNTIL PERMANENT BOLTING HAS BEEN COMPLETED.
  - BOLTS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND BROUGHT TO TIGHT TIGHT CONDITION. ALL PILES OF JOINTS IN FIRM CONTACT, IN ACCORDANCE WITH SECTION 8.1.1 OF THE AISC CODE OF STANDARD PRACTICE.
  - EMBRACEMENT OF HOLES BY BURNING WITH A TORCH SHALL NOT BE ALLOWED. ALL STEEL WITH BURST HOLES EMBRACEMENTS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- PAINTING
  - SHOP PAINT PREPARED SURFACES OF ALL STEEL WORK WITH FABRICATORS STANDARD RUST INHIBITIVE PAINT, MINIMUM 2.0 MIL THICKNESS, COMPATIBLE WITH BRACE COAT.
  - PRIME (ONLY), TO A MINIMUM OF HAND TOOL CLEAN OR EQUIVALENT AS DICTATED BY CONDITION OF PRODUCT AT TIME OF PAINTING.

## CLAY MASONRY

- GENERAL
  - THIS SECTION INCLUDES CUTTING AND PATCHING OF EXISTING CLAY MASONRY.
  - DELIVERY, STORAGE AND HANDLING
    - DELIVER OTHER MANUFACTURED PRODUCTS TO PROJECT SITE IN MANUFACTURERS ORIGINAL UNITS AND KEEP THEM PROTECTED FROM WEATHER OF PRODUCTS AND MANUFACTURERS, LABELED WITH TYPE AND NAME OF PRODUCT AND MANUFACTURER.
    - STORE CEMENTITIOUS MATERIALS OFF THE GROUND, UNDER COVER, AND IN A DRY LOCATION.
    - STORE AGGREGATES, COVERED AND IN A DRY LOCATION, WHERE GRADING AND OTHER REQUIRED CHARACTERISTICS CAN BE MAINTAINED AND CONTAMINATION AVOIDED.
    - CONVERT WITH MANUFACTURERS WRITTEN INSTRUCTIONS FOR MINIMUM AND MAXIMUM TEMPERATURE REQUIREMENTS FOR STORAGE.
  - PROJECT CONDITIONS
    - DO NOT REPOINT MORTAR JOINTS OR REPAIR MASONRY UNLESS AIR TEMPERATURE IS BETWEEN AND 40 AND 80 DEG F (4 AND 27 DEG C) AND WILL REMAIN 50 FOR AT LEAST 48 HOURS AFTER COMPLETION OF WORK.
    - COLD-WEATHER REQUIREMENTS: COMPLY WITH THE FOLLOWING:
      - WIND AIR TEMPERATURE IS BELOW 40 DEG F (4 DEG C). HEAT MORTAR WALLS TO PRODUCE TEMPERATURES BETWEEN 40 AND 120 DEG F (4 AND 49 DEG C).
      - WHEN MEAN DAILY AIR TEMPERATURE IS BETWEEN 25 AND 40 DEG F (MINUS 4 AND 4 DEG C), COVER COMPLETED WORK WITH WEATHER-RESISTANT INSULATING BURNERS FOR 48 HOURS AFTER WHEN MEAN DAILY AIR TEMPERATURE IS BELOW 25 DEG F (MINUS 4 DEG C). PROVIDE ENCLOSURE AND HEAT TO MAINTAIN TEMPERATURES ABOVE 32 DEG F (0 DEG C) WITHIN THE ENCLOSURE FOR 48 HOURS AFTER REPAIR AND POINTING.
      - HOT-WEATHER REQUIREMENTS: PROTECT RESTORATION WORK WHEN TEMPERATURE AND HUMIDITY CONDITIONS PRODUCE EXCESSIVE EVAPORATION OF WATER FROM MORTAR AND FINISHING MATERIALS. NOTIFY AS PER LOCAL CODES AND AVOID WORK IN EXCESSIVE HEAT. PROVIDE COOLING MATERIALS AS REQUIRED TO MAINTAIN MORTAR TO 50 DEGREES WITH TEMPERATURES OF 90 DEG F (32 DEG C) AND ABOVE.
      - PREVENT GROUT OR MORTAR USED IN REPOINTING AND REPAIR WORK FROM STAINING FACE OF SURROUNDING MASONRY AND OTHER SURFACES. IMMEDIATELY REMOVE GROUT AND MORTAR IN CONTACT WITH EXPOSED MASONRY AND OTHER SURFACES.
      - PROTECT SILLS, LEDGES, AND PROJECTIONS FROM MORTAR DROPPINGS.
  - PRODUCTS
    - MASONRY MATERIALS
      - PROVIDE NEW UNITS WITH COLOR, SURFACE TEXTURE, SIZE, AND SHAPE TO MATCH EXISTING BRICK WORK AND WITH PHYSICAL PROPERTIES NOT LESS THAN THOSE DETERMINED FROM RECONSTRUCTION TESTING OF SELECTED EXISTING UNITS.

## MASONRY, CONT.

- MORTAR MATERIALS
  - PORTLAND CEMENT: ASTM C 150, TYPE 1.
  - HYDRATED LIME: ASTM C 207, TYPE S.
  - AGGREGATE FOR MORTAR: ASTM C 144
  - WATER: CLEAN, AND GRANULATION OF EXISTING MORTAR AS CLOSELY AS POSSIBLE.
  - WATER: POTABLE.
- MORTAR MIXES
  - MORTAR ANALYSIS: OBTAIN A MORTAR ANALYSIS FROM INDEPENDENT SOURCE SO THAT NEW MORTAR MIX WILL MATCH EXISTING.
  - SOURCE SO THAT NEW MORTAR MIX WILL MATCH EXISTING.
  - AGGREGATE AND MIXING: MEASURE CEMENTITIOUS AND AGGREGATE BY WEIGHT. MEASURE WATER BY VOLUME. MEASURE MIX MATERIALS IN A CLEAN, MECHANICAL BATCH WAGER.
  - MIXING POINTING MORTAR: THOROUGHLY MIX CEMENTITIOUS AND AGGREGATE MATERIALS TOGETHER BEFORE ADDING ANY WATER. THEN MIX AGAIN ADDING ONLY ENOUGH WATER TO PRODUCE A DAMP, UNWORKABLE MIX THAT WILL RETAIN ITS FORM WHEN PRESSED INTO A BALL. MAINTAIN MORTAR IN THE DAMPENED CONDITION FOR 1 TO 2 HOURS. DO NOT ADD WATER TO MORTAR. DO NOT ADD WATER TO MORTAR OF THE DESIRED CONSISTENCY. USE MORTAR WITHIN 30 MINUTES OF FINAL MIXING. DO NOT RETEMPER OR USE PARTIALLY HARDENED MATERIAL.
  - DO NOT USE ADMIXTURES OF ANY KIND IN MORTAR, UNLESS OTHERWISE INDICATED.
  - MORTAR PROPORTIONS: MIX MORTAR MATERIALS IN THE FOLLOWING PROPORTIONS, OR IN CONFORMANCE WITH MORTAR ANALYSIS PROVIDED BY SUPPLIER, OR NATURAL MORTAR AGGREGATE IN A LIME AND 1/2 PARTS COLORED, OR NATURAL MORTAR AGGREGATE.
  - REBUILDING MORTAR: SAME AS POINTING MORTAR.
- EXECUTION
  - BRICK REMOVAL AND REPLACEMENT
    - CAREFULLY REMOVE BRICK AND POINTING UNDESIRABLE BRICKS THAT ARE DAMAGED BY HAND OR DISCOLORED CUT OUT UNITS FROM JOINT TO JOINT AND IN A MANNER TO PREVENT REPLACEMENT WITH FULL-SIZE UNITS WITHOUT DAMAGING SURROUNDING MASONRY.
    - SUPPORT AND PROTECT REMAINING MASONRY THAT SURROUND'S REMOVAL AREA. MAINTAIN FLASHING, REINFORCEMENT, LINTELS, AND ADJOINING CONSTRUCTION IN AN UNDAUNAGED CONDITION.
    - REMOVE MORTAR LOOSE PARTICLES, AND SOIL FROM SALVAGED BRICK OF CLEANING WITH BRUSHES AND WATER. STORE BRICK FOR REUSE.
    - REPAIR CRACKS AND DISCOLORED SURFACES OF BRICK BY APPLYING MORTAR, DUST, AND LOOSE PARTICLES IN PREPARATION FOR REPLACEMENT.
    - INSTALL NEW OR SALVAGED BRICK TO REPLACE REMOVED BRICK. FIT REPLACEMENT UNITS INTO BONDING AND COURSEING PATTERN OF EXISTING BRICK. IF CUTTING IS REQUIRED, USE A MOTOR-DRIVEN SAW DESIGNED TO CUT MASONRY WITH CLEAN, SHARP, UNCHIPPED EDGES.
    - LAY REPLACEMENT BRICK WITH COMPACTLY FILLED BED, BED, AND JOINTS. BRICKS TO BE REPLACED SHALL BE MATCHED TO EXISTING UNITS AND SHOVE INTO PLACE. WET CLAY BRICKS THAT HAVE ASTM C 67 INITIAL RATES OF ABSORPTION (SUCK) OF MORE THAN 50.0 G PER 30 SQ. IN. PER MIN. (30 G PER 194 SQ. CM PER MIN.) USE WETTING METHODS THAT ENSURE UNITS ARE NEARLY SATURATED BUT SURFACE DRY WHEN LAY. MAINTAIN JOINT WIDTH FOR REPLACEMENT UNITS TO MATCH EXISTING UNITS.
    - TOOL EXPOSED MORTAR JOINTS IN REPAIRED AREAS TO MATCH EXISTING JOINTS.
    - ROUT OUT MORTAR USED FOR LIVING BRICK BEFORE MORTAR SETS.
    - AND POINT NEW MORTAR JOINTS IN REPAIRED AREA TO COMPLY WITH REQUIREMENTS FOR REPOINTING EXISTING MASONRY.
  - FINAL CLEANING
    - AFTER MORTAR HAS FULLY HARDENED, THOROUGHLY CLEAN EXPOSED MASONRY SURFACES OF EXCESS MORTAR AND FOREIGN MATTER USE A STIFF BRUSH, STIFF BRUSHES AND CLEAN WATER. SHARP AFFLID AT AND PRESERVE FINISH.
    - DO NOT USE METAL SCRAPERS OR BRUSHES.

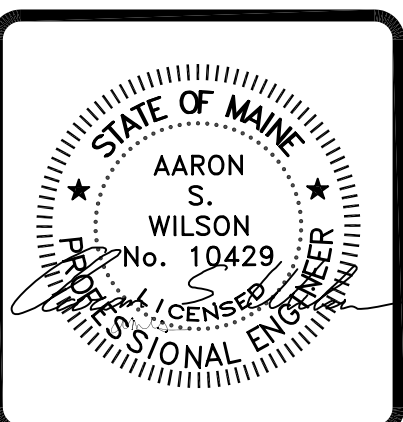
REVISIONS		DATE
NO.	BY	DESCRIPTION

PROJECT: **79 BRAMHALL ST. PORTLAND, MAINE**  
 FOR:  
 SHEET TITLE: **NOTES ISSUED FOR PERMITTING**

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