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2018/04/23 11:14 AM By: Hunter, Jacqueline

A GENERAL NOTES
 1 THIS STRUCTURE IS DESIGNED IN ACCORDANCE WITH, AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH, THE NATIONAL BUILDING CODE OF CANADA 2010 (NBCC 2010) AND THE MANITOBA BUILDING CODE 2011 (MBC 2011).
 2 DESIGN LOADS ARE INDICATED ON THE DRAWINGS.
 3 DESIGN LIVE LOADS SHALL NOT BE EXCEEDED AT ANY TIME DURING CONSTRUCTION.
 4 DO NOT SCALE DRAWINGS.
 6 VERIFY ALL DIMENSIONS, ELEVATIONS, SLOPES, DETAILS, CONDITIONS, ETC., SHOWN ON THE DRAWINGS AND VERIFIED WITH SITE CONDITIONS, PRIOR TO CONSTRUCTION OR PREFABRICATION OF ANY BUILDING COMPONENT.
 7 MODIFICATIONS, ALTERNATIONS OR SUBSTITUTIONS MUST BE AUTHORIZED IN WRITING BY THE ENGINEER.
 8 LOCATE ALL EXISTING SUBGRADE SERVICES PRIOR TO CONSTRUCTION.
 9 DESIGN AND INSTALL ALL NECESSARY SHORING, BRACING AND FORMWORK. FORMWORK FOR CONSTRUCTION SHALL BE BRIDGED OVER EXISTING SERVICES. PROCEDURE MUST BE APPROVED BY THE ENGINEER.
 10 REVIEW LOCATION OF INTENDED AND PROPOSED CONSTRUCTION JOINTS WITH ENGINEER PRIOR TO PROCEEDING.
 11 CONSTRUCTION SAFETY REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 12 DEFECTIVE OR UNACCEPTABLE WORK SHALL BE REPAIRED TO THE SATISFACTION OF THE CONSULTANT AT NO ADDITIONAL COST TO THE PROJECT.
 13 NOTIFY THE DESIGN ENGINEER AT LEAST 48 HOURS PRIOR TO ALL CONCRETE PLACEMENT TO ALLOW FOR SITE INSPECTIONS.
 14 WHERE THERE IS A DISCREPANCY BETWEEN DRAWINGS, SUBMIT A FORMAL RFI TO ENGINEER OF RECORD PRIOR TO MANUFACTURING OR INSTALLATION.
 15 ALL SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO ENGINEER OF RECORD.
 16 ALL SHOP DRAWING SUBMITTALS REQUIRING AN ENGINEER'S SIGNED SEAL SHALL BE ACCOMPANIED BY CERTIFICATE OF AUTHORIZATION FROM 'EGM'.

B CAST-IN-PLACE CONCRETE
 1 ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH CSA A23.1-14 CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION / METHODS OF TEST AND STANDARD PRACTICES FOR CONCRETE.
 2 SUPPLEMENTARY CEMENTITIOUS MATERIAL TO CAN/CSA-A3000-13 CEMENTITIOUS MATERIALS COMPENDIUM.
 3 CHEMICAL ADMIXTURES TO ASTM C494/C494M-16 AND ASTM C10171017M-13e1.
 4 GENERAL CONTRACTOR TO PROVIDE PROPRIETARY MIX DESIGN PERFORMANCE RECORD AS REQUIRED BY CONCRETE MANITOBA.
 5 SUBMIT CONCRETE MIX DESIGN STATEMENTS, SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA WHO HOLDS A CERTIFICATE OF AUTHORIZATION OF 'EGM', TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
 6 CONCRETE SPECIFICATIONS: REFER TO TABLE B.1
 7 CONSTRUCT FORMWORK, SHORING AND BRACING TO MEET DESIGN, CODE AND CSA A23.1-14 REQUIREMENTS. CONSTRUCT ACCURATELY, SO THAT RESULTING FINISHED CONCRETE CONFORMS TO SHAPES, LINES, AND DIMENSIONS INDICATED ON THE DRAWINGS.
 8 VIBRATE ALL CONCRETE WORK WITH APPROPRIATE INTERNAL VIBRATORS.
 9 CONCRETE WORKING TIME, FROM BATCHING TO PLACEMENT AND CONSOLIDATION, SHALL NOT EXCEED 1-1/2 HOURS.
 10 CONTRACTOR SHALL ACCURATELY PLACE AND SECURE ALL COMPONENTS TO BE EMBEDDED IN THE CONCRETE (ie. DOWELS FOR CONCRETE, ANCHOR BOLTS, ETC.). SEE STRUCTURAL, ARCHITECTURAL, AND ANY OTHER PERTINENT DRAWINGS.
 11 CLEAR CONCRETE COVER TO REINFORCING STEEL: REFER TO TABLE B.2.
 12 SEE ARCHITECTURAL DRAWINGS FOR SURFACE FINISHES, EDGE TREATMENTS, ETC.
 13 A WOOD TEMPLATE FOR ANCHOR BOLT PLACEMENT IS TO BE USED TO ACCURATELY PLACE ANCHOR BOLTS IN CONCRETE.

14 CONCRETE TESTING SHALL BE PERFORMED BY AN INDEPENDENT CSA APPROVED TESTING COMPANY. A MINIMUM OF THREE (3) CONCRETE TEST CYLINDERS AND ONE (1) SLUMP TEST SHALL BE TAKEN FOR EVERY 75 (OR LESS) CUBIC METERS OF EACH CLASS OF CONCRETE PLACED, OR FOR EACH DAY CONCRETE IS PLACED, WHICHEVER IS GREATER. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH CSA A23.2-14, AND THE RESULTS SHALL BE FORWARDED TO THE ENGINEER.
 15 VOID FORMS UNDER PILE CAPS / GRADE BEAMS / SLABS SHALL BE HONEYCOMB TYPE BIODEGRADABLE CARDBOARD, 200mm THICKNESS, CAPABLE OF PROVIDING SUFFICIENT STRUCTURAL SUPPORT FOR CONCRETE UNTIL CONCRETE IS CURED.,
 16 AS AN ALTERNATE VOID FORM, CONTRACTOR MAY USE STYROFOAM TYPE VOID FILLER WHICH MUST MAINTAIN VOID SPACE NOTED ABOVE WHEN COLLAPSED / COMPRESSED. STYROFOAM VOID FILLER SHALL BE SELECTED AND DESIGNED BY MANUFACTURER. VOID FORM SELECTED TO BE FORWARDED TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
 17 ALL FORMWORK INCLUDING CARDBOARD "SONO-TUBES" TO BE REMOVED UPON COMPLETION.
 18 ALL HOLES NOT SHOWN ON THE DRAWINGS TO BE CORED THROUGH REINFORCED CONCRETE TO BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO CORING.
 19 CONCRETE PLACEMENT SCHEDULING, AND WORK PROCEDURES SHALL BE DISCUSSED WITH THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
 20 FOR COLD WEATHER CONCRETE WORK, ALL ICE, SNOW, AND FROST SHALL BE REMOVED FROM FORMWORK AND THE TEMPERATURE OF ALL CONTACT SURFACES SHALL BE RAISED ABOVE 10C FOR 24 HOURS PRIOR TO PLACING CONCRETE. CONCRETE SHALL BE NOT LESS THAN 20 DEGREES CELSIUS NOR MORE THAN 30 DEGREES CELSIUS WHEN DEPOSITED. CONCRETE SHALL BE ENCLOSED AND THE SPACE SHALL HAVE A TEMPERATURE OF NOT LESS THAN 20 DEGREES CELSIUS FOR THREE (3) DAYS AND NOT LESS THAN 5C FOR AN ADDITIONAL FOUR (4) DAYS.
 21 NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO ALL CONCRETE PLACEMENT TO ALLOW FOR SITE INSPECTIONS.

C CAST-IN-PLACE CONCRETE PILES
 1 SHAFT AND BELL DIAMETERS ARE AS INDICATED ON THE DRAWINGS.
 2 PILING CONTRACTOR WILL BE REQUIRED TO SLEEVE HOLES DURING INSTALLATION OF CONCRETE FOR PILES, AS REQUIRED.
 3 INSTALL PILES VERTICALLY, NOT OUT OF PLUMB BY MORE THAN 2%; NOR OUT OF POSITION AS SHOWN IN THE FOUNDATION PLAN BY MORE THAN 50mm (2").
 4 REFER TO "CONCRETE" AND "REINFORCING STEEL" NOTES FOR MATERIAL SPECIFICATIONS AND REQUIREMENTS.
 5 REFER TO TYPICAL PILE DETAIL FOR ADDITIONAL INFORMATION.
 6 VIBRATE THE TOP 3000mm (10'-0") OF CONCRETE OF ALL CAST-IN-PLACE PILES.
 7 EXTEND VERTICAL PILE DOWELS MIN. 450mm (18") INTO THE STRUCTURAL CONCRETE MEMBERS SUPPORTED UNLESS NOTED OTHERWISE.

D REINFORCING STEEL
 1 REINFORCING STEEL SHALL BE NEW BILLET, DEFORMED BARS WITH A MINIMUM SPECIFIED YIELD STRENGTH OF 400MPa IN ACCORDANCE WITH CSA G30.18-09 (R2014).
 2 REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST RSIC REINFORCING STEEL MANUAL OF STANDARD PRACTICE.
 3 ALL REINFORCING TO BE HELD IN PLACE AND TIED BY THE USE OF PROPER ACCESSORIES SUCH AS HI-CHAIRS, SPACERS, ETC.
 4 SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SIZES, GRADE, SPACING, HOOKS, BENDS, SUPPORTING/SPACE DEVICES, ETC. FOR REVIEW TO ENGINEER PRIOR TO FABRICATION.
 5 PRIOR TO PLACING CONCRETE, ENSURE THAT ALL REINFORCING STEEL IS CLEAN, FREE OF LOOSE SCALE, RUST, MUD, OIL, OR OTHER FOREIGN MATERIAL THAT WOULD REDUCE BOND.

6 HEATING, QUENCHING, AND BENDING OF REINFORCING STEEL ON THE SITE IS NOT ALLOWED.
E MASONRY
 1 MASONRY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CAN/CSA-A371-14, UNLESS NOTED.
 2 MASONRY REINFORCEMENT AND TYING SHALL BE IN ACCORDANCE WITH CSA S304.1-14.
 3 CONCRETE BLOCKS SHALL CONFORM TO CSA A165 SERIES-14.
 4 MATERIALS USED IN CONCRETE MASONRY SHALL CONFORM TO CSA A165 SERIES-14.
 5 MASONRY MORTAR FOR LOAD BEARING WALLS SHALL BE TYPE S BASED ON PROPERTY AND PROPORTION SPECIFICATIONS OF CAN/CSA-A179-14 WITH A 28 DAY STRENGTH OF 12.4 MPa.
 6 PROVIDE NO. 9 A.S.W.G.28. 'DUR-O-WALL' OR 'BLOK-LOK', LADDER TYPE, STANDARD, 3.76mm (9/64") SIDE RODS AND CROSS BARS, WELDED, TO ASTM A82/A82M-07 FOR COLD DRAWN STEEL. USE REINFORCING AT MAXIMUM SPACING OF 400mm (16") WITHIN EVERY SECOND MORTAR JOINT UNLESS NOTED.
 7 PROVIDE CLEAN-OUTS AT BOTTOM OF ALL FILLED CORES. REMOVE ALL MORTAR FLASH AND DEBRIS FROM WITHIN CORE PRIOR TO FILLING.
 8 PROVIDE MATCHING DOWELS EXTENDING FROM CONCRETE FOUNDATION INTO MASONRY WALLS AT ALL REINFORCED CORES.
 9 ALL REINFORCED CORES AND BLOCK COURSES SHALL BE FILLED WITH CONCRETE. VIBRATE WITH AN INTERNAL "PENCIL" TYPE VIBRATOR.
 10 CONCRETE LIFTS SHALL NOT EXCEED 2400mm (94").
 11 LAP ALL REINFORCING 600mm (24") MINIMUM UNLESS NOTED OTHERWISE. DETAIL TO SUIT CONCRETE LIFT CRITERIA WHERE APPLICABLE.
 12 WHERE MASONRY, CONCRETE OR STEEL LINTELS BEAR ON A MASONRY WALL, FILL ONE COURSE 200mm (8") MIN BELOW AND ONE CORE 200mm (8") WIDE WITH CONCRETE UNLESS NOTED OTHERWISE.
 17 FILL CORES WITH CONCRETE WHERE REQUIRED TO SUPPORT EMBEDDED OR DRILLED ANCHORS, INSERTS, SERVICES, ETC.
 18 TEMPORARY BRACING SHALL BE PROVIDED FOR ALL WALLS UNTIL STRUCTURE IS CLOSED IN, AND PERMANENT SUPPORT IS PROVIDED. SUBMIT BRACING DETAILS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
 19 MORTAR TEST SHALL BE TAKEN IN ACCORDANCE WITH CSA S304-14 AND CAN/CSA-179-14; A COPY OF RESULTS SHALL BE SUBMITTED TO THE ENGINEER.
 20 COLD-WEATHER REQUIREMENTS IN ACCORDANCE WITH THE NBCC 2010 SHALL BE IMPLEMENTED WHEN NECESSARY. NO "TORCHING TECHNIQUES" OR MORTAR ADMIXTURES WILL BE ALLOWED.
 22 PROVIDE CONCRETE FILL FOR ONE (1) FULL COURSE ALL AROUND ANCHORS. TYPICAL UNLESS NOTED OTHERWISE.

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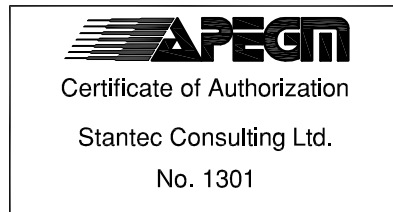
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Client/Project
 CITY OF WINNIPEG PLANNING, PROPERTY AND DEVELOPMENT
 ST. VITAL PARK
 ENTRANCE BEAUTIFICATION
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 Title
 GENERAL NOTES
 FOR PARK SIGN