

Foundation Plan
N.T.S.
Verify North Arrow with site orientation

STRUCTURAL NOTES

LOAD DATA:

2012 INTERNATIONAL BUILDING CODE
 BUILDING RISK/OCCUPANCY CATEGORY: 2 (STANDARD OCCUPANCY STRUCTURE)
 DEAD LOAD = SELF-WEIGHT OF THE STRUCTURAL COMPONENTS AND ROOFING MATERIAL PERMANENT EQUIPMENT BELOW ROOF LINE (CEILING, LIGHTING, INSULATION, ETC.)
 COLLATERAL GRAVITY = 5.00 PSF
 ROOF COVERING = 2.52 PSF
 SECONDARY DEAD LOAD = 20 PSF REDUCIBLE
 ROOF LIVE LOAD = 20 PSF REDUCIBLE
 WIND SPEED = 115.00 MPH (ULTIMATE) - 89.08 MPH (ASD)
 GROUND SNOW LOAD = 20.00 PSF
 FLAT ROOF SNOW = 16.80 PSF
 SPECTRAL RESPONSE - Ss = 12.00 %g
 SPECTRAL RESPONSE - Si = 7.00 %g
 WIND EXPOSURE (FACTOR) = C
 SEISMIC DESIGN CATEGORY = B

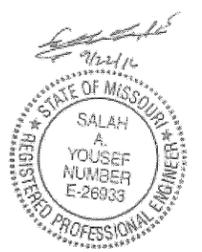
GENERAL FOUNDATION NOTES

- ALL WORK TO BE DONE IN ACCORDANCE WITH 2012 INTERNATIONAL BUILDING CODE & ALL LOCAL CITY & STATE CODES.
- ALL PERIMETER FOOTINGS AND GRADE BEAMS SHALL BEAR A MINIMUM OF 24" BELOW FINISHED GRADE AND A MINIMUM OF 18" INTO UNDISTURBED SOIL OR PLACED ON 95% STD. PROCTOR COMPACTED FILL. WHERE PLACED ON COMPACTED FILL, FTGS. SHALL BE PLACED AT LEAST 12" BELOW THE COMPACTED SURFACE AN INDEPENDENT TESTING LABORATORY SHALL PERFORM SOIL COMPACTION TESTS AND SUBMIT WRITTEN REPORTS TO THE ARCHITECT PRIOR TO THE CONTRACTOR'S PLACING FTGS. ON COMPACTED FILL. UNDER NO CIRCUMSTANCES SHALL THE FTGS. BE LESS THAN 30" BELOW FINISH GRADE.
- NO FOOTING TRENCH SHALL BE OPENED WITHOUT HAVING REINFORCING AND CONCRETE READY TO BE PLACED WITHIN THAT WORKING DAY. ANY VARIATION FROM THIS PROCEDURE REQUIRES THE APPROVAL OF THE ARCHITECT. ALL FOOTINGS SHALL BE CENTERED UNDER WALLS UNLESS NOTED OTHERWISE.
- BEARING SURFACES AT THE BOTTOM OF EXCAVATIONS SHALL BE PROTECTED FROM EITHER INUNDATION OR DRYING OUT DURING THE EXCAVATION PROCESS. CONTRACTOR SHALL PROVIDE POSITIVE SURFACE DRAINAGE DURING CONSTRUCTION.
- ALL CONCRETE SHALL BE MADE FROM TYPE II CEMENT WITH A 28 DAY COMPRESSIVE STRENGTH AS NOTED BELOW.

| LOCATION | 28 DAY PSI | SLUMP | MAX. AGGR. |
|--------------------|------------|-------|------------|
| FOOTINGS | 3500 | 4-6" | 1 1/2" |
| SLAB ON GRADE | 4000 | 2-4" | 1" |
| FOUNDATION WALL | 4000 | 4-6" | 1 1/2" |
| STAIRS & STEPS | 4000 | 1-4" | 1" |
| SIDEWALKS & DRIVES | 4000 | 2-4" | 1" |
- CONCRETE MIX SHALL CONFORM TO ASTM C94. AGGREGATES SHALL CONFORM TO ASTM C33. ALL CONCRETE WITH EXTERIOR EXPOSURE SHALL HAVE AIR ENTRAINMENT AS PER ASTM C260.
- UNLESS OTHERWISE NOTED, CLEAR CONCRETE COVER OVER STEEL REINFORCEMENT SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE CURRENT EDITION OF ACI CODE 318 AS FOLLOWS:
 CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH3"
 CONCRETE EXPOSED TO EARTH OR WEATHER (FORMED & POURED).....1 1/2"
- THE USE OF ADMIXTURES, INCLUDING CALCIUM CHLORIDE, IS NOT PERMITTED WITHOUT THE CONSENT OF THE ARCHITECT.
- REINFORCING BARS SHALL BE NEW BILLET STEEL - ASTM A615, GRADE 60. PROVIDE CONTINUOUS BENT BARS AT FOOTING STEPS & 90 DEGREE BENT TIES AT CORNERS. UNLESS OTHERWISE NOTED, LAP SPLICES & EMBEDMENT LENGTH SHALL CONFORM TO THE CURRENT ACI CODE 318.
- PROVIDE CORNER BARS EQUAL TO ADJACENT BAR SIZE, OR BEND LONGITUDINAL BARS.
- ADJACENT BAR SPLICES IN WALLS AND FOOTINGS SHALL ALTERNATE.
- WELDED WIRE FABRIC SHALL CONFORM TO THE CURRENT ASTM SPECIFICATION FOR COLD DRAWN STEEL REINFORCEMENT WIRE. LAP END AND EDGES A MINIMUM OF 6".
- REINFORCEMENT DETAILING AND PLACEMENT SHALL CONFORM TO CURRENT ACI CODE 318 EXCEPT WHERE OTHERWISE INDICATED.
- ALL REINFORCING IS TO BE FABRICATED AND PLACED IN STRICT ACCORDANCE WITH THE ACI DETAILING MANUAL, LATEST EDITION.
- TYPICAL CONCRETE SLAB: 6" SLAB W/ 6X6 - W2.1 X W2.1 WWF OVER 4" CRUSHED STONE BASE.
- ALL EXTERIOR OR EXPOSED CONCRETE SHALL BE PROTECTED BY INTERNAL VIBRATION IN ACCORDANCE WITH A.C.I. 309 "RECOMMENDED PRACTICE FOR CONSOLIDATION OF CONCRETE".
- ALL REINFORCING SHALL BE FREE OF RUST, DIRT, AND MILL SCALE PRIOR TO PLACEMENT OF CONCRETE.
- ASSUMED SOIL BEARING CAPACITY OF 2000 PSF USED IN DESIGN OF THIS STRUCTURE. FIELD VERIFY CONDITIONS & IF WEAKER SOILS ARE ENCOUNTERED REDESIGN AS REQUIRED.
- THE BASE OF THE FOOTING EXCAVATIONS MUST BE COMPACTED WITH MECHANICAL TAMPERS PRIOR TO PLACING REINFORCING STEEL.
- IN THE EVENT ORGANIC SOIL IS FOUND BELOW FOOTINGS OR FLOOR SLABS, IT SHALL BE REMOVED AND REPLACED WITH SELECT FILL, COMPACTED IN 8" LIFTS AND COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY STANDARD PROCTOR PROCEDURES (ASTM D 698).
- FOOTING EXCAVATIONS SHOULD BE INSPECTED BY THE GEO-TEC ENGINEER TO VERIFY THAT FOOTINGS BEAR ON SUITABLE SOILS PRIOR TO PLACING REINFORCING STEEL. FOOTING SIZE BASED ON 2000 PSF SOIL BEARING CAPACITY - CONTRACTOR TO VERIFY SOIL CONDITIONS & ADJUST FOOTINGS AS REQUIRED (DO NOT DECREASE FROM SIZE SHOWN).
- FIBERESH IN CONCRETE NOT ACCEPTABLE IN LIEU OF WOVEN WIRE MESH.
- 2" (MIN.) DIAMOND SHAPED CLOSURE AT COLUMNS, TYPICAL.
- ALL EXPOSED CONCRETE EDGES AND CORNERS SHALL BE CHAMFERED 3/4".
- INTERIOR SLABS SHALL BE SMOOTH TROWELLED. EXTERIOR SLABS SHALL HAVE A LIGHT BROOM FINISH, UNLESS OTHERWISE NOTED. ALL SLABS SHALL HAVE A CURING COMPOUND APPLIED TO THE SURFACE, COMPLYING WITH ASTM C309, UNLESS CURING COMPOUNDS ARE NOT COMPATIBLE WITH REQUIRED ADHESIVES OR FINISHES.
- THE ELEVATIONS ARE GIVEN WITH REFERENCE TO FINISH FLOOR DATUM 100'-0".
- VERIFY ALL DIMENSIONS, SLOPES, DEPRESSIONS, EMBEDMENT, ETC BEFORE PLACING CONCRETE.
- FOOTING ELEVATIONS NOTED ON THE FOUNDATION MAY BE LOWERED AS NECESSARY TO OBTAIN THE SPECIFIED BEARING CAPACITY AND/OR COVER.
- LAP ALL UNDER SLAB VAPOR BARRIER SHEETS A MINIMUM OF 6" AT ALL SPLICES.
- FOR FUTURE SLAB (IF ANY), PROVIDE SLAB CONTROL (C.J.) AT 12'-0" O.C. MAX. C.J.s SHALL BE APPROX. 1/3 OF THE SLAB DEPTH AND SHALL BE SAW CUT AS SOON AS POSSIBLE (WITHIN 12 HOURS OF POUR).

SPECIFIC FOUNDATION NOTES

- SEE METAL BUILDING SUPPLIER ANCHOR ROD AND DETAILS FOR EXACT LOCATIONS OF ANCHORS.
- ASSUMED SOIL CAPACITY OF 2000 PSF.



REVISED

BLUESCOPE CONSTRUCTION
 PROJECT # G-16085
 MoDOT Milan Mechanics
 Milan, MO

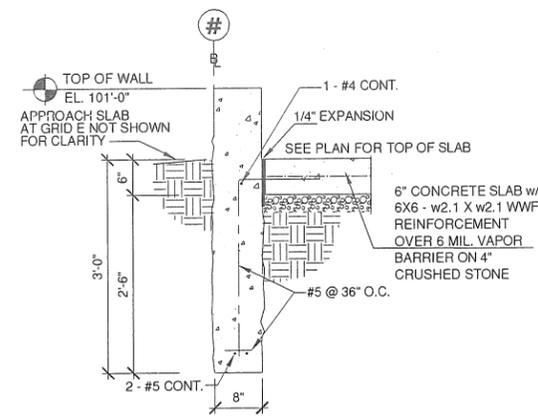


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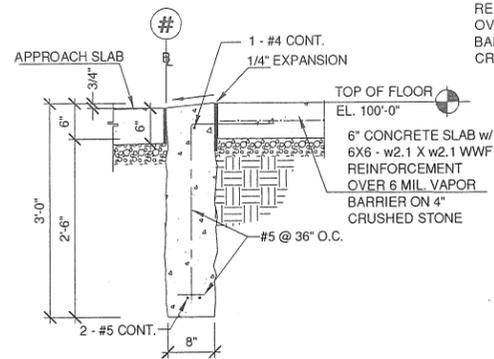
A New Project for
 MoDOT
 Milan Mechanics
 Milan, MO

DRAWN BY: SMH
 CHECKED BY: SMH
 DATE: September 2016
 SCALE: As Indicated
 CS NUMBER: G16085
 Foundation Plan and Notes

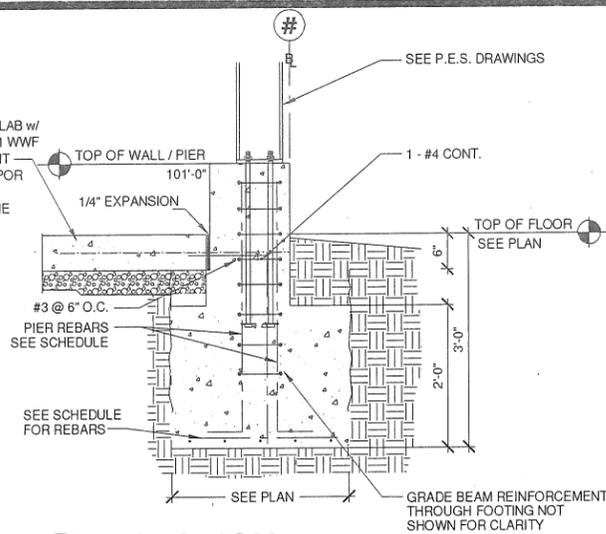
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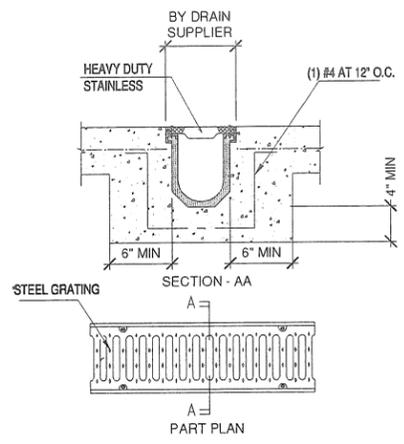
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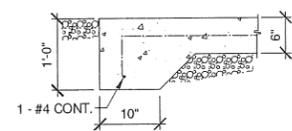
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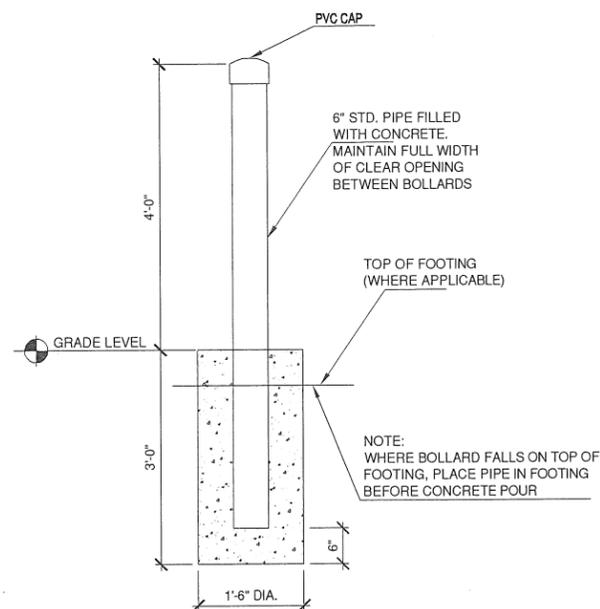
C SECTION
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D SECTION
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E SECTION
N.T.S.



F BOLLARD DETAIL
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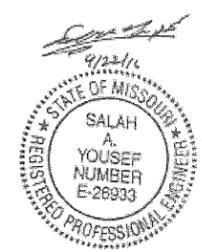
| FOOTING SCHEDULE | | | |
|------------------|--|---|---|
| FTG. MARK | PIER: TOP OF PIER ELEV. VERT. PIER REINF. PIER TIES: | FOOTING TOP OF FOOTING ELEV. BOTTOM OF FOOTING ELEV. FOOTING SIZE (WxLxT) FOOTING REINFORCING | ANCHOR RODS (QTY.) DIA. x (L) A36 THREADED ROD HEAVY HEX NUT UPSET THREADS |
| F1 | T.O.P. = 101.00 (4) - #5 VERT. #3 TIES AT 6" O.C. o = 6"; b = 12" | T.O.F. = 99'-6" B.O.F. = 97'-6" SIZE = 3'-0" x 3'-0" x 2'-0" (6) #5 x 2'-6" EACH WAY | (4) 3/4" ϕ x 36" |
| F2 & F7 | T.O.P. = 101.00 (4) - #5 VERT. #3 TIES AT 6" O.C. o = 6"; b = 12" | T.O.F. = 99'-6" B.O.F. = 97'-6" SIZE = 7'-0" x 7'-0" x 2'-0" (12) #5 x 6'-6" EACH WAY | (4) 3/4" ϕ x 36" |
| F3 & F8 | T.O.P. = 101.00 (4) - #5 VERT. #3 TIES AT 6" O.C. o = 6"; b = 12" | T.O.F. = 99'-6" B.O.F. = 97'-6" SIZE = 5'-0" x 5'-0" x 2'-0" (9) #5 x 4'-6" EACH WAY | (4) 3/4" ϕ x 36" |
| F4 | T.O.P. = 101.00 (4) - #5 VERT. #3 TIES AT 6" O.C. o = 6"; b = 12" | T.O.F. = 99'-6" B.O.F. = 97'-6" SIZE = 3'-6" x 3'-6" x 2'-0" (6) #5 x 3'-0" EACH WAY | (4) 3/4" ϕ x 36" |
| F5 | T.O.P. = 101.00 (4) - #5 VERT. #3 TIES AT 6" O.C. o = 6"; b = 12" | T.O.F. = 99'-6" B.O.F. = 97'-6" SIZE = 6'-0" x 6'-0" x 2'-0" (11) #5 x 5'-6" EACH WAY | (4) 3/4" ϕ x 36" |
| F6 | T.O.P. = 101.00 (14) - #5 VERT. #3 TIES AT 6" O.C. o = 18"; b = 30" | T.O.F. = 99'-6" B.O.F. = 97'-6" SIZE = 7'-0" x 7'-0" x 2'-0" (12) #5 x 6'-6" EACH WAY | (4) 3/4" ϕ x 36" ⊙ BLDG. COLUMN (8) 1 1/4" ϕ x 36" ⊙ WIND POST |

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MoDOT Milan Mechanics
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A New Project for
MoDOT
Milan Mechanics
Milan, MO



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September 2016
SCALE
As Indicated
G16085
Foundation Sections

S3