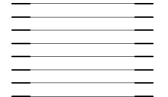
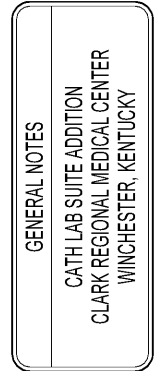
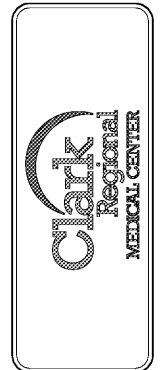




STENGEN-HILL ARCHITECTURE

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SSE PROJECT NO. 11316 SSE FIRM NO. 1492

CONSTRUCTION DRAWINGS

GENERAL

- 1. THE CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS BEFORE STARTING WORK... 2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED... 3. THE CONTRACTOR HAS THE SOLE RESPONSIBILITY FOR JOBSITE SAFETY AND FOR CONTROLLING ALL HEALTH AND SAFETY PRECAUTIONS AS REQUIRED BY ANY REGULATORY AGENCY...

DELEGATED DESIGN OF BUILDING COMPONENTS

- 1. DESIGN OF CERTAIN BUILDING COMPONENTS THAT ARE NOT CONSIDERED PART OF THE PRIMARY STRUCTURAL SYSTEM IS DELEGATED TO BE COMPLETED BY A SPECIALTY STRUCTURAL ENGINEER... 2. THE SPECIALTY STRUCTURAL ENGINEER SHALL DESIGN THE COMPONENT(S) AND ASSOCIATED CONNECTIONS... 3. EXTERIOR CURTAIN WALL SYSTEMS, DEFLECTION CLIPS AT COLD-FORMED METAL FRAMING AND HEAD JOINTS AT CURTAIN WALL AND STOREFRONT SYSTEMS SHALL ACCOMMODATE 1/2" OF VERTICAL STRUCTURAL DEFLECTION AND STORY DRIFT OF 1/300 IN ADDITION TO THERMAL MOVEMENT OF THE SYSTEM.

DESIGN AND CODE INFORMATION

- 1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE 2018 KENTUCKY BUILDING CODE (BASED ON THE 2015 INTERNATIONAL BUILDING CODE). 2. BUILDING RISK CATEGORY IV 3. WIND DESIGN DATA A. BASIC WIND SPEED, V(1.1)(V(50)) 120 MPH (104 MPH) B. EXPOSURE CATEGORY C C. INTERNAL PRESSURE COEFF. (ENCLOSED BUILDING) +/- 0.18 D. TOPOGRAPHIC FACTOR, Kz 1.0 4. SEISMIC DESIGN DATA A. SEISMIC DESIGN CATEGORY A B. SEISMIC IMPORTANCE FACTOR 1.5 C. SITE CLASS B D. SPECTRAL RESPONSE ACCELERATION (Sa) 0.166 E. SPECTRAL RESPONSE ACCELERATION (Sv) 0.132 F. SPECTRAL RESPONSE COEFFICIENT (Cs) 0.060 H. BASIC SEISMIC FORCE-RESISTING SYSTEM STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE I. RESPONSE MODIFICATION FACTOR (R) 3.0 J. DEFLECTION AMPLIFICATION FACTOR (Cd) 3.0 K. ANALYSIS PROCEDURE EQUIV. LATERAL FORCE L. SEISMIC RESPONSE COEFFICIENT C, 0.01 M. SEISMIC BASE SHEAR 1.0 KIPS 5. SNOW DESIGN DATA A. GROUND SNOW LOAD (Pg) 15 PSF B. FLAT ROOF SNOW LOAD (Pp) 18 PSF (PLUS RAIN ON SNOW) C. SNOW IMPORTANCE FACTOR 1.2 D. SNOW EXPOSURE FACTOR (Ce) 1.0 E. SNOW THERMAL FACTOR (Ct) 1.0 6. LIVE LOADS DESIGN DATA (WITH LIVE LOAD REDUCTION WHERE APPLICABLE) A. FIRST FLOOR 100 PSF B. ROOF 30 PSF

SPECIAL INSPECTION AND TESTING

- 1. THE OWNER SHALL EMPLOY AN INDEPENDENT TESTING COMPANY TO PERFORM SITE INSPECTIONS AND TESTING IN ACCORDANCE WITH THE STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS AND QC TESTING ON SHEET

EXISTING BUILDINGS

- 1. INFORMATION REGARDING STRUCTURAL MEMBERS INDICATED TO BE EXISTING HAS BEEN OBTAINED FROM EXISTING DRAWINGS AND LIMITED VISUAL OBSERVATIONS... 2. THE CONTRACTOR SHALL FIRST VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO THE CONSTRUCTION AND ERECTION OF ANY NEW STRUCTURAL MEMBERS.

SUSPENDED MECHANICAL, ELECTRICAL, AND OTHER TRADES

- 1. THE TOTAL OF LOADS SUPPORTED DIRECTLY FROM ELEVATED SLABS ON METAL DECK SHALL NOT EXCEED 1000 POUNDS IN ANY 10 FT. BY 10 FT. AREA... 2. SUSPENDED CEILING AND TYPICAL LIGHT FIXTURES MAY BE SUPPORTED FROM THE ROOF DECK... MISCELLANEOUS LOADS MAY BE HUNG FROM THE ROOF DECK BUT SHALL NOT EXCEED 15 PSF...

FOUNDATION / EARTHWORK FOR STRUCTURES

- 1. FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS PROVIDED IN A REPORT PREPARED BY TERRACON CONSULTANTS, INC. DATED AUGUST 31, 2010 (REPORT NO. 5/106024). 2. FOUNDATION SYSTEM CONSISTS OF CONVENTIONAL SHALLOW SPREAD FOOTINGS AND CONTIGUOUS WALL FOOTINGS... 3. NO FOOTINGS SHALL BEAR ON ROCK... 4. ALL SITE PREPARATION ACTIVITIES WITHIN THE BUILDING LIMITS AND EXTENDING 10 FEET BEYOND SHALL BE MONITORED AND VERIFIED BY A REGISTERED GEOTECHNICAL ENGINEER... 5. THE DESIGN ADEQUACY AND SAFETY OF TEMPORARY RETAINING STRUCTURES, SHORING OF TRENCHES, ETC., REQUIRED TO CONSTRUCT THE FOUNDATION SYSTEM IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR... 6. DRAINAGE SHALL BE MAINTAINED AROUND THE FOUNDATION AT ALL TIMES... 7. THE CRUSHED STONE BASE BELOW SLABS ON-GRADE SHALL CONFORM TO THE KENTUCKY TRANSPORTATION CABINET (KTC) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION... 8. THE ZONE IMMEDIATELY BEHIND RETAINING WALLS, FOUNDATION WALLS, AND ELEVATOR PIT WALLS SHALL CONSIST OF AN OPEN-GRADED STONE SUCH AS NO. 57, PER ASTM D448... 9. UNDERGROUND UTILITIES SHALL NOT BE LOCATED UNDER OR PENETRATE COLUMN OR WALL FOOTINGS... 10. REINFORCING STEEL SHALL BE MECHANICALLY VIBRATED DURING PLACEMENT... 11. THE CONTRACTOR SHALL VERIFY THE COMPATIBILITY AND ALLOWABLE USE OF CONCRETE CURING METHODS WITH APPLICABLE FLOORING MANUFACTURER'S SPECIFICATIONS... 12. CONCRETE SHALL BE MAINTAINED ABOVE 50% AND IN A MOIST CONDITION FOR AT LEAST THE FIRST 7 DAYS AFTER PLACEMENT... 13. WHEN AIR TEMPERATURE HAS FALLEN TO OR BELOW 40F AT ANY TIME DURING THE FIRST THREE DAYS... 14. REFER TO ARCHITECTURAL DRAWINGS AND DETAILS OF SLAB RECESSES REQUIRED FOR MOTOR HOLES, WALK-OFF TIRES, ETC. 15. REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR FINISHES. 16. CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES:

CONCRETE

- 1. CONCRETE WORK SHALL BE IN CONFORMANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-14). 2. MAXIMUM CONCRETE SLUMP SHALL BE 4 INCHES WITHOUT A HIGH-RANGE WATER-REDUCING ADJUTIVE (HRWR) OR 8 INCHES WITH HRWR AT POINT OF DEPOSIT. 3. SIZE OF AGGREGATE AND GRADATION SHALL CONFORM TO ASTM C33 FOR NORMAL WEIGHT CONCRETE. 4. THE COMBINED TOTAL MASS PERCENT OF DELETERIOUS SUBSTANCES, INCLUDING, BUT NOT LIMITED TO, COAL AND LIGNITE, FOR BOTH COARSE AND FINE AGGREGATES SHALL BE LIMITED TO 0.5% AS DETERMINED BY ASTM C12. 5. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED DURING PLACEMENT. 6. CHAFFER EXPOSED CORNERS OF WALLS 3/4 INCH, U.N.O. 7. THE STRUCTURAL ENGINEER SHALL APPROVE THE LOCATION OF ALL CONSTRUCTION JOINTS NOT LOCATED ON THE DRAWINGS. 8. ALL SLAB ON-GRADE SAW CUT CONTROL JOINTS SHALL BE MADE PER THE ACI 301 EARLY-ENTRY DRY-CUT PROCESS... 9. ALL REINFORCING STEEL AND ITEMS TO BE EMBEDDED IN CONCRETE (INCLUDING ANCHOR RODS) SHALL BE LOCATED AND SECURELY TIED IN PLACE PRIOR TO PLACING CONCRETE... 10. THE CONTRACTOR SHALL VERIFY THE COMPATIBILITY AND ALLOWABLE USE OF CONCRETE CURING METHODS WITH APPLICABLE FLOORING MANUFACTURER'S SPECIFICATIONS... 11. THE CONTRACTOR SHALL VERIFY THE COMPATIBILITY AND ALLOWABLE USE OF CONCRETE CURING METHODS WITH APPLICABLE FLOORING MANUFACTURER'S SPECIFICATIONS... 12. CONCRETE SHALL BE MAINTAINED ABOVE 50% AND IN A MOIST CONDITION FOR AT LEAST THE FIRST 7 DAYS AFTER PLACEMENT... 13. WHEN AIR TEMPERATURE HAS FALLEN TO OR BELOW 40F AT ANY TIME DURING THE FIRST THREE DAYS... 14. REFER TO ARCHITECTURAL DRAWINGS AND DETAILS OF SLAB RECESSES REQUIRED FOR MOTOR HOLES, WALK-OFF TIRES, ETC. 15. REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR FINISHES. 16. CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES:

Table with 8 columns: CONCRETE USE, COMPRESSIVE STRENGTH (FCI), 28-DAY STRENGTH (PSI), MAXIMUM W/C RATIO, CEMENT TYPE, MAX. % FLY ASH, MAX. AGG. SIZE, AIR %

REINFORCING STEEL

- 1. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A66 (GR. 60) U.N.O. 2. REINFORCING STEEL SHALL BE SPLICED ONLY WHERE SHOWN OR NOTED... 3. ALL REINFORCING STEEL SHALL BE CONTINUOUS AND SPLICED WITH CLASS "B" TENSION LAP SPLICES... 4. PROVIDE THE FOLLOWING CLEAR CONCRETE COVER FOR PLACEMENT OF REINFORCING STEEL... 5. PROVIDE CORNER BARS TO MATCH LONGITUDINAL REINFORCING AT ALL CORNERS AND INTERSECTIONS... 6. PROVIDE DOUELS IN FOOTINGS THE SAME SIZE AND NUMBER AS VERTICAL WALL OR COLUMN REINFORCING...

REINFORCING STEEL (CONT'D)

- 7. ALL OPENINGS IN CONCRETE FOUNDATION WALLS UP TO 4'-0" X 4'-0" SQUARE OR 4'-0" IN DIAMETER SHALL BE REINFORCED WITH (2) #4 BARS ON ALL SIDES... 8. REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE, CONDUIT, OR METAL PARTS EMBEDDED IN CONCRETE... 9. STEEL REINFORCEMENT FABRICATION AND PLACEMENT SHOP DRAWINGS SHALL CONTAIN ALL NECESSARY INFORMATION FOR THE INSTALLER TO ACCURATELY INSTALL REINFORCEMENT... POST-INSTALLED ANCHORS 1. ALL POST-INSTALLED ANCHORS IN CONCRETE AND CPU ARE TO BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS... 2. WHEN A SPECIFIC PRODUCT AND MANUFACTURER IS REFERENCED IN THE CONTRACT DOCUMENTS... 3. THE ANCHOR MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT DURING THE INITIAL INSTALLATION OF EACH TYPE OF ANCHOR... 4. CONCRETE CHEMICAL ANCHORING SYSTEMS GENERICALLY REFERRED TO AS "EPOXY" ANCHORING SYSTEMS SHALL BE ONE OF THE FOLLOWING... 5. THREADED ANCHOR RODS USED WITH THE CHEMICAL ANCHORING SYSTEMS SHALL BE STANDARD STRENGTH STEEL RODS (ASTM A36) U.N.O. REINFORCING STEEL USED WITH THESE SYSTEMS SHALL COMPLY WITH ASTM A665 (GR. 60)... 6. FASTENERS GENERICALLY REFERRED TO AS "SCREW ANCHOR" ON THE DRAWINGS SHALL BE ONE OF THE FOLLOWING... 7. USE MATCHING BIT PROVIDED BY MANUFACTURER FOR INSTALLATION... 8. FASTENERS GENERICALLY REFERRED TO AS "P.A.E." OR POWER-ACTUATED FASTENERS SHALL BE "POP" FASTENER BY SIMPSON STRONG-TIE ANCHOR SYSTEMS.

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL FABRICATOR SHALL BE AISC CERTIFIED. 2. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION, 14TH EDITION. 3. STRUCTURAL STEEL ROLLED SHAPES SHALL CONFORM TO ASTM A992, U.N.O. STEEL COLUMN END PLATES SHALL CONFORM TO ASTM A36, U.N.O. CHANNELS, AND ALL OTHER MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36, U.N.O. 4. HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500, GRADE B. 5. PIPE MEMBERS SHALL CONFORM TO ASTM A53, GRADE B OR A53, GRADE C. 6. STEEL FRAMING CONNECTIONS MAY BE WELDED OR BOLTED... 7. ANCHOR RODS SHALL BE WELDED AND SHALL CONFORM TO ASTM F1554, GRADE 36, U.N.O. MINIMUM ANCHOR ROD EMBEDMENT SHALL BE 10 BOLT DIAMETERS, U.N.O. CLEAN ANCHOR RODS OF ALL GREASE, DIRT, ETC., BEFORE INSTALLATION... 8. ALL STEEL MEMBERS AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED... 9. THE STEEL FABRICATOR SHALL PROVIDE CONNECTIONS FOR BEAMS AS SHOWN IN DETAILS 103.0.

STEEL DECK

- 1. STEEL DECK SHALL CONFORM TO THE SPECIFICATIONS OF THE STEEL DECK INSTITUTE, LATEST EDITION. 2. STEEL DECK TYPE, DEPTH, THICKNESS, AND FINISH SHALL BE AS SPECIFIED ON STRUCTURAL DRAWINGS. 3. STEEL DECK SHALL HAVE THE FOLLOWING MINIMUM YIELD STRENGTHS: A. ROOF DECK 33 KSI 4. DECK SUPPLIER SHALL PROVIDE ALL NECESSARY DECK ACCESSORIES... A. STEEL DECK SHALL BE FURNISHED IN SHEET LENGTHS SUFFICIENT TO EXTEND OVER FOUR SUPPORTS (3 SPANS) WHEREVER POSSIBLE.

COLD-FORMED METAL FRAMING

- 1. ALL COLD-FORMED METAL STUDS AND/OR JOISTS AND ACCESSORIES SHALL BE OF THE TYPE, SIZE, AND MINIMUM GAGE INDICATED. 2. A SPECIALTY STRUCTURAL ENGINEER LICENSED IN THE PROJECT STATE SHALL DESIGN THE NON-LOAD-BEARING CURTAIN WALL FRAMING INCLUDING THE ANCHORAGE TO THE PRIMARY STRUCTURAL FRAME... 3. ALL STRUCTURAL MEMBERS SHALL BE DESIGNED ACCORDING TO THE AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS." 4. ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM G90 ZINC COATED STEEL... 5. THE FRAMING INSTALLER IS TO ENSURE FINCHOUT ALIGNMENT WHEN ASSEMBLING LATERAL BRACING AND FIELD CUTTING STUDS TO LENGTH... 6. STUDS SHALL BE CUT SQUARE AND PLACED TIGHT TO TRACKS WITH NO GAPS... 7. FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING SCREWS OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTIONS... 8. NON-LOAD-BEARING CURTAIN WALL FRAMING SHALL COMPLY WITH THE FOLLOWING: A. NON-LOAD-BEARING STUDS SHALL BE AS REQUIRED BY DESIGN BUT NOT LESS THAN 18 GAGE... B. STRUCTURAL TRACKS AT EXTERIOR WINDOW HEADS AND SILLS SHALL BE 16 GA. MINIMUM... C. INSTALLATION OF CURTAIN WALL FRAMING SHALL ACCOMMODATE DEFLECTION OF PRIMARY STRUCTURAL FRAMING USING DEFLECTION CLIPS... D. CURTAIN WALL FRAMING SHALL BE DESIGNED FOR HORIZONTAL WIND PRESSURES PER THE GOVERNING BUILDING CODE... E. LIFT OUT-OF-PLANE DEFLECTION TO BE NOT AT LEAST 1/8" WITH BRICK VENEER OR 1/16" AT WALLS WITH NON-BRICK VENEER... F. CURTAIN WALL FRAMING SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS THE WEIGHT OF ALL GLASS MATERIALS AND GLAZING... G. BOND HEADERS SHALL BE INSTALLED OVER ALL WALL OPENINGS.

