



FOUNDATION GENERAL NOTES 302-01-12-Natatorium-Orig-2003-Arch-Struct-S2.01-fondn sect's-BD-TTF

CONCRETE

- CONCRETE WORK SHALL CONFORM TO THE LATEST ISSUE OF "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318 AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 301, UNLESS NOTED OTHERWISE ON THE PLANS.
- WEATHER EXPOSED CONCRETE SHALL BE AIR-ENTRAINED. AIR CONTENT SHALL BE WITHIN 5% TO 7% BY VOLUME.
- MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH:
BUILDING FOOTINGS - $f'_c = 3000$ psi
BUILDING SLABS, PIERS, WALLS, GRADE BEAMS AND ALL OTHER - $f'_c = 4000$ psi
POOL SLABS, PIERS, WALLS, PLATFORMS AND ALL OTHER - $f'_c = 4000$ psi
- CONTRACTOR SHALL SUBMIT A COMPLETE CONCRETE MIX DESIGN FOR BOTH REGULAR WEIGHT, NON-AIR ENTRAINED AND REGULAR WEIGHT, AIR ENTRAINED CONCRETE MIXES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, LATEST ISSUE. MAXIMUM SLUMP FOR ALL CLASSES SHALL BE 4 INCHES.
- DURING THE PROGRESS OF THE CONCRETE WORK, STANDARD TEST CYLINDERS SHALL BE MADE AND CURED IN ACCORDANCE WITH ASTM C-31.
- CONCRETE FINISHING:
INTERIOR BUILDING SLABS AND POOL SLABS - HARD TROWEL
EXTERIOR SLABS - BRUSH OR BROOM FINISH
- HOT WEATHER CONCRETING SHALL CONFORM TO ACI 305.
- ALL CONCRETE SHALL BE CURED USING AN APPROVED MEMBRANE CURING COMPOUND. EXPOSED INTERIOR SLABS SHALL BE SEALED WITH SEALING COMPOUND. DO NOT PLACE ANY SLAB ON UNCOMPACTED FILL.
- LOCATIONS OF CONSTRUCTION JOINTS OTHER THAN THOSE INDICATED ON THE PLANS SHALL BE SUBMITTED FOR REVIEW PRIOR TO THE START OF WORK.

FORMWORK

- FORMWORK SHALL BE DESIGNED, ERECTED, MAINTAINED AND REMOVED ACCORDING TO THE PROVISIONS OF "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK", ACI 347, LATEST ISSUE.
- COMPLETED WORK SHALL NOT VARY FROM THE PLUMB, LEVEL, INDICATED GRADE OR POSITION SHOWN ON THE PLANS BY MORE THAN 1/4 INCH IN TEN FEET. REFER ALSO TO ACI 301, LATEST ISSUE FOR ADDITIONAL FORMWORK TOLERANCES.

REINFORCING STEEL

- DETAILING, FABRICATION, PLACING, AND SUPPORT OF REINFORCING STEEL SHALL FOLLOW THE CURRENT ISSUE OF THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST ISSUE, UNLESS NOTED OTHERWISE.
- REINFORCING BARS SHALL HAVE DEFORMED SURFACES CONFORMING TO ASTM A615.
- WELDED WIRE FABRIC (WWF) SHALL BE LAPPED 1-1/2 MESH AND WWF SHALL BE WIRED TOGETHER WHERE REQUIRED. WWF SHALL CONFORM TO ASTM A185.
- REINFORCING STEEL IN FOOTINGS WITH LONGITUDINAL AND TRANSVERSE STEEL SHALL BE ASSEMBLED INTO EQUALLY SPACED MAT GRILLS AND WIRED TOGETHER AT ALTERNATE INTERSECTIONS BEFORE CONCRETE IS PLACED.
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS CLEARLY INDICATING SIZE, QUANTITY, LOCATIONS AND DETAILS OF ALL REINFORCING STEEL FOR REVIEW BEFORE THE START OF WORK.
- LAP SPLICES SHALL BE ACI - CLASS B UNLESS NOTED OTHERWISE.
- DESIGN STRESSES FOR THE VARIOUS REINFORCING ARE AS FOLLOWS:

WELDED WIRE FABRIC	$F_y = 60,000$ psi
ALL OTHER	$F_y = 60,000$ psi

MASONRY

- CONCRETE MASONRY UNITS: HOLLOW LOAD BEARING UNITS, ASTM C90, GRADE N-1 NOMINAL DIMENSIONS ARE 16" LONG x 8" HIGH x THICKNESS AS INDICATED ON THE DRAWINGS.
- MORTAR: ASTM C270 TYPE N; GROUT ASTM C476. DO NOT USE MORTAR TO GROUT CORES.
- ANCHOR BOLTS: STEEL BOLTS WITH HEX NUTS AND WASHERS, ASTM A307, GRADE A, HOT-DIPPED GALVANIZED IN SIZE AS INDICATED ON THE DRAWINGS.
- MASONRY WALL REINFORCING SHALL BE ZINC-COATED TRUSS TYPE AS MANUFACTURED BY DUN-0-WALL, INC. OR APPROVED EQUAL. WIDTH TO BE APPROXIMATELY 2" LESS THAN THE NOMINAL WIDTH OF THE WALL. SIDE ROD AND CROSS ROD DIAMETER TO BE 0.1875 INCH.
- LAY MASONRY UNITS WITH CORE CELLS VERTICALLY ALIGNED. REINFORCE MASONRY UNIT CORES WITH REINFORCEMENT BARS AND GROUT SOLID AROUND BARS AS INDICATED ON THE DRAWINGS.
- USE LOW LIFT GROUTING TECHNIQUES FOR ALL GROUTING AS FOLLOWS:
 - PROVIDE MINIMUM OF 2" CLEAR DIMENSION AND 8 SQ. IN. CLEAR AREA IN VERTICAL CORES TO BE GROUTED.
 - PLACE REINFORCING PRIOR TO LAYING MASONRY UNITS AND EXTEND ABOVE MAXIMUM POUR HEIGHT AS REQUIRED FOR SPLICING.
 - LAY MASONRY UNITS TO MAXIMUM POUR HEIGHT. DO NOT EXCEED 5'-0", EXCEPT POUR HEIGHT SHALL STOP AT COURSE BELOW BOND BEAM.
 - POUR GROUT USING CHUTE OR CONTAINER WITH SPOUT. ROD OR VIBRATE GROUT DURING PLACEMENT. PLACE GROUT CONTINUOUSLY AND DO NOT INTERRUPT POURING FOR MORE THAN 20 MINUTES. TERMINATE POUR 1 1/2" BELOW TOP COURSE OF POUR.

DESIGN DATA

FLOOR LIVE LOAD 100 PSF
ROOF LIVE LOAD-SNOW AND ICE 20 PSF + DRIFT
WIND & SEISMIC LOAD 2003 KENTUCKY BUILDING CODE (2000 INTERNATIONAL BUILDING CODE)

MINIMUM ALLOWABLE SOIL BEARING CAPACITY:
2000 PSF COLUMNS
1500 PSF CONT. WALL FOOTINGS

REFERENCE THE GEOTECHNICAL REPORT PREPARED BY:
ODDEN ENVIRONMENTAL & ENERGY SERVICES DATED NOVEMBER 20, 1998

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CONSTRUCTION DOCUMENTS

CARDINAL PARK NATATORIUM

UNIVERSITY OF LOUISVILLE

Project: 03006
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Checked: MJL
Scale: AS NOTED
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FOUNDATION SECTIONS

S2.01

OFFICIAL BID DOCUMENT