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Project Title: **JASPER STAFF HOUSING CONSTRUCTION**

DUPLEX
 720 PATRICIA STREET,
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GENERAL NOTES

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
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- THE CONCRETE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POUR SEQUENCES AND CONSTRUCTION PROCEDURES FOR ALL CONCRETE WORK TO ACCOUNT FOR TEMPERATURE DIFFERENTIALS AND SHRINKAGE OCCURRING DURING THE CONSTRUCTION PHASE UNTIL THE BUILDING IS PERMANENTLY IN A MECHANICALLY CONTROLLED ENVIRONMENT.
- CONCRETE CONTRACTOR SHALL INCLUDE IN THE ESTIMATE ADDITIONAL CONCRETE QUANTITY AS REQUIRED TO COMPENSATE FOR DEFLECTIONS OF METAL DECK AND UN-SHORED COMPOSITE BEAMS AND TO PROVIDE A LEVEL CONCRETE SURFACE. REFER TO COMPOSITE STEEL BEAM (UNDER STRUCTURAL STEEL) AND METAL DECK NOTES FOR ADDITIONAL CONSIDERATIONS.
- THE USE OF CHLORIDES SUCH AS DEICING SALTS IS PROHIBITED FOR MELTING ICE PRIOR TO PLACEMENT OF CONCRETE.
- SIZES OF CONCRETE PLACEMENTS SHALL NOT EXCEED THE FOLLOWING, UNLESS OTHERWISE INDICTED ON THE PLANS:
a) WALLS: 30 m MAXIMUM LENGTH
b) SLABS ON GRADE: PLACE IN ALTERNATING STRIPS (APPROXIMATE WIDTH 10 m & MAXIMUM LENGTH 60 m)
- MINIMUM ELAPSED TIME BETWEEN ADJACENT CONCRETE PLACEMENTS SHALL BE 48 HOURS.
- JOINTS BETWEEN THE STRUCTURAL (AND ARCHITECTURAL) MEMBERS SHALL BE PROPERLY PREPARED AND FILLED WITH JOINT SEALANT UNLESS NOTED OTHERWISE. ALL JOINT EDGES, INCLUDING TOP AND BOTTOM SURFACES AND VERTICAL AND HORIZONTAL SURFACES SHALL BE FORMED OR TOOLED AS REQUIRED. JOINT SEALANT SHALL BE APPLIED ONLY TO THE TOP, VERTICAL, AND HORIZONTAL SURFACES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- JOINTS TO BE PREPARED AND FILLED WITH JOINT SEALANT SHALL INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION JOINTS, CONTROL JOINTS, ISOLATION JOINTS, AND ALL INTERFACE JOINTS BETWEEN SIMILAR AND DISSIMILAR MEMBERS. SPECIFIC LOCATIONS MAY BE INDICATED ON THE DRAWINGS, OR MAY BE REQUIRED BY APPROVED SHOP DRAWINGS, OR MAY OCCUR DUE TO THE CONSTRUCTION SEQUENCE SELECTED BY THE CONTRACTOR.
- PRIOR TO PLACING CONCRETE ADJACENT TO EXISTING CONCRETE WITHOUT A CONSTRUCTION JOINT THOROUGHLY CLEAN, DE-GREASE AND MECHANICALLY ROUGHEN EXISTING CONCRETE SURFACES. APPLY EPOXY BONDING AGENT PRIOR TO PLACING FRESH CONCRETE. FOLLOW ALL MANUFACTURER'S INSTRUCTIONS FOR SURFACE PREPARATION, MIXING AND APPLICATION.
- TOOL SLAB JOINTS AT THE TIME OF FINISHING. SAW CUTTING IS NOT ALLOWED UNLESS APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.
- WHERE NEW CONCRETE ELEMENTS ARE CAST AGAINST EXISTING CONCRETE ELEMENTS OR STRUCTURES, PROVIDE NECESSARY TEMPORARY SHORING TO RESIST FULL HYDROSTATIC PRESSURE OR OTHERWISE EMPLOY NECESSARY MEANS AND METHODS TO AVOID EXERTING ANY PRESSURE OR LOADING ON THE EXISTING STRUCTURE.

2. REINFORCING STEEL

- REINFORCING STEEL SHALL BE DEFORMED BAR CONFORMING TO CSA STANDARD G30.18-09 (R2014), GRADE 400R, UNLESS OTHERWISE NOTED. REINFORCING STAINLESS STEEL BARS SHALL BE GRADE 420. BAR MARKS WITH PREFIX 'S' DENOTE STAINLESS STEEL BARS. BAR MARKS WITH PREFIX 'C' DENOTED EPOXY-COATED STEEL BARS.
- REFER TO TYPICAL DETAILS FOR MINIMUM COVER TO REINFORCEMENT.
- REINFORCING BAR AREAS ARE 100, 200, 300, 500, 700, 1000, 1500 AND 2500 sq. mm FOR BAR DESIGNATIONS 10, 15, 20, 25, 30, 35, 45 AND 55, RESPECTIVELY.
- WELDED WIRE FABRIC SHALL HAVE A MINIMUM YIELD STRENGTH OF 450 MPa AND SHALL CONFORM TO CSA STANDARD G30.5. SUPPLY IN FLAT SHEET ONLY.
- PRE-STRESSING STRANDS SHALL CONFORM TO CSA STANDARD G279.
- REINFORCING STEEL IS TO BE DETAILED, BENT AND PLACED IN ACCORDANCE WITH R.S.I.C. REINFORCING STEEL MANUAL OF STANDARD PRACTICE SUBMIT SHOP DRAWINGS INDICATING ALL DETAILS OF REINFORCING STEEL PLACEMENT.
- ALL REINFORCEMENT SHALL BE SECURELY HELD IN PROPER POSITION WHILE POURING CONCRETE. CONTRACTOR SHALL PROVIDE CHAIRS, SPACER BARS, SUPPORT BARS AND OTHER ACCESSORIES TO SUPPORT REINFORCING. ALL THE WIRE, CHAIRS AND BAR SUPPORTS FOR FOUNDATIONS AND FOR EXPOSED CONCRETE SHALL BE NON-METALLIC OR COATED.
- CONTRACTOR SHALL NOT USE ANY OF THE STRUCTURAL REINFORCEMENT SHOWN ON PLANS AS ACCESSORY/SUPPORT BARS. SUPPORT BARS MUST BE PROVIDED TO MAINTAIN LOCATION OF STRUCTURAL REINFORCEMENT AS INDICATED ON PLANS.
- TACK WELDING OF REINFORCEMENT IS NOT PERMITTED. WELDED SPLICES IN REINFORCING BARS WILL ONLY BE PERMITTED IF EXPLICITLY SHOWN ON THE STRUCTURAL DRAWINGS OR IF WRITTEN APPROVAL IS GIVEN BY THE DEPARTMENTAL REPRESENTATIVE.
- PROVIDE CLASS 'B' TENSION LAP SPLICES U.N.O. ALL SPLICE LOCATIONS SHALL BE TO THE APPROVAL OF THE DEPARTMENTAL REPRESENTATIVE.
- APPROVED REBAR COUPLERS MAY BE USED AT THE CONTRACTORS OPTION TO AID PLACEMENT OF DOWELS THROUGH FORMS. MECHANICAL SPLICES SHALL DEVELOP 125% OF THE TENSILE STRENGTH OF THE REBAR.
- LAP SPLICES IN WELDED WIRE MESH SHALL NOT BE LESS THAN 200mm, AS MEASURED BETWEEN THE OUTERMOST CROSS-WIRES OF EACH FABRIC SHEET.

6. TIMBER CONSTRUCTION

- ALL WOOD FRAMING SHALL CONFORM TO THE MINIMUM STANDARDS BELOW UNLESS NOTED OTHERWISE ON THE ENGINEERING DRAWINGS.

WOOD MEMBER MATERIAL GRADES	
MEMBER	MATERIAL GRADE
JOISTS (2x8 AND SMALLER)	SPRUCE-PINE-FIR NO. 2 OR BETTER
BEAMS AND STRINGERS (2x10 AND LARGER)	SPRUCE-PINE-FIR NO. 2 OR BETTER
POSTS AND TIMBERS	SPRUCE-PINE-FIR NO. 2 OR BETTER
STUDS, PLATES & MISC. FRAMING	SPRUCE-PINE-FIR NO. 2 OR BETTER
TOP AND BOTTOM PLATES AT BEARING WALLS	SPRUCE-PINE-FIR NO. 2 OR BETTER
2x4 STUDS	SPRUCE-PINE-FIR NO. 2 OR BETTER
2x6 STUDS AND LARGER	SPRUCE-PINE-FIR NO. 2 OR BETTER
PLYWOOD SHEATHING	GRADE C-D
OSB SHEATHING	STRUCTURAL 1

- THE USE OF STUD GRADE MATERIAL TO SUBSTITUTE ANY OF THE GRADES NOTED ABOVE MUST BE REVIEWED AND APPROVED BY THE DEPARTMENTAL REPRESENTATIVE OF RECORD PRIOR TO CONSTRUCTION.
- STUD LOAD CARRYING CAPACITY HAS BEEN REDUCED IN ACCORDANCE WITH THE CORRESPONDING ULC FIRE RATING ASSEMBLY. REFER TO ARCHITECTURAL DRAWINGS AND WALL SCHEDULE FOR SPECIFIC DETAILS.
- NAILS, SPIKES, AND STAPLES TO CONFORM TO CSA STANDARD B111.
- ALL NAILS FOR STRUCTURAL WORK SHALL BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.
- ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2x4 STUDS AT 400 mm O.C. AT INTERIOR WALLS AND 2x6 AT 400 mm O.C. AT EXTERIOR WALLS.
- PROVIDE TWO STUDS MINIMUM AT THE END OF ALL WALLS AND ONE STUD AT EACH SIDE OF ALL OPENINGS.
- PROVIDE ADDITIONAL STUDS UNDER TRUSSES SUPPORTED BY EXTERIOR WALLS IF THE BEARING LOCATION FALLS BETWEEN REGULARLY SPACED STUDS.
- PROVIDE WOOD LINTEL HEADERS AT ALL OPENINGS AS SHOWN IN THE FLOOR PLANS AND SCHEDULE.

- BEAMS (EXCEPT LINTELS) SHALL HAVE A MINIMUM BEARING LENGTH OF NO LESS THAN 89mm UNLESS OTHERWISE REQUIRED BY NBCC 2015 (REFER TO NOTES TO TABLES A-8 TO A-11). FLOOR JOISTS SHALL HAVE A MINIMUM BEARING LENGTH OF NO LESS THAN 38mm UNLESS OTHERWISE NOTED.
- PROVIDE SOLID BLOCKING FOR WOOD COLUMNS THROUGH FLOOR TO SUPPORTS BELOW.
- WALLS SHALL HAVE SINGLE BOTTOM PLATES AND MINIMUM DOUBLE TOP PLATES FOR ALL EXTERIOR BEARING WALLS. END NAIL THE TOP PLATE TO EACH STUD WITH TWO 75 NAILS AND TOENAIL OR END NAIL EACH STUD TO THE BOTTOM PLATE WITH TWO 75 NAILS.
- ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO:
a) WOOD FRAMING BELOW WITH 89 NAILS AT 400mm O.C.
b) CONCRETE WITH 13mm DIAMETER ANCHOR BOLTS (150mm MIN EMBED) AT 1200mm O.C. UNLESS NOTED OTHERWISE.
c) MASONRY WITH 13 mm DIAMETER ANCHOR BOLTS x 300 mm LONG AT 1200 mm ON CENTRES. STAGGER ANCHOR BOLTS.
d) STRUCTURAL STEEL AND STEEL JOISTS WITH 12 mm DIAMETER BOLTS AT 1200 mm ON CENTRES. STAGGER BOLT LOCATIONS.
- PROVIDE DOUBLE JOISTS AROUND ALL OPENINGS IN FLOOR OR ROOFS UNLESS NOTED OTHERWISE.
- PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH THE GRAIN PERPENDICULAR TO SUPPORTS AND NAILED WITH 64 NAILS AT 150mm O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND AT 300mm O.C. TO INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE.
- ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. TOENAIL BLOCKING TO SUPPORTS WITH (NAILS) AT 300mm O.C. UNLESS NOTED OTHERWISE.
- AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 38x89 BLOCKING AT ALL UNFRAMED PLYWOOD PANEL EDGES AND NAIL WITH EDGE NAILING SPECIFIED.
- LAY TIMBER PLANK DECKING IN A TWO-SPAN CONTINUOUS PATTERN.
- PROVIDE MINIMUM BEARING OF 50 mm FOR ALL TIMBER PLANK DECKING.
- SAWN LUMBER SHALL NOT BE NOTCHED OR DRILLED IN THE FIELD WITHOUT THE PERMISSION OF THE DEPARTMENTAL REPRESENTATIVE.
- WOOD IS NOT PERMITTED TO BEAR DIRECTLY ON MASONRY OR CONCRETE WITHOUT PROTECTION. PROVIDE EITHER PRESSURE TREATED WOOD OR POLYETHYLENE SHEET BETWEEN THE WOOD AND MASONRY OR CONCRETE.
- ALTERATIONS AND/OR CONNECTIONS TO EXISTING CONSTRUCTION ARE NOT PERMITTED UNLESS NOTED OTHERWISE.
- OPENINGS AND HOLES:
a) PREPARE LAYOUTS OF ALL NEW HOLES AND OPENINGS THROUGH EXISTING WORK FOR REVIEW BY THE DEPARTMENTAL REPRESENTATIVE.
b) CORE DRILL NEW HOLES FOR PIPES TO A DIAMETER NOT LARGER THAN THE OUTSIDE PIPE DIAMETER PLUS 25 mm (1").
c) WHERE OPENINGS ARE TO BE CUT, ALWAYS PRE-DRILL THE CORNERS USING A 100 mm (4") DIAMETER CORE DRILL OR DRILL A SERIES OF HOLES TO PREVENT OVERCUTTING AT THE CORNERS.
- PROVIDE SLOTTED HOLES AND FRICTION TYPE BOLTED CONNECTIONS TO CONNECT NEW STEEL TO EXISTING WORK.
- PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD.
- ALL FASTENERS (HANGERS, CLIPS, SCREWS, BOLTS, WASHERS, ETC.) IN CONTACT WITH PRESSURE TREATED OR FIRE TREATED WOOD TO BE STAINLESS STEEL OR HOT DIP GALVANIZED. DO NOT MIX STAINLESS STEEL AND HOT DIP GALVANIZED IN THE SAME CONNECTION.
- ALL SHIMS SHALL BE SEASONED AND DRIED AND OF THE SAME GRADE (MINIMUM) AS THE MEMBERS CONNECTED.
- 25mm DIAMETER HOLES MAY BE DRILLED IN THE CENTER 1/3 OF JOISTS, BUT ALL OTHER HOLES MUST BE APPROVED PRIOR TO DRILLING.
- DIAPHRAGMS: THE FLOOR/ROOF SHEATHING AND SUPPORTING MEMBERS HAVE BEEN DESIGNED AS A DIAPHRAGM. UNLESS OTHERWISE NOTED, DIAPHRAGM CONNECTION REQUIREMENTS FOR FLOR/ROOF SHEATHING ARE:
a) UNBLOCKED DIAPHRAGMS:
i) FASTENERS: 3.7 MM DIA. X 75 MM LONG COMMON NAILS.
ii) SPACING: 100 MM O/C AT DIAPHRAGM BOUNDARIES; 100 MM O.C. AT SUPPORTED PANEL EDGES; 300 MM O.C. ALONG INTERMEDIATE FRAMING MEMBERS.
b) BLOCKED DIAPHRAGMS (BLOCKING MUST BE PROVIDED AT ALL PANEL EDGES):
i) FASTENERS: 3.7 MM DIA. X 75 MM LONG COMMON NAILS.
ii) SPACING: 100 MM O/C AT DIAPHRAGM BOUNDARIES; 100 MM O.C. AT CONTINUOUS PANEL EDGES PARALLEL TO LOAD; 300 MM O.C. ALONG INTERMEDIATE FRAMING MEMBERS.
iii) ALL ROOF SHEATHING COMES WITH "H" CLIPS U.N.O. ABOVE.
c) ALL PANEL EDGES SHALL BE BACKED BY BLOCKING AT ALL JOINTS THAT ARE PERPENDICULAR TO THE FLOOR JOISTS
- MANUFACTURED WOOD JOISTS, BEAMS AND TRUSSES:

- ALL MANUFACTURED WOOD JOISTS AND TRUSSES AND THEIR CONNECTIONS TO THE CORRESPONDING STRUCTURE BELOW SHALL BE DESIGNED BY THE SUPPLIER AND THE SHOP DRAWINGS AND CALCULATIONS SHALL BE PROVIDED TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW PRIOR TO FABRICATION, UNLESS NOTED OTHERWISE. SHOP DRAWINGS AND CALCULATIONS MUST HAVE A PROFESSIONAL ENGINEER'S SEAL ON ALL PAGES. THIS ENGINEER MUST BE LICENSED IN THE PROVINCE OF JURISDICTION, AND SHALL BE RESPONSIBLE FOR SUPERVISION OF JOISTS / TRUSSES FABRICATION AND INSTALLATION (COMPLETE FLOOR / ROOF SYSTEM INCLUDING JOISTS / TRUSSES, HANGERS/CONNECTORS, BRACING, STAIRS, ETC. TO BE DESIGNED BY SUPPLIER.)
b) TOP MOUNT HANGERS ARE NOT PERMITTED FOR USE ON THIS PROJECT. CONTRACTOR TO PROVIDE FACE MOUNT HANGERS AT ALL CONNECTIONS UNLESS NOTED OTHERWISE
c) JOIST / TRUSS SUPPLIER SHALL BE RESPONSIBLE FOR ALL FRAMING FOR ADDITIONAL MECHANICAL LOADS AND OPENINGS AS REQUIRED. COORDINATE WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL FOR SIZE & LOCATIONS OF ALL OPENINGS.
d) ACCESSORIES: ALL ACCESSORIES REQUIRED FOR ERECTION INCLUDING BRACING, BRIDGING, BLOCKING, METAL BEARING HARDWARE AND CROSS BRACING MUST BE DESIGNED AND SUPPLIED BY JOIST / TRUSS SUPPLIER.
e) LIVE LOAD DEFLECTION L/480 FOR FLOOR JOISTS AND TRUSSES (IF APPLICABLE) TO A MAXIMUM OF 10MM (3/8") AND L/360 FOR ROOF TRUSSES. CANTILEVER JOISTS LIVE LOAD DEFLECTION 2L/480.
f) LUMBER: MACHINE STRESS RATED OR LAMINATED VENEER. MOISTURE CONTENT 19% AT TIME OF MANUFACTURE.
g) JOIST / TRUSS SUPPLIER'S ENGINEER TO PROVIDE A CERTIFICATE INDICATING THAT THE FLOOR / ROOF SYSTEM AND CONNECTIONS TO THE CORRESPONDING STRUCTURE BELOW IS FABRICATED AND INSTALLED IN ACCORDANCE WITH THEIR DESIGN.
h) JOIST SUPPLIER SHALL BE RESPONSIBLE FOR THE DESIGN OF CONNECTIONS TO TIMBER WALLS AND OTHER MISCELLANEOUS DETAILS.
i) ALL MANUFACTURED JOIST PRODUCTS SHALL BE DESIGNED BY THE SUPPLIER TO VIBRATION CRITERIA 4.1.1.6 AND 9.23.4 OF THE NATIONAL BUILDING CODE OR DESIGNED TO LOCAL CODE REQUIREMENTS, WHICHEVER IS THE MORE STRINGENT. SPACING SHOWN ON FRAMING PLANS ARE SUGGESTED ONLY AND MUST BE DESIGNED TO MEET VIBRATION REQUIREMENTS.
j) ALL MANUFACTURED JOIST PRODUCTS AND THEIR CONNECTIONS TO THE SUPPORTING STRUCTURE SHALL BE DESIGNED BY THE SUPPLIER TO RESIST WIND UPLIFT LOADS IN CONFORMANCE WITH THE NATIONAL BUILDING CODE OF CANADA AND ALBERTA BUILDING CODE, UNLESS MORE STRINGENT REQUIREMENTS ARE NOTED ON THE DRAWINGS.
k) JOIST/TRUSS SUPPLIER'S ENGINEER IS TO ACCOUNT FOR ANY STRUCTURAL IMPLICATIONS ASSOCIATED WITH "NON LOAD BEARING" WALLS CONSTRUCTED TIGHT TO THE UNDERSIDE OF THE FLOOR JOIST AND TRUSSES.

31. SHEAR WALLS:

- ALL EXTERIOR WALLS AND INTERIOR PARTY WALLS ON THE DRAWING ARE TO BE CONSIDERED AS SHEAR WALLS.
 - ALL EXTERIOR WALLS TO HAVE A MINIMUM 16 MM PLYWOOD OR OSB SHEATHING ON ONE SIDE. NAIL SHEATHING WITH 64 MM COMMON NAILS ALONG ALL PANEL EDGES AT 150MM O/C FROM MAIN TO ROOF AND NAIL AT 300MM O/C ALONG ALL INTERMEDIATE FRAMING MEMBERS FROM MAIN TO ROOF.
 - ALL INTERIOR PARTY WALLS TO HAVE MINIMUM 16 MM GYPSUM BOARD ON BOTH SIDES FASTEN SHEATHING WITH 64 MM GYPSUM BOARD SCREW ALONG ALL PANEL EDGES AT 150MM FROM BASEMENT TO ROOF AND FASTEN AT 300MM ALONG ALL INTERMEDIATE FRAMING MEMBERS FROM BASEMENT TO ROOF.
 - ALL PANEL EDGES SHALL BE BACKED BY BLOCKING HAVING THE SAME CROSS SECTIONAL AREA AS THE STUDS AT ALL JOINTS THAT ARE PERPENDICULAR TO THE STUDS FROM MAIN FLOOR TO ROOF.
 - PROVIDE SOLID BLOCKING AT 1200MM O/C MAXIMUM FOR ALL EXTERIOR WALL.
 - NAIL SHEATHING BOARD TO STUDS, TOP AND BOTTOM PLATES AND BLOCKING. FASTENING OF GYPSUM BOARDS SHALL BE AS PER CODE.
 - PROVIDE 13MM DIA. ANCHOR BOLTS AT 600MM O/C TYPICAL AT SHEAR WALLS; PROVIDE 12MM DIA ANCHOR BOLTS AT 1200MM O/C AT OTHER WALLS, UNLESS NOTED OTHERWISE IN THE DRAWING.
32. SAWN LUMBER SHALL NOT BE NOTCHED OR DRILLED IN THE FIELD WITHOUT THE PERMISSION OF THE DEPARTMENTAL REPRESENTATIVE.
33. ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH MASONRY OR CONCRETE EXPOSED TO WEATHER SHALL BE PRESSURE TREATED UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS. INTERIOR MEMBERS BEARING ON EXTERIOR CONCRETE OR MASONRY WALLS EXPOSED TO WEATHER SHALL BE TREATED WITH 3 COATS OF WOOD PRESERVATIVE ALL AROUND. USE EITHER MICRONIZED OR SOLUBLE COPPER BASED WOOD PRESERVATIVE.

7. TESTING AND INSPECTION

THE CONTRACTOR SHALL ARRANGE FOR THE FOLLOWING ITEMS TO BE INSPECTED OR TESTED BY AN INDEPENDENT THIRD-PARTY INSPECTION/TESTING AGENCY ACCEPTABLE TO THE DEPARTMENTAL REPRESENTATIVE. THE ITEMS TO BE TESTED SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING.

- GEOTECHNICAL: PERFORM ALL TESTING AND INSPECTION (COMPACTION, BEARING CAPACITY PILE INSTALLATION, SUB GRADE PREPARATION ETC.) AS PER THE REQUIREMENTS OF THE DRAWINGS AND THE SOILS REPORT.
- CONCRETE: CONCRETE TO BE TESTED ON ACCORDANCE WITH THE REQUIREMENTS OF CSA A23.1 AND A23.2, INCLUDING THE REQUIREMENTS FOR AIR, SLUMP AND AGE PRIOR TO BEING USED. CONTRACTOR TO MAINTAIN RECORDS OF POUR DATES, TESTING PERFORMED, CLASS OF CONCRETE USED AND TEST RESULTS FOR ALL ITEMS POURED. RESULTS OF CYLINDER STRENGTH TESTING TO BE SENT TO DEPARTMENTAL REPRESENTATIVE. ALL MIX DESIGNS TO BE REVIEWED AND CERTIFIED BY TESTING AGENCY.
- MASONRY: SAMPLE AND TEST JOB-MIXED GROUT IN ACCORDANCE WITH CSA A179 AND CSA S304.1. TEST FREQUENCY TO BE IN ACCORDANCE WITH S304.1, BUT NOT LESS THAN ONE TEST FOR EACH DAY OF WORK. CONTRACTOR TO SUBMIT LABORATORY TEST REPORTS OF MANUFACTURER FOR CONCRETE MASONRY UNITS.
- STRUCTURAL STEEL AND STEEL DECK: PERFORM VISUAL INSPECTION OF ALL WELDS, TORQUE TESTING OF BOLTED CONNECTIONS AND CHECK ON BRACING, PLUMBNESS, ALIGNMENT AND PAINTING. BASIS OF INSPECTION SHALL BE FINAL REVIEWED SHOP DRAWINGS. PERFORM NON-DESTRUCTIVE TESTING OF WELDS WHERE RESULTS OF VISUAL INSPECTION ARE NOT ACCEPTABLE OR INCONCLUSIVE.
- REINFORCING STEEL AND MASONRY: CONTRACTOR SHALL ADVISE DEPARTMENTAL REPRESENTATIVE OF PLACEMENT OF ALL REINFORCING STEEL FOR REINFORCED MASONRY OR REINFORCED CONCRETE, AT LEAST 24 HOURS PRIOR TO PLANNED TIME OF GROUT OR CONCRETE PLACEMENT.

8. DEMOLITION

- COMPLY WITH THE NATIONAL BUILDING CODE OF CANADA PART 8 CONSTRUCTION SAFETY MEASURES AT CONSTRUCTION AND DEMOLITION SITES, AND ALL APPLICABLE PROVINCIAL REQUIREMENTS.
- PREVENT MOVEMENT, SETTLEMENT, OR OTHER DAMAGE TO ADJACENT STRUCTURES, UTILITIES, AND PARTS OF BUILDINGS TO REMAIN IN PLACE.
- BEFORE PROCEEDING WITH DEMOLITION OPERATIONS, SUBMIT SHOP DRAWINGS PREPARED BY A LICENSED PROFESSIONAL ENGINEER, SHOWING PROPOSED METHOD OF DEMOLITION AND MEANS OF PROTECTING EXISTING CONSTRUCTION TO REMAIN.
- DO NOT DEVIATE FROM OR FIELD-ALTER SHORING AND BRACING INDICATED ON REVIEWED SHOP DRAWINGS WITHOUT PRIOR WRITTEN APPROVAL OF ENGINEER RESPONSIBLE FOR SHORING DESIGN. NOTIFY CONSULTANT OF ANY DEVIATIONS.
- DO NOT COMMENCE REMOVAL OF EXISTING STRUCTURAL ELEMENTS UNTIL ALL REQUIRED SHORING AND BRACING IS IN PLACE AND HAS BEEN INSPECTED BY THE ENGINEER RESPONSIBLE FOR SHORING DESIGN.
- DO NOT REMOVE TEMPORARY SHORING OR BRACING UNTIL APPROVED BY SHORING CONSULTANT.

