



Drawn By KML Scale As indicated Designed By PWM Date 2024.12.20

RJC Project Number Sheet Number S 1.1

1 2024-12-20 18-56-20

Revision

SAS.138936.0001

Sa (0.5) = 0.064 Sa (1.0) = 0.034 Sa (2.0) = 0.015 Sa (5.0) = 0.003 Sa (10.0) = 0.001

AND THE FOLLOWING CLIMATIC DATA:

HOURLY WIND PRESSURE, (1/50) = 9.58 PSF lw = 1.0 ULS, 0.75 SLS.

SITE CLASSIFICATION: SITE CLASS D WOOD FRAME CONCRETE

Ro = PGA = 0.043

CONCRETE - STRENGTH AND EXPOSURE

GENERAL (AF	REAS NOT INC	CLUDING F	PARKING)
ELEMENT	COMPRESSIVE STRENGTH (MPa) 28 DAY U.N.O.		COMMENTS
SLAB ON GRADE (INTERIOR)	25 MPa	N	-
SLAB ON GRADE (EXTERIOR)	32 MPa	C-2	
RETAINING WALLS / FOUNDATION WALLS	25 MPa	F-2	19mm AGGREGATE
SHEAR WALLS	SEE SCHEDULE (56 DAY)	N/F-2	
OTHER WALLS	25 MPa	N/F-2	-
COLUMNS	SEE SCHEDULE (56 DAY)	N/F-2	
MECHANICAL HOUSEKEEPING PADS	20 MPa	N	
SLABS AND BEAMS	25 MPa (28 DAY)	N	
EXTERIOR EXPOSED BALCONIES AND EYEBROWS	35 MPa	F-1	SEE PLANS ANI ARCH. DWGS.

NOTES:

- . WHERE EXPOSURE CLASS LISTED AS N/F-1/F-2:
- A LISE N EXPOSURE FOR INTERIOR CONCRETE LOCATED WITHIN AN INSULATED BUILDING ENVELOPE (E.G. DRY AND NOT SUBJECTED TO FREEZING AND THAWING).
- B. USE F-1 EXPOSURE FOR HORIZONTAL AND SLOPED CONCRETE MEMBERS EXTERIOR TO THE BUILDING INSULATION AND NOT PROTECTED BY A MEMBRANE AND DRIP EDGE (E.G. WET AND SUBJECT TO FREEZING AND THAWING).
- C. USE F-2 EXPOSURE FOR HORIZONTAL AND SLOPED CONCRETE MEMBERS EXTERIOR TO THE BUILDING INSULATION AND PROTECTED BY A MEMBRANE AND DRIP EDGE (E.G. DRY AND SUBJECT TO FREEZING AND THAWING).
- D. USE F-2 FOR VERTICAL CONCRETE MEMBERS EXTERIOR TO THE BUILDING INSULATION.
- CONCRETE STRENGTH AND EXPOSURE CLASS OF STAIRS AND RAMPS SHALL MEET THE MOST STRINGENT CRITERIA OF THE ADJOINING SLABS AND BEAMS UNLESS NOTED OTHERWISE.

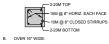
PARKING AREAS							
ELEMENT	COMPRESSIVE STRENGTH (MPa) 28 DAY U.N.O.	EXPOSURE CLASS	COMMENTS				
REINFORCED SLAB ON GRADE	35 MPa	C-1	-				
ALL OTHER INTERIOR CONCRETE (SLABS, BEAMS, WALLS, COLUMNS AND STAIRS	SEE SCHEDULES (35 MPa MIN.)	C-1					

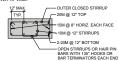
CONCRETE - SUPPLY, TESTING AND SUBMITTAL S

- CONCRETE IS SPECIFIED AS PER THE "PERFORMANCE" ALTERNATE AS OUTLINED IN CSA A23.1.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR WORKING WITH THE CONCRETE SUPPLIER TO ENSURE THAT THE PLASTIC AND HARDENED MIX PROPERTIES MEET SITE REQUIREMENTS FOR PLACING, FINISHING, AND THE OWNERS'S SPECIFIED PERFORMANCE REQUIREMENTS. THE GENERAL UWNERS' SPECIFIED PERFORMANCE REQUIREMENTS. THE GENERAL CONTRACTOR SHALL MEET THE DOCUMENTATION AND QUALITY CONTREQUIREMENTS OUTLINED UNDER THE "PERFORMANCE" ALTERNATE OF CSA A23.1.
- SUBMIT A MIX DESIGN REVIEW LETTER SIGNED AND SEALED BY A PROFESSIONAL ENGINEER CONFIRMING THAT THE PROPOSED MIX DESIGNS WILL ACHIEVE THE REQUIRED STRENGTH, DURABILITY, AND PERFORMANC REQUIREMENTS INDICATED UNDER SUPPLIER RESPONSIBILITY - ITEM (g) O TABLE 5 (ALTERNATIVE 1) OF CSA 423.1.
- AT THE REQUEST OF THE OWNER, THE SUPPLIER WILL FURNISH TEST DATA RESULTS (LESS THAN 3 MONTHS OLD) FOR EACH PROPOSED MIX DESIGN DEMONSTRATING THAT THEY MEET THE STRENGTH, DURABILITY, AND SHRINKAGE REQUIREMENTS SPECIFIED.
- THE CONCRETE SUPPLIER SHALL BE CERTIFIED BY THE READY MIXED CONCRETE ASSOCIATION OF SASKATCHEWAN.

GRADE BEAM REINFORCEMENT

- UNLESS OTHERWISE NOTED ALL GRADE BEAM REINFORCEMENT SHALL CONSIST OF THE FOLLOWING:





- HOOK HORIZONTAL BEAM REINFORCING OR PROVIDE CORNER BARS AT ALL BEAM INTERSECTIONS AND CORNERS PER DETAILS CF130 & CF131.
- 3. UNLESS NOTED OTHERWISE BEAM REINFORCEMENT SHALL BE CONTINUOUS:
- TOP REINFORCEMENT SHALL BE SPLICED AT MIDSPAN AND SHALL HAVE LAPS OF 39*. HOOK TOP REINFORCEMENT AT END SUPPORTS AND PROVIDE ADDITIONAL TOP BARS WHERE REINFORCEMENT IS INTERRUPTED BY RECESSED COLUMN OR BASEPLATE DETAILS.
- B. BOTTOM REINFORCEMENT SHALL BE SPLICED AT PILE, OR FOUNDATION LOCATIONS AND SHALL HAVE LAPS OF 30".
- ALL REINFORCEMENT TO BE CONTINUOUS THROUGH PILE CAPS,
- UNLESS OTHERWISE NOTED MAXIMUM LENGTH OF POUR SHALL NOT EXCEED 100"-0". LOCATIONS AND DETAILS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW PRIOR TO CONSTRUCTION.
- REFER TO STRUCTURAL DRAWINGS FOR DETAILS OF GRADE BEAN CONSTRUCTION JOINTS AND CONTROL JOINTS PER DETAIL CF132.
- 6. TOP OF GRADE BEAM TO BE FLUSH WITH TOP OF END SUPPORT U.N.O.

CONCRETE - GENERAL

- UNLESS NOTED OTHERWISE. ALL CONCRETE IS TO BE CAST-IN-PLACE.
- THE USE OF SHOTCRETE REQUIRES APPROVAL BY THE STRUCTURAL ENGINEER. ANY COSTS ASSOCIATED WITH REDESIGN, CHANGES TO THE CONTRACT DOCUMENTS AND ANY ADDITIONAL TESTING AND CONTRACT ADMINISTRATION COSTS TO ACCOMMODATE SHOTCRETE IS TO BE PAILE FOR BY THE CONTRACTOR.
- PORTLAND CEMENT SHALL BE TYPE GU OR GUL UNLESS NOTED OTHERWISE. ALL CONCRETE MIX SUBMITTALS MUST CLEARLY NDICAT SPECIFIC CEMENT TYPE TO BE UTILIZED, OR THE PROPORTIONS WHEN MULTIPLE CEMENT TYPES ARE UTILIZED IN THE SAME MIX.
- CEMENT TYPE AND SUPPLEMENTARY CEMENTING MATERIALS FOR EXPOSURE CLASSES S-1, S-2, AND S-3 SHALL BE AS OUTLINED IN CSA A23.1.
- CONCRETE SHALL HAVE A UNIT WEIGHT OF 23±1 kN/m³ (145±5 PCF) UNLESS NOTED OTHERWISE.
- THE OWNERTE PROPERTIES USED IN DESIGN ARE BASED ON A NOMINAL COMPRESE AGREGATE STATE OF DOMINIUM ACCORDING TO TABLE IT OF A A MANUAL COMPRESE AND THE OWNER AND THE OWNER
- RECYCLED AGGREGATE IS NOT TO BE USED WITHOUT WRITTEN APPROVAL BY THE STRUCTURAL ENGINEER.
- SLUMP AND AGGREGATE SIZE TO BE DETERMINED BY THE GENERAL CONTRACTOR AND SUPPLIER TO MEET PLACEMENT, AND FINISHING REQUIREMENTS WITHOUT SEGREGATION WHILE MEETING ALL OWNER SPECIFICATIONS.
- MAXIMUM WATER/CEMENT RATIO AND AIR CONTENT TO MEET THE REQUIREMENTS FOR THE EXPOSURE CLASS AS OUTLINED IN CSA A23.1. REQUIRED AIR CONTENT FOR EXPOSURE CLASSES F-1, F-2, C-1, C-2, AND C-XL SHALL BE BASED ON CONCRETE EXPOSED TO FREEZE-THAW CYCLES UNLESS NOTED OTHERWISE.
- CHLORIDE ION PENETRABILITY FOR EXPOSURE CLASS C-1 AND C-XL SHALL MEET THE REQUIREMENTS OF CSA A23.1.

HELICAL SCREW PILE FOUNDATIONS

- PILING SHALL BE PERFORMED BY FIRMS SPECIALIZING IN THE DESIGN AND INSTALLATION OF HELICAL SCREW PILE FOUNDATIONS. PROVIDE CERTIFICATION DOCUMENTS TO THE OWNER OR THEIR REPRESENTATIVE.
- PILING AND PILE DESIGN SHALL CONFORM TO THE NATIONAL BUILDING PILING AND PILE DESIGN STALL CONFORM TO THE MATIONAL BUILDING CODE OF CANADA 2020 AND TO COMMENTARY K OF THE "USERS GUIDE-NBC 2020 STRUCTURAL COMMENTARIES (PART 4 - DIVISION B)". REFER TO PLANS FOR FACTORED PILE DESIGN LOADING REQUIREMENTS.
- UNDER SPECIFIED LOADS, HELICAL SCREW PILES SHALL NOT SETTLE MORE THAN 5 mm. THIS REQUIREMENT SHALL BE CONFIRMED BY PILE TESTING AS OUTLINED BELOW:
 - LOAD TESTS SHALL BE PERFORMED TO VERIFY THE SUITABILITY AND CAPACITY OF THE PROPOSED SCREW FILE AND THE PROPOSED INSTALLATION PROCEDURES PRIOR TO INSTALLATION OF PRODUCTION PILES. TESTING SHALL CONFORM TO ASTM STANDARD D1143
 - A MINIMUM OF ONE SACRIFICIAL TEST PILE WITH REACTION ANCHORS SHALL BE CONSTRUCTED PRIOR TO THE START OF WORK AT LOCATION AS DIRECTED BY THE OWNER.
 - TESTING SHALL BE USED TO VERIFY THE SCREW PILE DESIGN AND CONFIRM THAT PILE SETTLEMENT UNDER SPECIFIED LOADS DOES NOT EXCEED 5 mm.
 - D. PROVIDE THE OWNER COPIES OF FIELD TESTING REPORTS WITHIN 24 HOURS AFTER THE COMPLETION OF THE LOAD TEST. THIS WRITTEN DOCUMENT WILL ETHER COMFIRM THE LOAD CAPACITY AS REQUIRED ON THE DRAWINGS OR PROPOSE CHANGES BASED UPON THE RESULTS OF THE LOAD TEST.
- ALL MATERIALS FORMING PART OF THE SCREW PILE ASSEMBLY SHALL STRICTLY ADHERE TO MANUFACTURER'S REQUIREMENTS.
- HELICAL REARING PLATE CENTRAL SHAFT (HEAD AND EXTENSION SECTIONS) AND ALL OTHER COMPONENTS IN CONTACT WITH THE SOIL SHALL BE HOT-DIPPED GALVANIZED.
- SCREW PILES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION PROCEDURES.
- SCREW PILES SHALL BE DRIVEN VERTICALLY WITH A VARIATION OF NOT MORE THAN 10 mm PER METTER ALL HARDS SHALL BE WITHIN 75 mm. THEIR SHOWN LOCATIONS. MINIMUM INSTALLATION TORQUE AND MINIMUM VERTIL LENGTH CETTERN AS SHOWN ON THE WIDDRIVEN WITH STATEMENT OF THE WIDDRIVEN OF THE WIDDR REMOVED. THE OBSTRUCTION SHALL BE REMOVED AND THE SCREW PILE RE-INSTALLED. IF THE OBSTRUCTION CANNOT BE REMOVED, THE SCREW PILE SHALL BE INSTALLED AT AM ADJACENT LOCATION SUBJECT TO REVIEW AND ACCEPTANCE BY THE OWNER.
- SCREW PILE CUT-OFF SHALL BE TRUE AND LEVEL WITHIN 25 mm OF THE SPECIFIED CUT-OFF ELEVATIONS
- SUBMIT SHOP DRAWINGS FOR ALL SCREW PILE COMPONENTS, INCLUDING CASING COMPONENTS AND PILE TOP ATTACHMENT. THIS INCLUDES CASING COMPONENTS AND PILE TOP AT TACHMENT. THIS INCLUDES SCREW PILE LEAD AND EXTENSION SECTION IDENTIFICATION. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ALBERTA.
- THE CONTRACTOR SHALL SUBMIT RECORD DRAWINGS SHOWING THE CONTRACTOR SHALL SUBMIT RECORD DRAWINGS SHOWING THE ACCURATE LOCATIONS AND DETAILS OF AS-BUILT PILES AND PROVIDE WRITTEN CONFIRMATION THAT AS-BUILT PILES HAVE BEEN INSTALLED IN CONFORMANCE WITH ENSINEERED SHOP DRAWINGS.

CONCRETE - FINISHING AND ADMIXTURES

- CURING OF CONCRETE TO MEET THE REQUIREMENTS FOR THE EXPOSURE CLASS AS OUTLINED IN CSA A23.1. CURING COMPOUNDS ARE NOT PERMITTED FOR SUSPENDED PARKING SLABS OR EXPOSURE CLASS C-XL CONCRETE. PARKING SLABS AND REINFORCED SLAB ON GRADES IN PARKING AREAS ARE TO BE CURED FOR MINIMUM 7 DAYS
- CORROSION INHIBITORS ARE TO BE USED IN CONCRETE IN AREAS NOTED ON THE STRUCTURAL DRAWINGS, AS WELL AS IN STAIRS AND STAIR LANDINGS WITHIN PARKADES. USE 10 10 11 10 °F "DCI S" BY GRACE CONSTRUCTION PRODUCTS OR "MASTERLIFE CI 30" BY BASIF CONSTRUCTION CHEMICALS. ALTERNATIVELY, USE C-XL CONCRETE WITH CURING TYPE 3 (EXTENDED) PER CSA A23.1.
- ALL BOTTOM EDGES OF EXPOSED SLABS AND BEAMS, AS WELL AS EDGES OF WALLS AND COLUMNS, TO BE CHAMFERED 3/4" X 3/4". ALL TOP EDGES OF EXPOSED SLABS. BEAMS. UPSTANDS AND STAIRS TO BE TOOLED UNLESS NOTED OTHERWISE. SEE ALSO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR OTHER FINISH REQUIREMENTS.
- NO CALCIUM CHLORIDE IS PERMITTED, IN ANY FORM, IN ANY CONCRETE MIX WITHOUT THE EXPRESS WRITTEN CONSENT OF READ JONES CHRISTOFFERSEN LTD.
- CURING AND PROTECTION OF CONCRETE FOR HOT, COLD OR DRY WEATHER IS TO BE AS PER CSA A23.1 AS A MINIMUM. SEE ALSO "CONCRETE COLD WEATHER REQUIREMENTS" IN THE STRUCTURAL DRAWINGS.

NON-STRUCTURAL ELEMENTS

- NON-STRUCTURAL '40 SECOMARY STRUCTURA' 'ELBESTS ARE NOT THE CONTROL OF THE CONTRO
- EXAMPLES OF NON-STRUCTURAL ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO:
- ARCHITECTURAL COMPONENTS SUCH AS GUARDRAILS, HANDRAILS, FLAG POSTS, CANOPIES, GELINGS, MILLWORK, ETC.

 LANDSCAPE LEBENTS SUCH AS BENCHES, LIGHT POSTS, PLANTERS, PAVERS, SUPPORT PEDESTALS, ETC.

 CADDING, GLAZON, WINDOW MULLIONS, INTERIOR STUD WALLS AND EXTERIOR STUD WALLS.

- SYALISHTS.

 MECHANICAL AND ELECTRICAL EQUIPMENT, COMPONENTS, AND THEIR ATTACHMENT DETAILS.

 ATTACHMENT DETAILS.

 ATTACHMENT DETAILS.

 ATTACHMENT SETAILS.

 ATTACHMENT SETAILS.

 ATTACHMENT SETAILS.

 ATTACHMENT SETAILS.

 ESCALATORS, SELEVATORS, AND CONVEYING SYSTEMS.
- ESCALATORS, ELEVATORS, AND CONVEYING SYSTEMS, GLASS BLOCK AND ITS ATTACHMENTS. BRICK OR BLOCK VENEERS AND THEIR ATTACHMENTS. BRICK OR BLOCK VENEERS AND THEIR ATTACHMENTS. DESIGNA MO FIELD REVIEW OF SEISION CESTRANT FOR SECONDARY STRUCTURAL ELEMENTS AND OPERATIONAL AND FUNCTIONAL COMPONENTS BUCLUDION MECHANICAL AND ELECTRICAL EQUIPMENT. NON-STRUCTURAL CONCRETE TOPPING. AND SECRIFICAL EQUIPMENT. DESIGNA AND FELD REVIEW OF NON-LOAD BEARING MASONRY.
- DESIGNS PRODUCED BY THE SPECIALTY ENGINEER SHALL CONSIDER STRENGTH, STABILITY, SERVICEABILITY AND INTEGRITY REQUIREMENTS UNDER GRAVITY AND SEISME LOADING IN ACCORDANCE WITH THE CURRENT EDITION OF APPLICABLE DESIGN CODES AND ALL OTHER DESIGN REQUIREMENTS INDICATED IN THE DRAWINGS AND SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE THE DESIGN OF ALL NON-STRUCTURAL ELEMENTS DESIGNED BY ONE OR MORE SPECIALTY ENGINEERS AND CONNECTING TO ELEMENTS DESIGNED BY OTHER SPECIALTY PENISHEERS TO ENSURE THE STRENGTH, STABILITY, SERVICEABILITY AND INTEGRITY OF THE FINAL CONSTRUCTION.
- SHEP PRAWINGS FOR NOWS TRUCTURAL BELIENTS WHICH MAY AFFECT THE PRAMARY STRUCTURAL SYSTEM SHALL BE SUBMITTED TO READ JONES CHRISTOFFERSEN LTD. INDICATE CLEARLY THE METHOD DO ATTACHMENT AND IMAGINATE OF ALL FORCES (SPECIFIED AND FACTORED) THAT THE STRUCTURE MUST WITHSTAND. THESE DRAWINGS WILL BE REVIEWED ONLY FOR THE EFFECT OF THE ELBERTO ON THE PRIMARY STRUCTURAL SYSTEM.

STRUCTURAL MOVEMENTS

THIS STRUCTURE WILL UNDERGO NORMAL TYPES OF MOVEMENT AND THIS STRUCTURE WILL UNDERGO NORMAL TYPES OF MOVEMENT AND DEFLECTION, AND THE FOLLOWING ARE ESTIMATES FOR THIS STRUCTURE. NON-STRUCTURAL COMPONENTS MUST BE DETAILED TO ACCOMMODATE THIS. DESIGN, DETAILING, AND FIELD REVIEW OF THESE NON-STRUCTURAL ELEMENTS IS BY OTHERS, AND NOT READ JONES CHRISTOFFERSEN LITD.

- DIFFERENTIAL VERTICAL MOVEMENTS BETWEEN ADJACENT COLUMNS AND BETWEEN ADJACENT COLUMNS AND WALLS = APPROXIMATELY 3/4".
- VERTICAL DEFLECTION OF COLUMNS AND WALLS DUE TO SHRINKAGE AND CREEP = APROXIMATELY 0.15" PER 12"-0" OF HEIGHT.
- VERTICAL DEFLECTIONS OF EDGE BEAMS AND EDGES OF SLABS =
- APPROXIMATELY 1". DIFFERENTIAL DEFLECTIONS OF EDGE BEAMS AND EDGES OF SLABS = ± 5/8".
- VERTICAL DEFLECTIONS AT INTERIOR OF FLOORS = APPROXIMATELY 1". DIFFERENTIAL DEFLECTIONS AT INTERIOR OF FLOORS = ± 5/8".
- 5. HORIZONTAL DRIFT DURING WIND AND EARTHQUAKE BETWEEN FLOORS:
- ± 1/2" DRIFT WITHOUT DAMAGE TO NON-STRUCTURAL COMPONENTS.
 ± 2" DRIFT WITHOUT COLLAPSE OF NON-STRUCTURAL COMPONENTS.

ALL STRUCTURES ARE ALSO SUBJECT TO CONSTRUCTION TOLERANCES. THIS SHOULD BE ALLOWED FOR IN DETAILING NON-STRUCTURAL COMPONENTS IN ADDITION TO THE ABOVE MOVEMENTS.

EXCAVATIONS & SHORING

DESIGN AND FIELD REVIEW OF EXCAVATION, SHORING, AND BACKFILL IS NOT WITHIN THE SCOPE OF READ JONES CHRISTOFFERSEN'S WORK.

SUB-GRADE NOTES

- REFER TO GEOTECHNICAL REPORT FOR OTHER SPECIFIC DESIGN REQUIREMENTS FOR FOUNDATIONS, SOIL SLOPES, FROST PROTECTION
- FOR GROUND ELEVATIONS AND DRAINAGE SLOPES, SEE ARCHITECTURAL &
- REMOVE ALL ORGANIC MATERIAL FROM THE BUILDING AREA AS OUTLINED IN THE GEOTECHNICAL PEPOPPT
- BEARING SURFACES MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER MMEDIATELY BEFORE CASTING OF CONCRETE FOR FOUNDATIONS OR SLAB ON GRADE. RLC IS NOT RESPONSIBLE FOR CONFIRMING BEARING CAPACITIES OF SOILS.
- PROTECT EXCAVATIONS FOR FOOTINGS FROM RAIN, SNOW, FREEZING TEMPERATURES, STANDING WATER, LOSS OF MOISTURE AND DEGRADATION BY APPROVED METHODS.
- SHOULD WATER OR FROST, ENTER A FOOTING EXCAVATION AFTER SUB GRADE APPROVAL, THE SUB-GRADE SHALL BE RE-INSPECTED BY THE GEOTECHNICAL ENGINEER AFTER REMOVAL OF THE WATER OR FROST.



Creative Thinking **Practical Results**

Read Jones Christoffersen Ltd.

Date By

No.

- Lawring invotes

 1. All drawings, plans, models, designs, specifications and other documents propared by Read Jones Christoffersen Ltd. ("RLC") and used in connection with this project are instruments of service for the work shown in them (the "Vick") and as such are and remain the property of RLC whether the Work is secreted or not, and RLC reservas the copyright in them and in the Work executed from them, and they shall not be used for any other work for project.



PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

Drawn By KML Scale As indicated Designed By PWM Date 2024.12.20

RJC Project Number SAS.138936.0001 Sheet Number

S 1.2

1 2024-12-20 18-56-20

CONCRETE FORMWORK STRIPPING AND SHORING

- THE DESIGN AND FIELD REVIEW OF FORMWORK, SHORING AND RESHORING IS THE RESPONSIBILITY OF THE CONTRACTOR. RESHORING DRAWINGS SHALL BE SUBMITTED TO RJC FOR THE EFFECT ON THE BASE BUILDING STRUCTURE ONLY.
- NO COLUMN OR WALL FORMS SHALL BE REMOVED BEFORE CONCRETE HAS REACHED 10 MPa FOR ARCHITECTURAL CONCRETE OR 8 MPa FOR OTHER COLUMNS OR WALLS.
- NO SLABFORMS OR BEAMFORMS SHALL BE REMOVED BEFORE CONCRETE HAS REACHED 75% OF THE 28 DAY STRENGTH BEFORE STRIPPING AND RESHORING.
- STRENGTH OF CONCRETE FOR STRIPPING TO BE DETERMINED USING CYLINDERS STORED ON SITE IN A PROTECTED ENCLOSURE THAT MAINTAINS A SIMILAR TEMPERATURE AND HUMDITY AS THE STRUCTURAL ELEMENTS REPRESENTED. ALTERNATE METHODS, IF ACCEPTABLE TO RIC.
- ALL SLABS, BEAMS, GIRDERS ETC. TO BE SHORED OR RESHORED UNTIL CONCRETE REACHES DESIGN STRENGTH BUT NOT LESS THAN 21 DAYS.
- NO CONCRETE MAY BE REMOVED WITH PERCUSSIVE METHODS SUCH AS CHIPPING OR JACK-HAMMERING WITHOUT PRIOR APPROVAL BY RJC.
- THE DESIGN OF THE SLABS / FLOORS TO SATISFY THE "STRUCTURAL MOVEMENT" NOTE ASSUMES THE FOLLOWING TYPICAL PRACTICE FOR SHORING AND RESHORING U.N.O.:
 - COMMON / TYPICAL CONSTRUCTION PRACTICE TO SHORE THE FRESH WEIGHT OF FLOORS HAS BEEN ASSUMED.
- LOADING APPLIES TO COMPONENTS OF THE BASE BUILDING STRUCTURE (SLABS, COLUMNS, ETC.) BY THE FORMWORK, SHORES, OR RESNORES SHALL NOT EXCEED THE DESIGN LOAD FOR THOSE BASE BUILDING COMPONENTS. WHEN THIS LOADING IS APPLIED BEFORE THE CONCRETE STRENGTH IN THE BASE BUILDING COMPONENTS HAS REACHED THE SPECIFIED COMPRESSIVE STRENGTH, PRORATE THE COMPONENT CAPACITY BY THE RATIO OF ACTUAL CONCRETE STRENGTH TO SPECIFIED CONCRETE
- C. AT NO TIME SHALL THE FACTORED CONSTRUCTION LOAD EXCEED THE FACTORED DESIGN LOAD ON FLOORS.
- VERIFICATION OF ALL SUBGRADE MATERIALS WHICH PROVIDE SUPPORT VERBICATION OF ALL SUBGROUSE MATERIALS WHICH PROVIDE SUPPORT TO TEMPORARY WORKS, INCLUDING SHORING, AND DESIGN OF ANY ASSOCIATED GROUND IMPROVEMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR'S SPECIALTY GEOTECHNICAL ENGINEER.
- USE OF ALTERNATE SHORING AND RESHORING METHODS FOR SLABS/ FLOORS PROPOSED BY THE CONTRACTOR'S SPECIALTY ENGINEER TO DE SUBMITTED TO RUC FOR REVIEW AGAINST THE BASE BUILDING SEGION ASSUMPTIONS SUCH REVIEW BY RUC DOES NOT RELIEVE THE CONTRACTOR OR THE CONTRACTOR'S SPECIALTY ENGINEER OF THEIR CONSTRUCTION THE CONTINCTIONS SPECIAL TENSINEER OF THE RESPONSIBILITY TO ESTABLISH THE MEANS AND METHODS OF CONSTRUCTION THAT SATISFIES ALL REQUIREMENTS OF STRENGTH, STABILITY, SERVICEABILITY AND CONSTRUCTION SAFETY.

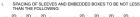
CONDUITS, PIPES, AND SLEEVES **EMBEDDED IN CONCRETE - SLABS**

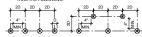
REFER TO CONDUITS, PIPES, AND SLEEVES EMBEDDED IN CONCRETE -GENERAL FOR ADDITIONAL REQUIREMENTS

- 1. SUSPENDED SLABS:
- A. GUIDELINES FOR CONDUIT SPACING REQUIREMENTS PARALLEL TO THE PLANE OF THE SLAB:
 - LOCATE CONDUIT BETWEEN TOP AND BOTTOM REINFORCING, COMDUIT DIAMETER IN ONE LAYER SHALL NOT EXCEED 1/4 CONCRETE SLAB THICKINES. THERE LAYERS OR MOBE CROSSING WILL NOT BE PERMITTED. CENTERLINE SPACING OF CONDUITS AND PIPES TO BE NOT LESS THAN 3 DIAMETERS (4" CLEAR MINIMUM), UNLESS NOTED

 - THAN 3 DIAMETERS (4" CLEAR MINIMUM), UNLESS NOTED OTHERWISE. CENTERLINE SPACING BETWEEN PARALLEL CONDUIT AND REINFORCING BARS TO BE 3 BAR DIAMETERS (2" CLEAR MINIMUM), UNLESS NOTED OTHERWISE.
- JIDELINES FOR IN-SLAB CONDUIT SPACING IN RELATION TO DLUMNS, WALLS, BEAMS, ETC.:
 - NO IN-SLAB CONDUIT OR PIPES WITHIN 2-0" OR 3 X SLAB THICKNESS OF HEADED STUD ASSEMBLY UNLESS APPROVED IN WITHING ST FUC. WHERE SUCH APPROVAL IS GIVEN, IN-SLAF THE SUCH APPROVAL IS GIVEN, IN-SLAF THE AND SHALL NOT BE WITHIN 2 DIAMETERS CLEAR (1" MINIMUM) OF ANY STUD HEAD.
- ANY STUD HEAD.

 NO IN-SLAG COMDUIT OR PIPES CLOSER THAN 3 X SLAB
 THICKNESS (2-6" MINIMUM) FROM ANY FACE OF SHEAR WALLS
 AND END FACE OR TIED ZONES IN NON-SHEAR WALLS.
 NO IN-SLAB CONDUIT OR PIPES CLOSER THAN BEAM DEPTH
 (2-6" MINIMUM) FROM COLUMN FACE AT BEAM)
- C. GUIDELINES FOR EMBEDDED BOXES AND SLEEVES PERPENDICULAR TO THE DI ANE OF THE SI AR:





- WHERE TOP SLAB BANS OO BETWEEN SLEEVES, ADD 1-19M TOP EACH SIDE OF SLEEVES IN PERPENDICULAR DIRECTIONS. SLEEVES AND REMORDED BOXES IN TAIT SLABS AND PLAT PLATES AND TO BE LOCATED NEXT TO COLUMNS UNLESS CLEAR DIMENSION FOR SLEEVES AND RESERVED SUCKES TO COLUMNS TO BE 4°C MINIMAN UNLESS NOTED OTHERWISE ON CLEAR DIMENSION OF ALL SLEEVES AND BIRECIDED BOXES TO ANY HEADED STUD ASSEMBLY SHALL NOT BE LESS THAN 2 X SLAB THOCKNESS ("TIMMANIAN) UNLESS NOTED OTHERWISE.

CONCRETE COLD WEATHER REQUIREMENTS (CAST-IN-PLACE AND SHOTCRETE)

(SEE ALSO CSA A23.1, EXCEPT THE FOLLOWING MINIMUM REQUIREMENTS MUST ALSO BE MET)

- FORECASTED AIR TEMPERATURE AT OR BELOW 5°C
 - THE AGGREGATE OR MIXING WATER SHALL BE HEATED TO MAINTAIN A MINIMUM CONCRETE TEMPERATURE OF 10°C AT POINT OF
 - CONCRETE SHALL NOT BE PLACED ON OR AGAINST ANY SURFACE WHICH IS AT A TEMPERATURE LESS THAN 5°C.
 - CONTRACTOR SHALL BE PREPARED TO COVER SLABS IF UNEXPECTED DROP IN AIR TEMPERATURE SHOULD OCCUR.
 - CONCRETE EXPOSURE CLASSES REQUIRING CURING TYPE 1 (BASIC) IN ACCORDANCE WITH CSA A23.1 SHALL HAVE THE THE CONCRETE TEMPERATURE MAINTAINED ABOVE 10°C FOR AT LEAST 7 DAYS OR UNTIL THE CONCRETE REACHES 70% OF SPECIFIED STRENGTH.
 - CONCRETE EXPOSURE CLASSES REQUIRING CURING TYPE 2 (ADDITIONAL CURING) OR CURING TYPE 3 (EXTENDED WET C ACCORDANCE WITH CSA A23.1 SHALL HAVE THE THE CONCR TEMPERATURE MAINTAINED ABOVE 10°C FOR AT LEAST THE DURATION INDICATED IN THE STANDARD.
- 2. FORECASTED AIR TEMPERATURE BELOW 2°C BUT NOT BELOW -4°C

FOLLOW REQUIREMENTS OF NOTES 1A, 1B, 1D, 1E, AND:

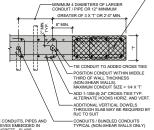
- A. FORMS AND STEEL SHALL BE FREE FROM ICE AND SNOW.
- SLABS SHALL BE COVERED WITH CANVAS OR SIMILAR, KEPT A FEW INCHES CLEAR OF SURFACE.
- C. IN WINDY WEATHER, STOREY BELOW SLAB SHALL BE ENCLOSED.
- PROTECTION SHALL BE MAINTAINED FOR AT LEAST THE SPECIFIED CURING PERIOD.
- 3. FORECASTED AIR TEMPERATURE BELOW -4°C
- A. STOREY BELOW SHALL BE ENCLOSED AND ARTIFICIAL HEAT PROVIDED. HEATING TO BE STARTED AT LEAST ONE HOUR AHEAD OF POURING AND MAINTAINED FOR A MINIMUM OF THE SPECIFIED CURING PERIOD.
- TEMPERATURE OF THE CONCRETE AT ALL SURFACES SHALL BE KEPT AT A MINIMUM OF 20°C FOR 3 DAYS, OR 10°C FOR 7 DAYS, CONCRETE SHALL BE KEPT ABOVE FREEZING TEMPERATURES UNTIL IT REACHES 70% OF ITS SPECIFIED STRENGTH.
- ENCLOSURE MUST BE CONSTRUCTED SO THAT AIR CAN CIRCULATE OUTSIDE THE OUTER EDGES AND MEMBERS
- REINFORCING TO BE COVERED AND WARMED TO MAINTAIN ITS TEMPERATURE AT 0°C OR HIGHER AT THE TIME OF CONCRETE PLACEMENT.

CONDUITS, PIPES, AND SLEEVES **EMBEDDED IN CONCRETE - WALLS**

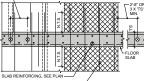
REFER TO CONDUITS, PIPES, AND SLEEVES EMBEDDED IN CONCRETE - GENERAL FOR ADDITIONAL REQUIREMENTS

- WALLS AND SHEAR WALLS:
 - A. BOXES, CONDUIT, SLEEVES OR EMBEDDED PIPES ARE NOT ALLOWED WITHOUT THE WRITTEN APPROVAL OF RJC.
 - CONTRACTOR MUST SURMIT SHOP DRAWINGS SHOWING PROPOSED ASSUME THAT VERTICAL WALL RUNS WILL BE PERMITTED OR THAT ANY STRUCTURAL PROVISIONS TO ACCOMMODATE VERTICAL WALL PILINS HAVE REEM MADE
 - C. GUIDELINES FOR CONDUIT, SLEEVES, OR EMBEDDED PIPES IN NON-SHEAR WALLS:
 - MAXIMUM DIAMETER = 1/4 WALL THICKNESS.
 NO HORIZONTAL RUNS PERMITTED UNLESS NOTED OTHERWISE
 ON WALL ELEVATIONS OR DETAILS.
 VERTICAL RUNS TO HAVE MINIMUM 27 CONCRETE COVER.
 VERTICAL RUNS TO HAVE MINIMUM SPACINGS IN PLANE OF
 WALL OF REPERBOLICLAR TO PLANE OF WALL OF
 4 DIAMETERS (27 MINIMUM).

NO CONDUITS, SLEEVES, OR PIPES THROUGH ZONE AREAS OF SHEAR WALLS AND NON-SHEAR WALLS WITHOUT PRIOR WRITTEN APPROVAL OF RJC (AREA HATCHED).



SLEEVES EMBEDDED IN CONCRETE - SLABS WALL PLAN



SHEAR WALL VERTICAL REINFORCING-WALL ELEVATION

CONCRETE REINFORCEMENT

- 10M AND LARGER (U.N.O.) CSA G30.18 GRADE 400R WELDED WIRE REINFORCEMENT-ALL REINFORCING THAT WILL BE-WELDED CSA G30.18 GRADE 400W

(NOTE: CSA G30.18 W GRADES MAY BE SUBSTITUTED FOR

- DO NOT SUBSTITUTE DEFORMED WIRE FOR REINFORCING BARS WITHOUT PRIOR APPROVAL OF THE RJC.
- SUPPORT REINFORCING WITH CHAIRS, ACCESSORIES, OR REINFORCING BARS AS REQUIRED. BARS USED AS SUPPORT BARS SHALL BE CONSIDERED AS ACCESSORIES.
- PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN CONCRETE COVER AS SPECIFIED, ALL SUPPORTS AND BARS MUST BE TIED TOGETHER TO MAINTAIN REINFORCING STEEL SECURELY IN PLACE DURING CONCRETE PLACEMENT.
- SEE STRUCTURAL DRAWINGS FOR EXTENT OF EPOXY COATED REBAR
- TESTING OF REINFORCING STEEL SHALL CONFORM TO THE SPECIFICATIONS.

CONDUITS, PIPES, AND SLEEVES **EMBEDDED IN CONCRETE - GENERAL**

EXCEPT WHEN APPROVED BY RJC, PIPES, CONDUITS, AND SLEEVES EMBEDDED IN CONCRETE SHALL BE INSTALLED IN ACCORDANCE WITH CSA A23.1 CLAUSE 6.7.5 AND THE FOLLOWING GUIDELINES:

- - SLEEVING DRAWINGS FOR THE FOLLOWING ELEMENTS AND THOSE NOTED ON PLANS AND SECTIONS SHALL BE SUBMITTED TO RJC FOR REVIEW PRIOR TO CONSTRUCTION:

 - ALL ELEMENTS SLABS AND SLAB BANDS BEAMS AND GRADE BEAMS WALLS AND SHEAR WALLS
 - NOT WITHSTANDING THE SATISFYING OF THESE GUIDELINES, THE CONDUITS, SLEEVES, PIPES, ETC. SHALL MEET THE RIC SPACING REQUIREMENTS NOTED AND SHALL NOT REDUCE THE STRUCTURAL CAPACITY.
 - CONTRACTOR SHALL MINIMIZE QUANTITY AND SIZE OF IN-SLAB CONDUITS AND EMBEDDED BOXES TO LEAST AMOUNT POSSIBLE INCLUDING COMBINING DATA AND TELECOM CABLES IN COMMON CONDUITS WHERE PERMITTED BY CODES AND APPROVED BY THE LECTRICAL ENGINEER.
 - D. THE CONSULTANT RESERVES THE RIGHT, AT NO EXTRA COST TO THE OWNER TO:
 - HIGHLIGHT ITEMS NOT MEETING THE SPACING REQUIREMENTS WHICH MUST BE CORRECTED PRIOR TO PROCEEDING WITH
 - WHICH MUST BE CORRECTED PRIOR TO PROCEEDING WITH PLACEMENT OF CONCRETE TO CONCRETE LOCALLY INCREASE THE THICKNESS OF THE SLAS OR INCREASE THE SPECIFIED CONCRETE STRENGTH AS REQUIRED. REQUEST THE USE OF 10mm AGGREGATE (PEA GRAVEL) TO ACHIEVE PROPER CONSOLIDATION.

CONDUITS, PIPES, AND SLEEVES **EMBEDDED IN CONCRETE - COLUMNS** AND BEAMS

REFER TO CONDUITS, PIPES, AND SLEEVES EMBEDDED IN CONCRETE -GENERAL FOR ADDITIONAL REQUIREMENTS COLUMNS:

- A BOXES, CONDUIT, SLEEVES OR EMBEDDED PIPES ARE NOT ALLOWED WITHOUT THE WRITTEN APPROVAL OF RJC.
- WHERE ACCEPTED BY RJC, THE TOTAL AREA OF EMBEDDED CONDUITS OR FITTINGS SHALL NOT EXCEED 1% OF GROSS COLUMN AREA SECURE CONDUITS TO COLUMN TIES. LOCATE AS CLOSE TO CENTER OF SECTION AS POSSIBLE DO NOT TIE ALONG VERTICAL BAR.



- 2. BEAMS:
 - A. THE TOTAL MAXIMUM SIZE OF HORIZONTAL CONDUIT OR PIPES PARALLEL TO THE BEAM NOT TO EXCEED 4% OF THE AREA.
- NO SLEEVES OR EMBEDDED BOXES ALLOWED IN ANY BEAMS OR SLAB BANDS UNLESS APPROVED IN WRITING BY RJC.

CLOSER TOLERANCES SHALL BE MAINTAINED WHERE ARCHITECTURAL DETAILS OR OTHERS REQUIRE.

WHERE ANY DEVIATION OCCURS, AND IT IS ACCEPTABLE TO THE ENGINEER AND ARCHITECT, THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENT OF OTHER BUILDING ELEMENTS TO ACCOMMODATE SUCH DEVIATION. COSTS FOR REMEDIA

WORK FOR DEVIATIONS NOT ACCEPTED SHALL BE BORNE BY THE CONTRACTOR.

IN THE LINES AND SURFACES OF COLUMNS, PIERS, WALLS AND IN ARRISES: 0.25% OF HEIGHT (1 IN 400), MAXIMUM 1 1/2* OVER THE

ALL MEASUREMENTS SHALL BE TO THE SAME SIDE OF THE PLUMB LINE.

UNLESS SPECIFIED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS - THE TOLERANCES FOR EXPOSED CORNER COLUMNS, CONTROL JOINT GROOVES, AND OTHER CONSPICUOUS LINES SHALL BE: (SEE ALSO ELEVATOR SHOP DRAWINGS, ETC.)

MAYIMI IM VARIATION IN WINDOW BAYS 0.2% OF OPENING

CLOSER TOLERANCES MAY BE REQUIRED TO GIVE THE QUALITY OF FINISH FLOOR SURFACES CALLED FOR ELSEWHERE IN THE CONTRACT

VARIATIONS OF STRUCTURAL CONCRETE ELEMENTS RELATED TO EACH OTHER AND RELATIVE TO A REFERENCED GRID SYSTEM FOR PLAN DIMENSIONS TO MEET CSA A23.1.

VARIATION IN CROSS-SECTIONAL DIMENSIONS OF COLUMNS AND BEAMS AND IN THE THICKNESS OF SLABS AND WALLS: AS IN CSA A23.1.

THE ABOVE REQUIREMENTS DO NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY OF MEETING MORE RIGID REQUIREMENTS SPECIFIED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS OR AS REQUIRED BY EQUIPMENT SHOP DRAWINGS OR SPECIFICATIONS SUCH AS THOSE FOR

(TOLERANCES AS PER CSA A23.1, EXCEPT AS NOTED BELOW)

ENTIRE HEIGHT OF THE STRUCTURE

ONLY ONE CURVATURE ALLOWED PER 10'-0". THE TOLERANCE GIVEN IS THE MAXIMUM VARIATION FROM A PLUMB LINE.

0.125% OF HEIGHT (1 IN 800), MAXIMUM 3/4" ONLY ONE CURVATURE ALLOWED PER 20'-0".

OVERALL F-NUMBER OF F_F=20 & F_L=15.

ONLY ONE CURVATURE ALLOWED PER 10'-0".

FLEVATORS FTC

VARIATION FROM THE PLUMB

CONCRETE CONSTRUCTION TOLERANCES

NOT FOR CONSTRUCTION

1. All diswings, plans, models, designs, specifications and other documents prepared by Read Jones Christoffersen Ltd. ("RUC") and used in connection with this project are instruments of service for the work shown in them (the "Votos") and as such are and remain the property of RUC whether the Next is executed front, and RUC reservas the opplyight in them and in the Virols resocuted from them, and they shall not be used for any other work or project.

PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

Designed By PWM RJC Project Number

Drawn By KML Scale As indicated Date 2024.12.20 SAS.138936.0001

Sheet Number

S 1.3

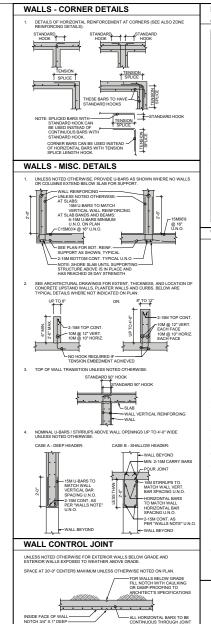
1 2024-12-20 18-56-21

Revision



Date By

Creative Thinking



NOTCH 3/4" X 1" DEEP ON EACH FACE

PLAN

EMBEDMENT / DEVELOPMENT LENGTHS AND SPLICE LENGTHS

CASE 2 TENSION EMBEDMENT AND SPLICE CONDITIONS TENSION EMBEDMENT AND SPLICE LENGTHS CONFORMING TO CSA A23.3 TABLE 12.1 (0.8k,k,k,k,f,k, / / f,) ARE TO BE AS PER THE FOLLOWING TABLE FOR MEMBERS NOT SATISFYING CASE 1 CONDITIONS AS SET OUT ABOVE. FOR EXAMPLE:

- ONE WAY SLAB TOP BARS (SEE TOP BAR NOTE).
 BARS (EXCLUDING THE SPLICE) SPACED CLOSER TOGETHER THAN
 2 BAR DIAMETERS IN SAME LAYER AND BETWEEN LAYERS.
 STIRRUPS IN BEACH SAND GIRDERS.
 SEE ALSO NOTES ON TOP BARS.

CONCRETE	FUNCTION	REB/	REBAR DESIGNATION (GRADE 400 LENGTHS)						
STRENGTH	FUNCTION	10M	15M	20M	25M	30M	35M		
20 MPa	EMBEDMENT	17"	26"	34"	53"	64"	74"		
	(SPLICE)	(22")	(33*)	(44*)	(69")	(83*)	(97*)		
25 MPa	EMBEDMENT	16"	23"	31"	48"	57*	67"		
	(SPLICE)	(20*)	(30")	(40")	(62")	(74*)	(86*)		
30 MPa	EMBEDMENT	14"	21*	28"	44"	52*	61"		
	(SPLICE)	(18")	(27°)	(36*)	(57")	(68*)	(79")		
35 MPa	EMBEDMENT	13"	20"	26*	40"	48*	56"		
& GREATER	(SPLICE)	(17*)	(25")	(34*)	(52°)	(63*)	(73*)		

- NOTES: 1. "TOP BAR" VALUES ARE 1.3 TIMES THE ABOVE LENGTHS,
 "TOP BAR" APPLIES TO HORIZONTAL REINFORCEMENT CAST
 WITH 12" OR MORE OF CONCRETE BELOW THE BAR.
 - . INCREASE THESE TABLE LENGTHS BY 1.15 TIMES WHEN SPACING BETWEEN LAYERS OF REBAR IS 1.0do-
 - 3. WHERE A TENSION SPLICE IS SPECIFIED BETWEEN TWO BARS OF DIFFERENT DIAMETERS, THE MINIMUM SPLICE LENGTH SHALL BE THE GREATER OF THE SPLICE LENGTH FOR THE SMALLER DIAMETER BAR AND THE EMBEDMENT LENGTH OF THE JARGER DIAMETER BAR.

WALLS

THESE NOTES APPLY SPECIFICALLY TO CONCRETE WALLS NOT CLASSIFIED AS SHEAR WALLS. SEE ALSO CONCRETE SHEAR WALL NOTES

LINEESS NOTED OTHERWISE WALLS SHALL BE REINFORCED AS FOLLOWS:

THICKNESS	FIRE EXPOSURE	VERTICAL REINFORCING	HORIZONTAL REINFORCING
6"	1 SIDE	10M @ 18" CENTERED	10M @ 13" CENTERED
	2 SIDES	10M @ 18" E.F. STAG.	10M @ 18" E.F. STAG.
8"	1 SIDE	10M @ 13* CENTERED	10M @ 10" OR 15M @ 20" CENTERED
	2 SIDES	10M @ 20" E.F. STAG.	10M @ 20" E.F. STAG.
10"	1 OR 2 SIDES	10M @ 20" E.F. STAG.	10M @ 16" E.F STAG.
12"	1 OR 2 SIDES	10M @ 17" E.F.	10M @ 13* E.F.

FOR OTHER THICKNESSES, REINFORCEMENT TO BE PROPORTIONAL TO ABOVE.

15M @ 20" MAY BE SUBSTITUTED FOR 10M @ 13" ONLY WITH THE APPROVAL OF RIC. FOR WALLS WITH A SINGLE LAYER OF STEEL, THE WALL REINFORCING SHALL BE PLACED IN THE CENTER OF THE WALL U.N.O.

REFER TO THE "CONCRETE REINFORCEMENT" NOTE AND THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FIRE EXPOSURI REQUIREMENTS. ALL WALLS DESIGNED FOR FIRE EXPOSURE ONE SIDE U.N.O. ON STRUCTURAL DRAWINGS.

- PLACE VERTICAL REINFORCEMENT IN OUTER LAYERS OF THE CURTAINS AND HORIZONTAL REINFORCEMENT IN INNER LAYERS (BEHIND VERTICALS), UNLESS NOTED OTHERWISE.
- ALL WALL REINFORCING SHALL BE CONTINUOUS, WITH HOOKS OR CORNER BARS USED AT ALL WALL JUNCTIONS. EXTEND HOOKS TO FAR FACE OF WALL. CORNER BARS TO BE LOCATED ON OUTSIDE FACE OR CENTER OF WALL.
- HORIZONTAL AND VERTICAL SPLICES SHALL BE TENSION SPLICES. U.N.O.
- ENDS OF ALL WALLS AND ALL WALL INTERSECTIONS SHALL HAVE 2-15M VERTICAL MINIMUM UNLESS NOTED OTHERWISE ON DRAWINGS.
- ADD 2-15M PARALLEL TO ALL EDGES AND EXTENDING 25" BEYOND CORNERS AT OPENINGS IN WALLS.
- UNLESS NOTED OTHERWISE, PROVIDE DOWELS AT BOTTOM OF WALLS (E.G. AT FOOTINGS OR WHEREVER WALL BEGINS) AS SHOWN BELOW. DOWELS TO MATCH VERTICAL REINFORCEMENT.



INLESS NOTED OTHERWISE, ALL BETAINING WALLS BELOW GRADE AND ALL DETRINOR WALLS EXCHAURTED AND ALL DETRINOR WALLS EXPOSED TO THE WEATHER ABOUGH GRADE SHALL WHICH CONTROL JOHN'S SEE CONTROL JOINT DETAIL CONSTRUCTION JOHN TWO REPLACE CONTROL JOHN'S HER EQUIRED. THE LOCATION OF CONTROL JOHN'S HER EQUIRED. THE LOCATION OF CONTROL JOHN'S IN EXPOSED CONCRETE WALLS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVEW.



EMBEDMENT / DEVELOPMENT LENGTHS AND SPLICE LENGTHS

- BASED ON CSA A23.3
- WHERE EMBEDMENT OR SPLICES ARE DIMENSIONED ON THE DRAWINGS, SUCH DIMENSION SHALL APPLY.
- WHERE THE DRAWINGS INDICATE A COMPRESSION EMBEDMENT, IT IS A
- COMPRESSION EMBEDMENT LENGTH AND IT SHALL BE AS NOTED BELOW.
- WHERE THE DRAWINGS INDICATE A TENSION EMBEDMENT, IT IS A TENSION EMBEDMENT LENGTH AND SHALL BE AS NOTED BELOW. WHERE NO EMBEDMENT OR EMBEDMENT TYPE IS CALLED FOR ON THESE DRAWINGS, IT SHALL BE A TENSION EMBEDMENT, EXCEPT FOR COLUMNS WHICH SHALL BE A COMPRESSION EMBEDMENT.
- WHERE NO SPLICE OR SPLICE TYPE IS CALLED FOR ON THESE DRAWINGS, IT SHALL BE A TENSION SPLICE, EXCEPT FOR COLUMNS WHICH SHALL BE A COMPRESSION SPLICE.
- IN TABLES BELOW, EMBEDMENT LENGTHS ARE SHOWN WITHOUT BRACKETS, AND SPLICE LENGTHS ARE SHOWN IN BRACKETS.
- ALL TENSION SPLICE LENGTHS ARE CLASS "B" (1.3 td).
- WHERE MORE THAN ONE FACTOR APPLIES FOR INCREASING THE LENGTHS IN THESE TABLES, MULTIPLY ALL FACTORS TOGETHER.

COMPRESSION EMBEDMENT AND SPLICE LENGTHS

- COMPRESSION EMBEDMENT REFERS TO THE LENGTH REQUIRED TO PROVIDE THE "COMPRESSION DEVELOPMENT LENGTH" AS DEFINED IN CSA A23.3 CLAUSE 12.3.2.
- SPLICE LENGTH REFERS TO THE MINIMUM LAP LENGTH REQUIRED FOR A COMPRESSION SPLICE AS DEFINED IN CSA A23.3 CLAUSE 12.16.1.

CONCRETE	FUNCTION	REBAR DESIGNATION (GRADE 400 LENGTHS					
STRENGTH	FORCTION	10M	15M	20M	25M	30M	35M
20 MPa	EMBEDMENT	9"	13"	17"	22"	26"	30"
	(SPLICE)	(12")	(18")	(23")	(29*)	(35*)	(41")
25 MPa	EMBEDMENT	8"	12"	16"	19"	23*	27*
	(SPLICE)	(12")	(18*)	(23*)	(29")	(35*)	(41")
30 MPa &	EMBEDMENT	8*	11"	14"	18"	21"	25"
GREATER	(SPLICE)	(12")	(18*)	(23")	(29*)	(35*)	(41")
NOTES: 1. TABLE SHOWS LENGTHS FOR GRADE 400 REINFORCEMENT.							

- 2. WHERE A COMPRESSION SPLICE IS SPECIFIED BETWEEN TWO BARS OF DIFFERENT DIAMETERS, THE MINIMUM SPLICE LENGTH SHALL BE THE GREATER OF THE SPLICE LENGTH FOR THE SMALLER DIAMETER BAR AND THE EMBEDMENT LENGTH OF THI LARGER DIAMETER BAR.

TENSION EMBEDMENT AND SPLICE LENGTHS

- TENSION EMBEDMENT REFERS TO THE LENGTH REQUIRED TO PROVIDE A "TENSION DEVELOPMENT LENGTH" AS DEFINED IN CAN/CSA-A23.3 CLAUSE 12.2.
- SPLICE LENGTH REFERS TO THE MINIMUM LAP LENGTH REQUIRED FOR A CLASS 'B' TENSION SPLICE (1.3td) AS PER CAN/CSA-A23.3 CLAUSE 12.15.

CASE 1 TENSION EMBEDMENT AND SPLICE CONDITIONS

TENSION EMBEDMENT AND SPLICE LENGTHS CONFORMING TO CSA A23.3 TABLE 12.1 (0.45 k₁k₂k₃k₄l₄l₅ / √ Γ_c) ARE TO BE AS PER THE FOLLOWING TABLE FOR:

- COLUMNS VERTS REQUIRING TENSION SPLICES. BEAM AND GIRDER TOP AND BOTTOM BARS.

- B. BEAM AND GROBER TOP AND BOTTOM BARS.
 C TWO MAY SHAR TOP AND BOTTOM BARS.
 C TWO MAY SHAR TOP AND BOTTOM BARS.
 E. WALL HORIZOSITAL NID VIERTICAL DISTRIBUTED REINFORCING.
 F. SEE ALS NO TIES ON TOP BARS.
 G. MEMBERS WHICH DO NOT SATISFY THE ABOVE COMDITIONS SHALL HAVE
 TENSION EMBERMENTS AND SPLICES AS PER CASE 7 TABLE BELOW.

CONCRETE FUNCTION		REBAR DESIGNATION (GRADE 400 LENGTHS)					
STRENGTH	STRENGTH		15M	20M	25M	30M	35M
20 MPa	EMBEDMENT	13"	20*	26"	40"	48"	56"
	(SPLICE)	(17")	(25*)	(33")	(52*)	(62*)	(73")
25 MPa	EMBEDMENT	12"	18"	23"	36"	43*	50"
	(SPLICE)	(16")	(23*)	(30*)	(47")	(56*)	(65*)
30 MPa	EMBEDMENT	12"	16"	21"	33"	39"	46"
	(SPLICE)	(16*)	(21")	(27*)	(43")	(51*)	(59*)
35 MPa	EMBEDMENT	12"	15"	20"	30"	36"	42"
& GREATER	(SPLICE)	(16")	(19°)	(25")	(39")	(47*)	(55")

- NOTES: 1. "TOP BAR" VALUES ARE 1.3 TIMES THE ABOVE LENGTHS.
 "TOP BAR" APPLIES TO HORIZONTAL REINFORCEMENT CAST
 WITH 12" OR MORE OF CONCRETE BELOW THE BAR.
 - 2. "TOP BAR" FACTOR DOES NOT APPLY TO HORIZONTAL WALL REINFORCEMENT IN WALLS THAT ARE NOT VIBRATED.
 - 3. WHERE A TENSION SPLICE IS SPECIFIED BETWEEN TWO BARS OF DIFFERENT DIAMETERS, THE MINIMUM SPLICE LENGTH SHALL BE THE GREATER OF THE SPLICE LENGTH FOR THE SMALLER DIAMETER BAR AND THE EMBEDMENT LENGTH OF THE LARGER DIAMETER BAR.

CONCRETE COVER

- UNLESS OTHERWISE NOTED CONCRETE COVER TO REINFORCEMENT SHALL BE THE LARGEST OF A THROUGH H:
 - A. FOR FIRE RATINGS:

GENERAL (AREAS NOT INCLUDING PARKING)						
FI FMFN	-	FIRE RATINGS				
ELEMEN	'	0-2 HOURS	3 HOURS			
WALLS - NON-RETAINING AND EXPOSED TO FIRE ON 2 SIDES AND IDENTIFIED ON PLAN		1 5/8" MIN., 2" MIN. TO VERTS.				
WALLS - NON-RETAINING AND EXPOSED TO FIRE ON 1 SIDE		GREATER OF 3/4" AND 1.0d ₆ TO ZONE TIES / OUTER CURTAIN LAYER				
BEAMS	TO STIRRUPS	1 5/8"				
	NO STIRRUPS	2*				
SLABS	•	GREATER OF 1 3/8" 1" AND 1.0d _b				
RETAINING / INSIDE FACE FOUNDATION WALLS		GREATER OF 1 5/8" AND 1.5ds	N/A			
(F-2 EXPOSURE)	GROUND OR EARTH SIDE	GREATER OF 1 5/8" AND 1.5d _b	N/A			

PARKING AREAS						
FLEMEN	_	FIRE R	ATINGS			
ELEMEN		0-2 HOURS	3 HOURS			
COLUMNS AND	TO TIES	1 5/8"	1 5/8*			
FORMED PILES	TO VERTS	2"	2"			
WALLS - NON-RETAINING AND EXPOSED TO FIRE ON 2 SIDES AND IDENTIFIED ON PLAN		1 5/8" MIN., 2" I	MIN. TO VERTS.			
WALLS - NON-RETAINING AND EXPOSED TO FIRE ON 1 SIDE		1 5/8" TO ZONE TIES / OUTER CURTAIN LAYER				
BEAMS, GIRDERS & TRANSFER SLARS	TO STIRRUPS	1 5/8"				
WITH MEMBRANE	NO STIRRUPS	2"				
SLABS AND SLAB	TOP COVER	GREATER OF	1 5/8" OR 1.5db			
BANDS, STIRRUPS IN SLAB BANDS WITH MEMBRANE	BOT. COVER	GREATER OF 1 1/4" AND 1.5db	GREATER OF 1 3/8" AND 1.5d _b			
STRUCTURAL SLAB ON GRADE TOP AND BOTTOM COVER		2 1/4"	N/A			
RETAINING / FOUNDATION WALLS COVER BOTH FACES (C-1 EXPOSURE)		GREATER OF 1 5/8" AND 1.5d _b	N/A			

B.	UNLESS NOTED OTHERWISE IN NOTES C	1.0d _b OR 1.4ag
	THROUGH H. MINIMUM CONCRETE COVER BASED	(WHICHEVER
	ON REINFOREMENT SIZE (db) AND	IS GREATER)
	COARSE AGGREGATE SIZE (an)	

- C. CONCRETE CAST AGAINST EARTH OR GROUND ------ 3"
- CONCRETE WITH NO MEMBRANE (NON-PARKING) ----- 2 3/8" OR 2.0d:
 AND EXPOSED TO CHLORIDES EXPOSURE CLASS (WHICHEVER
 CXL C1, AND C3.
 SGREATER) - 1 5/8" OR 1.5d_c (WHICHEVER IS GREATER)
- FORMED FINISHED CONCRETE EXPOSED TO WEATHER EXPOSURE CLASS F1, F2, S1, S2, OR EARTH - 1 1/4" OR 1.5de (WHICHEVER IS GREATER) CONCRETE IN PARKING AREAS, -BOTTOM BARS

NOTES:

SEE ARCHITECTURAL DRAWINGS AND STRUCTURAL DRAWINGS FOR AREAS WHICH MAY REQUIRE 3 OR 4 HOUR RATINGS.

SEE STRUCTURAL DRAWINGS FOR AREAS CLASSIFIED AS (D) or (E) ABOVE FOR WEATHER EXPOSURE.

DESIGNATION OF REINFORCING BARS

BARS SHOWN THUS — IN BOTTOM OF BEAMS OR SLABS OR IN FAR FACE OF WALL

- IN TOP OF BEAMS OR SLABS OR IN

3. STRAIGHT BARS:

6-10M13'9 MEANS 6-10M BARS 13'-9" LONG. 15M12'6 + 15M9'10 ALT. @ 8" MEANS 1-15M 12-6" LONG BAR THEN 1-15M 9'-10" LONG BAR SPACED 8" QIC AWAY

20M13'1 @ 12" STAG. 2'-0" MEANS Z'-0" OFFSET FOR EACH 20M 13'-1" BAR SPACED AT 12' O'IC. IF STAGGER NOT SPECIFIED SEE GENERAL NOTES AND TYPICAL DETAILS FOR DIMENSION.

4. BENT BARS:

6-C15M04'11 @ 12" MEANS 6-15M BARS 4'-11" LONG (LENGTH INCLUDES HOOK LENGTH) HOOKED ONE E WITH 90" STANDARD HOOK AND SPACED AT 12" OK

8-A15M09'10 @ 12" MEANS 8-15M BARS 9'-10" LONG

15M @ 12" H.2.E. MEANS 15M BARS HOOKED BOTH ENDS WITH 90" STANDARD HOOK AND SPACED AT 12" O/C.

DEVELOPMENT OF STANDARD HOOKS IN TENSION

BASED ON CSA A23.3

DEVELOPMENT

2'-0"]

CONCRETE	REBAR DESIGNATION (GRADE 400 LENGTHS)					
STRENGTH	10M	15M	20M	25M	30M	35M
20 MPa	9*	14"	18"	23"	27*	31"
25 MPa	8"	12"	16"	20"	24"	28"
30 MPa	8"	11"	15"	18*	22"	26*
35 MPa & GREATER	7*	10"	14"	17*	20"	24"



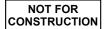
Read Jones Christoffersen Ltd.

SUED FOR 50% REVIEW	2024.12.20	KML
Revision	Date	Ву

1 IS No.

In average youters.

1. All drawings, plans, models, designs, specifications and other doc prepared by Read Jones Christothersen: Ltd. ("RLC") and used in connection with this project are instruments of service for the worl in them (the "Votn") and as such are and remain the property of whether the Work is executed front, and RLC reserves the copy them and in the Work executed from them, and they shall not be any other work or project.



PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

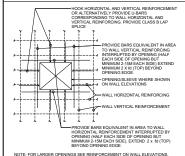
rawn By	KML	Scale	As indicated
lesigned By	PWM	Date	2024.12.20
JC Project Nu	ımber	SAS	138936 0001

Sheet Numbe S 1.4

1

2024-12-20 18-56-21

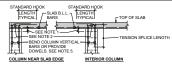
TYPICAL ADDITIONAL REINFORCEMENT FOR WALL OPENINGS UP TO 2'-6" X 2'-6" MAXIMUM SIZE



COLUMNS

- UNLESS NOTED OTHERWISE, CONCRETE STRENGTH IN COLUMNS IS INDICATED IN COLUMN SCHEDULE.
- TIE COLUMN CAGES TO FORMS AND SQUARE BEFORE PLACING CONCRETE
- CONDUITS, BOXES OR OTHER INSERTS MAY NOT BE PLACED IN COLUMNS UNLESS APPROVED IN WRITING BY RJC.
- UNLESS OTHERWISE NOTED ON COLUMN SCHEDULE, ALL COLUMN SPLICES SHALL BE AS PER TYPICAL DETAILS SHOWN ON THE STRUCTURAL DRAWINGS.
- ALL EXPOSED CORNERS OF COLUMNS SHALL BE CHAMFERED 3/4" X 3/4" UNLESS NOTED OTHERWISE BY ARCHITECT.
- UNLESS NOTED OTHERWISE, ALL COLUMN SPLICES SHALL BE COMPRESSION SPLICES.
- UNLESS NOTED OTHERWISE, COLUMNS SHOULD BE CENTERED ON COLUMNS BELOW.
- UNLESS NOTED OTHERWISE, COLUMNS SHALL BE CENTERED ON GRID LINES.
- LINESS NOTED OTHERWISE, PLACE TOP OF COLLAINS
 OF TO UZE BELOW SOFFIT OF SUPPORTED DOMORETE
 STRUCTURE IF TOP OF COLLIAN PLACED ABOVE SOFFIT,
 CAMERILLY CHE DOWN MIMMAM IS DAYS AFTER ELEMENT
 OURCED AND ARROURDED BY A
- WHERE COLUMN VERTICALS DO NOT EXTEND OVER, REFER TO "COLUMN SPLICE AND DOWEL DETAILS" NOTE.

COLUMN SPLICE AND DOWEL DETAILS



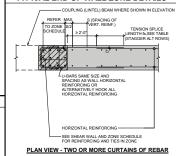
DETAIL A: TYPICAL TOP OF CONCRETE COLUMN

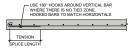
- ADD ADDITIONAL SETS OF TIES AT 1/2 TIE SPACING MAXIMUM IF THIS DISTANCE IS MORE THAN 1/2 TIE SPACE.
- WHERE COLUMN VERTICALS DO NOT EXTEND INTO A COLUMN ABOVE, EXTEND VERTICAL REINFORCING 24* MINIMUM INTO UNDERSIDE OF BEAMS OR TO WITHIN 1" OF TOP OF SLABS UNLESS CLEAR COVER REQUIREMENTS
- HOOKED DOWELS SAME SIZE AND NUMBER AS VERTICAL COLUMN REINFORCEMENT UNLESS NOTED OTHERWISE IN COLUMN SCHEDULE.
 - WHERE BARS WITH NO HOOK PERMITTED. EXTEND BAR TO TOP OF
 - SLAB LESS TOP COVER REQUIREMENT: ALL HOOKS AT EACH COLUMN FACE ORIENTED TO CROSS OVER FAR COLUMN FACE EXCEPT FOR HOOKS FROM INTERIOR FACE PARALLEL TO SLAB EDGE.
 - HOOKS TO EXTEND TO TOP OF SLAB AND PLACED IN THE SAME LAYER
 AS AND PARALLEL TO SLAB REINFORCING IN TOP UPPER LAYER U.N.O.

SHEAR WALL SPLICE LENGTHS

SHEAR WALL HORIZONTAL SPLICE LENGTHS - &s									
CONCRETE	REBAR SIZE								
STRENGTH	10M	15M	20M	25M	30M	35M			
25 MPa	20"	29"	39"	60"	72*	84"			
30 MPa	18"	27"	35*	55"	66*	77"			
35 MPa	17"	25"	33"	51"	61*	71"			
40 MPa	16"	23"	31*	48"	57*	67"			
50 MPa	16"	21"	28*	43"	51*	60"			
60 MPa	16"	19"	25*	39"	47*	55"			

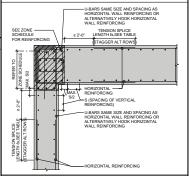
TYPICAL END OF WALL ZONE DETAILS





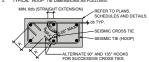
PLAN VIEW - SINGLE CENTERED CURTAIN OF REBAR

TYPICAL SHEAR WALL ZONE AT CORNER

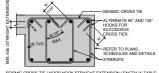


SEISMIC TIES (HOOPS), SEISMIC CROSS TIES, AND BUCKLING PREVENTION TIES

- SEISMIC TIES (HOOPS) AND SEISMIC CROSS TIES ARE REQUIRED FOR THE FOLLOWING ELEMENTS:
- COLUMN TIES WHERE NOTED ON DRAWINGS AND COLUMN TIES
 WHERE TIE SPACING IS 4" O/C OR LESS.
 ZONE TIES FOR ALL SHEAR WALLS. U.N.O. PLUS WALL TIES WHERE
- NOTED ON DRAWINGS AND SCHEDULE.
 C. OTHER TIES AND STIRRUPS WHERE NOTED ON DRAWINGS.
- BUCKLING PREVENTION TIES ARE REQUIRED FOR THE FOLLOWING
 - WALL ZONE TIES IN PLASTIC HINGE REGION. TIES FOR DIAGONAL REINFORCEMENT IN COUPLING BEAM BETWEEN
- WALLS.
 C. OTHER TIES AND STIRRUPS WHERE NOTED ON DRAWINGS.
- TYPICAL "HOOP" TIE DIMENSIONS AS FOLLOWS:



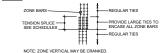
TYPICAL STIRRUP "SEISMIC HOOPS":



SEISMIC CROSS-TIE / HOOP HOOK STRAIGHT EXTENSION I ENGTH 'A' TABLE: SEISMIC TIE / HOOP BAR. db 10M 15M 20M

ZONE TIES

- ALL ZONE TIES 10M BARS UNLESS NOTED OTHERWISE.
- 2. TIE SPACINGS ARE ON CENTER UNLESS NOTED OTHERWISE.
- SEE "SEISMIC TIES (HOOPS) AND SEISMIC CROSS TIES" FOR ADDITIONAL TIE REQUIREMENTS.
- FOR ZONE TIE SPACING SEE ZONE SCHEDULE AND "ZONE TIE SPACING" TABLES, FIRST TIE TO BE POSITIONED AT 1/2 TIE SPACING ABOVE
- 5 ZONE TIES AT ZONE SPLICES TO BE AS EQUI DIMS



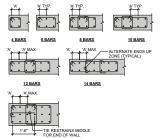
ZONE BARS MAY BE SPLICED WITH BENT BAR OFFSETS. IF THIS OPTION IS SELECTED SPLICE DETAILS ARE TO FOLLOW THOSE FOR "COLUMN SPLICE DETAILS". WITH CLASS "B TENSION LAP SPLICES THROUGHOUT, AND INCLUDING ADDITIONAL SETS OF TIES AT BAR CRANK LOCATION.

AT WALL THICKNESS TRANSITIONS, ZONE BAR OFFSETS DETAILS ARE TO FOLLOW THOSE FOR "COLUMN SPLICE DETAILS", WITH CLASS "B' TENSION DAY SPLICES THROUGHOUT. AND INCLUDING ADDITIONAL SETS OF TIES LAP SPLICES THROUGHOUT, AND INCLUDING AT BAR CRANK LOCATION, IF APPLICABLE.

18 BARS

SEISMIC CROSS TIES ALTERNATING END FOR END UP THE ZONE MAY BE SUBSTITUTED FOR EACH LEG OF A CLOSED INTERIOR TIE (TYPICAL U.N.O.)

'A' = 6" UNLESS NOTED OTHERWISE ON DETAILS.



CONCRETE SHEAR WALLS

- THESE NOTES APPLY TO WALLS SHOWN ON THE SHEAR WALL SCHEDULE OR OTHERWISE INDICATED AS "SHEAR WALLS" ON THE DRAWINGS. PROVIDE REINFORCING AS DEFINED ON WALL ELEVATIONS OR SHEAR WALL SCHEDULES, SHEAR WALL DETAILS, "MINIMUM SHEAR WALL DISTRIBUTED REINFORCING" TABLE, AND "ZOOD" ET SPACING" TABLE.
- WALL DISTRIBUTED AND COUPLING BEAM REINFORCING, SIZE WALLS, COUPLING BEAMS (THICKNESS, DEPTH, ETC.) AND CO WALLS, CLUPLING BEAMS (THICKNESS, DEPTH, ETC.) AND CONCRETE
 STRENGTH, SHEAR WALL ELEVATIONS SHOULD BE READ IN COMJUNCTION
 WITH SOCIEDULES AND TYPICAL SHEAR WALL DETAILS. THE GRAVITY
 ELEMENTS (SAS, BEAMS, FOUNDATION SYSTEMS, ETC.) ARE SHOWN
 ETC. OF THE GRAVITY ELEMENTS REFER TO PLANS, DETAILS AND
 SCHEDULES.
- UNLESS OTHERWISE NOTED ON THESE DRAWINGS, ALL HORIZONTAL AND VERTICAL LAP SPLICE LENGTHS SHALL BE CLASS 16 TENSION LAP SPLICES. SPLICE ELENGTH AND DEVELOPMENT (EMBEDMENT) LENGTHS SHALL BE AS PER TABLE FOR "CASE 1 CONDITION".
- ANY OPENINGS NOT SHOWN ON THE STRUCTURAL SHEAR WALL ELEVATIONS CAN NOT BE ADDED WITHOUT WRITTEN APPROVAL BY RJC.
- SEE ALSO WALL NOTES.

CONCRETE SHEAR WALLS -DISTRIBUTED REINFORCEMENT

- WHERE NO DISTRIBUTED WALL REINFORCING IS INDICATED ON WALL ELEVATIONS OR SCHEDULE, PROVIDE MINIMUM WALL REINFORCING AS PER "MINIMUM SHEAR WALL DISTRIBUTED REINFORCING" TABLE.
 - PLACE HORIZONTAL REINFORCEMENT IN OUTER LAYERS OF THE CURTAINS AND VERTICAL REINFORCEMENT IN INNER LAYERS (BEHIND HORIZONTALS), UNLESS NOTED OTHERWISE.
- VERTICAL SPLICES SHALL TYPICALLY OCCUR AT FLOOR LEVELS. OTHER VERTICAL SPLICES STRUCT FIFTING TO COURT OF THOUGH LEVELS. OTHER SPLICES OF HORIZONTAL AND VERTICAL REINFORCEMENT ARE NOT ALLOWED EXCEPT WHERE NECESSARY. THESE CASES MUST BE REVIEWED AND APPROVED BY NICE BEFORE USE AND, IF APPROVED. THE SPLICES MUST BE STAGGERED WITHIN EACH CURTAIN. DO NOT CRANK VERTICAL BABS ANYWHERE.
- FOOTING DOWELS ARE TO MATCH VERTICAL WALL REINFORCEMENT. EMBEDMENT SHALL BE AS PER TABLE "CASE I CONDITION". IF FOUNDATION THICKNESS IS LESS THAN EMBEDMENT LEINSTH, EXTEND DOWELS TO BOTTOM OF FOOTING AND PROVIDE STANDARD 90' HOOK. SEE ALSO OTHER NOTES AND DETAILS ON THESE DRAWINGS.
- WHERE VERTICAL REINFORCEMENT IS INTERRUPTED BY AN OPENING, PROVIDE U-BARS TO MATCH SPACING OF THE VERTICAL REINFORCMENT LAP U-BARS WITH VERTICAL REINFORCMENT WITH TENSION SPLICE PER TABLE "CASE 1 CONDITION".

CONCRETE SHEAR WALLS - ZONE REINFORCEMENT

- ZONE REINFORCING IS CALLED UP IN ZONE REINFORCING SCHEDULE OR ON SHEAR WALL ELEVATIONS.
- ZONE DOWELS TO MATCH SIZE AND NUMBER OF VERTICAL BARS IN ZONE. UNLESS NOTED OTHERWISE, EXTEND DOWELS TO BOTTOM OF FOUNDATION AND PROVIDE STANDARD 90° HOOK.

TIES FOR ZONE REINFORCEMENT

PROVIDE TIES FOR WALL ZONE REINFORCING AS PER "ZONE TIE SPACING" TABLES UNLESS NOTED OTHERWISE ON WALL ELEVATIONS OR SHEAR WALL SCHEDULE.

WALL CONSTRUCTION JOINT

(CONSTRUCTION JOINT CAN REPLACE CONTROL JOINT) IF ARCHITECTURAL DRAWINGS AND SPECIFICATIONS DO NOT REQUIRE A WATERSTOP, FOR WALLS BELOW GRADE, PROVIDE A 3/4" WIDE X 1" DEEP NOTCH AND FILL NOTCH WITH CAULKING OR DAMP PROOFING TO ARCHITECT'S REQUIREMENTS. KEY FROM 2x4 · · ALL HORIZONTAL BARS TO BE CONTINUOUS THROUGH JOINT OR - INSIDE FACE OF TENSION SPLICED.

CONCRETE SHEAR WALLS -CONSTRUCTION JOINTS

HORIZONTAL CONSTRUCTION JOINTS

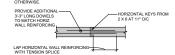
40. THE TOP OF THE WALL SHALL BE LEFT ROUGH (OR SHALL BE ROUGHENED) AND SHALL BE CLEANED OF LATTANCE AND LOOSE MATERIAL BY SUITABLE METHODS BEFORE THE SLAB OR WALL OVER IS PLACED.

PLAN

- SLABS WHERE WALLS ARE TO BE PLACED SHALL BE LEFT ROUGH AND CLEAN AND FREE OF LATTANCE. WHERE THIS IS NOT THE CASE, THE SLAB SURFACE SHALL BE CLEANED TO SOUND, ROUGH CONCRETE BY SUITABLE
- 42. SUITABLE METHODS OF CLEANING SHALL BE HIGH PRESSURE WATER BLAST, SAND BLASTING, ETC.

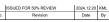
VERTICAL CONSTRUCTION JOINTS

LOCATION OF VERTICAL CONSTRUCTION JOINTS MUST BE APPROVED BY THE STRUCTURAL ENGINEER. USE THE FOLLOWING DETAIL UNLESS NOTED OTHERWISE.



Creative Thinking **Practical Results**

Read Jones Christoffersen Ltd.



No.

- 1. All drawings, plans, models, designs, specifications and other documents prepared by Read Jones Christoffersen Ltd. ("RUC") and used in connection with bis project are instruments of service for the work shown in them (the "Work") and as such are and remain the property of RUC whether the Work is asceuted for out, and RUC reservas the copyright in them and in the Work executed from them, and they shall not be used for any other work or project.



PROPOSED COLLEGE DRIVE APARTMENTS

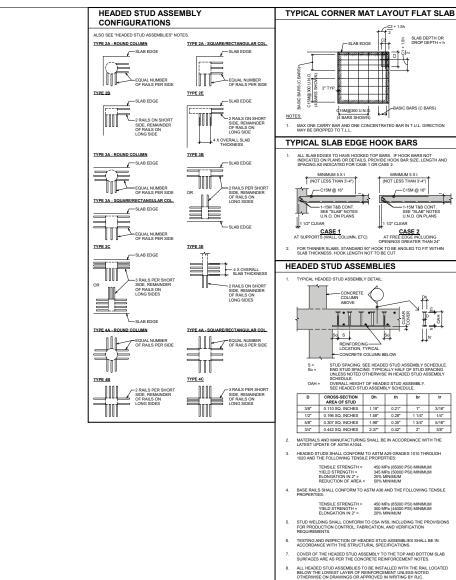
1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

Drawn By KML Scale As indicated Designed By PWM Date 2024.12.20 RJC Project Number SAS.138936.0001

Sheet Number Revision S 1.5

1

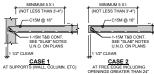


-SLAB EDGE

MAX ONE CARRY BAR AND ONE CONCENTRATED BAR IN T.U.L. DIRECTION MAY BE DROPPED TO T.L.L.

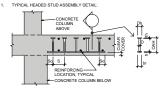
d15M@300 U.N.O. BASIC BARS (C BARS) NOTES: (4 BARS SHOWN)

TYPICAL SLAB EDGE HOOK BARS



FOR THINNER SLABS, STANDARD 90° HOOK TO BE ANGLED TO FIT WITHIN SLAB THICKNESS. HOOK LENGTH NOT TO BE CUT.

HEADED STUD ASSEMBLIES



S = So = STUD SPACING. SEE HEADED STUD ASSEMBLY SCHEDULE. END STUD SPACING. TYPICALLY HALF OF STUD SPACING UNLESS NOTED OTHERWISE IN HEADED STUD ASSEMBLY SCHEDULE. OVERALL HEIGHT OF HEADED STUD ASSEMBLY. SEE HEADED STUD ASSEMBLY SCHEDULE.

D	CROSS-SECTION AREA OF STUD	Dh	th	br	tr
3/8"	0.110 SQ. INCHES	1.19"	0.21"	1"	3/16"
1/2"	0.196 SQ. INCHES	1.58"	0.28"	1 1/4"	1/4"
5/8"	0.307 SQ. INCHES	1.98"	0.35"	1 3/4"	5/16"
3/4"	0.442 SQ. INCHES	2.37"	0.42"	2*	3/8"

- MATERIALS AND MANUFACTURING SHALL BE IN ACCORDANCE WITH THE LATEST UPDATE OF ASTM A1044
- HEADED STUDS SHALL CONFORM TO ASTM A29 GRADES 1010 THROUGH 1020 AND THE FOLLOWING TENSILE PROPERTIES:

TENSILE STRENGTH = 450 MPa (65000 PSI) MINIMUM YIELD STRENGTH = 345 MPa (50000 PSI) MINIMUM ELONGATION IN 2" = 20% MINIMUM EDUCTION OF AREA = 50% MINIMUM

4. BASE RAILS SHALL CONFORM TO ASTM A36 AND THE FOLLOWING TENSILE

TENSILE STRENGTH = 450 MPa (65000 PSI) MINIMUM YIELD STRENGTH = 300 MPa (44000 PSI) MINIMUM ELONGATION IN 2" = 20% MINIMUM

- STUD WELDING SHALL CONFORM TO CSA W59, INCLUDING THE PROVISIONS FOR PRODUCTION CONTROL, FABRICATION, AND VERIFICATION REQUIREMENTS
- TESTING AND INSPECTION OF HEADED STUD ASSEMBLIES SHALL BE IN ACCORDANCE WITH THE STRUCTURAL SPECIFICATIONS.
- ALL HEADED STUD ASSEMBLIES TO BE INSTALLED WITH THE RAIL LOCATED BELOW THE LOWEST LAYER OF REINFORCEMENT UNLESS NOTED OTHERWISE ON DRAWINGS OR APPROVED IN WRITING BY RJC.
- ALLOW MINIMUM 2" CLEAR COVER FROM THE HEADED STUD ASSEMBLY TO SLAB EDGES UNLESS NOTED OTHERWISE ON DRAWINGS.
- TIE ALL HEADED STUD ASSEMBLIES TO REINFORCING BARS AND USE ADEQUATE CHAIRS TO PREVENT MOVEMENT OF THE HEADED STUD ASSEMBLIES DURING CASTING.
- NO IN-SLAB DUCTS PERMITTED IN THE REGION CONTAINING HEADED STUD ASSEMBLIES UNLESS APPROVED IN WRITING BY RJC.
- NO SLEEVES OR CONDUIT PERMITTED WITHIN THE REGION CONTAINING HEADED STUD ASSEMBLIES UNLESS APPROVED IN WRITING BY RJC.

SLAB TEMPERATURE REINFORCING

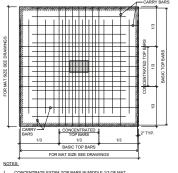


- BASED ON CAN/CSA-A23.3: 0.002 X AREA.
- 15M BOTTOM BARS MAY BE REPLACED WITH 10M BARS AT CLOSER SPACING SATISFYING 0.002 x AREA. (EG. REPLACE 15M @ 20" WITH 10M @ 10"). DO NOT INCREASE BAR SPACING UNLESS APPROVED BY RIG.

INTEGRITY REINFORCEMENT

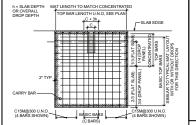
- PROVIDE INTEGRITY REINFORCEMENT IN ALL FLAT PLATES, FLAT SLABS WITH DROPS, AND SLABS WITH SLAB BANDS AS PER THE NOTE] SCHEDULE] SHOWN ON THE PLAN SHEETS UNLESS NOTED OTHERWISE ON PLAN.
- SEE S 3.1 FOR TYPICAL DETAILS OF INTEGRITY REINFORCEMENT
- ALL INTEGRITY REINFORCEMENT TO BE CONTINUOUS BARS WITHOUT SPLICES AND ALL BARS MUST PASS THROUGH THE COLUMN CORE. ADJUST SLEEVE LOCATIONS TO SUIT INTEGRITY REINFORCEMENT LAYOUT.
- CENTER ALL INTEGRITY BARS ABOUT COLUMN CENTERLINE. WHERE SLAB EDGE OR EDGE OF OPDINING IS LOCATED LESS THAN ONE-HALF OF THE INTEGRITY BAL INENTH FROM COLUMN CENTERLINE OR LESS THAN I'C WHERE APPLICABLE, EXTEND THE INTEGRITY REINFOREANT TO SLAB EDGE LESS COVER AND PROVIDE STRANDER HOOK OR BAT TERMINATOR (6 x A,

TYPICAL MAT LAYOUT WITHOUT DROP **PANEL**



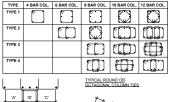
- CONCENTRATE EXTRA TOP BARS IN MIDDLE 1/3 OF MAT
- MAX TWO CARRY BARS + ONE CONCENTRATED BAR IN T.U.L. DIRECTION MAY BE DROPPED TO T.L.L.

TYPICAL EDGE MAT LAYOUT FLAT SLAB



- WHERE TUL PARALLEL TO SLAB EDGE, MAX ONE CARRY BAR AND ONE CONCENTRATED BAR IN TUL DIRECTION MAY BE DROPPED TO T.L.L.
- WHERE TUL PERPENDICULAR TO SLAB EDGE, MAX ONE TUL BAR EACH SIDE OF COLUMN MAY BE DROPPED TO T.L. DO NOT DROP BASIC BAR: PERPENDICULAR TO SLAB EDGE U.N.O.

COLUMN TIE ARRANGEMENTS

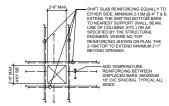


'A', 'C' = 20" MAX. 'B' = 12" MAX. TYPICAL AT ALL TIES -ANY SIDE OF COLUMN

NOTES:

- MAXIMUM CLEAR DISTANCE BETWEEN VERTICAL BARS ENCLOSED BY THE CORNER OF A TIE. AND WITHOUT AN INTERMEDIATE BAR. IS 20°.
- MAXIMUM ONE BAR MAY BE PLACED BETWEEN TIED BARS. MAXIMUM CLEAR DISTANCE BETWEEN TIED VERTICAL BARS FOR THIS CASE IS 12".
- 4. CLOSED TIES MAY ALWAYS BE SUBSTITUTED FOR CROSS-TIES.
- ROUND OR OCTAGONAL COLUMNS TO HAVE 6 VERTICAL BARS MINIMUM. OFFSET LOCATION OF TIE HOOKS OVER HEIGHT OF COLUMN.

- UNLESS NOTED OTHERWISE. THE MINIMUM BOTTOM REINFORCING IN BOTH DIRECTIONS IN SLABS SHALL BE AS SHOWN ON SLAB TEMPERATURE REINFORCING NOTES.
- UNLESS NOTED OTHERWISE, EDGES OF ALL SLABS SHALL HAVE 1-15M TOP + 1-15M BOTTOM CONTINUOUS LAPPED 25°. AT RE-ENTRANT CORNER EXTEND 2'-1" BEYOND THE CORNER. STAGGER TOP AND BOTTOM BAR LAPS MINIMUM
- CAMBERS: FOR SLABS, BEAMS, GIRDERS
- A. CIRCLED NUMBERS, E.G. (5/8) INDICATES POSITION AND MAGNITUDE OF POINTS WHERE SLABS SHALL BE CAMBERED 5/8".
- B. FOR SPANS OVER 23'-0" WHEN CAMBERS ARE NOT INDICATED ON DRAWINGS, SPANS SHALL BE CAMBERED 0.002 OF SPAN.
- C. UNLESS NOTED OTHERWISE, POST-TENSIONED SLABS AND BEAMS NEED NOT BE CAMBERED.
- LOCATIONS AND DETAILS OF CONSTRUCTION JOINTS TO BE SUBMITTED TO RJC FOR REVIEW AND APPROVAL, PRIOR TO CONSTRUCTION.
- UNLESS NOTED OTHERWISE, SLAB TEMPERATURE REINFORCING SHALL BE TENSION SPLICED. SEE "EMBEDMENT / DEVELOPMENT LENGTHS AND SPLICE LENGTHS" NOTE.
- WHERE NOTED ON PLAN SLAB RECESSES TO HAVE SLAB THICKNESS LOCALLY REDUCED.
- - UNLESS NOTED OTHERWISE, SLAB REINFORCING SHALL NOT BE CUT AT OPENINGS INCLUDING SLEEVES, PLUMBING BLOCK OUTS AND EMBEDDED ELECTRICAL BOXES.
- AT OPENINGS UP TO 12" X 12", SPREAD REINFORCING AROUND THE OPENING.
- AT OPENINGS UP TO 2'-6" X 2'-6", DISPLACE SLAB REINFORCEMENT AROUND OPENING AND PROVIDE EXTRA REINFORCEMENT AS SHOWN UNLESS NOTED OTHERWISE ON IT AMS AND DETAILS.



- AT OPENINGS GREATER THAN 2'-6", SEE PLANS AND DETAILS FOR REINFORCEMENT.
- NO OPENINGS PERMITTED WITHIN TWICE THE SLAB DEPTH FROM THE FACE OF COLUMN OR EDGE OF CAPITAL EXCEPT AS NOTED ON THE STRUCTURAL DRAWINGS.
- ALSO SEE "CONDUITS, PIPES, AND SLEEVES EMBEDDED IN CONCRETE" NOTE AND THE SPECIFICATIONS.

Creative Thinking **Practical Results**

Read Jones Christoffersen Ltd.

nop drawings. Use of these drawings as base drawings for 'sho,' " is not permitted unless written permission containing certain is and limitations is obtained from RJC. The work "as ted" may vary from what is shown on these drawings.
nese drawings is limited to that identified in the Issued/Revision Do not construct from these drawings unless marked "Issued for the "by P IS" is the Issued/Revision solvers, and then only for

1. All drawings, plans, models, designs, specifications and other documents prepared by Read Jones Christoffersen Ltd. ("RUC") and used in connection with this project are instruments of service for the work shown in them (the "Work") and as such are and remain the property of RUC whether the Work is associated for not, and RUC reservise the copyright in them and in the Work executed from them, and they shall not be used for any other work or project.

Date By

No.

NOT FOR CONSTRUCTION

PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

Drawn By KML Scale As indicated Designed By PWM Date 2024.12.20 RJC Project Number SAS.138936.0001

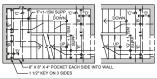
Sheet Number S 1.6

1

2024-12-20 18-56-22

MASONRY NOTES READ IN CONJUNCTION WITH THE MASONRY SPECIFICATIONS AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. ALL MASONRY WORK SHALL CONFORM TO CAN/CSA S304.1 AND ITS REFERENCED DOCUMENTS, INCLUDING BUT NOT LIMITED TO: CONCRETE BLOCK TO CAN/CSA-A165.1 TYPE H/15/A/M UNLESS NOTED OTHERWISE (RASED ON NET AREA) OTHERWISE (BASED ON NET AREA). MASONRY WIRE REINFORCING TO CSA-4371 AND ASTM 1084-GRADE 485 REINFORCING BARS TO CSA-4371 AND CSA G30.18- GRADE 400W. GROUT PREPARED ON OR OFF SITE SHALL BE IN ACCORDANCE WITH CANICSA-4179 AND SUPPLIER RECOMMENDATIONS CSA-4179 AND SUPPLIER RECOMMENDATIONS MINIMUM 28 DAY COMPRESSIVE STRENGTH – 12.5 MPa SLUMP 8" (MIN) TO 10" (MAX). FINE AGGREGATE SHALL BE USED WHERE SPACES TO BE GROUTED HAVE DIMENSIONS LESS THAN 2" CONNECTORS FOR MASONRY TO CAN/CSA-A370. MORTAR SHALL BE TYPE S PREPARED IN ACCORDANCE WITH CAN/CSA-A179. CONNECTIONS TO CAN/CSA-A370. PRACTICE TO CAN/CSA-A371. THE MASONRY CONTRACTOR SHALL BE A MEMBER OF THE CANADIAN MASONRY CONTRACTORS ASSOCIATION. NO MASONRY CONSTRUCTION SHALL BE PERMITTED WITHOUT THE CONTRACTOR ENSURING ALL NECESSARY PROTECTION AND CONSTRUCTION METHODS CAN BE READILY IMPLEMENTED IN ACCORDANCE WITH CANCSA-4371 PRIOR TO TEMPERATURES AND WEATHER CONDITIONS REACHING THE FOLLOWING. INCHING THE POLICUMING: HOT WEATHER - TEMPERATURE ABOVE +30°C COLD WEATHER - TEMPERATURE BELOW +5°C WET WEATHER OR SNOW PROTECTION (STORAGE AND CONSTRUCTION) HIGH WIND CONSTRUCTION ALL WALLS SHALL BE BUILT USING RUNNING BOND. STACK BOND SHALL NOT BE USED WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. 5. MORTAR MAY NOT BE SUBSTITUTED FOR GROUT. ALL MORTAR JOINTS IN CONCRETE BLOCK WORK SHALL BE TOOLED CONCAVE UNLESS NOTED OTHERWISE IN THE ARCHITECTURAL DRAWINGS. FILL BOND BEAMS AND CELLS CONTAINING VERTICAL REINFORCEMENT OR BOLTS WITH GROUT, VIBRATE OR PUDDLE TO COMPLETELY FILL CELLS. UNLESS MASONRY WALLS ARE NOTED AS "FULLY GROUTED" OR "GROUT SOLID", GROUT ONLY CELLS CONTAINING VERTICAL OR HORIZONTAL REINFORCEMENT, ANCHOR ROOS, BOLTS OR OTHER SPECIFICALLY NOTED AREAS, VIBRATE OR PUDDLE TO ENSURE CELLS ARE FILLED COMPLETELY AND PROPERITY CONSOLIDATED. GROUTING OF WALLS SHALL BE CARRIED OUT FOLLOWING ONE OF THE TWO METHODS BELOW. THE METHOD OF GROUTING SHALL BE INDICATED IN A. LOW LIFT GROUTING IN LIPT GROUTING LIFTS SHALL NOT EXCEED 4'-8" IN HEIGHT. TERMINATE EACH LIFT 1 12" BELOW THE TOP OF EACH MASONRY UNIT. B. HIGH LIFT GROUTING L LIFTS SHALL NOT EXCEED 8:0" IN HEIGHT. 1. THE MEXCRY MUST BE ALLOWED TO JURE FOR AT LEAST 4. E. GROUT SLUMP MUST BE MAINTAINED AT 10". 1. THE WALL SHALL NOT HALLOE ANY INTERMEDIATE BOND BEAMS BETWEEN 118 TOP AND BOTTOM OF THE LIFT. 1. REINFORCED AND FILED WITH GROUT, REPEALS TO BE REPORCED AND FILED WITH GROUT, REPEAL TO BE KEPT CLEAR AND CLEAN OF MONTRY. GROUT NOT PLACED WITHIN 1.5 HOURS AFTER WATER IS FIRST ADDED TO THE BATCH SHALL BE DISCARDED. COVER FOR VERTICAL REINFORCEMENT EXPOSED TO WEATHER OR EARTH SHALL BE INCREASED TO 2" REINFORCING BAR POSITIONERS SHALL BE PROVIDED AS PER THE TYPICAL DETAIL MW03 TO ENSURE BARS REMAIN WITHIN TOLERANCE DURING PLACEMENT OF GROUT OR MORTAR. HORIZONTAL JOINT REINFORCEMENT AND CONNECTIONS TO BASE BUILDING STRUCTURE SHALL HAVE THE FOLLOWING FINISH BASED ON LOCATION: A. EXTERIOR WALLS EXPOSED TO EARTH OR WEATHER OR INTERIOR WALLS EXPOSED TO HAMDITY > 79% MUST BE HOT-DIP GALVANZED. BROWY COATED (REQUIRENC INCREASED BABED & SPLICE LENDED. B. MITERIOR WALLS IN DRY CONDITIONS SHALL BE MILL OR HOT-DIP GALVANZED. PROVIDE LADDER STYLE HORIZONTAL REINFORCEMENT FOR ALL REINFORCED WALLS AND TRUSS STYLE REINFORCEMENT FOR UNREINFORCED WALLS UNLESS NOTED OTHERWISE. PROVIDE PRE-FABRICATED CORNER AND TEE SECTIONS FOR JOINT REINFORCEMENT PROVIDE DOWELS INTO FOUNDATION WALLS, CONCRETE FOOTINGS SUSPENDED SLABS, OR SLAB-ON-GRADE: TO MATCH VERTICAL REINFORCEMENT DETAILED FOR WALLS. AT MINIMUM PROVIDE 15Mg4-0" STARTER DOWELS WITH STANDARD HOOK DEVELOPMENT AND 4-0" PROJECTION INTO MASONRY ABOVE. FOR DOWELS IN CONCRETE ON DECK PROVIDE DROP IN ANCHORS PROVIDE LINTELS OVER ALL OPENINGS IN WALLS. SEE LINTEL SCHEDULE, UNLESS NOTED OTHERWISE ON PLAN. CONTROL JOINTS SHALL BE PROVIDED IN ACCORDANCE WITH TYPICAL DETAIL MW102 UNLESS NOTED OTHERWISE A. REFER TO CONTROL JOINT DETAIL FOR REINFORCEMENT THAT SHALL BE REFER TO CONTROL JOINT DETAIL FOR REINFORCEMENT THAT SHALL I CARRIED THROUGH AT BOND BEASIS UNLESS NOTED OTHERWISE FROM THE CONTROL OF THE STRUCTURAL NOTES, OPENINGS AND ARCHITECTURAL DRAWINGS. PROVIDE CONTROL JOINTS (WITH VERTICAL MOVEMENT ALLOWANCE) BETWEEN ALL LOAD-BEARING AND NON LOAD-BEARING WALLS. OUTSIDE FACES OF EXTERIOR WALLS SHALL BE WATERPROOFED AS PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

TYPICAL CAST INSITU STAIRS CONSTRUCTION JOINTS THROUGH HALF FLIGHT AND LANDING



SEE ARCHITECTURAL DRAWINGS FOR STAIR DIMENSIONS, ETC. FOR PRECAST STAIRS MODIFY B' AND 'E' BARS AS SHOWN ON PRECAST DETAILS.

		YPICA VEN RISI		PART PLAN (STAGGERED RISERS)				
RISERS	т	'A'	'B'	'C'	.D.	E.	'F'	'G'
7 TO 8	5*	4-15M	5-10M	2-20M	10M @ 12*	5-10M	3-15M	4-15M
9 TO 11	6"	5-15M	5-10M	3-20M	10M @ 12*	5-10M	4-15M	5-15M
12 TO 13	6"	6-15M	5-10M	3-20M	10M @ 12*	5-10M	4-15M	6-15M
une F	E LO DRAI NUM	AD TO B	E 100 PS OR LAYO RISERS	F. DUT		*	'C' BAR 'D' BAR	s-/ L

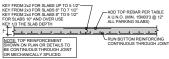


CAST INSITU UP FLIGHT 1/2" KEY AT INTERMEDIATE LANDINGS, TYPICAL SLAB EDGE C BARR 5-15M TOP (BEN C' BARS 10M @ 16" BOT. --2. "F' OR 'G' BARS WITH 1-15M SUPPORT "D" BARS GROUT -LIFTING INSERTS BY CONTRACTOR D' BARS 'E' BARS -1-15M TOP -----SUPPORT BAR

TYPICAL PRECAST STAIR

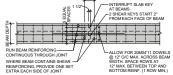
SLABS, SLAB BANDS, AND BEAMS

LOCATIONS TO BE APPROVED BY RJC



THROUGH SLABS

TABLE A							
SLAB / SLAB BAND	CONCRETE DESIGN STRENGTH Fc						
THICKNESS	35 MPa OR LESS	GREATER THAN 35 MPa					
'T' ≤ 12"	15M03'3 @ 12"	20M03'11 @ 12"					
12" < 'T' ≤ 24"	20M03'11 @ 12"	25M04'11 @ 12"					
SLAB BAND	20M03'11 @ 12"	25M04'11 @ 12"					

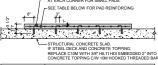


THROUGH BEAMS

- THESE DETAILS ARE TO ASSIST THE CONTRACTOR IN LOCATING POTENTIAL CONSTRUCTION JOINTS, FINAL CONSTRUCTION JOINT LOCATIONS ARE TO BE APPROVED BY RIC.
- FORMWORK AND REINFORCEMENT FOR LEVEL CONTAINING PROPOSED
- REQUIREMENTS FOR KEYS, ROUGHENED SURFACES AND DOWELS AT REQUIREMENTS FOR KEYS, KOUSEINED SURFACES AND DOWELS AT A CONSTRUCTION JOINTS PROVIDED IN THESE DEFIALS ARE FOR TYPICAL CONDITIONS AND ARE FOR PRICING AND PLANNING PURPOSES ONLY. A FINAL DESIGN OF THE CONSTRUCTION JOINT DETAILS IS TO BE COMPLETED BY RDL (AT CONTRACTORS COST) AFTER THE CONSTRUCTION JOINT LOCATIONS ARE APPROVED.
- NO STAYFORM PERMITTED IN CONSTRUCTION JOINTS IN PARKING AREAS UNLESS APPROVED IN WRITING BY RJC.

TYPICAL MECHANICAL / ELECTRICAL HOUSEKEEPING PAD DETAIL

- SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION. EXTENT
- THIS DETAIL PROVIDES RESISTANCE TO HORSENTAL (SLIDING) FRORES ONLY TRYON BOTH THE LONG THE CONNECTION OF ADDITIONAL STATEMENT OF THE CONNECTIONS FOR UPUAL FORCES FROM COMPACTIONS FOR UPUAL FORCES FROM DETAILED BY SECOLAT Y ROUNINEER AND DETAILED BY SECOLAT Y ROUNINEER AND DETAILED BY SECOLAT Y ROUNINEER AND THE CONTINUE OF THE CONTI NOT BY RJC (DETAILS MAY VARY) MAIN STRUCTURE -HOUSEKEEPING PAD DRILLING HOLES



'T' (PAD THICKNESS) REINFORCING 1 SHEET OF WWR 6 X 6 - W2.9 X W2.9 LAP 12" AT MID-DEPTH 10M @ 16" EACH WAY AT MID-DEPTH 6 1/2" TO 8" 10M @ 12" EACH WAY AT MID-DEPTH

SLAB ON GRADE REINFORCING AND CONTROL JOINTS

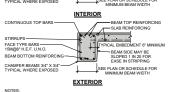
- SLAB ON GRADE SHALL BE PLACED ON SOIL CAPABLE OF SUSTAINING 520 PSF MINIMUM WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOUNDATIONS. IN AREAS WHERE S.O.G. IS USED TO SUPPORTED TEMPORARY SHORING LOADS, LARGER SUBGRADE CAPACITIEST MAY BE REQUIRED PER LOADS SUPPLIED BY TEMPORARY WORKS ENGINEER.
- REFER TO THE SUB-BASE NOTE AND GEOTECHNICAL REPORT FOR ALL SUB-BASE DESIGN AND COMPACTION REQUIREMENTS
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING THE SLAB ON GRADE AND ANY SPECIAL SUBBASE PREPARATIONS REQUIRED TO SUPPORT TEMPORARY SHORING OR ANY OTHER TEMPORARY CONSTRUCTION LOADS.
- FOR UNREINFORCED SLABS PROVIDE A 1 1/2" DEEP CONTINUOUS SHEAR KEY IN THE SLAB ON GRADE FACE.
- UNLESS NOTED OTHERWISE ON PLAN PROVIDE SLAB ON GRADE REINFORCEMENT AS SHOWN IN THE TABLE BELOW, MID-DEPTH IN THE

SLAB ON GRADE THICKNESS	MINIMUM REINFORCING UNLESS NOTED OTHERWISE ON PLAN			
LESS THAN 4 1/2"	WWR 6 X 6 - W2.9 X W2.9 (LAP 12*)			
4 1/2" TO 7"	10M @ 16" EACH WAY			
GREATER THAN 7"	15M @ 16" EACH WAY			
COORDINATE DEDAR DI ACCRENT TO AVOID DAMACINO OR CUIETINO DAD				

- CUCHOINATE REBAR PLACEMENT TO AVOID DAMAGING OR SHIFTING DURING SAWCUTING AND TO ACCOUNT FOR CONCRETE EXPOSURE CLASS.
- CONSTRUCTION JOINTS SHOULD BE LOCATED TO PROVIDE SQUARE POURS AND MEET THE POUR SIZE LIMITATIONS PER THE SPECIFICATIONS.
- CONTROL JOINTS / SAWCUTS SHALL BE LOCATED AT A MAXIMUM SPACING OF THE SLAB THICKNESS AND SHALL NOT EXCEED 14'-9", OR AS NOTED IN DRAWINGS. SAWCUT LAYOUT TO BE SQUARE GRIDS WHEREVER POSSIBLE.
- SAWCUT JOINTS SHALL BE 5/32" WIDE WITH A DEPTH OF 1/3 THE SLAB DEPTH BUT NOT LESS THAN 1 1/2".
 - COORDINATE THE SAWCUT PATTERN TO SUIT ARCHITECTURAL FLOOR FINISHES, CHANGES IN SLAB THICKNESS, AND POINTS OF SUPPORT. THE CONSULTANT MAY REQUEST A COORDINATION MEETING TO REVIEW THE SLAB LAYOUT AND METHODOLOGY PRIOR TO COMMENCING CONSTRUCTION.
 - REFER TO THE SPECIFICATIONS FOR ADDITIONAL SLAB ON GRADE CONSTRUCTION, FINISHING, AND TOLERANCE REQUIREMENTS.
- UNLESS NOTED OTHERWISE, PROVIDE CONTROL JOINTS AROUND ALL COLUMNS PER THE TYPICAL DETAILS.
- PROVIDE ADDITIONAL REINFORCEMENT AT ALL DISCONTINUOUS SAW CUTS, RE-ENTRANT CORNERS AND STEPS IN SLAB PER TYPICAL DETAILS.
- APPROVAL OF ARCHITECT IS REQUIRED TO SUBSTITUTE "ZIP-STRIPS" FOR SAWCUTS.

CONCRETE BEAMS





- CAMBERS AS PER SLAB NOTES.
- ADDITIONAL STIRRUPS MAY BE REQUIRED SHOULD HORIZONTAL POUR BREAK BE INTRODUCED. ALL POUR BREAKS PROPOSED BY CONTRACTOR TO BE REVIEWED BY RJC PRIOR TO CONSTRUCTION.

MASONRY - INSPECTION & TESTING

- AN INDEPENDENT TESTING AGENCY SHALL BE RETAINED TO PROVIDE AN ON-GOING SERVICE OF ON-SITE QUALITY CONTROL REVIEWS FOR THE MASONRY WORKS.
- A TESTING AND INSPECTION PROGRAM SHALL BE DEVELOPED IN ACCORDANCE WITH THE STANDARDS IN THE MASONRY NOTES, THE DRAWINGS, SPECIFICATIONS AND TIMS 42020-16 BUILLIDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES LEVEL A QUALITY ASSURANCE.
- THE CONTRACTOR SHALL CONTACT THE STRUCTURAL CONSULTANT FOR SITE VISITS 24 HOURS PRIOR TO POURING GROUT.

Creative Thinking **Practical Results**

Read Jones Christoffersen Ltd.

1	ISSUED FOR 50% REVIEW	2024.12.20	KML
No.	Revision	Date	Ву

- In average proteins

 1. All drawings, plans, models, designs, specifications and other do prepared by Read Jones Christothrenen Ltd, "R.P.C"; and used in connection with this project air sustiturants of service for the wor in them (the "Voto") and as such are and remain the property of whether the Work is executed from them, and they shall not be any other works or project.

NOT FOR CONSTRUCTION

PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

Drawn By KML Scale As indicated Designed By PWM Date 2024.12.20 RJC Project Number SAS.138936.0001

Sheet Number S 1.7

2024-12-20 18-56-23

1

WOOD MOVEMENT DUE TO SHRINKAGE

- THE WOOD FRAME STRUCTURE WILL UNDERGO MOVEMENT DUE TO SHRINKAGE. SHRINKAGE OCCURS AS THE MOISTURE CONTENT IN WOOD SPIRINANCE. SPIRINANCE OCCURS AS THE MOISTURE CONTENT IN WOL DROPS AS IT IS DRIED. IN SERVICE, THE MOISTURE CONTENT SHOULD REACH AROUND 6% AND IS CONSIDERED THE EQUILIBRIUM MOISTURE (EMC) CONTENT FOR THE PROJECT.
- KILN DRIED WOOD IS INITIALLY DRIED TO AN AVERAGE MOISTURE CONTENT OF 15% WITH NO PIECE EXCEEDING 19%.
- VIELLINER AND EXCEED THE INITIAL FABRICATION MOISTURE CONTENT.
 THE CONTRACTOR BY OTAKE ALL REAGONABLE MEASURES OF PORTECT
 WOOD FROM MOISTURE WHILE IT IS STORED ON SHIT. THE SINCLIDES
 ESPANATING SHOKERS, AND STORED IN A DRY AREA OF PROTECTED WHI
 A MOISTURE RESISTANT COVER. THE CONTRACTORS SHOULD ALSO TAKE
 POSSIBLE. REDUCEN THE EXPOSIBLE OF VICCOT TO MOISTURE DURING
 CONSTRUCTION, WOOD ELEMENTS ALONG THE PERMIETTE OF THE
 CONTRACTOR OF THE WOOD THE STORED WITH THE THE PERMIETTE OF THE
 LEVENT THAT THERE IS POOLED WATER FROM RAMFAKE, NOR STRUCTURE
 MEASURES SHOULD BE TAKEN TO REMOVE THE WATER PROPERLY TO
 ANDO BATTERNITOR OF THE WOOD.
- CLT PANELS TO MEET PRG 320 REQUIREMENTS AND WILL BE LESS THAN 15%, BUT HAVE BEEN ASSUMED 15% FOR PURPOSES OF CALCULATING
- THE CONTRACTOR IS TO TAKE ALL REASONABLE MEANS TO KEEP THE BUILDING MOISTURE CONTENT OF THE WOOD STRUCTURE TO 15% MAXIMUM DURING CONSTRUCTION. THIS INCLUDES CONSTRUCTION IN THE DRY SEASON, TARPING WHEN POSSIBLE REMOVING STANDING AND OR TRAPPED WATER, OR OTHER REASONABLE MEASURES.
- PRIOR TO ENCLOSING THE STRUCTURE WITH THE BUILDING ENVELOPE. THE CONTRACTOR IS TO DRY THE WOOD TO A MAXIMUM MOISTURE CONTENT OF 15%. THIS INICLUDES ALL WOOD IN THE STRUCTURE (NOT JUST THE EXTERIOR WALL).
- THE CONTRACTOR IS TO ENGAGE A BUILDING ENVELOPE SPECIALIST TO THE CONTRACTOR IS TO ENGAGE A BOILDING ENVELOPE SPECIALIST TO MONITOR REPRESENTATIVE VALUES OF WOOD WITHIN THE BUILDING TO ENSURE MAXIMUM MOISTURE OF 15% IS NOT EXCEEDED, AFTER WHICH TIME BUILDING FINISHES CAN BE PLACED.
- THE BUILDING WILL SEE TWO INTIAL STACES OF CHANGE IN MOISTURE CONTENT IN THE WHOOD THE FIRST EBING THE CHANGE IN MOISTURE CONTENT UNTIL WHOO! THE THE STRUCTURE IS DRIED TO 15%, SHOULD IT TAKE ON MOISTURE DURING CONSTRUCTION. IT IS ASSUMED INTIALLY THE WOOD MAY BE AT 24% MOISTURE CONTENT AS AN UPPER LIMIT. THE SECOND BEING THE CHANGE THE CHANGE THE CONTENT TO THE CHANGE THE CHANGE THE CONTENT TO THE CHANGE THE CHANGE THE CONTENT TO THE EQUILIBRIUM MOISTURE CONTENT OF 6% WHICH IS THE ANTICIPATED FINAL MOISTURE CONTENT EXPECTED.
- THE NATURAL MECHANICAL CONDITIONING STRATEGY FOR THE PROJECT WILL RESULT IN VARIABLE LEVELS OF RELATIVE HUMIDITY (RH) THROUGH THE SERVICE LIFE OF THE BUILDING. WITH RANGES ANTICIPATED IN THE SERVICE LIFE OF THE BUILDING, WITH RANGES ANTICIPATED IN WINTER BETWEEN 12% AND 19 X, MAD IN SUMMER BETWEEN 50% AND 80%. THE WOOD STRUCTURE WILL FUNCTION AS A PASSIVE CONDITIONING THE WOOD STRUCTURE WILL FUNCTION AS A PASSIVE CONDITIONING THE RELEASING TO A STIFE OF THE PROPERTY OF RESULT IN CHECKING AND SURFACE CRACKS. REGULAR MONITOR THE BUILDING RH, ELEMENT EMC, AND ANY VISUAL DISTRESSES IS IMPORTANT AND RECOMMENDED.
- IT IS THE CONTROLORS RESPONSIBILITY TO ENSURE THAT ALL TRADES ARE AWARE OF THE POTENTIAL PER FLOOR SERRIMAGE AND CUMULATIVE SHRIMAGE THAT WAY OCUR IN THE BUILDING AT VANDUOS STAGES OF CONSTRUCTION AND HOW MUCH THEY MEED TO ACCOMMIGNATE FOR WAYNER OF THE GENERAL MISTERIES CONTENT OF PLATES, CLT PANELS, AND BEAMS SHOULD THEY BE SUBJECT TO SIGNIFICANT MOISTURE DURING CONSTRUCTORS.
- 12. FOR SYSTEMS OR COMPONENTS THAT ARE NOTALLED BEFORE THE BUILDING HAS BEEN DRIED TO 15%, ALLOW FOR THE FULL SHRINKAGE BETWEET THE BUILDING HAS BEEN ORIED TO 15%, ALLOW FOR THE SHRINKAGE BETWEEN 15% AND 6%, IF THE MOISTURE CONTEND SHOULD BE FOUND TO BE GREATER THAN 24% DURING CONSTRUCTION, CONTACT DUND TO BE GREATER THAN 24% DURING CONSTRUCTION, CONTAC FOR REVISED SHRINKAGE VALUES FOR COMPONENTS THAT MAY BE
- ALL VERTICAL WOOD FRAMING IS CONSIDERED BALLOON FRAMING RESULTING IN NEGLIGABLE CUMULATIVE SHRINKAGE THROUGH HEIGHT OF BUILDING. SHRINKAGE WILL OCCUR WITHIN FLOOR ASSEMBLY ITSELF.
- THE SHRINKAGE OR SWELLING OF A WOOD MEMBER BETWEEN THE INITIAL AND FINAL MOISTURE CONTENT MAY BE ESTIMATED BY USING THE EQUATION OUTLINED IN CSA 086 8.5.4.6.

WOOD FRAMING - MATERIALS

- STUDS AND BUILT-UP POSTS TO BE S-P.F.NO.1:NO.2 GRADE OR BETTER:
 STUDS MAY BE FINGER-JOINTED (MAXMAIM 3 JOINTS PER STUD) EXCEPT IN
 SHEAR WALLS. REFER TO WOOD SHEAR WALL NOTES FOR ADDITIONAL.
 REQUIREMENTS: FINGER JOINTED STUDS IN FIRE SEPARATIONS SHALL
 HAVE HEAT RESISTANT ADDIESTIVE (HSA).
- BUILT-UP BEAMS AND HEADERS TO BE S-P-F NO.1/NO.2 GRADE OR BETTER
- WALL PLATES TO BE S-P-F NO.1/NO.2 GRADE OR BETTER. REFER TO WOOD SHEAR WALL NOTES FOR ADDITIONAL REQUIREMENTS. WALL PLATES SHALL SHEAR WALL NOTES FOR ADDITIONAL REQUIREMENTS. WALL PLATES SI BE KILN-DRIED AND MAY BE FINGER JOINTED EXCEPT IN SHEAR WALLS.
- POSTS AND BEAMS TO BE S-P-F NO.2 GRADE OR BETTER
- 5. CLT CROSS-LAMINATED TIMBER PANELS PER CLT NOTES.
- 6. ALL DIMENSION LUMBER TO BE SURFACED FOUR SIDES ("S4S").
- PLYWOOD TO BE DOUGLAS FIR PLYWOOD (DFP): REGULAR GRADES OF UNSANDED. CANADIAN SOFTWOOD PLYWOOD (CSP): REGULAR GRADES OF UNSANDED
- O.S.B. TO CONFORM TO CSA 0325.
- TIMBER CONNECTION HARDWARE TO BE SIMPSON STRONG-TIE, OR EQUIVALENT APPROVED BY RJC. COMPLETE WITH NAILS SUPPLIED BY MANUFACTURER. DO NOT USE P NAILS.
- 10. NAILS SEE "WOOD FRAMING NAILING".
- 11. MISCELLANEOUS STEEL TO BE CSA G40.21 OR APPROVED EQUIVALENT.
- 12. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 OR APPROVED EQUIVALENT. ANCHOR RODS SHALL BE DEFORMED, THREADED ALONG THEIR FULL LENGTH OR HOOKED 1 1/2" AT THE BOTTOM.
- BOLTS SHALL BE ASTM A307 OR APPROVED EQUIVALENT, USED WITH STANDARD CUT STEEL WASHERS UNLESS NOTED OTHERWISE ON DRAWINGS
- ALL FASTENERS AND CONNECTION HARDWARE THROUGH PRESERVATIVE TREATED MATERIALS OR OUTSIDE OF THE MOISTURE BARRIER TO BE HOT DIPPED GALVANIZED OR STAINLESS STEELAS SPECIFIED.

WOOD FRAMING - SHRINKAGE

- THE WOOD FRAME STRUCTURE WILL UNDERGO MOVEMENT DUE TO SHRINKAGE. SHRINKAGE OCCURS AS THE MOISTURE CONTENT IN WOOD DECREASES AS IT DRIES.
- KILN DRIED WOOD IS INITIALLY DRIED TO A MOISTURE CONTENT OF 19% WOOD MAY TAKE ON MOISTURE DURING CONSTRUCTION DUE TO WEATHER.
- THE CONTRACTOR IS TO TAKE ALL REASONABLE MEASURES TO PROTECT WOOD FROM MOISTURE WHILE IT IS STORED ON SITE. THIS INCLUDES KEEPING WOOD STORED IN A DRY AREA OR PROTECTED WITH A MOIS RESISTANT COVER THE CONTRACTOR SHOULD ALSO TAKE REASONABLE
 MEASURES TO CLOSE IN THE STRUCTURE AS QUICKLY AS POSSIBLE TO
 PEDILICE THE EXPOSIBLE OF WOOD TO MOISTURE IN BURNING CONSTRUCTION REDUCE THE EXPOSURE OF WOOD TO MOISTURE DURING CONSTRUCTION BEAMS IN BALCONIES SHOULD ALSO BE COVERED AS LONG AS POSSIBLE
- THE RUILDING WILL SEE TWO STAGES OF CHANGE IN MOISTURE CONTENT THE BUILDING WILL SEE TWO STAGES OF CHANGE IN MOISTURE CONTENT IN THE WOOD, THE FIRST BEINS THE CHANGE IN MOISTURE CONTENT UNTIL WHICH TIME THE STRUCTURE IS DIEDO 1994. IT IS ASSUMED INTULLY WHICH TIME THE STRUCTURE IS DIEDO 1994. IT IS ASSUMED INTULLY CHANGE FROM 1994 MOISTURE CONTENT TO THE COULDERIUM MOISTURE CONTENT OF 8% WHICH IS THE ANTICIPATED FINAL MOISTURE CONTENT EXPECTED DURING THE SERVICE OF THE BUILDING.
- THE TOTAL PER FLOOR SHRINKAGE TO BE TAKEN AS 1/2" BASED ON SHRINKAGE EPOM 30% TO 8%
- THE TOTAL PER FLOOR SHRINKAGE TO BE TAKEN AS 1/4" BASED ON SHRINKAGE FROM 19% TO 8%.
- FOR SYSTEMS OR COMPONENTS THAT ARE INSTALLED EARLY ON BEFORE THE BUILDING HAS BEEN DRIED TO 19%, ALLOW FOR THE FILL SHRINKAGE FROM 30% TO 98. FOR SYSTEMS OR COMPONENTS THAT ARE ADDED AFTER THE BUILDING HAS BEEN DRIED TO 19%, ALLOW FOR THE SHRINKAGE BUTWEEN 19% AND 8%.
- MOST OF THE SHRINKAGE OCCURS PERPENDICULAR TO THE GRAIN OF THE LUMBER OR CROSS GRAIN. THUS MOST OF THE SHRINKAGE OCCURS IN THE WALL PLATES AND FLOOR SYSTEM TISELF WHERE THE WOOD IS STACKED IN PERPENDICULAR TO GRAIN LOADING. THE STRUCTURE SHRINKS VERY LUTTLE OVER THE HEIGHT OF THE STUDS.
- FRAMING DETAILS SHALL ENSURE UNIFORM VERTICAL SHRINKAGE.
 ADJACENT PORTIONS OF STRUCTURE SHALL BE SUPPORTED ON ROUGHLY
 EQUIVALENT AMOUNTS OF HORIZONTAL TIMBER (JOISTS AND SILL PLATES).
 DO NOT MIX KILN-DRIED AND NON-KILN DRIED JOISTS IN ANY GIVEN FLOOR.
- FRAMING DETAILS AROUND NON-SHRINKING STRUCTURAL ELEMENTS (CONCRETE, STEEL, PARALLAMS, GLULAMS, MICROLLAMS, PLYWOOD ETC SHALL TAKE INTO ACCOUNT THE SHRINKAGE OF THE TIMBER. EXAMPLES:



-SHRINKAGE GAP TOP AND BOTTOM

11. THE TOTAL BUILDING SHORTENING DUE TO SHRINKAGE TO BE TAKEN AS

FLOOR	ESTIMATED SHRINKAGE AT FLOOR LEVEL (i)				
LEVEL (i) ABOVE CONC. BASE STRUCTURE	19% MOISTURE CONTENT TO 8% MOISTURE CONTENT	30% MOISTURE CONTENT TO 8% MOISTURE CONTENT			
5	1 11/16"	3 5/16"			
4 1 5/16*		2 11/16"			
3 1"		2"			
2 11/16"		1 5/16"			
1 5/16"		11/16"			

WOOD FRAMING - GENERAL

- ALL LOADS AND DESIGN SHALL CONFORM TO PART 4 OF THE NATIONAL BUILDING CODE OF CANADA. SEE 'DESIGN LOADS' NOTE. ALL DETAILS, MATERIALS, NAILING, AND CONSTRUCTION PROCEDURES SHALL CONFORM TO PART 9 AS AMINIUM.
- ALL LOADS, DESIGN, DETAILS, MATERIALS, NAILING, AND CONSTRUCTION PROCEDURES SHALL CONFORM TO PART 9 OF THE NATIONAL BUILDING CODE OF CANADA. SEE "DESIGN LOADS" NOTE.
- - CSA OBS. ENGNEERING DESIGN IN WOOD
 CSA 0151 COMULAS FIR PLYWOOD
 CSA 0151 CANDIAN SOFTWOOD PLYWOOD
 CSA 0151 CANDIAN SOFTWOOD PLYWOOD
 CSA 0151 CANDIAN SOFTWOOD PLYWOOD
 CSA 0157 CUALIFICATION CODE FOR MANUFACTURERS OF STRUCTURAL
 CSA 0157 COMPANY
 CSA 0
- ANY CHANGES TO THE FRAMING SHOWN ON THESE DRAWINGS SHALL HAVE PRIOR WRITTEN APPROVAL OF RIC. FRAMING CHANGES WHICH HAVE NOT BEEN SO APPROVED WILL BE REJECTED.
- CONFIRM ALL DIMENSIONS AND OUTLINES WITH THE ARCHITECTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS, ELEVATIONS AND DETAILS.
- ANY TIMBER NOT GRADE MARKED WILL BE REJECTED.
- FINISHES SHALL BE DETAILED TO ACCOMMODATE SHRINKAGE OF THE TIMBER OVER TIME.
- DO NOT COVER WOOD FRAMING WITH FINISHES UNTIL RJC'S FRAMING REVIEW IS COMPLETE. PROVIDE 24 HOURS ADVANCE NOTIFICATION WHEN FRAMING REVIEWS ARE REQUIRED.
- NOTCHING AND DRILLING OF STRUCTURAL ELEMENTS SHALL FOLLOW THE GUIDELINES SET FORTH IN THE BUILDING CODE PART 9, UNLESS OTHERWISE APPROVED IN WRITING BY RJC.
- ALL TIMBER ELEMENTS ARE DESIGNED FOR DRY-SERVICE CONDITIONS UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR WATERPROOFING AND VENTILATION DETAILS.
- ALL WOOD FRAME CONSTRUCTION SHALL SATISFY THE FOLLOWING CONSTRUCTION TOLERANCES AS A MINIMUM, REFER TO ARCHITECTURAL AND WARRANTY REQUIREMENTS FOR ADDITIONAL TOLERANCE AND WARRANTY SPECIFICATIONS
- A. FLOORS NOT MORE THAN 1/4" IN 10'-0" OUT OF LEVEL.
- B. WALLS NOT MORE THAN 1/4" IN 8'-0" OUT OF PLUMB. NOT MORE THAN 1/4" IN 10'-0" FOR ANY BOWING.
- C. OVERALL BUILDING WALLS AND FLOORS SHALL NOT BE MORE THAN 3/8" DIFFERENCE IN MEASUREMENT FROM DIMENSIONS SHOWN ON CONTRACT DOCUMENTS.

WOOD FRAMING - CONTRACTOR REQUIREMENTS

- PRIOR TO INSTALLING ANY WOOD FRAME, THE CONTRACTOR IS TO SURVEY THE SUPPORTING CONCRETE SLAB FOR LEVELNESS. WHERE THE FLOOR IS OUT OF LEVEL BY MORE THAN 1/2" FROM A HORIZONTAL DATUM BETWEEN ADJACENT HIGH POINTS, CONTRACTOR IS TO EITHER LEVEL THE SLAB WITH A SELF LEVELING COMPOUND OR POUR LEVELING CURBS UNDER ALL BEARING WALLS.
- THE CONTRACTOR IS TO ENSURE THAT SHOP DRAWINGS FOR ALL SYSTEMS AND COMPONENTS THAT ARE DESIGNED BY OTHERS ARE PREPARED AHEAD AND SUBMITTED FOR REVIEW BY RIC AND THE PREPARED AHEAD AND SUBMITTED FOR REVIEW BY RIC AND THE ARCHITECT PRIOR TO INSTALLATION. THIS INCLIDES ENGINEERED WOOD SHOP DRAWINGS, ROOF ANCHORS, ROOF TOP MECHANICAL UNITS, OR OTHER ELEMENTS DESIGNED BY THE CONTRACTOR'S TRADES WHICH MAY AFFECT THE WOOD FRAME.
- THE CONTRACTOR IS TO COORDINATE A MEETING WITH THEIR TRADES AND THE CONTRACTOR IS TO COORDINATE A MEETING. WITH THEIR TRADES AND RECTO REVIEW THE ANTIDIATED BUILDING MOVEMENTS WHICH CAN RECTO REVIEW THE ANTIDIATED BUILDING MOVEMENTS WHICH CAN SERVICE DUE TO WOOD SHRINKAGE. THE CONTRACTOR IS TO BHSURE THAT ALL TRADE ARE AWARE OF THE POTENTIAL BUILDING MOVEMENT AND HOW MUCH THEY NEED TO ACCOMMIDIATE FOR IN THEIR DETAILS AND CONNECTIONS. SEE SHRINKAGE HOTES.
- ALL FRAMING INCLUDING BACK FRAMING AND THE REMEDIATION OF ALL DEFICIENCIES IS TO BE SIGNED OFF BY RIC PRIOR TO INSTALLING ANY GYPCRETE OR CONCRETE TOPPING.
- THE CONTRACTOR IS TO ENGAGE THE BUILDING ENVELOPE CONSULTANT TO MONITOR THE GENERAL MOISTURE CONTENT OF THE WOOD TO MONITOR THE CENERAL MOISTURE CONTENT OF THE WOOD OF TRICUTURE DIVINING CONSTRUCTION INCLUDING BOTH THE INTERPRETATION TO TRICUTURE THE MONITOR OF THE PROPERTY OF THE PROPERTY OF THE MONITOR OF THE PROPERTY OF THE MONITOR OF THE MONITOR OF THE MONITOR OF THE WOOD SELECTION OF THE W

FIRE PROTECTION OF EXPOSED WOOD MEMBERS

- FIRE RATINGS PER ARCHITECTURAL DRAWINGS, ALL ELEMENTS DESIGNED FOR 1 HOUR RATING EXCEPT FOR ROOF.
- MASS WOOD ELEMENTS LISTED BELOW ARE EXPOSED AND ARE DESIGNED USING A RATIONAL DESIGN METHOD BASED ON ANNEX B OF CSA 086.
 - A. THE UNDERSIDE OF ALL PANELS FOR BOTH FLOORS, AND ROOFS.
- CLT FLOOR AND ROOF PANELS DESIGNED FOR THE RARE CASE FOR FIRE WITH U.S. SEGMENT OF THE RARE CASE FOR FIRE WITH U.S. SEGMENT CASE 1.00 F 1.01 CR 1.00 + 1.00 + 1.00 × MEMBER SECTIONS SECURED BASED ON A MONNAU, CHIEF ATTE OF 1.02 C, SEGMENT OF MANUFACT FOR SECURED SECURED
- SEE ALSO SPECIFICATIONS AND DETAILS ON ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR AREAS OF EXPOSED STEEL ELEMENTS WHERE INTUMESCENT PAINT REQUIRED.

NON-LOAD BEARING MASONRY **DELEGATED DESIGN**

- UNLESS NOTED OTHERWISE ALL NON-LOAD BEARING MASONRY TO BE DESIGNED BY SPECIALTY ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS.
- [SUBMIT SCHEDULES S-B AND S-C FOR DESIGN OF ALL MASONRY TO THE ARCHITECT]
- THE FOLLOWING NOTES FOR NON-LOAD BEARING MASONRY ARE PROVIDED FOR INITIAL PRICE ESTIMATING PURPOSES AND AS AN OUTLINE SPECIFICATION FOR TENDERING OF THE MASONRY PACKAGE. THESE NOTES SHALL NOT BE CONSIDERED PART OF THE CONSTRUCTION POCUMENTS.
- UNDER AWARD OF THE MASONRY CONTRACT THE SUCCESSFUL CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE EVENIBLE FIND DESIGN OF THE MOUNT LOAD BEFAINS MASONN AS DEPICTED BY THE SUBJECT OF THE MASONRY WITH MECHANICAL AND ELECTRICAL TRADES FOR WALL OPENINGS.
- NON-LOAD BEARING PARTITIONS SHALL HAVE A CLEAR HEIGHT NOT EXCEEDING 30 TIMES THE WALL THICKNESS UNLESS SPECIFIED OTHERWISE BY THE CONTRACTOR'S SPECIALTY ENGINEER.
- NON-LOAD BEARING PARTITIONS SHALL NOT BE CONNECTED TO THE BASE BUILDING STRUCTURE IN A WAY THAT WOULD ALTER THE LATERAL STIFFNESS OF THE PRIMARY STRUCTURAL SYSTEM OR THE GRAVITY LOAD PATH.
- ANY CONNECTIONS OTHER THAN THOSE PROVIDING LATERAL SUPPORT OF THE WALL MUST BE SUBMITTED TO RIC FOR REVIEW AND COMMENT PRIOR TO COMMENCING CONSTRUCTION. THE SUBMISSION SHALL BE SIGNED AND SEALED BY THE SPECIALTY ENGINEER AND SHALL INDICATE ALL FACTORED FORCES IMPOSED ON THE PRIMARY STRUCTURAL SYSTEM.
- THE SPECIALTY ENGINEER SHALL ENSURE
- A. PROVIDE DEFLECTION GAPS BETWEEN NON-LOAD BEARING MASONRY AND ADJACENT COLUMNS AND WALLS EQUAL TO THE MAXIMUM SEISMIC DRIFT AT THAT LOCATION INDICATED ON THE "STRUCTURA MOVEMENT" NOTES OR AS PROVIDED ON DETAILS, BUT IN NO CASE
- MASONRY UNITS OF NON-LOAD BEARING WALLS BELOW OR ADJACENT TO GRANTY STRUCTURE SHALL BE DESIGNED AND CONSTRUCTED TO ALLOW FOR THE FOLLOWING DEFLECTIONS:

 i. FLOOR FRAMING - L/300 OR 1" (MIN.)

 E. ROOF FRAMING - L/180 OR 1" (MIN.)
- DEFLECTION GAPS MAY BE FILLED WITH COMPRESSIBLE MATERIAL. IF REQUIRED BUT THIS MATERIAL SHALL NOT IMPEDE THE OPEINING OR CLOSING OF THE GAP DURING AN EARTHQUAKE.
- FIELD REVIEW OF NON-LOAD BEARING MASONRY IS NOT PART OF RJC's SCOPE AS REVIEWER OF THE PRIMARY STRUCTURAL SYSTEM.
- THE SPECIALTY ENGINEER OR THEIR REPRESENTATIVE SHALL ENSURE QUALITY ASSURANCE OF THE WORK ON SITE BY PERFORMING ALL NECESSARY FIELD REVIEWS INCLUDING REVIEW OF THE PROVIDED DEFLECTION GAPS
- UNLESS NOTED OTHERWISE, CONNECTION TO BASE BUILDING SHALL INCLUDE THE FOLLOWING:
 - ALL VERTS TO HAVE MATCHING DOWELS FROM SLAB OR
- PROVIDE LATERAL RESTRAINT AT TOP PER DETAILS MW301, MW302 OR MW303 AS APPLICABLE, OR DETAILS PROVIDING EQUIVALENT OR BETTER RESTRAINT. IMPOSED RESTRAINT FORCES ON THE BASE BUILDING STRUCTURE TO BE INDICATED ON THE SHOP D

ARCHITECTURAL BRICK VENEER LEDGER ANGLES

- SEE AND COORDINATE WITH ARCHITECTURAL DRAWINGS FOR BRICK VENEERS, UNLESS NOTED OTHERWISE, 4" (90 mm) BRICK VENEERS SHALL BE SUPPORTED AT BOTTOM BY DIRECT BEARING ON CONCRETE SLAS OR CORBEL (IF SHOWN ON STRUCTURAL DRAWINGS) OR ON A STEEL LEDGER
- SEE ARCHITECTURAL DRAWINGS FOR BRICK SUPPORTS IN CASES DIFFERENT THAN SHOWN IN "ARCHITECTURAL BRICK VENEER LEDGER ANGLE" DETAILS.
- SEE ARCHITECTURAL DRAWINGS FOR LATERAL SUPPORT OF BRICK VENEER TO WALL BEHIND (CONCRETE, CONCRETE BLOCK, STEEL STUD, WOOD STUD, ETC.).
- CORROSION PROTECTION OF LEDGER ANGLES SHALL BE HOT-DIP GALVANIZING AFTER ALL SHOP FABRICATION. GRIND SMOOTH ALL AFTER WELDING OR BOLTING THE ANGLE IN PLACE, COAT ALL NO ANIZED STEEL (EXPOSED PORTION OF EMBED PLATES, WELDS, AND HEADS) WITH GALVACON OR EQUIVALENT ZINC RICH PAINT.
- PROVIDE LEDGER ANGLE AT EVERY FLOOR, UNLESS NOTED OTHERWISE
- RRICK LEDGER ANGLES SHOULD BE INSTALLED WITH MINIMUM 6" CLEARANCE ABOVE SOIL AND 2" CLEARANCE ABOVE CONCRETE. SEE ARCHITECTURAL DRAWINGS FOR UNDERSIDE OF BRICK LEDGER ANGLE ELEVATIONS.
- SHOP DRAWINGS SHOWING ALL STEEL SUPPORTS FOR BRICK VENEER SHALL BE SUBMITTED FOR REVIEW. SHOP DRAWINGS SHALL INCLUDE ELEVATION DRAWINGS SHOWING DIMENSIONED LOCATIONS FOR ALL EMBEDS IN CONCRETE.
- U.N.O. BRICK LEDGER ANGLES SHOWN IN "ARCHITECTURAL BRICK VENEER LEDGER ANGLE" DETAILS MAY BE FLIPPED ON HORIZONTAL AXIS IF REQUIRED FOR ARCHITECTURAL ELEVATIONS.

WOOD FRAMING - MOISTURE BARRIERS PROVIDE A MOISTURE BARRIER BETWEEN WOOD ELEMENTS AND ALL

PROVIDE A MOISTURE BARRIER BETWEEN WOOD ELEMENTS AND ALL CONCRETE OR MASONRY. THIS CAN BE A SHEET OF LIGHT-CARDE BUILDING (24 GAUGE MINMAM) GALVANAZED METAL ASPHALT IMPREGNATED BUILDING (24 GAUGE MINMAM) GALVANAZED METAL ASPHALT IMPREGNATED BUILDING MATERIAL, TYPE S ROLL ROOFING, SHEET FOLVETHYLENE NOT PERMITTED. ALL JUNCTIONS AND TERMINATIONS TO BE LAPPED (2" MINMAM) AND SEALED. BUTL JOINTS IM MOISTURE BARRIERS NOT PERMITTED.



Read Jones Christoffersen Ltd.

Date By

No.

- 1. All drawings, plans, models, designs, specifications and other documents prepared by Read Jones Christofferson Ltd. ("RUC") and used in connection with this project are instruments of service for the work shown in them (the "Vort") and as such are and remain the property of RLC whether the Work is asceuted for out, and RLC reservas the copyright in them and in the Work executed from them, and they shall not be used for any other work or project.
- These drawings are "design drawings" only. They may not be suitable for use as shop drawings. Use of these drawings as base drawings for "sho drawings" in on permitted unless within permission containing certain conditions and limitations is obtained from RIX. The work" as conducted "may valy from what is shown on these drawings.
- b. Use of these drawings is limited to that identified in the Issued/Revision column. Do not construct from these drawings unless marked Tassued for Construction *P.W.C.Ir the Issued/Revision column, and then only for the parts noted. The drawings shall not be used for "pricing" i "costing" or "hander" unless so indicated in the Issued/Revision column. "Plicing" or "Costing" or "Costing" drawings are not complete and any prices based on such drawings are not complete and any prices based on such drawings are not complete and any prices based on such drawings are not such profit in the complete and any prices based on such drawings are not complete and any prices based on such drawings are not such profit in the complete and any prices based on such drawings.



Sheet Title

PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

Drawn By KML Scale As indicated Designed By PWM Date 2024.12.20 RJC Project Number SAS.138936.0001

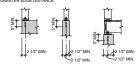
Sheet Number

S 1.8

1

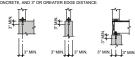
2024-12-20 18-56-23

WOOD FRAMING - WALL ANCHORAGE FASTEN LOAD BEARING WALLS AT BASE BY BOLTING THE BOTTOM PLATE (SILL PLATE) TO THE CONCRETE WITH 1/2" Ø ANCHORS AT 4'-0" OIC UNLESS NOTED OTHERWISE. ANCHORING OPTIONS ARE AS FOLLOWS: ANCHOR RODS CAST IN PLACE OR EPOXIED INTO PRE-DRILLED HOLES WITH THE HILT | HIT-HY 200] | HIT-RE 500-V3] ADHESIVE ANCHORING SYSTEM, ANCHOR RODS SHALL HAVE A MINIMUM S' FIREDEMENT, MINIMUM S' PROJECTION ABOVE THE CONCRETE, AND 2 1/2" OR GREATER EDGE DISTANCE.



NOTE: ANCHOR RODS MUST BE HOOKED 1 1/2" AT THE BOTTOM IF THEY ARE NOT DEFORMED OR THREADED ALONG THEIR ENTIRE LENGTH.

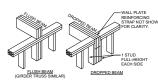
HILTI [KWIK BOLT 1][KWIK BOLT TZ2] MECHANICAL ANCHORS WITH A MINIMUM 3" EMBEDMENT, MINIMUM 3" PROJECTION ABOVE THE CONCRETE. AND 3" OR GREATER EDGE DISTANCE.



- NON-LOAD BEARING WALLS MAY BE FASTENED WITH 1/8" Ø POWER DRIVE! FASTENERS AT 16" O/C (MINIMUM 3/4" PENETRATION INTO CONCRETE).
- SILL PLATES SHALL BEAR ON A LEVEL SURFACE; PROVIDE A LEVELLING BED OF MORTAR IF REQUIRED, PROVIDE A SILL GASKET UNDER SILL PLATES BEARING ON CONCRETE. SEE NOTES ON "MOISTURE BARRIERS" FOR SILL GASKET REQUIREMENTS.

WOOD FRAMING - WALLS

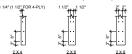
- LOAD BEARING WALLS: DENOTED ON PLAN THUS. ALL EXTERIOR WALLS ARE LOAD BEARING.
- SEE TYPICAL DETAILS FOR LOAD BEARING WALL CONNECTIONS BETWEEN FLOORS UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE, PROVIDE A BUILT-UP STUD POST AT THE ENDS OF ALL BEAMS AND GIRDER TRUSSES FRAMING INTO A WALL THE BUILT-UP STUD POST SHALL MATCH THE WIDTH OF THE BEAM, AND THE STUD SIZE SHALL MATCH THOSE IN THE WALL UN.O. ON PLAN.



NAILING OF BUILT-UP STUD POSTS SHALL CONFORM TO THE FOLLOWING SCHEDULE. EACH STUD OF BUILT-UP POST SHALL BE NAILED.

STUD	NAILING
2 X 4	3" NAILS @ 8" O/C STAGGERED
2 X 6	2 ROWS OF 3" NAILS @ 8" O/C
2 X 8	2 ROWS OF 3" NAILS @ 8" O/C

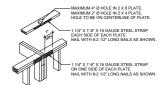
BUILT-UP STUD POST NAILING PATTERNS (BY STUD SIZE)



BLUET, UP STUD DOST NAILING PATTERNS (BY NUMBER OF DEVS).



- ALL POSTS AND BUILT-UP STUD POSTS SHOWN ON ANY LEVEL SHALL BE CARRIED DOWN TO THE CONCRETE UNLESS NOTED OTHERWISE. PROVIDE SOLID BLOCKING BETWEEN JOISTS UNDER ALL POSTS AND BUILT-UP POSTS
 - ALL LOAD BEATING WALLS SHALL HAVE Z CONTINUOUS TOP PLATES AND 1 CONTINUOUS BOTTOM PLATE BEAMS OR HEADERS OVER OPENINGS IN WALLS SHALL BE PROPPED TO ALLOY THE OFFICE THE PLATE SHALL BE SHALL BE PROPPED TO ALLOY THE OFFICE THE PLATE SHALL BE OFFICE THE OF



- WHERE PERMANENT SHEATHING IS NOT APPLIED TO STUDS PROVIDE BLOCKING AT 3'-4" O/C FOR 2 X 4 WALLS AND 2'-0" O/C FOR 2 X 6 WALLS.
- ALL BEARING WALLS WITHOUT PLYWOOD SHEATHING BUT CLAD IN GYPSUM WALL BOARD TO HAVE STUD BLOCKING PER THE FOLLOWING TABLE. BLOCKING TO BE INSTALLED PRIOR TO PLACEMENT OF GYPCRETE OR CONCRETE TOPPING.

STUD HEIGHT	BLOCKING REQUIREMENT		
LESS THAN 4'-0"	NONE		
4'-0" TO 8'-10"	1-ROW (MID HEIGHT)		
8'-10" TO 11'-10"	2-ROWS (THIRD POINTS)		

- EXTERIOR WALL OPENINGS LESS THAN 1200 mm WIDE TO HAVE AT LEAST ONE SILL PLATE, AT TOP OF DOOR OPENINGS, AND AT TOP AND BOTTOM WINDOW OPENINGS. EXTERIOR WALL DEVENINGS GREATER THAN 1200 mm WIDE TO HAVE AT LEAST TWO SILE PLATES, AT TOP OF DOOR OPENINGS, AND AT TOP AND BOTTOM OF WINDOW OPENINGS.
- WHERE A RIM BOARD IS NOT BRACED BY A FLOOR SYSTEM, SUCH AS AT A STAIR SHAFT, EITHER THE RIM BOARD SHALL BE FULL WIDTH OF THE WALL OR ALL WALL STUDS SHALL BE FULLY BLOCKED BESIDE THE RIM BOARD.

ENGINEERED WOOD SCREWS

- ENGINEERED WOOD SCREWS SPECIFIED IN THE DRAWINGS ARE ASSY SCREWS AS MANUFACTURED BY SWG AND PROVIDED BY MTC SOLUTIONS
- ALTERNATIVES WITH CANADIAN CONSTRUCTION MATERIALS CENTRE REPORTS (CCMC) APPROVAL ARE TO BE PREAPROVED BY RJC.









PROVIDE TAPERED HOLES IN STEEL SECTIONS TO SUIT FLUSH SCREW HEAD INSTALLATION.

7/19/12

- 6 PREDRILL HOLES AS RECOMMENDED BY SCREW MANUFACTURER
- SOME SAMPLE DETAILS ALSO REFERENCE USE OF SIMPSON STRONG TIE (SST) SDS SCREWS. ALTERNATIVES TO ALSO BE PREAPPROVED BY RJC.

ENGINEERED WOOD PRODUCTS (E.W.P.) GENERAL

- ENGINEERED WOOD PRODUCTS INCLUDE ALL PRE-MANUFACTURED BEAMS, COLUMNS, AND I-JOISTS BY WEYERHAEUSER TRUS JOIST AS SHOWN ON
- BEAMS EXPOSED TO VIEW IN FINISHED BUILDING SHALL BE SANDED APPEARANCE GRADE WITH STAMPS IN COVERED LOCATIONS.
- ALL MANUFACTURED BEAMS, COLUMNS, AND I-JOISTS SHALL HAVE A MOISTURE CONTENT OF LESS THAN 12%. ALL WOOD SHALL BE WRAPPED AND PROTECTED FROM MOISTURE UNTIL IT IS INSTALLED.
 - SIZES OF BEAMS AND POSTS SHALL BE AS SPECIFIED ON PLAN
- 5. BEAMS: MINIMUM STRENGTHS OF BEAMS AS SPECIFIED ON PLAN

TRUS JOIST DESIGNATION	MODULUS OF ELASTICITY	SHEAR RESISTANCE (f _v)	BENDING RESISTANCE (f _b)	BEARING RESISTANCE (f _{cp})
LSL	1.55E (1550 KSI)	575 PSI	4295 PSI	1635 PSI
LVL	2.0E (2000 KSI)	530 PSI	4805 PSI	1365 PSI
PSL	2.2E (2200 KSI)	540 PSI	5360 PSI	1135 PSI

BEAM DEFLECTIONS SHALL BE LIMITED TO SPAN/360 FOR LIVE LOAD AND SPAN/240 FOR TOTAL LOAD.

- LAMINATED STRAND LUMBER (TRUS JOIST TIMBERSTRAND)
 LAMINATED VENEER LUMBER (TRUS JOIST MICROLLAM)
 PARALLEL STRAND LUMBER (TRUS JOIST PARALLAM)
- COLUMNS: COLUMNS SHALL BE PSL 1.8E BY WEYERHAEUSER TRUS JOIST OR PRE-APPROVED EQUIVALENT.
- UNLESS NOTED OTHERWISE ON PLAN STEEL CONNECTING HARDWARE FOR LSI, LVL, AND PSI. BEAMS SHALL BE CAPABLE OF DEVELOPING 100% OF THE BEAM SHEAR CAPACITY.
- DO NOT SUBSTITUTE BUILT-UP MEMBERS OF SAWN TIMBER FOR ENGINEERED WOOD PRODUCTS.
- PSL USED IN EXTERIOR APPLICATION SHALL MEET THE EXPOSURE REQUIREMENTS SPECIFIED BY THE MANUFACTURER. DO NOT USE LSL OR LVL FOR EXTERIOR APPLICATIONS.
- ALL ENGINEERED WOOD PRODUCTS SHALL BE KEPT DRY AND PROTECTED FROM THE ENVIRONMENT DURING STORAGE ON OR OFF THE PROJECT SITE AS PER THE MANUFACTURERS REQUIREMENTS. STORE MATERIAL ELEVATED FROM GROUND AND WRAPPED TO SHED MOISTURE.

WOOD FRAMING - NAILING

- NAILING SHALL CONFORM TO THE BUILDING CODE PART 9, AND "WOOD BUILDING TECHNOLOGY" PUBLISHED BY THE CANADIAN WOOD COUNCIL. NAILING CALLED UP ON THESE DRAWINGS (E.G. FOR SHEATHING) IS BASED ON COMMON NAILS.
- IN ESS NOTED OTHERWISE NALL ALL WALL, FLOOR, AND ROOF SHEATHING TO FROMMEN BRANESS WITH 2 150 MALE SPACE NAS AT 8° OC AT ALL SUPPORTED EDGES OF SHEATHING SHEETS AND AT 12° OLG AT ALL ALL SUPPORTED EDGES OF SHEATHING SHEETS AND AT 12° OLG AT ALL ALL SUPPORTED EDGES SHEATHING SHEATH AND EDGES OF SHEATHING SHALL BE GLUED TO THE JOISTS IN ADDITION TO MALIING. SEE SHEAR WALL SCHEDULE OR DARHEADM ANLING SCHEDULE FOR ADDITIONAL REQUIREMENTS.



SHEATHING NAILING PATTERN

- DO NOT OVERDRIVE NAILS. NAILS OVERDRIVEN BY MORE THAN 10% OF PANEL THICKNESS MAY BE REJECTED.
- ALL PNEUMATICALLY DRIVEN NAILS ARE TO HAVE FULL ROUND HEADS. PNEUMATIC NAILS THAT HAVE CLIPPED OR MOON SHAPED HEADS ARE NOT PERMITTED. MOST STRIP STYLE NAILERS USE CLIPPED OR MOON SHAPED HEADS. THEREFORE, ONLY COIL STYLE NAILERS THAT USE NAILS WITH FULL ROUND HEADS SHALL BE USED.



6 NAILS SHALL BE COMMON ROUND STEEL WIRE NAILS OR PNEUMATIC NAILS

	DLLOWING TABLE. NAILS M TO THE FOLLOWING

	PENNY WEIGHT	NAIL DIAMETER
2"	6d	0.113"
2 1/2"	8d	0.131"
3"	10d	0.148"
3 1/4"	12d	0.148"
3 1/2"	16d	0.162"
4"	20d	0.192"
4 1/2"	30d	0.207"
5"	40d	0.226"

NOTE: 3" X 0.131" NAILS MAY BE SUBSTITUTED FOR 3" X 0.148" NAILS PROVIDED ADDITIONAL NAILS ARE USED OR THE SPECIFIED NAIL SPACING IS REDUCED PER THE FOLLOWING TABLE:

3" X 0.148" NAIL SPACING SPECIFIED ON DRAWINGS	3" X 0.131" NAIL SPACING (20% MORE NAILS REQUIRED)
12"	10"
10"	8*
8"	6*
6"	5*
4"	3*
3"	2 1/2"
2"	NOT APPLICABLE



Read Jones Christoffersen Ltd.

SUED FOR 50% REVIEW	2024.12.20	KML
Revision	Date	Ву

1 ISS No.

- J. All d'ausings, plans, models, designs, specifications and other do prepared by Read Jones Christofferenn Ltd, FRLC¹¹, and used in connection with bits project are instruments of service for the word in them (the "Modri") and as such are and remain the property of whether the Work's area as such are and remain the property of whether the Work's is associated on root, and PLU reserves the copy them and in the Work seasouted from them, and they shall not be any other work or project.



PROPOSED COLLEGE DRIVE APARTMENTS

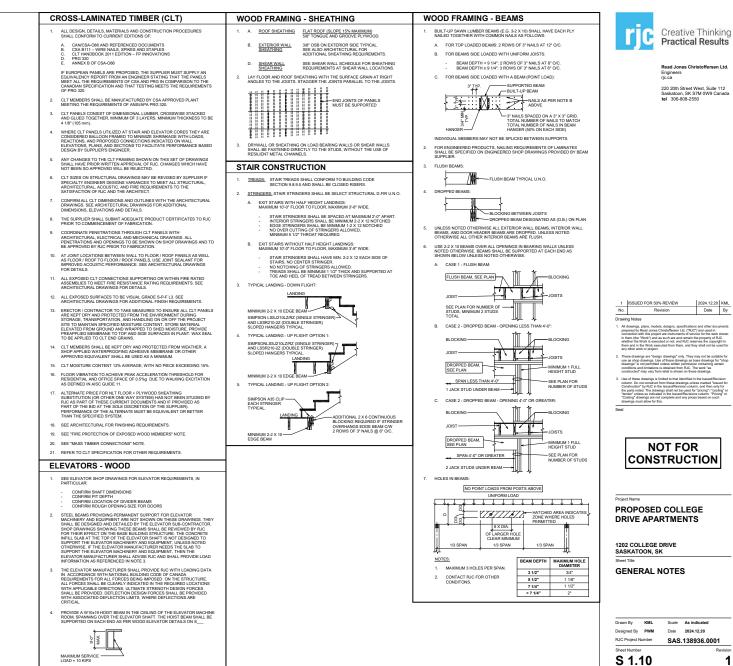
1202 COLLEGE DRIVE SASKATOON, SK

GENERAL NOTES

Drawn By	KML	Scale	As indicated
Designed By	PWM	Date	2024.12.20
RJC Project N	umber	SAS	.138936.0001

Sheet Number S 1.9

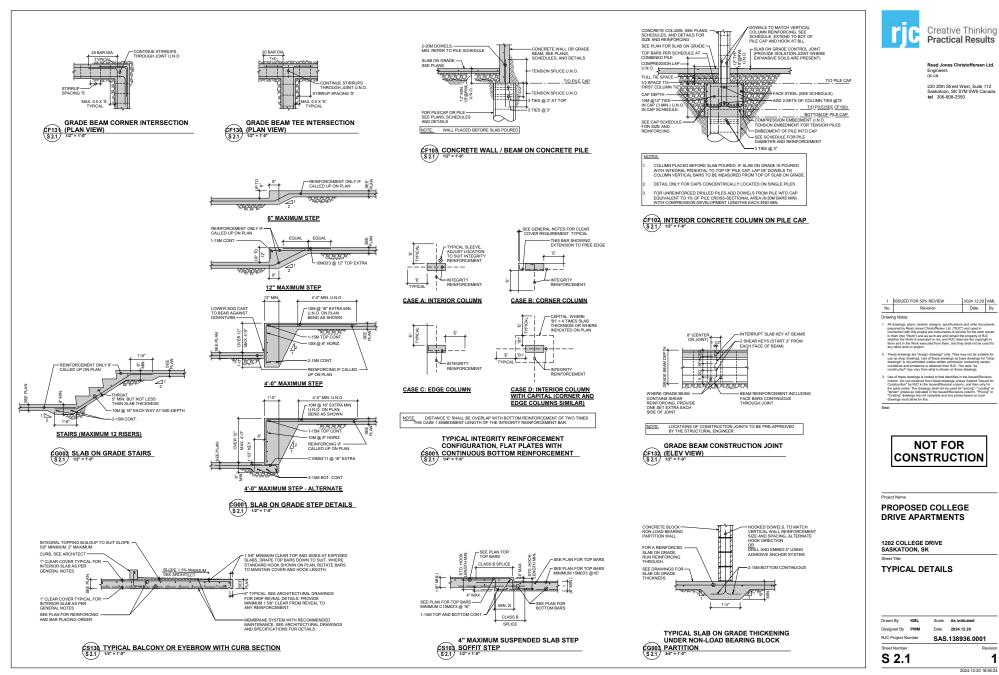
1

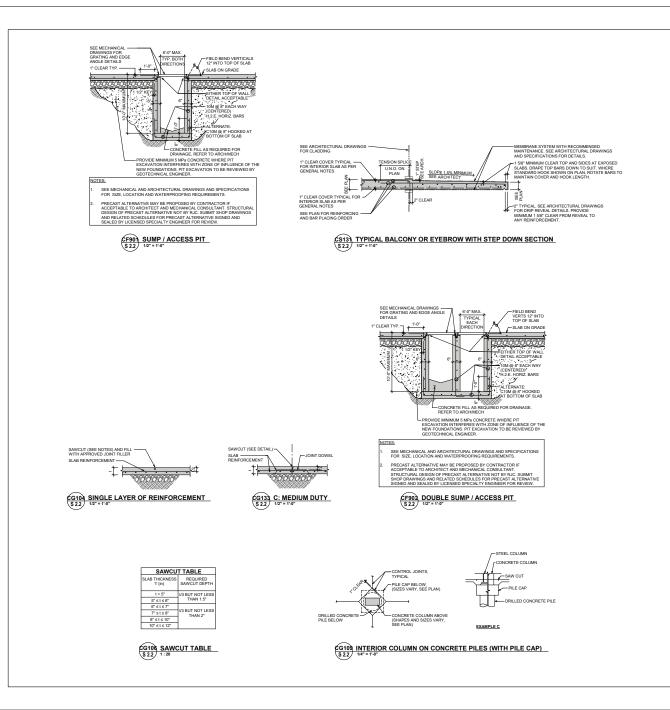


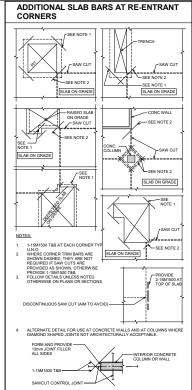














Read Jones Christoffersen Ltd.

1	ISSUED FOR 50% REVIEW	2024.12.20	KML
lo.	Revision	Date	Ву
	na Notes		

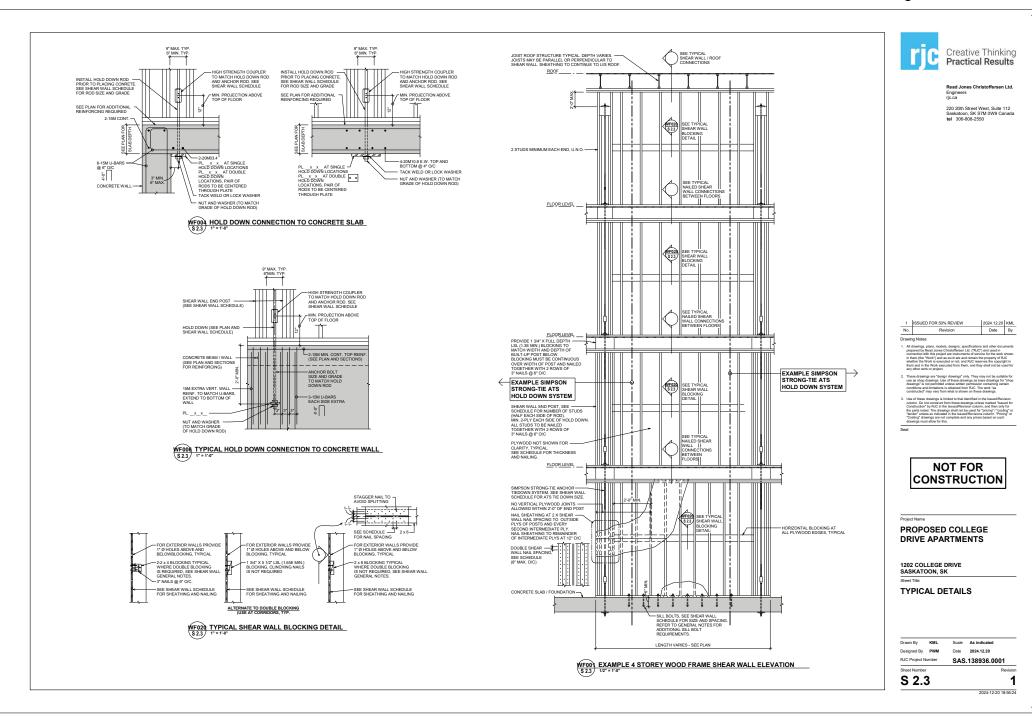


PROPOSED COLLEGE DRIVE APARTMENTS

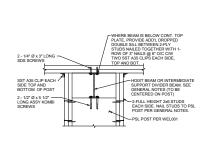
1202 COLLEGE DRIVE SASKATOON, SK

TYPICAL DETAILS

KML	Scale	As indicated
PWM	Date	2024.12.20
RJC Project Number		.138936.0001
		Revision
S 2.2		1
	PWM umber	PWM Date

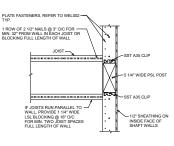


WOOD FRAME SHEAR WALL SCHEDULE NOTES SW4 SW3 SW2 SW1 LEGEND LEVEL ROW @ 4" O/C 1 ROW @ 4" O/C ROW @ 6" O/C ROW @ 6* O/C SHEAR WALLS SHOWN ON PLAN AS THUS: DO NOT LOCATE VERTICAL BUTT JOINTS IN SHEAR WALL SHEATHING WITHIN 24" OF END POST. BLOCKING / TRUSS SW TAG SHOWN ON PREFERRED SIDE OF WALL TO ATTACH SHEATHING SHEAR CLIPS T.O.W. SHEATHING NAILING END POSTS HOLD DOWN (EACH END) SILL NAILS TYPE 'A' SILL NAILS TYPE 'B' 16" O/C 7/16" OSB 1 SIDE 2 1/2" @ 4" O/C 16" O/C 7/16" OSB 1 SIDE 2 1/2" @ 4" O/C REQUIREMENTS OF WOOD FRAME LOAD BEARING WALLS APPLY TO ALL SHEAR WALLS. 7/16" OSB 1 SIDE 2 1/2" @ 6" O/C SHEAR WALL END POST (3 STUDS ON OUTSIDE, ROD, THEN REMAINDER OF STUDS ON THE INSIDE) 4-2x6 MQC5-1 1/2 1 ROW @ 4* O/C 1 ROW @ 3* O/C PROVIDE HOLD DOWN ANCHORS AS MANUFACTURED BY MITEK ONLY, UNLESS ALTERNATES ARE PRE-APPROVED BY RJC IN WRITING. 4-2x6 MQC5-1 1/4 1 ROW @ 6" O/C 1 ROW @ 5" O/C 4-2x4 MQC5-1 1/4 1 ROW @ 6" O/C 1 ROW @ 5" O/C MQC5-1 1/2 1 ROW @ 4" O/C 1 ROW @ 3" O/C NAILS SHALL BE COMMON WIRE NAILS OR PNEUMATIC NAILS THAT ARE EQUIVALENT TO THE COMMON NAIL SIZES BELOW: SIXTH FLOOR STUDS WITH OVERSIZED HOLES WILL BE REJECTED AND ARE TO BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. 10" O/C 7/16" OSB 1 SIDE 2 1/2" @ 2" O/C † 6-2x6 MQC5-1 1/2 2 ROWS @ 5" O/C # 2 ROWS @ 5" O/C # 16" O/C 7/16" OSB 1 SIDE 2 1/2" @ 4" O/C DIAMETER PENNY WEIGHT SHEAR CLIPS T.O.W. SHEATHING 7/16" OSB 1 SIDE 2 1/2" @ 4" O/C 2 1/2" 0.131 NO OPENINGS GREATER THAN 8" Ø ALLOWED THROUGH SHEAR WALL SHEATHING UNLESS PRE-AUTHORIZED BY ENGINEER OF RECORD. 6-2x6 MQC5-1 1/4 1 ROW @ 4* O/C 1 ROW @ 4* O/C 3 1/2" 0.162" 16d FOR SILL NAIL TYPES 'A' AND 'B' ARRANGEMENTS SEE TYPICAL WOOD FRAME DETAILS IN GENERAL NOTES. SILL NAILS TYPE 'A' SILL NAILS TYPE 'B' ABBREVIATIONS USED IN THE SCHEDULE: WHERE PANELS ARE APPLIED ON BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" O/C ON EITHER SIDE, PANEL JOISTS MUST BE OFFSET TO FALL ON DIFFERENT MEMBERS. 8" O/C 7/16" OSB 2 SIDES 2 1/2" @ 4" O/C 8-2x4 MQC5-1 1/2 2 ROWS @ 4" O/C # 2 ROWS @ 4" O/C # 8" O/C 7/16" OSB 2 SIDES 2 1/2" @ 4" O/C 3-2x6 SHEAR CLIPS T.O.W. SHEATHING NAILING B.S. ----- BOTH SIDES OF STUD S.S.T. ---- SIMPSON STRONG-TIE E.F.S. ---- EACH FACE STAGGERED T.O.W. ---- TOP OF WALL END POSTS
HOLD DOWN (EACH END
SILL NAILS TYPE 'A'
SILL NAILS TYPE 'B' NAILING SHOWN ON SCHEDULE APPLIES TO ALL FREE EDGES OF SHEATHING PANELS. PROVIDE NAILS AT 12" OIC ALONG INTERMEDIATE SUPPORTS. SYMBOL LEGEND: 2 ROWS @ 4" O/C # ROW @ 3* O/C 1 ROW @ 3" O/C FOURTH FLOO † DOUBLE STUDS/DOUBLE BLOCKING (SEE NOTE 5) 12" O/C 2 SIDES <>
7/16" OSB 2 SIDES
2 1/2" @ 3" O/C †
10-2x6 12" O/C 2 SIDES 0 7/16" OSB 2 SIDES 2 1/2" @ 3" O/C † 10" O/C 7/16" OSB 1 SIDE 2 1/2" @ 2" O/C † 10" O/C 7/16" OSB 1 SIDE 2 1/2" @ 2" O/C † SHEAR CLIPS T.O.W. SHEATHING # DOUBLE RIM BOARD/DOUBLE BLOCKING (SEE NOTE 6) SHEAR WALL CLIPS ON BOTH SIDES OF WALL AT STATED SPACING 10-2x6 MQC5-1 1/2 2 ROWS @ 3" O/C # 2 ROWS @ 4" O/C # THIRD FLOOR DOUBLE RIM BOARD OR DOUBLE BLOCKING IS REQUIRED WHERE TWO ROWS OF SILL NAILS "B" ARE NOTED IN THE SHEAR WALL SCHEDULE. REFER TO TYPICAL DEVALLS FOR ADDITIONAL REQUIREMENTS. 12" O/C 2 SIDES 0 7/16" OSB 2 SIDES 2 1/2" @ 3" O/C † 10-2x6 12" O/C 2 SIDES ◊ 7/16" OSB 2 SIDES 2 1/2" @ 3" O/C † 12-2x4 10" O/C 7/16" OSB 1 SIDE 2 1/2" @ 2" O/C † SHEAR CLIPS T.O.W. SHEATHING END POSTS HOLD DOWN (EACH END SILL BOLTS PROVIDE DOUBLE BOTTOM SILL PLATES FOR SHEAR WALLS SHEATHEI BOTH SIDES OR FOR FLOORS WITH CONCRETE TOPPING. ALL STUDS II MQC5-1 1/2 3/4" Ø @ 16" O/C MQC5-1 1/2 3/4" Ø @ 16" O/C SHEAR WALLS SHALL BE KILN DRIED D.FIR NO.1/NO.2 GRADE OR BETTER SECOND FLOOR



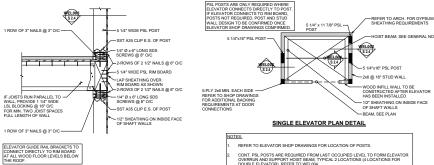
WEL004 DIVIDER BEAM TO PSL POST S 2.4 1" = 1'-0"





WEL003 ELEVATOR WALL PLAN DETAIL \$ 2.4 1" = 1'.0"

WEL002 JOISTS TO ELEVATOR WALL CONNECTION S 2.4 / 1" = 1'.0"



CONT. PSL POSTS ARE REQUIRED FROM LAST OCCUPIED LEVEL TO FORM ELEVATOR OVERRUM AND SUPPORT HOIST BEAM, TYPICAL 2 LOCATIONS (4 LOCATIONS FOR DOUBLE ELEVATOR), REFER TO WELDO4.

WEL001 ELEVATOR PARTIAL PLAN



Read Jones Christoffersen Ltd.

No. Date By

L'average protects

A di d'awaings, plans, models, designs, specifications and other documents
prepared by Read Jones Christoffersen Ltd. ("RUC") and used in
connection with its preject air mainternants of service for the work shown
in them (the "Vort") and as such are and remain the propenty of RUC
whether the Work is executed from them, and they shall not be used for
any other work or project.



PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

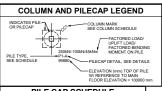
TYPICAL DETAILS

Drawn By KML Scale As indicated Designed By PWM Date 2024.12.20 RJC Project Number SAS.138936.0001

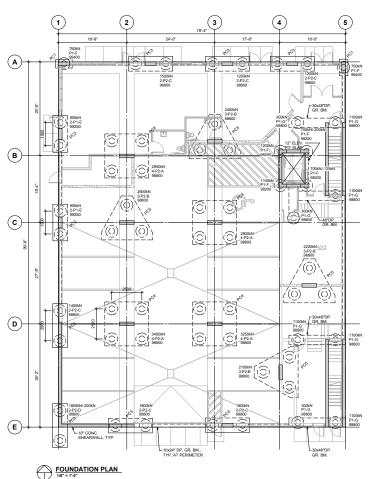
Sheet Number S 2.4

1

2024-12-20 18-56-25









Read Jones Christoffersen Ltd. Engineers rjc.ca

2024.12.20	KML	
Date		



PROPOSED COLLEGE DRIVE APARTMENTS

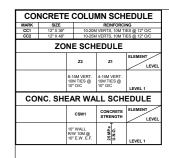
1202 COLLEGE DRIVE SASKATOON, SK

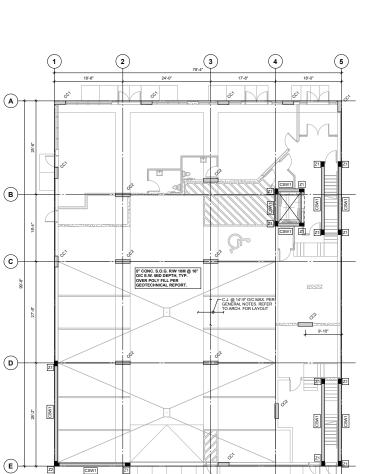
FOUNDATION PLAN

Designed By Designer Date 2024.12.20 RJC Project Number

SAS.138936.0001

S 3.1





MAIN FLOOR PLAN
1/8" = 1'-0"



Read Jones Christoffersen Ltd. Engineers rjc.ca

SUED FOR 50% REVIEW	2024.12.20	KML
Revision	Date	Ву



PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

MAIN FLOOR PLAN

Drawn By Author Scale As indicated Designed By Designer Date 2024.12.20 RJC Project Number

SAS.138936.0001

Sheet Number S 3.2

1

SLAB STRUCTURE

18" DEEP SLAB R/W 20M @ 8" EACH WAY BOTTOM

PLUS EXTRA BOTTOM BARS AS SHOWN ON THE PLAN.
CENTER EXTRA BOTTOM BARS ALONG COLUMN CENTER LINES AND SPACE
AT 4" OF ULNESS NOTED OTHERWISE ON THE PLAN. ALL BOTTOM
REINFORCING TO BE TENSION SPLICED

- 2. BAR PLACING ORDER:
- 4. TOP UPPER LAYER (T.U.L.)
- TOP LOWER LAYER (T.L.L.)
- 2. 4--- BOTTOM UPPER LAYER (B.U.L.)
- BOTTOM LOWER LAYER (B.L.L.)

CONCRETE OUTLINE LEGEND

◆ SLOPE SLAB OR SLAB BAND SOFFIT DOWN

DENOTES MECHANICAL PENETRATION THROUGH SLAB.
 SEE MECHANICAL DRAWINGS.

SHEARWALL HOLD-DOWN REINFORCING

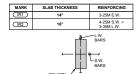
U.N.O. CENTER EXTRA REINFORCING AROUND HOLD-DOWN LOCATIONS, SPACE @ 4" O/C. U.N.O.

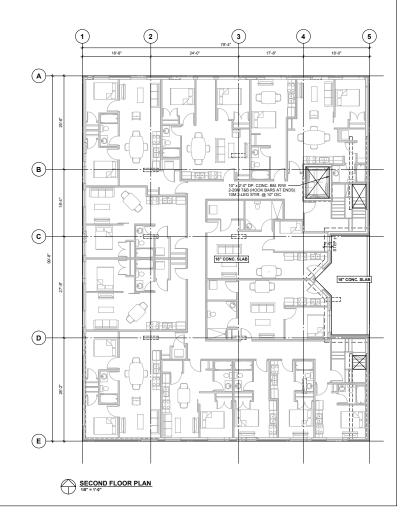
REFER TO TYPICAL SHEAR WALL HOLD-DOWN DETAILS FOR ADDITIONAL REQUIREMENTS.

CONTRACTOR TO LOCATE EXACT POSITION OF HOLD-DOWNS PRIOR TO PLACEMENT OF REINFORCING IN WALLS AND SLABS. SEE DETAILS / SECTIONS ON . IF DRILLING HOLDES THROUGH CURED SLAB, ENSURE REINFORCING WILL NOT BE INTERFERING WITH THE HOLD-DOWN BOLT LOCATION.

INTEGRITY REINFORCING

UNLESS NOTED OTHERWISE ON PLAN, ALL FLAT PLATE SLABS TO HAVE THE FOLLOWING INTEGRITY REINFORCEMENT:







Read Jones Christoffersen Ltd. Engineers rjc.ca





PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

SECOND FLOOR PLAN

Drawn By Author Scale As indicated Designed By Designer Date 2024.12.20 RJC Project Number

SAS.138936.0001

Sheet Number S 3.3

1

WOOD WALL LEGEND

DENOTES SHEAR WALL.

DENOTES LOAD BEARING WALL.

	WOOD WALL SCHEDULE					
FLOOR	EXTERIOR WALLS (2 x 6)	INTERIOR WALLS (2 x 4)	INTERIOR WALLS (2 x 6)	DOUBLE PARTY WALLS	STAGGERED STUD CORRIDOR WALLS	
SIXTH	2 x 6	2 x 4	2 x 6	2 x 4 @ 16*	2 x 4	
TO ROOF	@ 16"	@ 16*	@ 16*	(TWO WALLS)	@ 8"	
FIFTH TO	2 x 6	2 x 4	2 x 6	2 x 4 @ 16*	2 x 4	
SIXTH	@ 16"	@ 12*	@ 16*	(TWO WALLS)	@ 8"	
FOURTH	2 x 6	2-2 x 4	2 x 6	2 x 4 @ 10"	2-2 x 4	
TO FIFTH	@ 16"	@ 16*	@ 12*	(TWO WALLS)	@ 8"	
THIRD	2 x 6	2-2 x 4	2 x 6	2 x 4 @ 8*	2-2 x 4	
TO FOURTH	@ 16"	@ 12*	@ 10* *	(TWO WALLS)	@ 8" "	
SECOND	2 x 6	2-2 x 4	2-2 x 6	2 - 2 x 4 @ 12*	2-2 x 4	
TO THIRD	@ 12**	@ 10" *	@ 16" *	(TWO WALLS) *	@ 8" "	

- * DENOTES DOUBLE RIM BOARD OR DOUBLE BLOCKING IS REQUIRED IN FLOOR LEVEL ABOVE WALL (I.E. MIN. 2 1 1/4" WIDE LSL RIM BOARD / BLOCKING). REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR ADDITIONAL REQUIREMENTS.
- REFER TO "WOOD FRAMING" GENERAL NOTES AND WOOD SHEAR WALL SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- 3. ALL STUDS TO BE S-P-F NO.1/NO.2 GRADE OR BETTER.
- FOR STAGGERED STUD CORRIDOR WALLS:



WOOD FRAME SCHEDULE

wc	WOOD JOIST SCHEDULE					
DIMEN	DIMENSIONAL LUMBER JOISTS					
MARK	SIZE	TYPE	SPACING			
J1	2 x 6	SL	SEE PLAN			
J2	2×8	SL	SEE PLAN			
J3	2 x 10	SL	SEE PLAN			
J4	2 x 12	SL	SEE PLAN			

WOOD	BEAM	SCH	IEDUL	E
------	------	-----	-------	---

MARK	SIZE	TYPE	MARK	SIZE	TYPE
B1	2 x 6	SL	B6	1 3/4" x XX X/X"	LSL 1.55E
B2	2 x 8	SL	B7	1 3/4" x XX X/X"	LVL 2.0E
В3	2 x 10	SL	В8	3 1/2" x XX X/X"	PSL 2.2E
B4	2 x 12	SL	В9	5 1/4" x XX X/X"	PSL 2.2E
D.E	4.0145 0.4145	130.005	240	78 307 3707	DOI 0.05

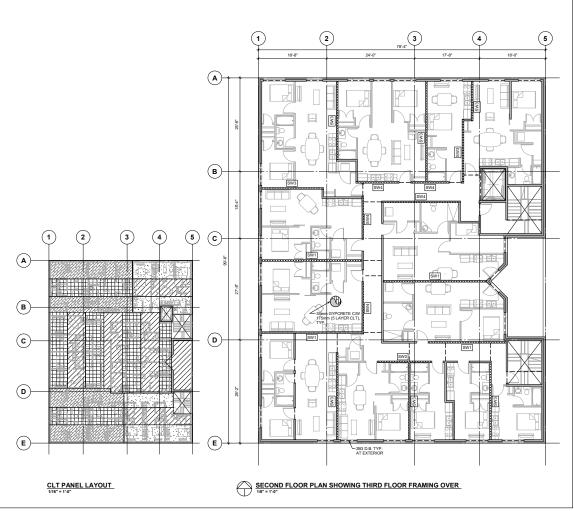
WOOD POST SCHEDULE

MARK	SIZE	TYPE	MARK	SIZE	TYPE
P1	2 x 4	SL	P5		
P2	2 x 6	SL			
P3	4 x 4	SL			
P4	6 x 6	SL			

NOTES:

- SEE PLAN FOR NUMBER OF LAMINATIONS REQUIRED. EXAMPLE: 3B1 = 3 2x6 MEMBERS
- PROVIDE NUMBER OF JACK STUDS PER GENERAL NOTES UNLESS NOTED OTHERWISE ON PLAN. WHERE ADDITIONAL JACK STUDS ARE REQUIRED THE FOLLOWING CONVENTION MILE BE USED:

 4P1-3J DENOTES 4 STUDS TOTAL, 3 OF WHICH ARE JACK STUDS.
- ABBREVIATIONS:
 SLSAWN LUMBER
 PSLPARALLEL STRAND LUMBER
 LVLLAMINATED STRAND LUMBER
 LVLLAMINATED VENEER LUMBER
- I-JOIST HANGERS TO HAVE A MINIMUM CAPACITY OF VI = 7.5 kN U.N.O. ON PLAN.
- UNLESS NOTED OTHERWISE, BEAM HANGERS TO BE AS FOLLOWS. ALTERNATE HANGERS TO BE PRE-APPROVED BY RJC AND MUST PROVIDE EQUIVALENT OR GREATER CAPACITY.





Read Jones Christoffersen Ltd.



NOT FOR CONSTRUCTION

PROPOSED COLLEGE DRIVE APARTMENTS

1202 COLLEGE DRIVE SASKATOON, SK

SECOND FLOOR PLAN SHOWING THIRD FLOOR FRAMING OVER

Drawn By Author Scale As indicated Designed By Designer Date 2024.12.20 RJC Project Number

Sheet Number

SAS.138936.0001 S 3.4 1

