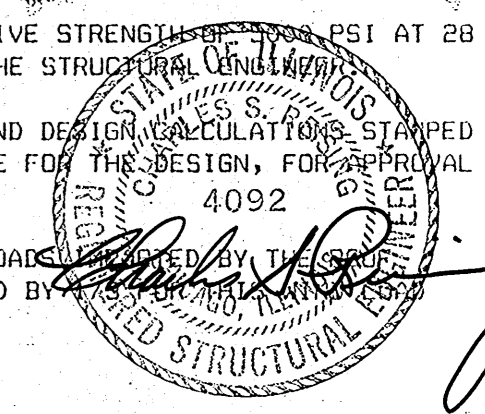


**FOUNDATION PLAN**

FINISHED FLOOR ELEVATION = +0'-0", UNLESS NOTED THIS ( ) ON PLAN.  
 SEE CIVIL/SITE PLANS FOR USGS DATUM.  
 TOP OF FOOTING ELEVATION = -0'-8", UNLESS NOTED THIS ( ) ON PLAN.  
 TOP OF FOUNDATION WALLS = +0'-0", EXCEPT AT DOOR OPENINGS = -0'-8",  
 AND WHERE NOTED OTHERWISE ON PLAN.

**FOUNDATIONS:**  
 ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR COMPACTED FILL HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 4000 P.S.F., AT APPROXIMATE DEPTHS BELOW GRADE, AS NOTED ON PLAN, AS RECOMMENDED BY TERRA TESTING, INC., IN THEIR REPORT 7480-B(7-52), DATED JULY 24, 1986.  
 ALL FOOTING ELEVATIONS SHOWN ON THE DRAWINGS ARE ESTIMATES AS INDICATED IN THE REFERENCED SOILS REPORT AND PROVIDE MINIMUM DEPTHS FOR FROST PROTECTION. THESE SHOULD BE USED FOR BIDDING PURPOSES ONLY. PROVIDE ADDITIONAL UNIT COSTS FOR EXCAVATION AND/OR COMPACTED FILL SHOULD THE ACTUAL FIELD CONDITIONS ENCOUNTERED VARY FROM THOSE ANTICIPATED IN THE SOIL REPORT.  
 ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY A SOILS TESTING LABORATORY PRIOR TO PLACEMENT OF CONCRETE.  
 ALL COMPACTED FILL SHALL BE PLACED IN LAYERS NOT EXCEEDING 9", AND COMPACTED TO A MINIMUM DENSITY OF 95% UNDER FOOTINGS, 90% UNDER SLABS AND PAVEMENTS, OBTAINED IN ACCORDANCE WITH ASTM D-1557-78 (COHESIVE SOILS).  
 ALL SLAB-ON-GRADE AREAS SHALL BE PROOF ROLLED. ALL SOFT SPOTS ENCOUNTERED SHALL BE REMOVED AND REPLACED TO FINISHED GRADE WITH APPROVED FILL MATERIAL. FILL MATERIAL FOR ALL SLAB AREAS SHALL BE PLACED IN LAYERS NOT EXCEEDING 9", AND COMPACTED TO A MINIMUM DENSITY OF 90%, OBTAINED IN ACCORDANCE WITH ASTM D-1557-78 (COHESIVE SOILS).  
 PLACE BACKFILL EQUALLY ON BOTH SIDES OF FOUNDATION WALLS.  
 CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY IN THE EVENT THAT THE SOILS CONDITIONS ENCOUNTERED VARY FROM THOSE SHOWN ON THE BORING LOGS.  
**CONCRETE AND REINFORCING:**  
 ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE "AMERICAN CONCRETE INSTITUTE BUILDING CODE" (ACI 318) AND WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301), LATEST EDITIONS.  
 ALL NORMAL WEIGHT CONCRETE (145 P.C.F.) SHALL OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.  
 CALCIUM CHLORIDE AND/OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE TO BE PLACED ON METAL DECK.  
 ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE WITH SPECIFIED STRENGTH LESS THAN 6000 PSI SHALL BE AIR ENTRAINED 4% TO 6%.  
 TEST CYLINDERS SHALL BE MADE AND TESTED AS OUTLINED IN CHAPTER 16 OF ACI-301 SPECIFICATION OR PER ARCHITECTURAL SPECIFICATIONS.  
 COLD WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH ACI-306. HOT WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH ACI-305.  
 REINFORCING BARS SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM SPECIFICATION A-615, GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. ALL REINFORCING AND ACCESSORIES SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI STANDARDS 315-80 AND 315R-80.  
 PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITIONS SHOWN ON THE PLANS AND DETAILS. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE WORK.  
 FOUNDATION WALLS SHALL HAVE A MINIMUM OF TWO (2) #5 BARS TOP AND BOTTOM CONTINUOUS, UNLESS OTHERWISE SHOWN OR NOTED.  
 REINFORCEMENT SHALL BE CONTINUOUS ACROSS JOINTS AND AROUND CORNERS OR SPLICE BARS SHALL BE PROVIDED IN ACCORDANCE WITH ACI STANDARDS 315-80 AND 315R-80. CORNER BARS SHALL BE PROVIDED AT ALL WALL CORNERS, EQUAL TO THE HORIZONTAL WALL REINFORCEMENT.  
 CONTROL JOINTS FOR SLABS-ON-GRADE SHALL BE IN A SQUARE PATTERN AND BE NOT MORE THAN 20 FT. ON CENTER, UNLESS NOTED OTHERWISE ON PLAN.  
 GENERAL CONTRACTOR SHALL CHECK WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND CONTRACTORS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, INSERTS, SLAB DEPRESSIONS AND OTHER ITEMS RELATED TO THE CONCRETE WORK, AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR PROPER LOCATION BEFORE PLACING CONCRETE. PITCH CONCRETE SLABS AS REQUIRED TO ALL FLOOR DRAINS.  
**PRECAST CONCRETE SLABS:**  
 DESIGN AND FABRICATION OF PRECAST CONCRETE SLABS WITH PRESTRESSED OR NON-PRESTRESSED REINFORCEMENT SHALL CONFORM TO ACI 318 AND ACI 301, LATEST EDITIONS.  
 SLABS SHALL BE DESIGNED FOR LOADS AS LISTED ON PLAN.  
 PRECAST UNITS SHALL NOT BE ERECTED UNTIL AT LEAST THREE WEEKS AFTER THEY HAVE BEEN MANUFACTURED.  
 NO PRESTRESSING STRAND MAY BE CUT WITHOUT PRIOR APPROVAL OF THE MANUFACTURER.  
 PRECAST CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS UNLESS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.  
 STRUCTURAL TOPPING FOR PRECAST PLANKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.  
 PRECAST CONTRACTOR SHALL DESIGN, FURNISH, AND INSTALL ALL REQUIRED STEEL HEADERS AT OPENINGS. ALL OPENINGS LARGER THAN A SLAB WIDTH SHALL BE FRAMED.  
 SUBMIT THREE (3) COPIES OF SHOP DRAWINGS TO ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.

**MASONRY:**  
 ALL CLAY BRICK DESIGN AND CONSTRUCTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR ENGINEERED BRICK MASONRY", BRICK INSTITUTE OF AMERICA, LATEST EDITION.  
 ALL UNREINFORCED CONCRETE BLOCK DESIGN AND CONSTRUCTION SHALL CONFORM TO "AMERICAN STANDARD BUILDING CODE REQUIREMENTS FOR MASONRY", LATEST EDITION.  
 MASONRY MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING ASTM SPECIFICATIONS:  
 CLAY BRICK: ASTM C-216 (FACE BRICK) MINIMUM COMPRESSIVE STRENGTH = 4000 PSI  
 HOLLOW LOAD BEARING CONCRETE BLOCK: ASTM C-90, GRADE N1  
 MORTAR: ASTM C-270, TYPE N - MINIMUM COMPRESSIVE STRENGTH = 1000 PSI AT 28 DAYS  
 GROUT: ASTM C-476, MINIMUM COMPRESSIVE STRENGTH = 2000 PSI AT 28 DAYS  
 MASONRY REINFORCEMENT: ASTM A-82, GALVANIZED  
 PRIOR TO DELIVERY OF MASONRY UNITS TO THE JOB SITE, FURNISH THE OWNER WITH AFFIDAVITS FROM AN APPROVED TESTING LABORATORY CERTIFYING THAT ALL UNITS CONFORM TO THEIR RESPECTIVE ASTM REQUIREMENTS.  
 MORTAR SHALL BE TESTED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH ASTM C-780. TWO SETS OF THREE MORTAR CUBES SHALL BE TAKEN AT RANDOM FOR EACH DAY OF MASONRY WORK. TEST ONE CUBE OF EACH SET AT 7 DAYS AND 28 DAYS. TEST THE THIRD CUBE AT 56 DAYS ONLY IF REQUIRED BY THE ARCHITECT.  
 PROVIDE STANDARD DUR-D-WALL OR EQUIVALENT REINFORCEMENT AT EVERY SECOND BLOCK COURSE IN ALL WALLS UNLESS NOTED OTHERWISE.  
 MASONRY CONTROL JOINTS REQUIRED AS NOTED ON THE ARCHITECTURAL DRAWINGS WITH A MAXIMUM HORIZONTAL SPACING BETWEEN JOINTS OF 40'-0".  
 CALCIUM CHLORIDE AND/OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE INCLUDED IN MORTAR OR GROUT MIX, EXCEPT WHEN APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. NO ANTI-FREEZE COMPOUNDS SHALL BE USED TO LOWER THE MORTAR'S FREEZING POINT.  
 NO EXTERIOR MASONRY SHALL BE LAID WHEN THE OUTSIDE AIR TEMPERATURE IS LESS THAN 40°F., UNLESS THE RECOMMENDATIONS SPECIFIED BY THE INTERNATIONAL MASONRY INDUSTRY ALL WEATHER COUNCIL IN THEIR BOOK "RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR COLD WEATHER MASONRY CONSTRUCTION" ARE STRICTLY FOLLOWED.  
 MASONRY WALLS SHALL BE BRACED TO WITHSTAND A MINIMUM HORIZONTAL LOAD OF 20 PSF DURING THEIR ERECTION, AND UNTIL THEIR DESIGN SUPPORTS ARE IN PLACE.  
 ALL EMBEDDED STEEL SHALL HAVE ADJUSTABLE MASONRY ANCHORS SPACED NOT GREATER THAN 16" VERTICALLY, AND 32" HORIZONTALLY, UNLESS OTHERWISE NOTED.  
 WALLS SHOWN ON THE STRUCTURAL DRAWINGS ARE TO CONFORM TO THE AFOREMENTIONED REQUIREMENTS. SEE THE ARCHITECT'S DRAWINGS FOR NON-STRUCTURAL MASONRY WALLS.  
 MISCELLANEOUS LINTELS: STEEL LINTELS FOR MASONRY OPENINGS NOT SHOWN ON DRAWINGS SHALL CONFORM TO THE FOLLOWING:  
 OPENINGS TO 4'-0" 1-L3-1/2 x 3-1/2 x 5/16 PER 4" OF WALL THICKNESS  
 OPENINGS 4'-0" TO 10'-0" W8 x 10 + 5/16" PLATE  
 ALL SUCH LINTELS TO BEAR 8" MINIMUM ON SOLID GROUTED MASONRY EACH END.  
**MISCELLANEOUS**  
 ALL DIMENSIONS ON STRUCTURAL DRAWINGS TO BE CHECKED AGAINST ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS BY THE GENERAL CONTRACTOR. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.  
 ALL EXISTING DIMENSIONS AND CONDITIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION.  
 THESE TRACINGS AND ALL INFORMATION CONTAINED THEREON OR ANY PRINTS THEREOF IS THE PROPERTY OF SYSTEMS DESIGN GROUP, LTD. AND IS SUBJECT TO RETURN UPON DEMAND, IS CONFIDENTIAL AND MUST NOT BE MADE PUBLIC OR COPIED UNLESS AUTHORIZED BY AN OFFICER OF SYSTEMS DESIGN GROUP, LTD.  
 SUBCONTRACTORS SHALL ASSUME FULL RESPONSIBILITY, UNRELIEVED BY REVIEW OF SHOP DRAWINGS AND DOCUMENTS, FOR: DIMENSIONS; COORDINATION OF VARIOUS TRADES; FABRICATION PROCESSES; CONSTRUCTION TECHNIQUES; SAFETY CONDITIONS.  
 DO NOT SCALE DRAWINGS.  
**PRECAST CONCRETE PANELS:**  
 THE PRECAST CONCRETE MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL PRECAST PANELS, INCLUDING REINFORCING, INSERTS AND CONNECTIONS TO THE STRUCTURE NOT SPECIFICALLY CALLED OUT ON THE DRAWINGS. PANELS SHALL BE DESIGNED FOR ALL LOADING CONDITIONS REQUIRED BY THE GOVERNING BUILDING CODES IN ADDITION TO ANY SPECIFIC LOADINGS SHOWN ON THE DRAWINGS. THE DESIGN AND INSTALLATION OF ALL PANELS SHALL BE IN ACCORDANCE WITH A.C.I. 318 AND 301, LATEST EDITION.  
 PRECAST PANELS SHALL BE ERECTED AFTER CONCRETE FLOORS AND METAL ROOF DECKS ARE IN PLACE.  
 ALL PRECAST PANEL CONNECTIONS TO THE STRUCTURAL FRAME SHALL MAKE ALLOWANCE FOR EXPANSION AND CONTRACTION OF THE PANELS.  
 PRECAST CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS UNLESS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.  
 SUBMIT THREE (3) COPIES OF THE SHOP DRAWINGS AND DESIGN CALCULATIONS, STAMPED BY A REGISTERED STRUCTURAL ENGINEER RESPONSIBLE FOR THE DESIGN, FOR APPROVAL PRIOR TO FABRICATION.  
 WALL PANELS SHALL BE DESIGNED TO RESIST WIND LOADS AS SPECIFIED BY THE ARCHITECT. ALLOWABLE STRESSES MAY BE INCREASED BY THE ARCHITECT.  
 CONDITION.



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