

COLUMN FOOTING SCHEDULE			
COLUMN DESIGNATION	FOOTING SIZE AND REINFORCING	PIER SIZE AND REINFORCING	COMMENTS
D-2 THRU D-14	8'-0" x 8'-0" x 1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	1'-8" x 1'-8" (8) #6 BARS, VERT. ROD & DOWEL #3 TIES @ 12" O.C.	INTERIOR COLUMNS TOP OF PIER ELEVATION = 0'-8"
D-1	8'-0" x 8'-0" x 1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	8'-0" x 8'-0" (8) #6 BARS, VERT. ROD & DOWEL #3 TIES @ 12" O.C.	-
A-2 THRU A-14 G-2 THRU G-14	8'-0" x 8'-0" x 1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	1'-4" x 2'-0", (6) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C. BELOW HARPIN #4 TIES @ 3" O.C. ABOVE HARPIN	-
A-1, G-1	8'-0" x 8'-0" x 1'-4" #6 @ 12" O.C. E.W. BOT. #5 @ 12" O.C. E.W. TOP	2'-10" x 2'-0", (8) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C. BELOW HARPIN #4 TIES @ 3" O.C. ABOVE HARPIN	-
B-1, E-15, C-1, G-15, D-15, E-1E-15, F-1, F-15,	4'-0" x 4'-0" x 1'-0" #5 @ 12" O.C. E.W. BOT, #5 @ 12" O.C. E.W. TOP AT D-10, E-10 & F-10 ONLY	1'-4" x 2'-0" (6) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C.	-
A-10, G-10	4'-0" x 4'-0" x 1'-0" #5 @ 12" O.C. E.W. BOT.	2'-0" x 2'-0" (8) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C.	-
H-4, H-5, H-7, H-8 I-3, I-4, I-5, I-7, I-8, I-9	4'-0" x 4'-0" x 1'-0" #5 @ 12" O.C. E.W. BOT.	2'-6" x 2'-6" (8) #6 BARS, VERT. ROD & DOWEL, #3 TIES @ 12" O.C.	OFFICE COLUMN FOOTINGS & PIERS TOP OF PIER EL. = (-) 0'-8"
I-6, I-6.5 J-6, J-6.5	2'-6" x 2'-6" x 1'-0" THICK #5 @ 12" O.C. EA. WAY TOP & BOT.	1'-4" x 1'-4" (4) #5 BARS, VERT ROD & DOWEL #3 TIES @ 12" O.C.	OFFICE PORCH COLUMN FOOTINGS. SEE FOUNDATION PLAN FOR TOP OF FTG.

NOTES:

- COVER FOR FOOTING REINFORCING IS 3" BOTTOM AND 2" TOP.
- COVER FOR PIER TIES IS 2".
- PIER #6 VERTICAL RODS AND DOWELS TO BE LAPPED 1'-1" MIN. DOWEL TO HAVE 1'-0" LONG 90° BOTTOM HOOK PLACED IN THE PLANE OF THE FOOTING'S BOTTOM REINFORCING. (LOWER BARS OF THE BOTTOM MAT).
- TOP OF PIER ELEVATION = (+) 0'-0" UNLESS NOTED OTHERWISE.

GENERAL STRUCTURAL NOTES, ALL THREE BUILDINGS

A. NOTES TO CONTRACTOR

1. DRAWINGS REPRESENT THE DESIRED RESULT OF CONSTRUCTION. THE METHODS OF CONSTRUCTION AND THE RISKS INVOLVED DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE BUILDING'S STRUCTURAL INTEGRITY AT ALL STAGES OF CONSTRUCTION.

2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS DURING CONSTRUCTION AND REPORT IMMEDIATE ANY DISCREPANCIES TO THE A/E.

3. ALL CONTRACTOR'S PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY A/E PRIOR TO COMMENCING ANY PERTINENT WORK.

4. SEE IMPORTANT NOTE TO CONTRACTOR ON THE FOUNDATION PLAN REGARDING NOT STARTING WORK ON THE BUILDING FOUNDATIONS UNTIL THE PRE-ENGINEERED BUILDING DESIGN IS APPROVED AND THE ENGINEER HAS CONFIRMED THE FOUNDATIONS SHOWN ON THE DRAWINGS ARE COMPATIBLE WITH THE BUILDING DESIGNED (SOME FOUNDATION REVISIONS MAY BE REQUIRED).

B. DESIGN CRITERIA

THIS STRUCTURE HAS BEEN DESIGNED ACCORDING TO THE CURRENT KENTUCKY BUILDING CODE AND FOR THE SPECIFIC LOADS WHICH ARE LISTED BELOW.

1. ROOF LOADS

- A) DEAD LOAD = 5 PSF (APPROX.)
- B) COLLATERAL ROOF LOAD = FRONT OFFICE AREA 7 PSF, WAREHOUSE 6 PSF
- C) LIVE LOAD = 20 PSF (SUBJECT TO CODE REDUCTIONS, BUT NOT LESS THAN 16 PSF)
- D) SNOW LOAD:
 - 1) PF = 10.5 PSF
 - 2) CE = 1
 - 3) I = 1
 - 4) GT = 1

2. WIND LOAD

- A) BASIC WIND SPEED (3 SEC. 60ST) = 90 MPH
- B) I = 1
- C) WIND EXPOSURE CATEGORY - C (ASSUMED, METAL BLDG, DESIGNER MAY CHOOSE A MORE SEVERE CATEGORY)
- D) INTERNAL PRESSURE COEFFICIENT - PER METAL BLDG, DESIGNER
- F) COMPONENTS AND CLADDING - PER METAL BLDG, DESIGNER

3. SEISMIC DESIGN DATA

- A) OCCUPANCY CATEGORY - II (SEISMIC IMPORTANCE FACTOR 1.0)
- B) S(S) = 0.251, S(I) = 0.082
- C) SITE CLASS: D (ASSUMED)
- D) S(Ds) = 0.268, S(D1) = 0.181
- E) SEISMIC DESIGN CATEGORY - C
- F) BASIC SEISMIC-FORCE-RESISTING SYSTEM: *
 - 6) DESIGN BASE SHEAR: *
 - H) SEISMIC RESPONSE COEFFICIENT, CS = *
 - I) RESPONSE MODIFICATION FACTOR, R = *
 - J) ANALYSIS PROCEDURE: *

*PER PRE-ENGINEERED BUILDING MANUFACTURER/DESIGNER

4. SPREAD FOOTINGS, MAXIMUM ALLOWABLE BEARING PRESSURE OF 2500 PSF.

5. DEFLECTION CONDITIONS

- A) FRAMES ARE VERTICALLY SUPPORTING CEILING WITH FLEXIBLE FINISH (L/240)
- B) FRAMES ARE LATERALLY SUPPORTING MASONRY WALL (H/240)
- C) FURLINS ARE SUPPORTING CEILING WITH FLEXIBLE FINISH (L/240)
- D) GIRTS ARE SUPPORTING MASONRY WALL (L/240)

6. PRE-ENGINEERED BUILDING SERVICEABILITY REQUIREMENTS

- A) SEE SPECIFICATIONS.

C. FOUNDATION, FILLING AND EXCAVATION NOTES.

1. SEE GEOTECHNICAL REPORT FOR PROJECT COMET SITE 10 DATED FEBRUARY 27, 2015 BY CONSULTING SERVICES INCORPORATED.

D. CONCRETE NOTES

1. CONCRETE FOR FOOTINGS SHALL HAVE COMPRESSIVE STRENGTH OF FC = 3500 PSI. ALL OTHER CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF FC = 4000 PSI.

2. REINFORCING SHALL BE DEFORMED STEEL RODS, FY = 60 KSI AND MEETING ASTM A615. WELDED WIRE FABRIC SHALL MEET ASTM A185. SHOULD WELDING OF REINFORCING RODS BE REQUIRED, SUBSTITUTE ASTM A106 BARS FOR ASTM A615. ASTM A615 SHALL NOT BE WELDED.

3. SPLICES IN CONTINUOUS VERTICAL OR HORIZONTAL REINFORCING BARS SHALL BE 40 BAR DIAMETER LAP SPICE UNLESS NOTED AND SHALL BE EITHER CONTINUOUS OR SPLICED WITH CORNER BARS AT CORNERS.

4. CLEARANCES BETWEEN REINFORCING AND CONCRETE SURFACES SHALL BE THE MINIMUM ALLOWED BY ACI 318, CURRENT EDITION UNLESS NOTED OTHERWISE.

E. STRUCTURAL STEEL

1. ANCHOR BOLTS SHALL MEET ASTM A307 OR ASTM A36. FORMER NON-HEADED ANCHOR BOLT, PROVIDE SUFFICIENT THREADING AT THE EMBEDDED END FOR A HEX NUT WHICH SHALL BE THREADED ONTO THE ANCHOR BOLT AND TACK WELDED TO THE BOLT. MINIMUM EMBEDMENT SHALL BE 1'-0", EXCEPT AT PORCH COLUMNS, WHICH MAY BE 1'-0".

2. ALL WELDS SHALL BE MADE WITH E70XX RODS AND SHALL BE PERFORMED PER LATEST ASN CODE.

3. STEEL SMOOTH ROD TIE RODS SHALL BE A36.

STATEMENT OF SPECIAL INSPECTIONS: ALL THREE BUILDINGS

THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE: MARTIN FRIEDMAN, ARCHITECT.

THE SPECIAL INSPECTIONS ENCOMPASS THE FOLLOWING DISCIPLINES:

1. STRUCTURAL

THE SEISMIC-FORCE-RESISTING SYSTEM CONSISTS OF THE FOLLOWING: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (ASSUMED). THIS BUILDING IS TO BE DESIGNED BY THE PRE-ENGINEERED BUILDING MANUFACTURER WHO MAY CHOOSE ANOTHER SYSTEM.

IMPORTANT NOTES REGARDING SPECIAL INSPECTIONS:

1. THE SPECIAL INSPECTOR SHALL BE DESIGNATED BY THE OWNER OR MSE OF KENTUCKY, INC.

2. THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND FURNISH INSPECTION REPORTS TO THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND TO THE STRUCTURAL ENGINEER.

3. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND THE BUILDING OFFICIAL.

4. A FINAL REPORT OF SPECIAL INSPECTIONS IS REQUIRED BY KBC TO BE SUBMITTED BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE TO THE BUILDING OFFICIAL PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

THE FOLLOWING MATERIALS, SYSTEMS, COMPONENTS AND WORK ARE REQUIRED TO HAVE SPECIAL INSPECTION OR TESTING.

A. INSPECTION OF PRE-ENGINEERED BUILDING FABRICATOR. SEE KBC 1702.2.1. SPECIAL INSPECTION OF FABRICATOR IS NOT REQUIRED WHERE THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTIONS.

B. STEEL CONSTRUCTION. SEE KBC 1704.2 AND TABLE 1704.3.

1. INSPECTION OF HIGH-STRENGTH BOLTING.

A. BEARING-TYPE CONNECTIONS - PERIODIC.

B. SLIP-CRITICAL CONNECTIONS. MONITORING OF BOLT INSTALLATION FOR PRETENSIONING USING THE CALIBRATED WRENCH METHOD OR THE TURN-OF-NUT METHOD WITHOUT MATCHMARKING SHALL BE PERFORMED ON A CONTINUOUS BASIS. WHEN USING DIRECT TENSION INDICATORS AND TWIST-OFF BOLTS, ONLY PERIODIC INSPECTION REQUIRED.

SLIP-CRITICAL CONNECTIONS ARE NOT ANTICIPATED IN THIS PROJECT. SEE PRE-ENGINEERING SHOP DRAWINGS.

2. INSPECTION OF WELDING STRUCTURAL STEEL

A. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS - CONTINUOUS.

B. MULTIPASS FILLET WELDS - CONTINUOUS.

C. SINGLE-PASS FILLET WELDS LARGER THAN 5/16 INCH - CONTINUOUS.

D. SINGLE-PASS FILLET WELDS 5/16 INCH OR SMALLER - PERIODIC.

THE WELDS DESCRIBED IN A, B, C & D ABOVE ARE NOT ANTICIPATED TO BE REQUIRED FOR THE PRE-ENGINEERED BUILDING. SEE THE PRE-ENGINEERED BUILDING SHOP DRAWINGS.

3. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS - PERIODIC. SEE BELOW.

A. DETAILS SUCH AS BRACING AND STIFFENING.

B. MEMBER LOCATIONS.

C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

C. CONCRETE CONSTRUCTION. SEE KBC 1704.4 AND TABLE 1704.4.

1. INSPECTION OF REINFORCING STEEL AND PLACEMENT - PERIODIC.

2. VERIFYING USE OF REQUIRED DESIGN MIX - PERIODIC.

3. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE - CONTINUOUS.

4. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES - PERIODIC.

5. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED - PERIODIC.

D. SOILS. SEE KBC 1704.1 AND TABLE 1704.1.

1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY - PERIODIC.

2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL - PERIODIC.

3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS - PERIODIC. NOTE THAT IF TOTAL DEPTH OF CONTROLLED FILL IS 12 INCHES OR LESS, SPECIAL INSPECTION NOT REQUIRED.

4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES - CONTINUOUS.

5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY - PERIODIC.

THE FOLLOWING ELEMENTS ARE REQUIRED TO HAVE SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE. SEE KBC 1701.

THIS SECTION NOT REQUIRED.

STRUCTURAL TESTING FOR SEISMIC RESISTANCE. TESTING AND VERIFICATION OF THE FOLLOWING MATERIALS AND ASSEMBLIES ARE REQUIRED. SEE KBC 1708.

THIS SECTION NOT REQUIRED.

SPECULATIVE BUILDING NO. 3
 FOR
 SOUTHEAST KY. REGIONAL IND. PARK
 CORBIN, KENTUCKY

DATE	REVISION	BY

PROJECT NO. 2063-56	DESIGNED BY GR	DRAWN BY MSF	CHECKED BY GR	REVIEWED BY	DATE JULY 2015	SCALE AS NOTED
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MSE
 OF KENTUCKY, INC.
 Engineers
 Architects
 Planners
 Phone: (609)225-5684
 Fax: (609)225-2607
 624 Wellington Way
 Lexington, KY 40503
 www.mseinc.com

DRAWING NO.
S-4
SHEET OF