

12-0020
Renovation 430 Riverside Street
Portland, ME

GENERAL STRUCTURAL NOTES

DESIGN LIVE LOADS: 2009 IBC/IRC, MUEBC
 * Snow 50 psf (Pg), used for drifting
 * Wind 100 mph, exp C, 3 second gust
 * Floor 80 psf

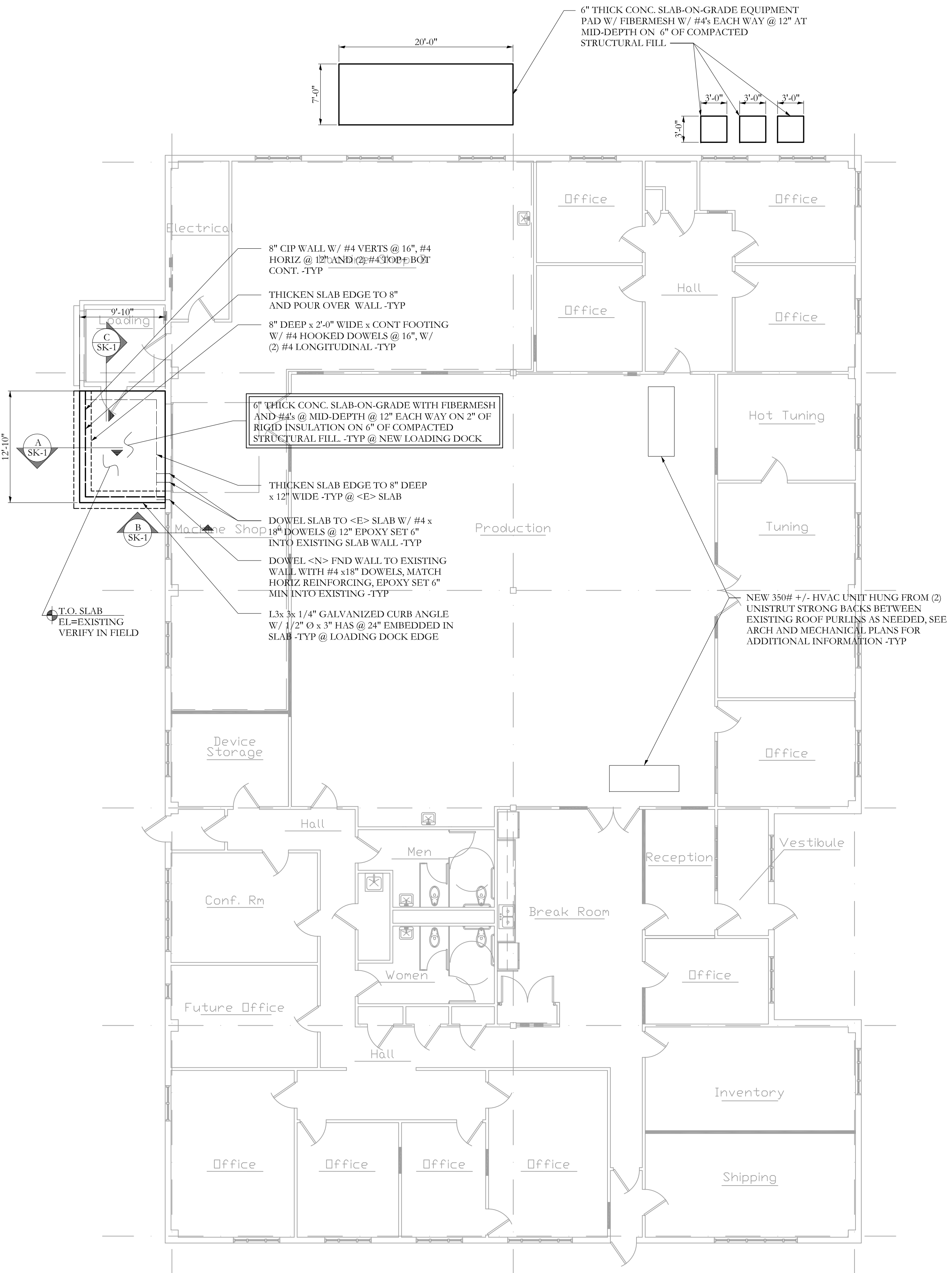
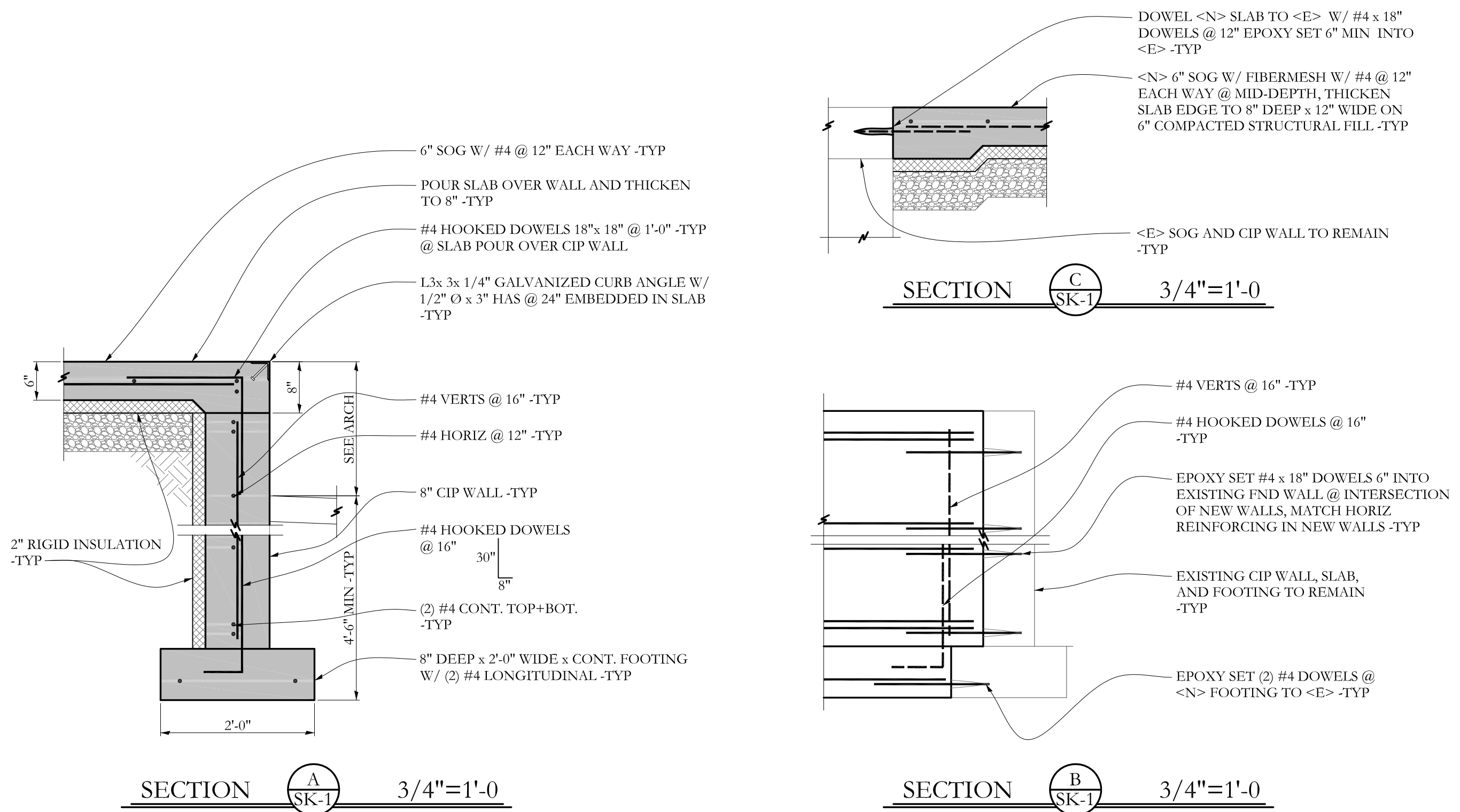
FOUNDATION:
 * Foundations are designed without an engineer's soil investigation. Foundation design criteria was assumed for purposes of foundation design and shall be confirmed by a soils engineer, at owner's expense, prior to construction. (This procedure may require revisions to foundation design, at additional expense to the owner, if soils engineer determines that such design criteria are inappropriate for this building site.)
 * Footings shall be placed on undisturbed natural soil or compacted fill tested and approved by soils engineer.
 * Maximum design soil pressure: 1,500 psf on crushed stone on firm virgin soil

FOUNDATION WALLS:
 * Design lateral soil pressure (equivalent fluid pressure):
 Walls: 50 psf
 * Backfill all retaining walls with free draining granular material except the top two feet.
 * Provide perimeter drain system with invert minimum of 6" below bottom of basement slab. Extend perimeter drain to daylight or to sump.
 * Slope perimeter grade away from building.
 * Place concrete continuously without horizontal cold joints.

CONCRETE AND REINFORCEMENT:
 * Concrete shall conform to applicable provisions of ACI-301 and 318.
 Minimum 28 day compressive strength (f'c) as follows:
 Footings: 4,000 psi w/ 4-6% air entrainment
 Foundation Walls: 4,000 psi w/ 4-6% air entrainment
 Exterior Slabs: 4,000 psi w/ 4-6% air entrainment and fiber mesh
 * Cement Type: I/II
 * Deformed reinforcement: ASTM A615 grade 60, except bars specified to be field-bent, stirrups, and ties which shall be grade 40.
 * Fibremesh: 100% virgin polypropylene, fibrillated fibers as manufactured by Fibremesh Co. per ASTM C-1116 type 111 4.1.3 and ASTM C-1116 performance level one, 1.5 lb. per cubic yard.
 * Welded Wire Fabric (WWF): ASTM A185. See also plan.
 * Typical minimum foundation reinforcing: 2 #4 top and bottom, (except as noted) continuous at corners and steps.
 * Reinforcement shall be fabricated and placed per ACI Manual of Standard Practice (ACI-315). At splices, lap bars 50 diameters unless noted otherwise.
 * Minimum 2 #4 around all four sides of all openings, extend min. 2'-0" beyond openings.
 * Concrete cover over reinforcing: 1 1/2" for concrete placed against forms; 3" for concrete placed against earth. See also drawings.
 * In continuous members, splice top bars at mid span and bottom bars over supports.
 * Keep reinforcement clean and free of dirt, oil, and scale. Oil forms prior to placing reinforcement.

STRUCTURAL STEEL:
 * Angles, misc.: ASTM A36
 * Anchor Bolts: ASTM A36.
 * Expansion Anchors shall be ICC-ES approved, installed in accordance with manufacturers specifications. In concrete: Wedge Type

STRUCTURAL ERECTION AND BRACING REQUIREMENTS
 * The structural drawings illustrate the completed structure with all elements in their final positions, properly supported and braced. The contractor, in the proper sequence, shall provide proper shoring and bracing as may be required to achieve the final completed structure.
 * These plans have been engineered for construction at one specific building site. Builder assumes ALL responsibility for use of these plans at Any Other building site. Plans shall not be used for construction at any other building site without specific review by the engineer.
 * Observations of foundation reinforcing if required by the owner, lender, insurer, building department or any other party will be accomplished by the engineer at the owner's expense. At least 24 hours advance notice is requested.



LOADING DOCK FOUNDATION/ SLAB PLAN
 SCALE 1/8"=1'-0"
 NOTES:
 1. ALL FOOTINGS ARE 8" DEEP x 2'-0" WIDE x CONT. WITH (2) #4 BARS LONGITUDINAL -TYP UNO
 2. FOOTING ELEV. TO BEAR 4'-6" BELOW GRADE -TYP
 3. COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH ARCH -TYP
 4. <E> INDICATES EXISTING TO REMAIN, <N> INDICATES NEW -TYP

