

This document is protected by Copyright laws and may not be reproduced in any manner, or for any purpose, except with the written permission of Kewatin-Aski Ltd. The contractor shall check and verify all dimensions and report all errors and omissions to Kewatin-Aski Ltd. without delay before proceeding with the work.
 DO NOT scale the drawings.

ISSUED FOR TENDER

TIMBER NOTES

- WOOD CONSTRUCTION SHALL CONFORM TO CSA STANDARD 086 AND TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE.
- LUMBER, UNLESS OTHERWISE NOTED, TO BE SPRUCE SPECIES, GRADE No.2 CONFORMING TO CSA STANDARD 0141 WITH MAXIMUM MOISTURE CONTENT OF 19% AT THE TIME OF INSTALLATION. LUMBER SHALL BEAR THE GRADING STAMP OF AN AGENCY APPROVED BY THE CANADIAN LUMBER STANDARDS ADMINISTRATION BOARD.
- NAILS, SPIKES, STAPLES TO CSA STANDARD B111, GALVANIZED FOR EXTERIOR WORK, OR HIGHLY HUMID AREAS AND FOR TREATED LUMBER. PLAN ELSWHERE. NAILING OF FRAMING UNLESS OTHERWISE NOTED. SHALL CONFORM TO TABLES 9.2.3 AND 9.3 AND IN THE ONTARIO BUILDING CODE.
- METAL CONNECTORS AND ROUGH HARDWARE: BOLTS, NUTS, WASHERS, LAGS, PINS, SCREWS ALL TO BE HOT DIP GALVANIZED.
- WOOD PRESERVATIVE: WHERE REQUIRED, TO CONFORM TO CSA STANDARD 080.
- FRAMING ANCHORS: FRAMING ANCHORS, JOIST HANGERS, BEAM HANGERS, POST CAPS, POST ANCHORS, BACK-UP CLIPS AND ANGLES, UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ARE ALL TO BE AS MANUFACTURED BY TIMBER ENGINEERING COMPANY (TECO) OR APPROVED EQUAL, SIZES TO THE JOB AT HAND. ALL ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS UTILIZING "SPECIAL" NAILS WHERE REQUIRED.
- STUD WALLS: STUDS TO BE OF SIZE AND SPACING AS NOTED ON THE DRAWINGS. PROVIDE, UNLESS OTHERWISE NOTED, A MINIMUM OF TWO (2) STUDS AT CORNERS, INTERSECTIONS AND EACH SIDE OF THE OPENINGS. ALL STUDS TO BE CONTINUOUS FOR FULL STOREY HEIGHT WITH NO SPLICE. MID HEIGHT BLOCKING FOR ALL STUDS UNLESS NOTED ON DRAWINGS. PROVIDE MINIMUM TWO (2) TOP PLATES FOR LOADBEARING WALLS. PLATED TO BE LAPED OR TIED AT CORNERS AND INTERSECTIONS. NON-LOAD BEARING STUD WALLS TO CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE.
- FLOOR AND ROOF TRUSSES/JOISTS: PROVIDE TRUSSES/JOISTS OF SIZE, SPACING AND SPAN AS NOTED ON THE DRAWING. UNLESS OTHERWISE NOTED, WHERE TRUSSES/JOISTS FRAME INTO THE SIDE OF A WOOD BEAM, PROVIDE APPROPRIATE HANGERS, NAILED TO THE SIDE OF THE BEAM.
- PROVIDE DOUBLE JOIST UNDER PARTITION WALLS PARALLEL TO JOISTS (SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.)
- BRIDGING OR BLOCKING: PROVIDE CROSS BRIDGING OR SOLID BLOCKING OR APPROVED PROPRIETARY METAL STRAPS IN ACCORDANCE WITH THE ONTARIO BUILDING CODE. SPACING TO BE AT THE END AND AT 2100mm (7'-0") MAXIMUM ON TRUSSES UNLESS JOIST SPAN IS WITHIN 450mm (18") OF THE MAXIMUM SPAN PERMITTED BY THE ONTARIO BUILDING CODE, IN WHICH CASE, BRIDGING OR BLOCKING SHALL BE AT MAXIMUM 1370mm (4'-6") ON CENTRE.
- NOTCHING AND DRILLING: ONLY ALLOWED WITHIN THE LIMITATIONS SET OUT IN THE ONTARIO BUILDING CODE.
- REMOVE AND REPLACE ANY DEFECTIVE MATERIALS WHEREVER FOUND PRIOR TO FINAL ACCEPTANCE OF THE WORK.
- CONTRACTOR SHALL TEMPORARILY BRACE ALL CONSTRUCTION UNTIL ROOF AND FLOOR SHEATHING AND OTHER PERMANENT BRACING ARE IN PLACE.
- ALL TIMBER CONNECTION SHALL BE IN ACCORDANCE WITH THE REFERENCE STANDARD AND WITH GOOD CARPENTRY PRACTICE.
- ALL STEEL ANGLES OR PLATE SHALL CONFORM TO G40.21M 300W.
- ALL BOLTS SHALL BE A307 BOLTS. PROVIDE STANDARD WASHERS AT TIMBER SURFACE.
- ALL EXTERIOR TIMBER EXPOSED TO WEATHER SHALL BE PRESSURE-TREATED.

ROOF TRUSS NOTES

- ROOF TRUSSES INDICATED ON DRAWINGS SHALL BE DESIGNED FOR A SUPERIMPOSED DEAD LOAD AS INDICATED AND A SNOW LOAD IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE.
- ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER WHO SHALL ASSUME ALL RESPONSIBILITY FOR THEIR STRENGTH AND SERVICEABILITY, INCLUDING ALL NECESSARY BRACING, AND BRIDGING REQUIRED FOR THEIR STRUCTURAL INTEGRITY.
- TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE AND CSA STANDARD CAN-3-086-M89 "CODE FOR ENGINEERING DESIGN IN WOOD" TRUSS DESIGN PROCEDURES AND SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES, BY THE TRUSS PLATE INSTITUTE OF CANADA.
- TRUSSES SHALL HAVE WOOD TOP AND BOTTOM CHORDS AND EITHER WOOD OR METAL WEB MEMBERS.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO COMMENCING FABRICATION. ALLOW ONE WEEK FOR REVIEW. SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO WHO SHALL TAKE SOLE RESPONSIBILITY FOR THE DESIGN OF THE TRUSSES. REVIEW OF THESE SHOP DRAWINGS BY THE ARCHITECT OR THEIR CONSULTANTS DOES NOT ABSOLVE THIS ENGINEER OF THAT SOLE RESPONSIBILITY.
- SHOP DRAWINGS SHALL SHOW MEMBER SIZES, LENGTHS AND DIMENSIONS, WOOD TYPE AND GRADES, DESIGN LOADS REQUIRED, BRACING AND BRIDGING, AND REACTIONS TO BE CARRIED BY OTHER PORTIONS OF THE STRUCTURE.
- LIVE LOAD DEFLECTIONS:
 A. ROOF TRUSSES = L/360 MAXIMUM

PRE-ENGINEERED WOOD JOISTS NOTES

- ALL PRE-ENGINEERING WOOD JOISTS TO BE TJI-SERIES WOOD JOISTS, BY TRUS JOIST CANADA LTD., TTS "I" BEAMS BY JAGER INDUSTRIES INC., GN-SERIES BY GANG-NAIL CANADA, OR APPROVED EQUIVALENT AS APPROVED BY THE ARCHITECT/ENGINEER.
- ALL PRE-ENGINEERING WOOD JOISTS TO BE DESIGNED FOR LOADING AS SHOWN ON THE STRUCTURAL DRAWINGS.
- JOIST MANUFACTURER TO SUPPLY AND INSTALL ALL NECESSARY AND ADEQUATE HARDWARE, INCLUDING ANY JOIST HANGERS AND/OR NAILERS TO COMPLETE ALL STRUCTURAL DETAILS FOR TRANSFER OF LOADS TO STEEL BEAMS AND COLUMNS.
- PROVIDE AT LEAST 2 ROWS OF "X" BRIDGING AT 3RD POINTS OF SPAN OF JOIST FOR STIFFENING AND LOAD SHARING.
- JOIST MANUFACTURER TO SUPPLY ADEQUATE BEARING STIFFENER AT EACH END OF JOISTS FOR TRANSFER OF REACTIONS TO BEAMS OR COLUMNS.
- SUBMIT SHOP DRAWINGS TO ARCHITECT FOR REVIEW BEFORE FABRICATION. SHOP DRAWINGS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO.
- TTS, TJI OR GNI SUPPLIER SHALL PROVIDE ALL NECESSARY, TEMPORARY AND PERMANENT BRACING.
- PROVIDE DOUBLE JOISTS UNDER PARTITION WALL PARALLEL TO JOISTS. (SEE ARCHITECT DRAWINGS FOR LOCATIONS.)
- LIVE LOAD DEFLECTION:
 A. FLOOR JOISTS = L/480 OR 12mm (1/2") MAX. WHICHEVER GOVERNS.
 B. ROOF JOISTS = L/360 MAX.

PLYWOOD SHEATHING NOTES

- SHEATHING SHALL BE EXTERIOR TYPE PLYWOOD CONFORMING TO CSA 0121(08/R2013), "DOUGLAS FIR PLYWOOD" OR CSA 0151-M1919(R1998), "CANADIAN SOFTWOOD PLYWOOD".
- ALL SHEATHING IS TO BE TONGUED-AND-GROOVED.
- PLYWOOD SHEATHING SHALL BE INSTALLED WITH THE SURFACE GRAIN AT RIGHT ANGLES TO THE GRAMING AND WITH THE END JOINTS STAGGERED.
- LAYOUT PLYWOOD STAGGERED JOINT PATTERN SUCH THAT PLYWOOD SHEET IS AT LEAST TWO SPAN CONTINUOUS WHERE POSSIBLE.
- ALL END JOINTS MUST BE POSITIONED ALONG CENTRE LINE OF SUPPORT.
- PLYWOOD SHEATHING SHALL BE INSTALLED WITH AT LEAST 2mm (1/16") GAP BETWEEN SHEETS.
- FASTENERS SHALL BE SPIRAL OR RING THREAD NAILS 50mm (2") LONG MINIMUM, UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE, PLYWOOD SHEATHING SHALL BE NAILED TO SUPPORTS AT 150mm (6") MAXIMUM ALONG EDGES AND 250mm (10") MAXIMUM ALONG INTERMEDIATE SUPPORTS.

COLD WEATHER REQUIREMENTS

CONFORM TO CSA-A23.1-14.
 THE FOLLOWING MINIMUM REQUIREMENTS MUST ALSO BE MET.

- FORECAST AIR TEMPERATURE NOT BELOW 2°C.
 A. IF THE CONCRETE TEMPERATURE DROPS BELOW 5°C AT THE POINT OF POURING, THE MIXING WATER SHALL BE HEATED TO MAINTAIN A MINIMUM CONCRETE TEMPERATURE OF 10°C.
 B. CONCRETE SHALL NOT BE PLACED ON OR AGAINST ANY SURFACE WHICH IS AT A TEMPERATURE OF LESS THAN 5°C.
 C. THE CONTRACTOR SHALL BE PREPARED TO COVER THE SLAB IF AN UNEXPECTED DROP IN AIR TEMPERATURE SHOULD OCCUR.
 D. THE CONCRETE TEMPERATURE SHALL BE MAINTAINED ABOVE 10°C FOR AT LEAST 3 DAYS OR UNTIL THE CONCRETE REACHES A STRENGTH OF 7MPa.
- FORECAST AIR TEMPERATURE BELOW 2°C BUT NOT BELOW -4°C.
 A. FORMS AND STEEL SHALL BE FREE FROM ICE AND SNOW.
 B. MIXING WATER SHALL BE HEATED TO MAINTAIN A MINIMUM CONCRETE TEMPERATURE OF 10°C AT THE POINT OF POUR.
 C. CONCRETE SHALL NOT BE PLACED ON OR AGAINST ANY SURFACE WHICH IS AT A TEMPERATURE OF LESS THAN 5°C.
 D. SLABS SHALL BE COVERED WITH CANVAS OR SIMILAR MATERIAL, KEPT CLEAR OF BUT CLOSE TO THE CONCRETE SURFACE.
 E. IN WINDY WEATHER, STOREY BELOW SLAB SHALL BE ENCLOSED, ESPECIALLY WITH PANSLABS.
 F. PROTECTION SHALL BE MAINTAINED FOR AT LEAST 3 DAYS.
 G. CONCRETE TEMPERATURE SHALL BE MAINTAINED ABOVE 10°C FOR AT LEAST 3 DAYS OR UNTIL THE CONCRETE REACHES A STRENGTH OF 7MPa.
- FORECAST AIR TEMPERATURE BELOW -4°C.
 A. THE STOREY BELOW SHALL BE ENCLOSED AND ARTIFICIAL HEAT PROVIDED. HEATING SHALL BE STARTED AT LEAST ONE HOUR BEFORE POURING, AND SHALL BE MAINTAINED FOR AT LEAST 3 DAYS AFTER POURING.
 B. THE CONCRETE TEMPERATURE AT ALL SURFACES SHALL BE MAINTAINED ABOVE 20°C FOR AT LEAST 3 DAYS, OR ABOVE 10°C FOR AT LEAST 7 DAYS. CONCRETE SHALL BE MAINTAINED ABOVE FREEZING TEMPERATURES UNTIL THE CONCRETE REACHES A STRENGTH OF 17MPa.
 C. THE ENCLOSURE SHALL BE CONSTRUCTED IN SUCH A WAY THAT AIR CAN CIRCULATE OUTSIDE THE OUTER EDGES AND MEMBERS.

DRILLED ANCHORS AND DOWELS

- DRILLED ANCHORS SHALL BE STAINLESS STEEL HWY TYPE AS MANUFACTURED AND DISTRIBUTED BY HILTI CANADA LTD., 99 GILDEN ROAD, BRAMPTON, ONTARIO.
- ANCHORS ARE TO BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURERS RECOMMENDATIONS.
- DOWELS SHOWN ON THE DRAWINGS ARE TO BE DEFORMED BAR GRADE G30, 18M 400MPa, UNLESS NOTED OTHERWISE.
- EMBED ALL DOWELS INTO EXISTING CONCRETE TO DEPTH SHOWN ON THE DRAWING. MINIMUM EMBEDMENT SHALL BE 150mm.
- GROUT ALL DOWELS WITH SIKADUR 32 HI MOD EPOXY BY SIKA CANADA INC. OR HILTI, C-100 GROUT. MINIMUM EMBEDMENT SHALL BE 150mm.

EMBEDMENT OF DOWELS

WHERE EMBEDMENT IS DIMENSIONED ON THE DRAWINGS, SUCH DIMENSION SHALL APPLY.

WHERE THE DRAWINGS INDICATE COMPRESSION EMBEDMENT OR WHERE NO EMBEDMENT TYPE IS CALLED FOR, IT SHALL BE AS NOTED BELOW FOR CONSTRUCTION EMBEDMENT.

WHERE THE DRAWINGS INDICATE TENSION EMBEDMENT, IT SHALL BE AS NOTED BELOW FOR TENSION EMBEDMENT.

ALL EMBEDMENT LENGTHS ARE FOR GRADE 400 REINFORCING STEEL.

LENGTHS: mm (INCHES)

BAR SIZE	COMPRESSION EMBEDMENT			TENSION EMBEDMENT		
	20MPa	25MPa	30MPa & OVER	20MPa	25MPa	30MPa 35MPa 40MPa
10M	240 (10")	220 (9")	200 (8")	300 (12")	300 (12")	300 (12")
15M	340 (14")	310 (12")	280 (11")	370 (15")	370 (15")	370 (15")
20M	420 (17")	370 (15")	340 (14")	510 (20")	450 (18")	450 (18")
25M	540 (21")	480 (19")	440 (17")	850 (33")	750 (30")	640 (26")
30M	640 (25")	570 (22")	530 (21")	1190 (47")	1060 (42")	970 (38")
35M	770 (30")	690 (27")	630 (25")	1700 (67")	1520 (60")	1380 (54")

LIST OF ABBREVIATIONS

A.F.F	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AH	ACCESS HATCH	MIN.	MINIMUM
ALUM	ALUMINUM	N.T.S.	NOT TO SCALE
ARCH	ARCHITECTURAL	O.D.	OUTSIDE DIAMETER
B.	BOTTOM	OH	OVERHEAD
B.L.L.	BOTTOM LOWER LEVEL	OP	OPENING
B.U.L.	BOTTOM UPPER LEVEL	PD	PREFAB
CC	CENTER TO CENTER	PREFAB	PREFABRICATED
CHKD	CHECKED/REVIEWED	PREFN.	PRESSURE TREATED
CNC	CONCRETE	REF.	REINFORCED
CONT.	CONTINUOUS	SEC.	SECTION
CW	COMPLETE WITH	SEF	STEPPED FOOTING
DEP	DEEP	S.P.D.	STANDARD PROCTOR DENSITY
EL	ELEVATION	STR.	STRUCTURAL
EA	EACH	T.	TOP
EQUIP.	EQUIPMENT	THK.	THICK
E.W.	EACH WAY	T.L.L.	TOP LOWER LEVEL
EX.	EXISTING	T.U.L.	TOP UPPER LEVEL
EXT.	EXTERIOR	T/O	TOP OF
F.D.	FLOOR DRAIN	TYP.	TYPICAL
FIN.	FINISH/FINISHED	UNL.	UNLESS NOTED OTHERWISE
F.O.T.G.	FOOTING	US	UNDERSIDE
FON.	FOUNDATION	V.E.F.	VERTICAL EACH FACE
GWB	GYPSSUM BOARD	VER.	VERTICAL
H.	HIGH	V.I.F.	VERTICAL INSIDE FACE
H.P.	HORIZONTAL EACH FACE	WT	WATER TREATMENT
INT.	INTERIOR	W	WOOD
LG	LONG	WI	WITH
MAX.	MAXIMUM	WD	WOOD

FOUNDATION NOTES

- FOOTING HAVE BEEN DESIGNED FOR THE FOLLOWING ALLOWABLE (WORKING STRESS) BEARING PRESSURES IN ACCORDANCE WITH THE SOIL REPORT PREPARED BY DST CONSULTING ENGINEERS.
 A. STRIP FOOTINGS
 B. SPREAD FOOTINGS
 C. MAT FOUND.
 $f_{SOIL} = 60 kPa$
- BEARING SURFACES MUST BE APPROVED BY THE SOLS ENGINEER IMMEDIATELY BEFORE FOOTING CONCRETE IS PLACED.
- REFER TO SOLS REPORT FOR OTHER SPECIFIC DESIGN REQUIREMENTS FOR FOOTINGS, SOIL SLOPES, FROST PROTECTION, MINIMUM COVER, ETC.
- UNLESS OTHERWISE SHOWN, CENTER FOOTINGS UNDER COLUMNS.
- DOWELS SHALL BE PLACED BEFORE CONCRETE IS PLACED. TEMPLATES SHALL BE USED TO ENSURE CORRECT PLACEMENT OF DOWELS.
- PROVIDE 50mm GROUND SEAL UNDER FOOTINGS AS REQUIRED BY SOIL CONDITIONS.
- FOR GROUND ELEVATIONS AND DRAINAGE SLOPES, SEE SITE PLAN DRAWINGS.
- VARY FOOTING ELEVATIONS WHERE REQUIRED IN ACCORDANCE WITH DETAIL FOR "TYPICAL STEPPED FOOTING", SHOWN ON STRUCTURAL DRAWINGS
- FOOTINGS MAY HAVE TO BE LOWERED TO ACCOMMODATE MECHANICAL OR ELECTRICAL SERVICES. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ELEVATIONS OF SAME. FOOTINGS ARE NOT TO BE UNDERMINED BY EXCAVATIONS FOR SERVICES, PITS, ETC.
- FOOTING ELEVATIONS IF SHOWN ARE NOT FINAL AND MAY VARY ACCORDING TO SITE CONDITIONS. ALL FOOTINGS MUST BE TAKEN TO A BEARING LAYER APPROVED BY THE SOLS ENGINEER.
- BEARING SURFACES MUST BE PROTECTED FROM FREEZING BEFORE AND AFTER FOOTING ARE POURED.
- CONCRETE PLACED UNDER WATER SHALL CONFORM TO CAN3-A23.1-M80.

STRUCTURAL STEEL NOTES

- DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL WORK SHALL BE IN ACCORDANCE WITH CAN 3-S1631-09. ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR UNLESS OTHERWISE NOTED.
- MATERIAL SHALL CONFORM TO THE FOLLOWING STANDARDS:
 ROLLED SECTIONS CSA G40.21M-350 W
 HSS SECTIONS CSA G40.21M-350 W CLASS C
- WELDING SHALL CONFORM TO CSA STANDARD W59 AND SHALL ONLY BE PERFORMED BY OPERATORS CERTIFIED UNDER CSA W47.1.
- BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM-A325-78C FOR HEAVY HEXAGONAL STRUCTURAL BOLTS. FIELD-BOLTED CONNECTIONS TO BE BEARING TYPE. BOLTS MINIMUM 20mm DIAMETER.
- ANCHOR BOLTS SHALL BE LOCATED IN THE FIELD FROM ERECTION DIAGRAMS. ANCHOR BOLTS SHALL CONFORM TO ASTM-A307, UNLESS NOTED OTHERWISE.
- ERECTION DIAGRAMS AND SHOP DRAWINGS PREPARED IN ACCORDANCE WITH CSA S16.1 SHALL BE SUBMITTED FOR REVIEW BEFORE FABRICATION COMMENCES. SHOP DRAWINGS SHALL BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER IN THE PROVINCE OF ONTARIO FOR ADEQUACY OF ALL CONNECTION DETAILS.
- STEEL JOISTS ARE TO BE DESIGNED FOR ALL LOADS NOTED IN THE DRAWINGS.
- PROVIDE ANGLES AT SIDES OF COLUMNS WHERE REQUIRED FOR SUPPORT OF INTERRUPTED DECK. ALL ANGLES SHALL BE L55x65x6 UNLESS SHOWN OTHERWISE.
- PROVIDE FRAMING FOR ALL OPENINGS IN DECK LARGER THAN 450mm WITH C150x12.
- PROVIDE FRAMING UNDER ROOF TOP "M" AND "E" UNITS WITH C200x17, OR L100x100x10
- ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED. BOLTS, FIELD WELDS AND ABRASIONS TO SHOP COAT SHALL BE FIELD PAINTED.
- NO HOLES SHALL BE PERMITTED IN STRUCTURAL STEEL EXCEPT THOSE SHOWN ON THE STRUCTURAL DRAWINGS.
- ALL FORCES SHOWN ON PLANS ARE FACTORED LOADS, UNLESS NOTED OTHERWISE.
- STEEL FRAMING SHALL PROVIDE ROOF DRAINAGE SLOPES AS INDICATED ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS.

CONCRETE NOTES

- A. ALL CONCRETE SHALL COMPLY TO REQUIREMENTS OF CSA A23.1-14 EXCEPT CONCRETE FOR WATER CONTAINMENT STRUCTURES, WHICH SHALL COMPLY TO REQUIREMENTS OF ACI 308R-89. CONCRETE SHALL BE STONE CONCRETE WITH A UNIT WEIGHT OF 23.8 kN/m³ (150 LBC/F).
 B. ALL CONCRETE FOR PARKING STRUCTURE SHALL COMPLY TO REQUIREMENTS OF S413-84.
 C. ALL CONCRETE HAVING C-1 EXPOSURE SHALL HAVE A MINIMUM CEMENTING MATERIAL CONTENT OF 320 kg/m³.
- THESE ARE MINIMUM REQUIREMENTS FOR CONCRETE UNLESS HIGHER STRENGTH IS REQUIRED BY SCHEDULES ON DRAWINGS.
- | | MIN 28 DAY STRENGTH (MPa) | MAX. AGG SIZE (mm) | WATER CEMENT RATIO | EXPOSURE CLASS | SUMP (mm) | AIR ENTR. |
|---|---------------------------|--------------------|--------------------|----------------|-----------|-----------|
| SPREAD FOOTINGS, WALLS, COLUMNS, SLABS, BEAMS, STAIRS, BASEMENT WALLS, (EXPOSED TO CHLORIDES) | 30 | 20 | 0.4 | C-1 | 70 | 5.0% |
| PERIMETER BASEMENT WALLS AND FOOTINGS | 30 | 20 | 0.4 | F-1 | 70 | 5.0% |
| SLAB ON GRADE (EXPOSED TO CHLORIDES) | 32 | 20 | 0.45 | C-2 | 70 | 5.0% |
- BUILDING STRUCTURE**
 EXTERIOR CONCRETE WALLS & COLUMNS EXPOSED TO FREEZING:
 25 20 0.55 F-2 70 5.0%
- ALL OTHER STRUCTURAL CONCRETE
 25 20 0.4 N 70 -
- NOTES:
 A. PUMP MIX SLUMPS SHALL ALSO CONFORM TO THE ABOVE
 B. WATER CEMENTING MATERIAL RATIOS FOR EXPOSURE CLASSES SHALL BE AS PER TABLE 7, 8 & 9 CSA-A23.1-14
 C. AIR CONTENTS FOR EXPOSURE CLASSES AND AGGREGATE SIZES SHALL BE AS PER TABLE 10 CSA-A23.1-14.
 D. SLUMP TOLERANCES SHALL BE ±20mm FOR SLUMPS LESS THAN 80mm AND ±30mm OTHERWISE.

2. ALL BOTTOM EDGES OF EXPOSED SLABS AND BEAMS, AND ALL EXPOSED COLUMN AND WALL EDGES SHALL BE BEVELED 20x20 (3/4"x3/4")
3. NO CALCIUM CHLORIDE, IN ANY FORM, IS PERMITTED IN ANY CONCRETE MIX.
4. CURING AND PROTECTION OF CONCRETE FOR HOT, COOL OR DRY WEATHER SHALL BE IN ACCORDANCE WITH CSA-A23.1-M84 - CHAPTER 21. FOR COLD WEATHER SEE ALSO "COLD WEATHER REQUIREMENTS" ON THE STRUCTURAL DRAWINGS.
5. MINIMUM WET CONCRETE CURING PERIOD TO BE 7 DAYS.

REINFORCING NOTES

- REINFORCEMENT SHALL BE BILLET STEEL CONFORMING TO THE FOLLOWING STANDARDS:
 A. C.S.A. G30.18 M - GRADE 400 MPa - 10M AND LARGER
 B. C.S.A. G30.15 - WELDED WIRE MESH
 C. C.S.A. G30.15 - DEFORMED WELDED WIRE MESH
 D. ASTM A775 - EPOXY REINFORCING
- CONCRETE COVER:
 UNLESS NOTED OTHERWISE ON THE DRAWINGS, CONCRETE COVER IN mm (inches) OVER REINFORCEMENT SHALL BE AS LISTED BELOW:
 EXPOSURE TO EARTH AND WEATHER EXPOSED NOT EXPOSED
 A. SURFACE PLACED IN CONTACT WITH GROUND 75 (3") -
 B. BEAMS, GIRDERS, COLUMNS AND PILES 50 (2") 40 (1 1/2")
 PRINCIPAL BARS, SMALLER THAN No.35 40 (1 1/2") 30 (1 1/4")
 TIES, STIRRUPS AND SPIRALS
 C. SLABS, WALLS, JOISTS, SHELS 50 (2") 40 (1 1/2")
 No. 20 AND SMALLER 1.5 db 1.0db
 LARGER THAN No.20
- DETAILING, FABRICATION AND PLACING OF REINFORCEMENT TO CONFORM TO CAN3-A23.1, CONCRETE MATERIALS AND METHODS OF CONSTRUCTION.
- LOCATION AND DETAILS OF CONSTRUCTION JOINTS TO BE ESTABLISHED WITH ENGINEER WELL IN ADVANCE OF CONSTRUCTION BY SUBMISSION OF SHOP DRAWINGS.
- SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION.
- HAVE ENGINEER TO REVIEW PLACING OF REINFORCING BARS PRIOR TO CONCRETING. PROVIDE NOTICE TO ENGINEER MIN. 3 DAYS PRIOR TO REQUIRED REVIEW.
- PROVIDE SLEEVES FOR DUCTS, PIPING AND CONDUITS THROUGH CONCRETE AS INDICATED ON DRAWINGS OR AS REQUIRED BY OTHER TRADES.
- PROVIDE SHOP DRAWINGS SHOWING LAYOUT OF ALL IN-SLAB ELECTRICAL CONDUITS TWO WEEKS IN ADVANCE OF PLACEMENT OF CONCRETE.

STRIPPING NOTES

- NO COLUMN OR WALL FORMS SHALL BE REMOVED BEFORE CONCRETE HAS REACHED 10MPa FOR ARCHITECTURAL CONCRETE OR 8MPa FOR OTHER COLUMNS OR WALLS.
- NO SLAB FORMS OR BEAM FORMS SHALL BE REMOVED BEFORE CONCRETE HAS REACHED 17MPa.
- STRENGTH OF CONCRETE FOR STRIPPING SHALL BE DETERMINED BY FIELD-CURED CYLINDERS. ALTERNATE METHODS, IF ACCEPTABLE TO THE STRUCTURAL ENGINEER, MAY BE USED.
- RESHORING SHALL BE SUBMITTED FOR REVIEW BY THE ENGINEER PRIOR TO STRIPPING. REVIEW IS ONLY FOR EFFECT ON THE PERMANENT STRUCTURE.
- ALL SHALBS, BEAMS, GIRDERS ETC. SHALL BE SHORED UNTIL CONCRETE REACHES 75% OF ITS DESIGN STRENGTH.
- ALL CONCRETE FORMWORK, INCLUDING SONO-TUBE PIER FORMS, TO BE STRIPPED AND REMOVED.

GENERAL NOTES

- THIS SET OF DRAWINGS SHOWS THE COMPLETED PROJECT. IT DOES NOT INCLUDE COMPONENTS THAT MAY BE NECESSARY FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY IN AND ABOUT THE JOB SITE DURING CONSTRUCTION, AND FOR THE DESIGN AND ERECTION OF ALL TEMPORARY STRUCTURES, SUCH AS FORMWORK, FALSE WORK AND SHORING, REQUIRED TO COMPLETE THE WORK.
- THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISIONS COLUMN. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION" BY KEEWATIN-ASKI LTD.
- SPECIFIED (UNFACTORED) DESIGN LOADS:

DISTRIBUTED LOADS:	LIVE LOAD [kN/m2]	SUPERIMPOSED DEAD LOAD [kN/m2 (PSF)]
ROOF - BASIC GROUND SNOW PLUS RAIN	2.3 (48)	1.0 (20)
ROOF - TYPICAL ACCESSIBLE AREAS	1.5 (30)	1.5 (30)
MECH. ROOM	7.2 (150)	2.4 (50)
EXITS, CORRIDORS, STAIRS	4.8 (100)	-
SLAB ON GRADE	7.2 (150)	1.5 (30)
LIVING AREAS	1.9 (40)	1.0 (20)

CONCENTRATED LOADS:	LIVE LOAD KN (KIPS)
APPLIED AREA = 750 x 750 mm (30" x 30")	1.3 (0.3)
ROOF FLOORS, UNLESS NOTED OTHERWISE	9.0 (2.0)
- SUPERIMPOSED DEAD LOADS ARE DEAD LOADS DUE TO NON-STRUCTURAL ELEMENTS, SUCH AS FINISHED, PARTITIONS AND ROOFING MATERIALS.
 CONSTRUCTION LOADS MUST NOT EXCEED THE ABOVE DESIGN LOADS, AND DESIGN LOADS MAY ONLY BE APPLIED AFTER CONCRETE REACHES ITS DESIGN STRENGTH.
- LATERAL STABILITY:
 THE CONSTRUCTION STRUCTURE HAS BEEN DESIGNED TO RESIST FORCES DUE TO WIND AND EARTHQUAKE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE - 1997
- SEE ARCHITECTURAL DRAWINGS FOR FLOOR AND ROOF ELEVATIONS, RECESSED, DRAINAGE SLOPES, ETC.
- THE GENERAL CONTRACTOR SHALL REVIEW ALL THE DRAWINGS AND CHECK DIMENSIONS BEFORE CONSTRUCTION. REPORT DISCREPANCIES BETWEEN STRUCTURAL DRAWINGS AND DRAWINGS OF OTHER DISCIPLINES FOR CLARIFICATION.
- CONCRETE WORK SHALL CONFORM TO CAN3-A23.1-M84, A23.3-M84 AND DOCUMENTS REFERENCED THEREIN.
- STRUCTURAL STEEL WORK SHALL CONFORM TO CAN3-S16.1 AND DOCUMENTS REFERENCED THEREIN.
- ALL DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS ARE FOR DESIGN REFERENCE ONLY. CONTRACTOR TO FOLLOW ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS, AND TO REPORT ANY DISCREPANCIES TO THE ENGINEER AND THE ARCHITECT PRIOR TO FABRICATION OR CONSTRUCTION.
- SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FIRE RESISTANCE RATINGS.
- OPENINGS TO BE CUT OR DRILLED THROUGH STRUCTURAL ELEMENTS SHALL BE SUBMITTED TO CONSULTANT FOR REVIEW.
- DO NOT CUT OR DRILL ANY OPENINGS IN STRUCTURAL MEMBERS WITHOUT WRITTEN PERMISSION FROM KEEWATIN-ASKI LTD.
- SECTION MARK SHOWN THUS $\frac{4}{S3}$ DENOTE SECTION 4 ON DRAWINGS S3
- DRAWINGS NOT TO BE SCALED. WORK TO DIMENSIONS ONLY.

TEMPORARY WORKS

- THE CONTRACTOR SHALL DESIGN, PROVIDE, ERECT, MAINTAIN, REMOVE AND ASSUME FULL AND SOLE RESPONSIBILITY FOR ALL TEMPORARY WORKS REQUIRED FOR THE SAFE AND COMPLETE EXECUTION OF THE WORKS.
- IN THE EXECUTION OF THE TEMPORARY WORKS AND FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION FOR ALL LIKELY CONSTRUCTION LOADING AND PROVIDE SUFFICIENT BRACING AND PROPS TO KEEP THE WORKS IN PLUMB AND ALIGNMENT AND FREE FROM EXCESSIVE DEFLECTION.
- ACCESS FOR HEAVY CONSTRUCTION EQUIPMENT AND ACCUMULATION OF CONSTRUCTION MATERIALS ON THE FLOORS ARE NOT PERMITTED, UNLESS SUCH HAVE BEEN CATERED FOR IN THE CONTRACTOR'S TEMPORARY WORKS DESIGN TO THE SATISFACTION OF THE ARCHITECT.
- COSTS OF ALL TEMPORARY WORKS ARE DEEMED TO HAVE BEEN INCLUDED IN THE CONTRACT PRICES.
- SUBMIT SHOP DRAWINGS FOR ALL TEMPORARY WORKS FOR REVIEW BEFORE FABRICATION COMMENCES. SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO.
- ANY CONSTRUCTION SEQUENCE SHOWN ON THE DRAWINGS SHALL BE PART OF TEMPORARY WORKS AND ARE FOR THE CONTRACTOR'S CONSIDERATION ONLY. THE CONTRACTOR IS AT LIBERTY TO USE ANY OTHER SEQUENCE AS DEEMED APPROPRIATE, BUT AT NO TIME SHALL THE SAFETY AND INTEGRITY OF THE WORKS BE COMPROMISED. IF THE CONTRACTOR ADAPTS THE SUGGESTED SEQUENCE, SUCH SEQUENCE SHALL BE DEEMED AS THE CONTRACTOR'S OWN SELECTION OF METHOD, AND THE CONTRACTOR SHALL ASSUME FULL AND SOLE RESPONSIBILITY FOR IT, AS STATED IN (1) ABOVE. THE CONTRACTOR SHALL INFORM THE ARCHITECT IF THEY WISH TO DEVIATE FROM ANY SUGGESTED SEQUENCE.

SITE REVIEW RESPONSIBILITIES

KEEWATIN-ASKI LIMITED ("KAL") WILL PROVIDE GENERAL REVIEW OF CONSTRUCTION IN ACCORDANCE WITH THE PERFORMANCE STANDARDS OF THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF ONTARIO BY MEANS OF RATIONAL SAMPLING PROCEDURE TO DETERMINE WHETHER THE CONSTRUCTION OF THAT WORK SHOWN ON THE KAL DRAWINGS IS IN GENERAL CONFORMITY WITH THE PLANS, SKETCHES, DRAWINGS, SPECIFICATIONS FORMING PART OF THE CONTRACT DOCUMENTS PREPARED BY KAL. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR QUALITY CONTROL AND THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT. KAL SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

SHOP DRAWING REVIEW RESPONSIBILITIES

AS PART OF THEIR FIELD SERVICES, KAL WILL REVIEW SHOP DRAWINGS PERTAINING TO WORK SHOWN ON KAL'S DRAWINGS BY MEANS OF APPROPRIATE RATIONAL SAMPLING PROCEDURES AND COMMENT ON THE ACCURACY WITH WHICH THE CONTRACTOR PREPARED THE DRAWINGS. REVIEW OF SHOP DRAWINGS IS FOR THE SOLE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT AND IS NOT AN APPROVAL OF THE DETAIL DESIGN INHERENT IN THE SHOP DRAWINGS. RESPONSIBILITY FOR WHICH SHALL REMAIN WITH THE CONTRACTOR SUBMITTING THEM. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR ERRORS AND OMISSIONS IN THE SHOP DRAWINGS OR FOR MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INFORMATION PERTAINING TO THE FABRICATION PROCESS TECHNIQUES OF CONSTRUCTION AND INSTALLATION AND FOR CO-ORDINATION OF THE WORK OF ALL SUB-TRADES.

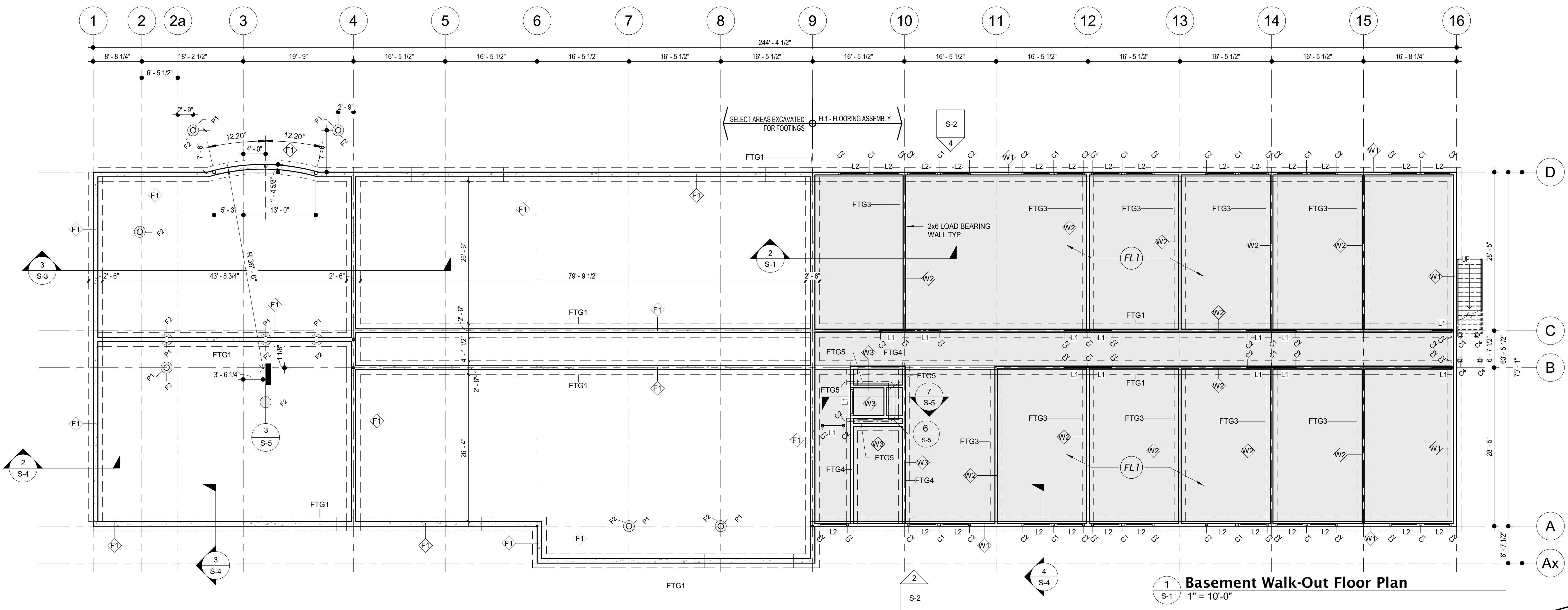
CONSTRUCTION TOLERANCES

CONSTRUCTION TOLERANCES SHALL CONFORM TO CAN3-A23.1-M84, EXCEPT AS NOTED BELOW.

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

- VARIATION FROM THE PLUMB:
 A. IN THE LINES AND SURFACES OF COLUMNS, PIERS, WALLS AND IN ARRISES:
 0.25% OF HEIGHT (1 IN 400), MAXIMUM 40mm (1 1/2"). ONLY ONE CURVATURE PER 3000mm (10'-0"). THE TOLERANCE GIVEN IS THE MAXIMUM VARIATION



Basement Walk-Out Floor Plan
 1" = 10'-0"

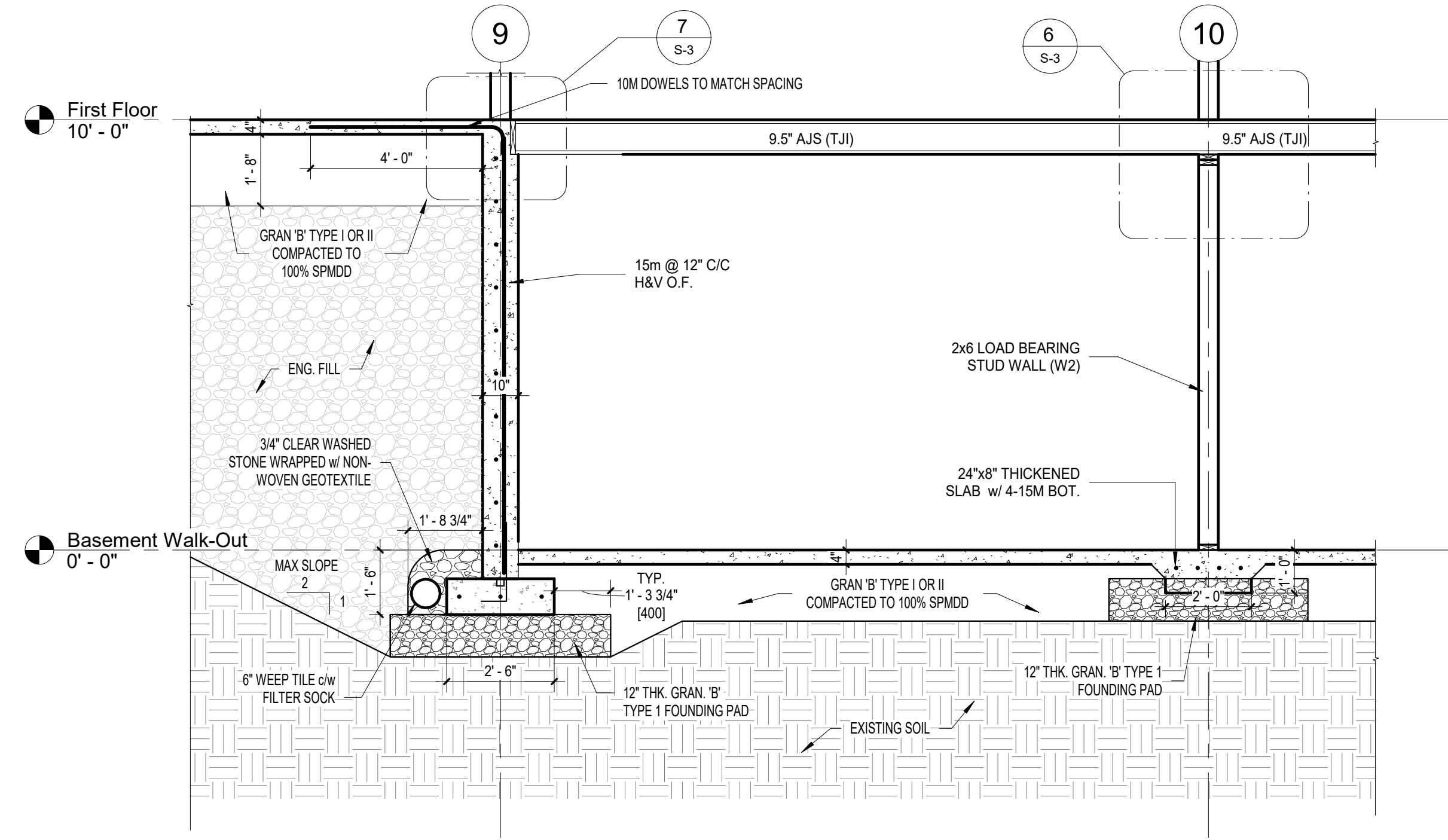
- FL1** REIN. CONCRETE SLAB ON GRADE
 4" THK CONC. SLAB ON GRADE REINF. W/
 4x4-44 MW18.7xMW18.7 WWF AND MIN 8" THK
 LAYER OF 3/4"mm CLEARSTONE TYPE 1 PER
 OPSS ON NON-WOVEN GEOTEXTILE
- F1** REIN. CONCRETE FOUNDATION WALL
 10" C.I.P. CONCRETE FOUNDATION WALL c/w
 15M @ 16" C/C HORIZ. & VERT.
- W1** EXTERIOR LOAD BEARING WALL
 2x6 WD. STUD @ 16" O.C.
 1/2" EXT. GRADE PLYWOOD SHEATHING
- W2** INTERIOR LOAD BEARING WALL
 2x6 WD. STUD @ 16" O.C.
- W3** INTERIOR LOAD BEARING WALL - SHAFT
 2x6 WD STUD @ 12" O.C.
 5/8" PLYWOOD SHEATHING

LEGEND

- 4'-0" TOP OF FOOTING / SLAB SPOT ELEVATION
- SF STEPPED FOOTING
- 1 A101 DETAIL NO. DETAIL MARK SHEET NO.
- 1 A101 SECTION NO. SECTION MARK SHEET NO.
- 12'-1" DIMENSIONS TIED TO GRID/CENTER LINES
- 12'-0.78" OTHER DIMENSIONS

ISSUED FOR TENDER

No.	Description	Date
1	ISSUED FOR REVIEW	2020-01-14
2	ISSUED FOR REVIEW	2020-02-21
3	ISSUED FOR 90% REVIEW	2021-01-06
4	ISSUED FOR 99% COORDINATION	2021-02-26
5	ISSUED FOR TENDER	2021-03-26



2 TYPICAL BASEMENT/2ND STOREY SUPPORT
 3/8" = 1'-0"

Design Loads:

DISTRIBUTED LOADS [KN/m ²]:	SPECIFIED MIN. DESIGN LOADS: (UNFACTORED)		SUPERIMPOSED DEAD LOAD KPa
	LIVE LOAD KPa	DEAD LOAD KPa	
GROUND FLOOR	4.8 KPa	1.0 KPa	1.0 KPa
2ND FLOOR	2.4 KPa	3.25 KPa	1.0 KPa
ROOF LOAD	SNOW + RAIN = 2.4 + 0.3KPa		0.75 KPa
WIND LOAD	0.31 KPa		
CONCENTRATED LOADS [KN (KIPS)]:	AS/IF INDICATED ON DRAWINGS N/A		

Column/Pier Schedule

MARK	SIZE	REMARKS
C1	4 - 2x6	SPF # 1 OR 2
C2	3 - 2x6	SPF # 1 OR 2
C3	2 - 2x6	SPF # 1 OR 2
C4	6x6	TIMBER
SC1	HSS 6x6x1/4	STEEL
SC2	HSS 4x4x1/4	STEEL
P1	12"Ø	CONCRETE REINF.

Footing Schedule

MARK	PLAN VIEW	SECTION VIEW	MATERIAL	REINFORCING
FTG1	WIDTH = 30"	WIDTH = 30" DEPTH = 10"	C.I.P. CONC.	3-15M CONT.
FTG2	Ø 2' - 0"	P1 FTG2 VARIES	C.I.P. CONC.	5-15M VERT IN P1, WITH L-BEND IN FTG2, c/w 10M @ 8" TIES
FTG3	WIDTH = 24" DEPTH = 10"	WIDTH = 24" DEPTH = 10"	C.I.P. CONC.	4-15M BOT.
FTG4	WIDTH = 24" DEPTH = 10"	WIDTH = 24" DEPTH = 10"	C.I.P. CONC.	4-15M BOT.
FTG5	WIDTH = 10"	REFER TO DETAIL 7/S-5	C.I.P. CONC.	15M @ 12" O.C. E.W.

Lintel Schedule

MARK	SIZE	REMARKS
L1	3 - 2x10	SPF # 1 OR 2
L2	2 - 2x10	SPF # 1 OR 2
L3	2 - 2x8	SPF # 1 OR 2

Foundation Notes

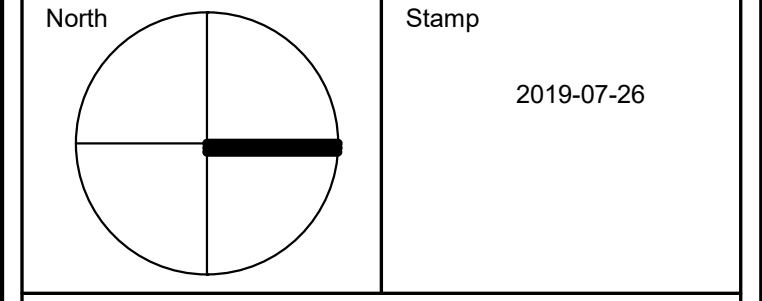
- Datum = Top of Fin. Floor at Ground Floor Level = 0'-0"
- Underside of strip footings to be at EL. = -4'-0" with respect to DATUM, unless noted otherwise (U.N.O.)
- Refer to sections, details and schedules for sizes of footings and reinforcing.
- Refer to Geotechnical Investigation Report (DST Ref. No. TS-NO-38927) for additional information on engineered fill, compaction and placement.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ELEMENTS NOT SHOWN OR OMITTED FOR CLARITY

KENORA SUPPORTIVE HOUSING

Basement Walk-Out Floor Plan

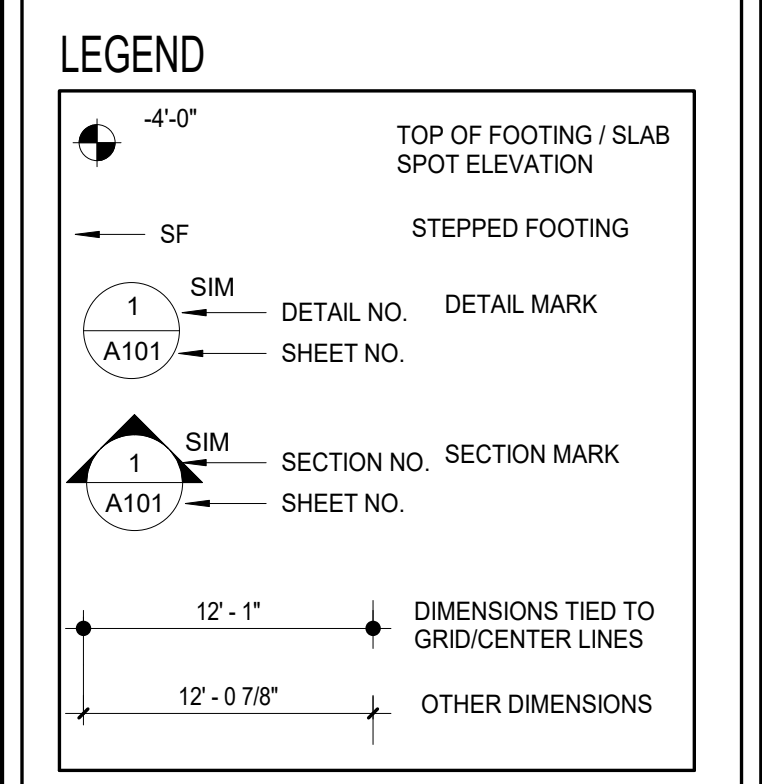
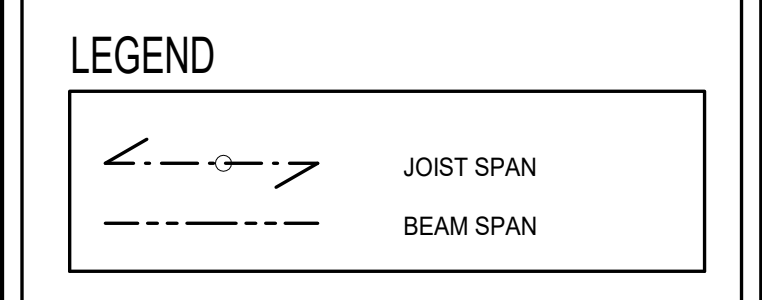
Reviewed for structural items only by Kewatin Group Ltd.



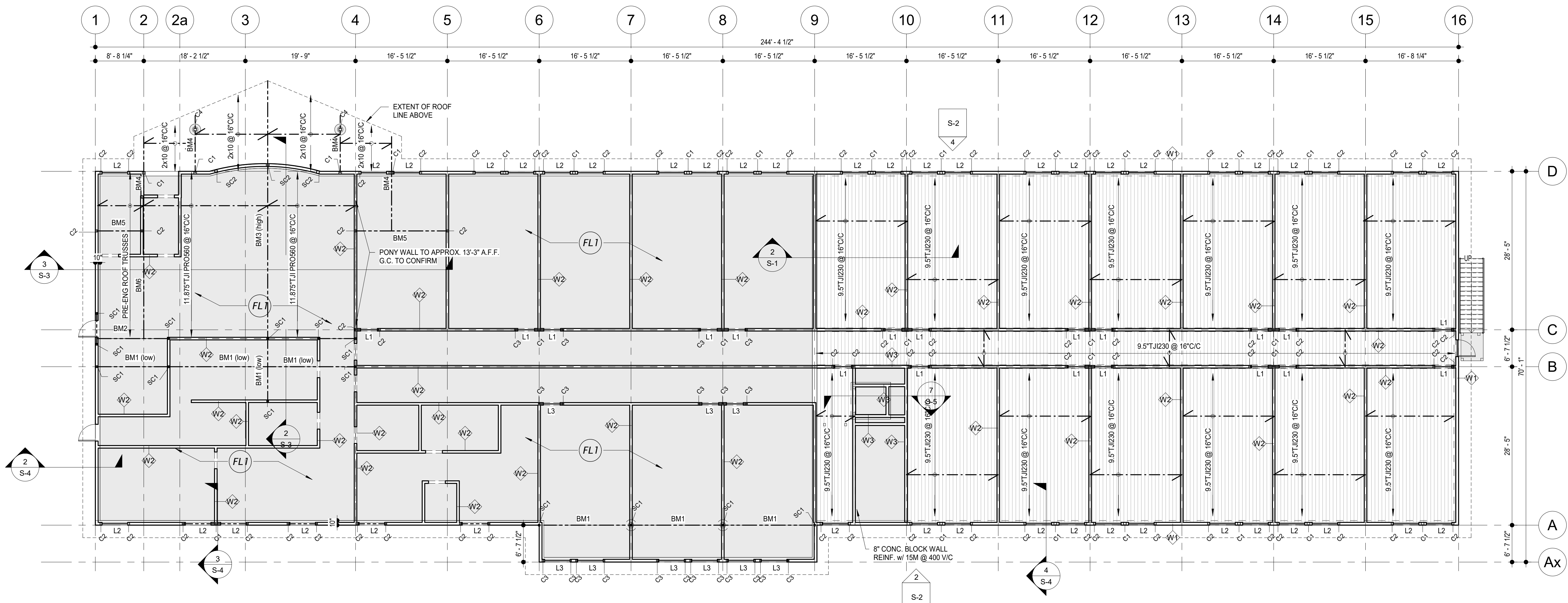
Date	Jan 7/2020
Drawn by	JTM
Checked by	RN
Project number	19063
Scale	S-1
	As indicated

Lintel Schedule

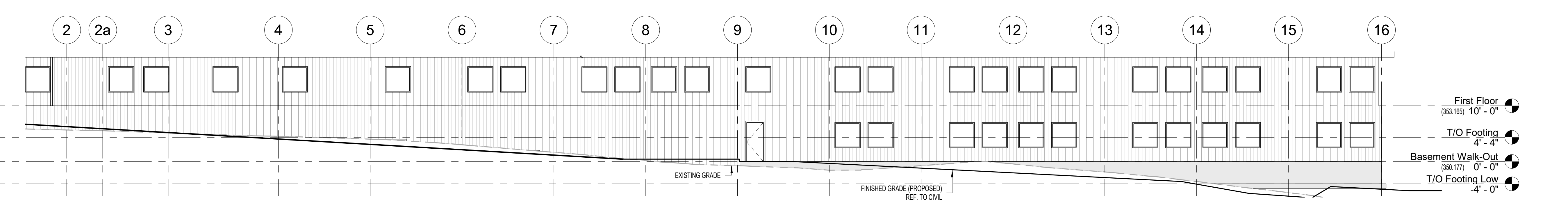
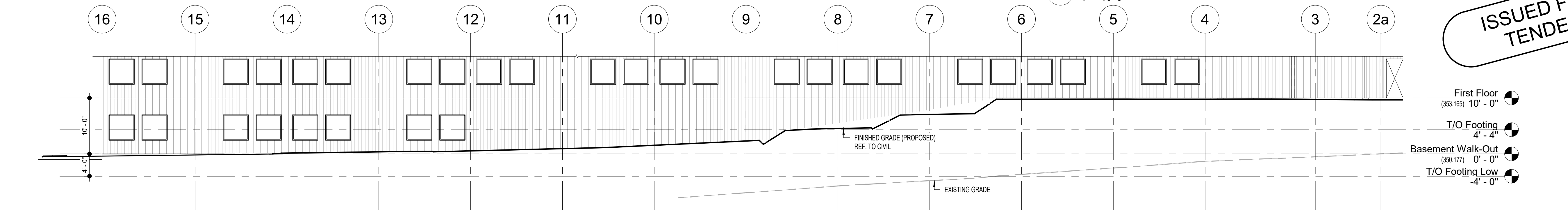
MARK	SIZE	REMARKS
L1	3 - 2x10	SPF #1 OR 2
L2	2 - 2x10	SPF #1 OR 2
L3	2 - 2x8	SPF #1 OR 2



No.	Description	Date
1	ISSUED FOR REVIEW	2020-01-14
2	ISSUED FOR REVIEW	2020-02-21
3	ISSUED FOR 90% REVIEW	2021-01-06
4	ISSUED FOR 99% COORDINATION	2021-02-26
5	ISSUED FOR TENDER	2021-03-26



ISSUED FOR TENDER



NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ELEMENTS NOT SHOWN OR OMITTED FOR CLARITY

KENORA SUPPORTIVE HOUSING

1st Floor Plan

Reviewed for structural items only by Kewatin Group Ltd.

North

Date: Jan 7/2020
 Drawn by: JTM
 Checked by: RN
 Project number: 19063
 Scale: As indicated

S-2

LEGEND

	JOIST SPAN
	BEAM SPAN

Beam Schedule

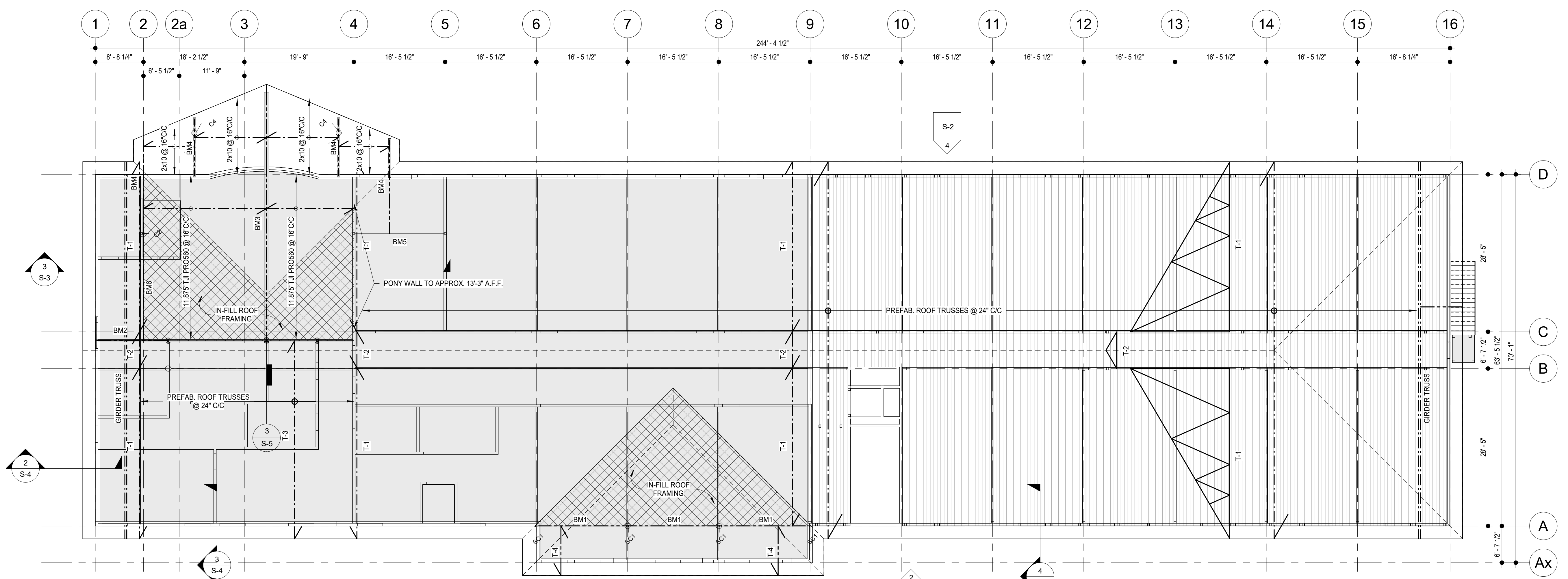
MARK	SIZE	REMARKS
BM1	W200x42	STEEL
BM2	W200x27	STEEL
BM3	24"x10" GLULAM	WD
BM4	6x10	TIMBER
BM5	2 - 9-1/2" LVL	
BM6	4 - 1-3/4" x 14" LVL	2.0E-3100

Column/Pier Schedule

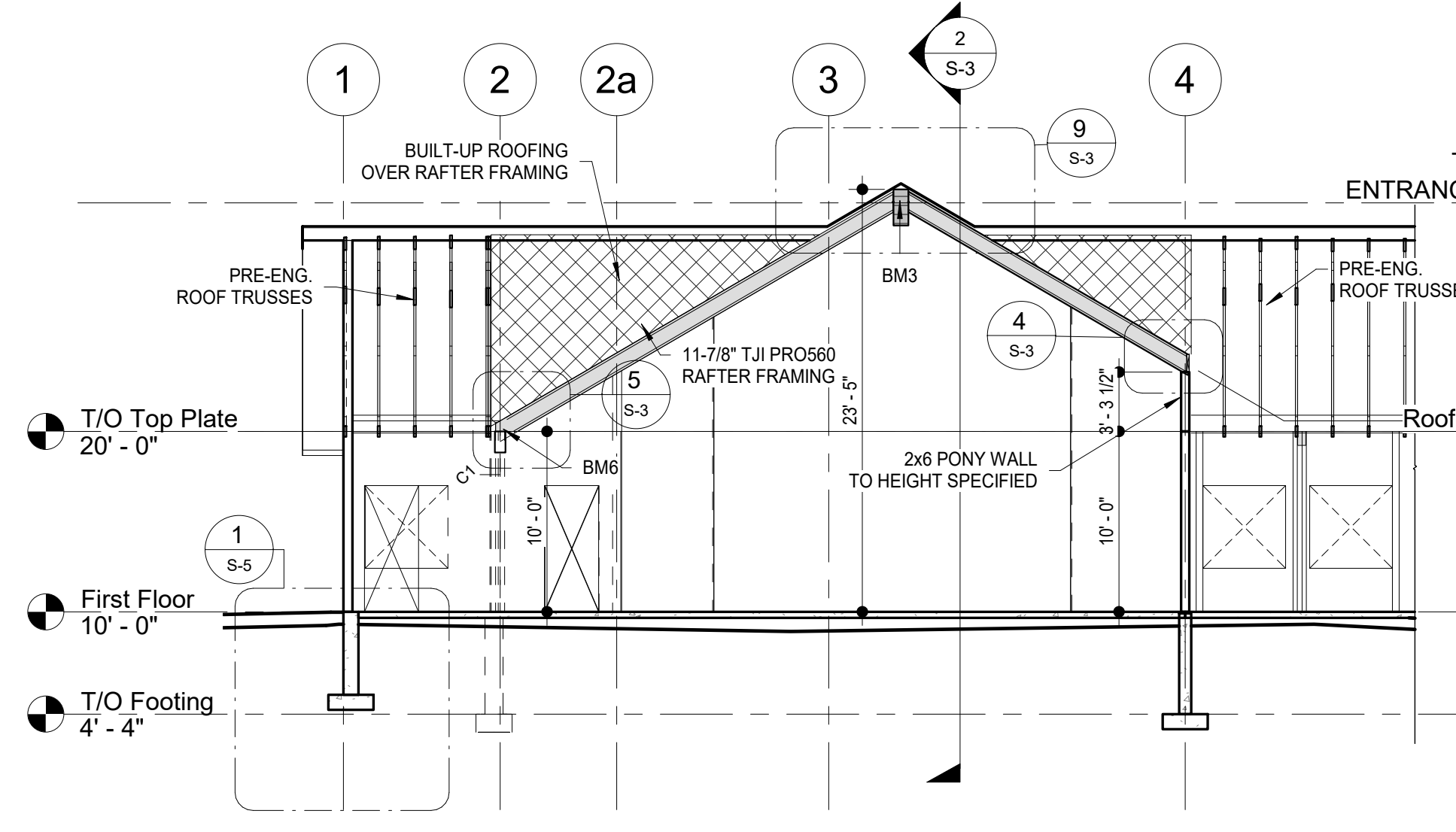
MARK	SIZE	REMARKS
C1	4 - 2x6	SPF # 1 OR 2
C2	3 - 2x6	SPF # 1 OR 2
C3	2 - 2x6	SPF # 1 OR 2
C4	6x6	TIMBER
SC1	HSS 6x6x1/4	STEEL
SC2	HSS 4x4x1/4	STEEL
P1	12"Ø	CONCRETE REINF.

No.	Description	Date
1	ISSUED FOR REVIEW	2020-01-14
2	ISSUED FOR REVIEW	2020-02-21
3	ISSUED FOR 90% REVIEW	2021-01-06
4	ISSUED FOR 99% COORDINATION	2021-02-26
5	ISSUED FOR TENDER	2021-03-26

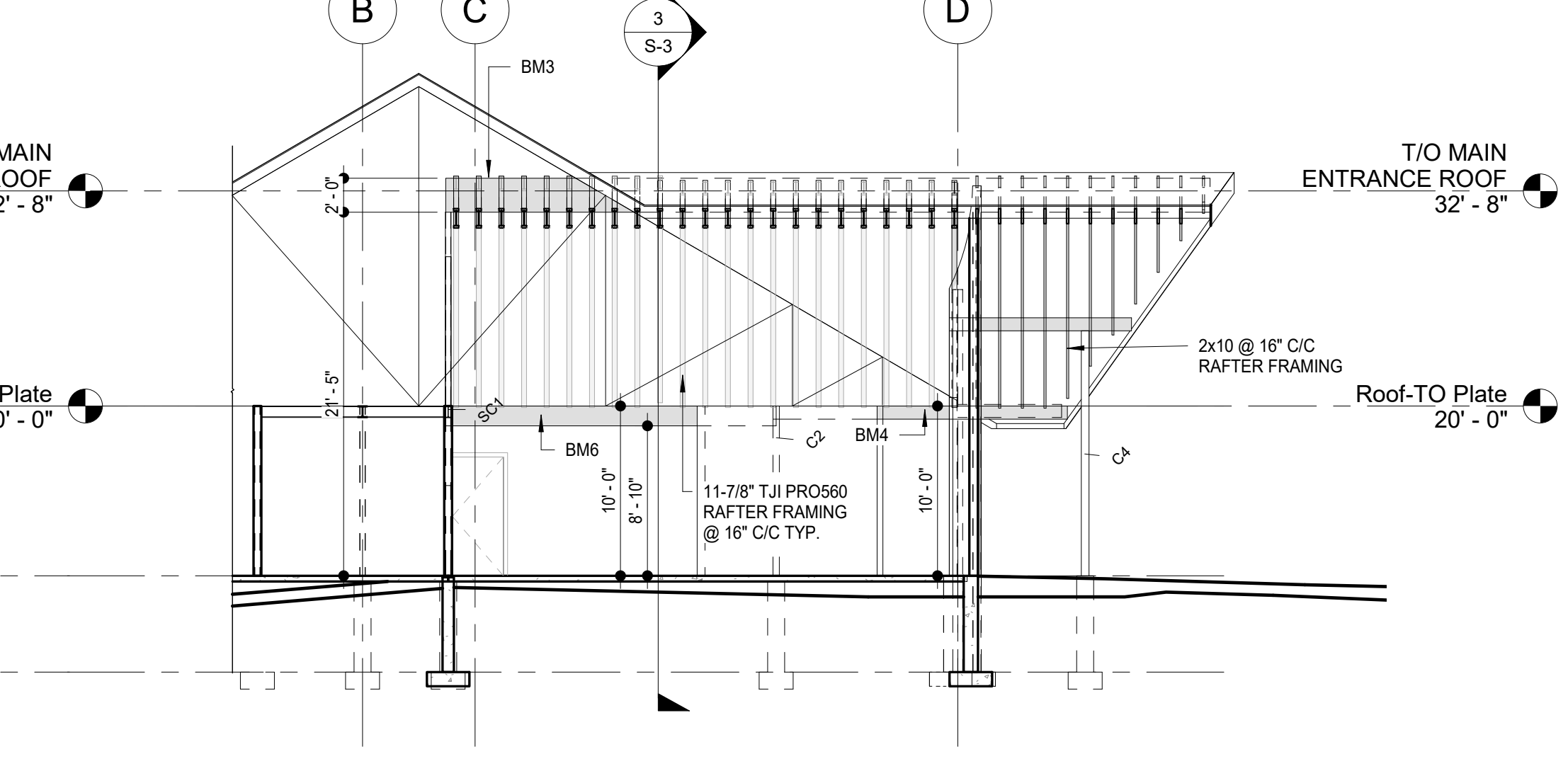
ISSUED FOR TENDER



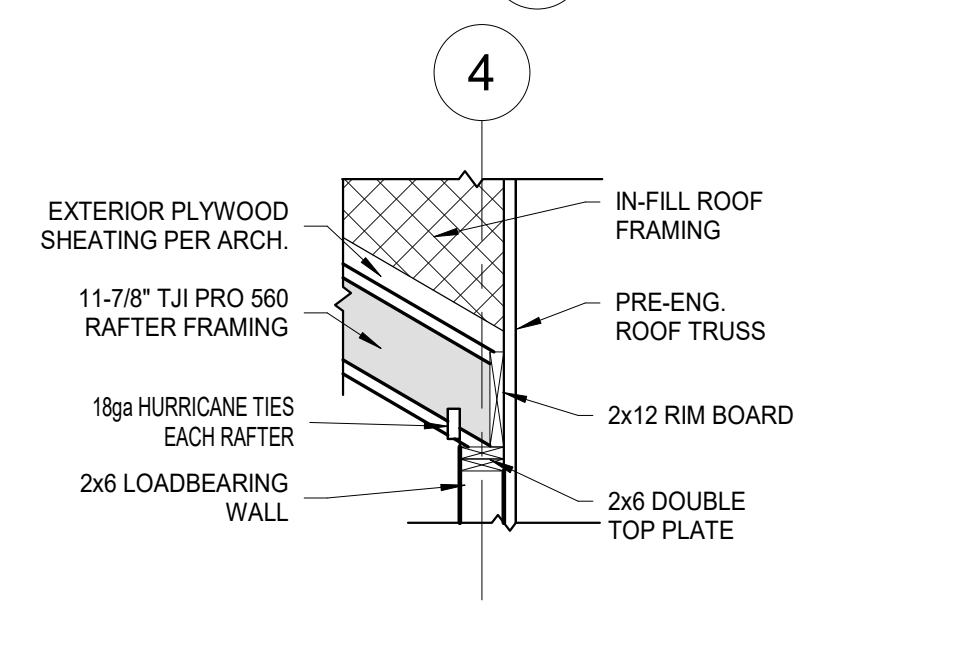
1 Roof Framing Plan
 1" = 10'-0"



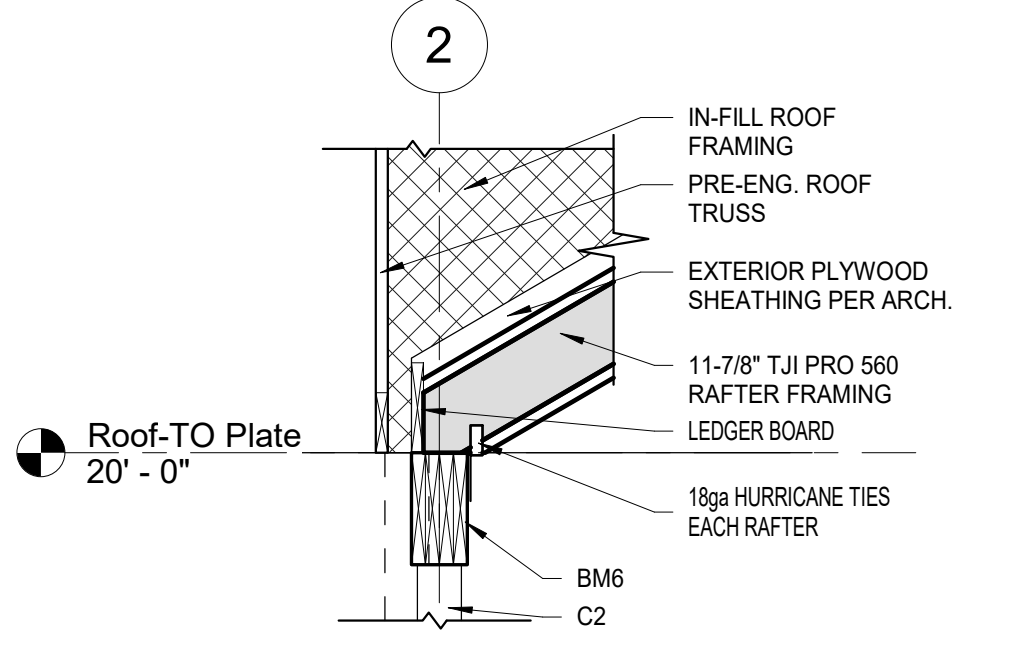
3 N-S SECTION THRU DINING ROOM
 1/8" = 1'-0"



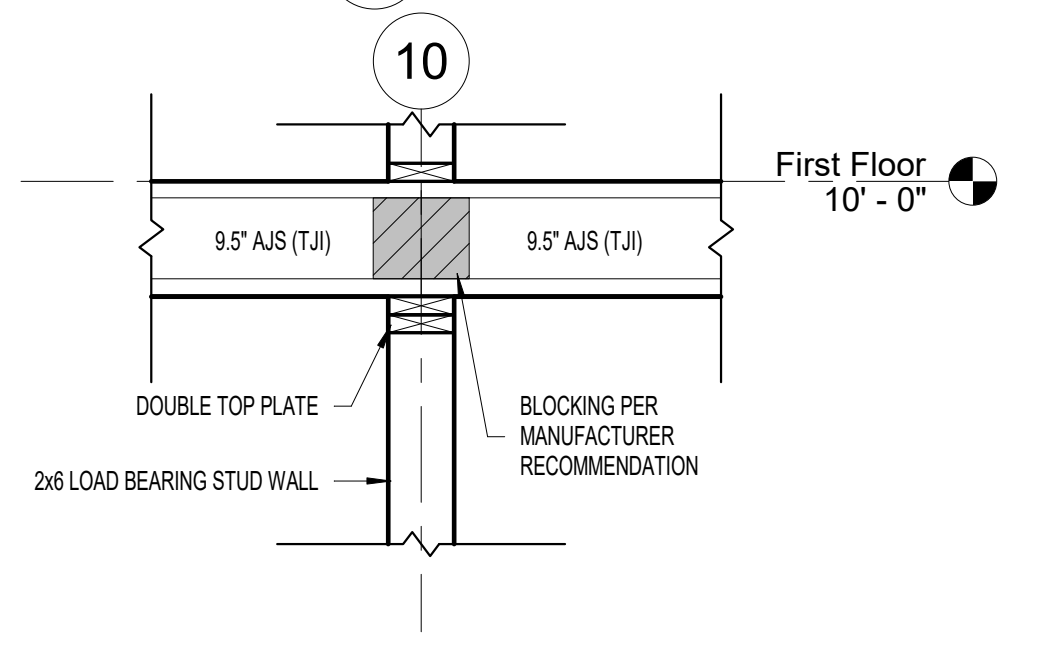
2 E-W SECTION THRU DINING ROOM
 1/8" = 1'-0"



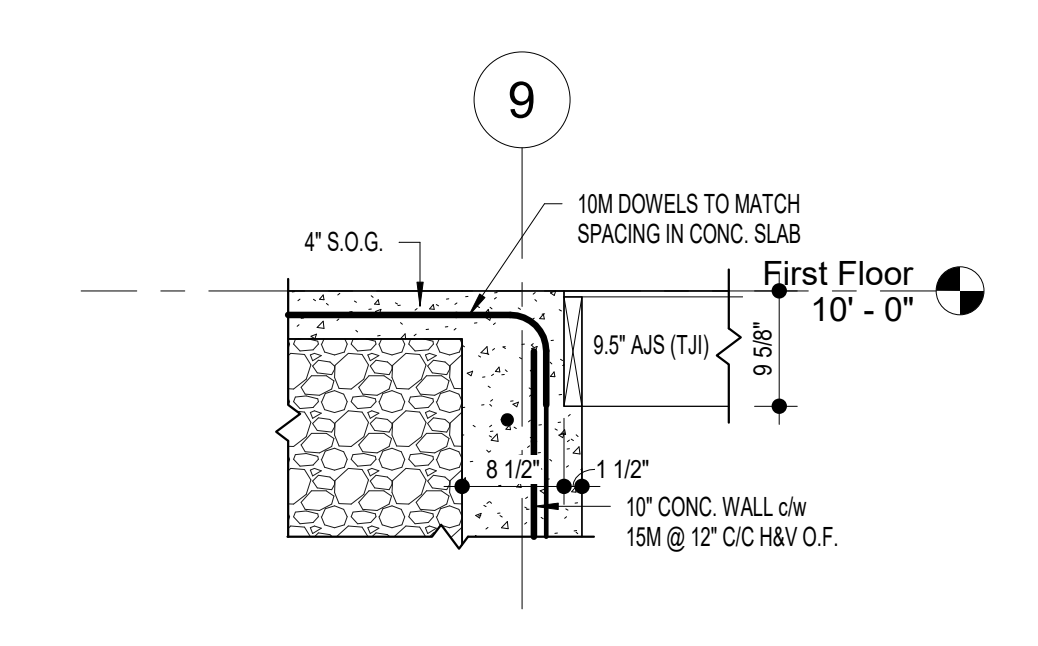
4 RAFTER CONNECTION @ PONY WALL
 1/2" = 1'-0"



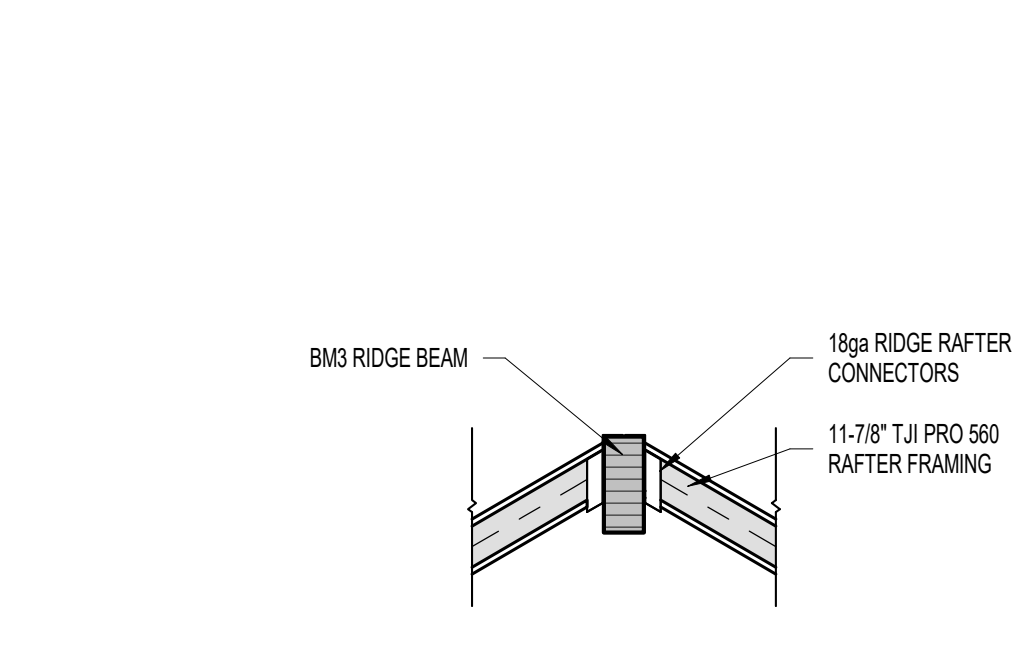
5 RAFTER CONNECTION @ BM6
 1/2" = 1'-0"



6 WOOD JOISTS ON LOAD BEARING WALL
 3/4" = 1'-0"



7 WOOD JOISTS ON CONC. FDN WALL
 3/4" = 1'-0"



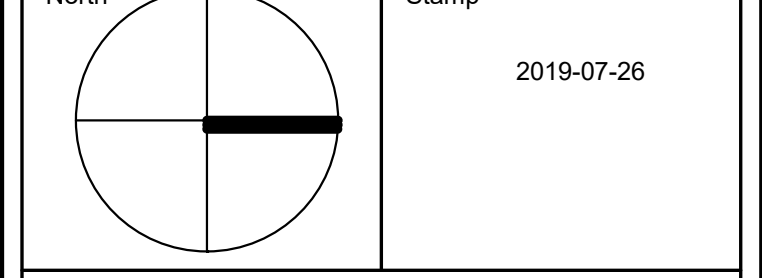
9 RAFTER CONNECTION @ RIDGE BEAM
 1/4" = 1'-0"

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ELEMENTS NOT SHOWN OR OMITTED FOR CLARITY

KENORA SUPPORTIVE HOUSING

Roof Framing Plans

Reviewed for structural items only by Kewatin Group Ltd.



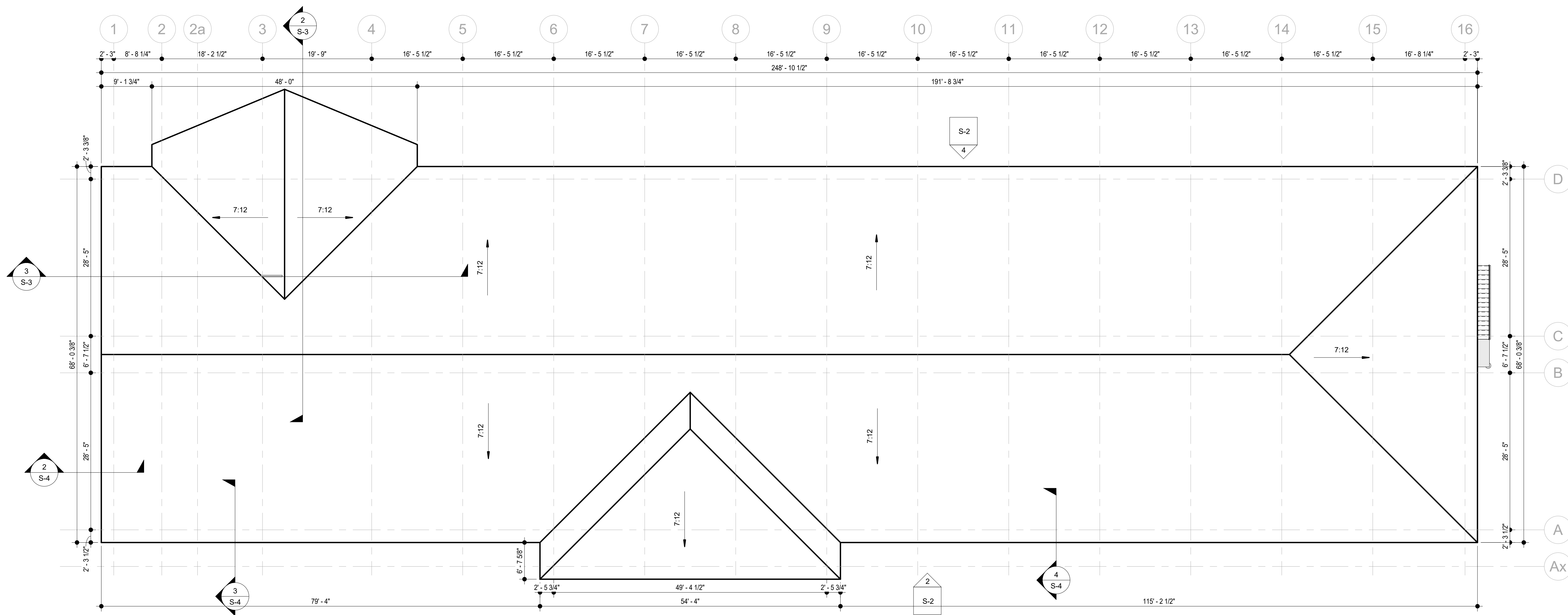
Date: Jan 7/2020

Drawn by: JTM
 Checked by: RN

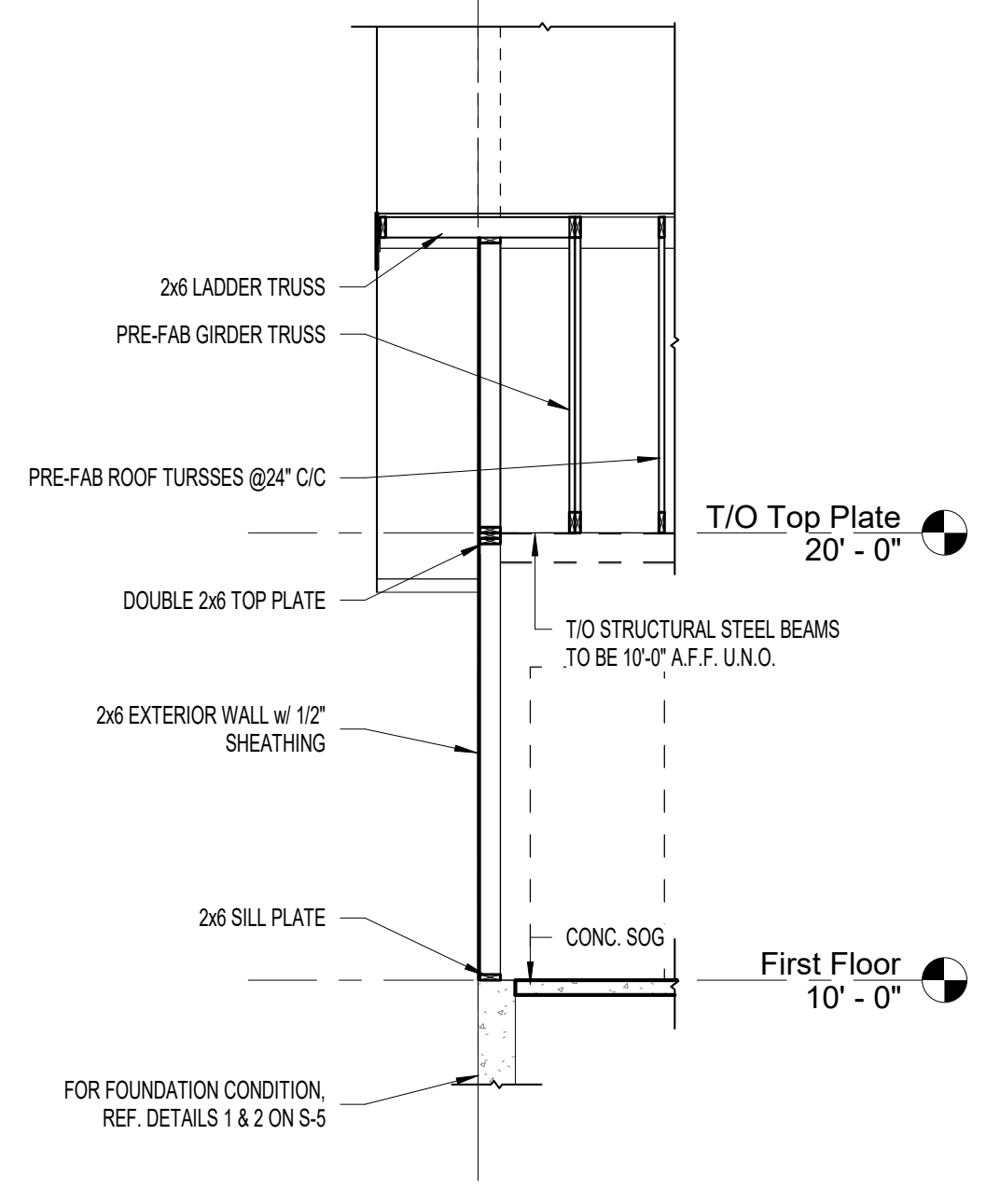
Project number: 19063

Scale: As indicated

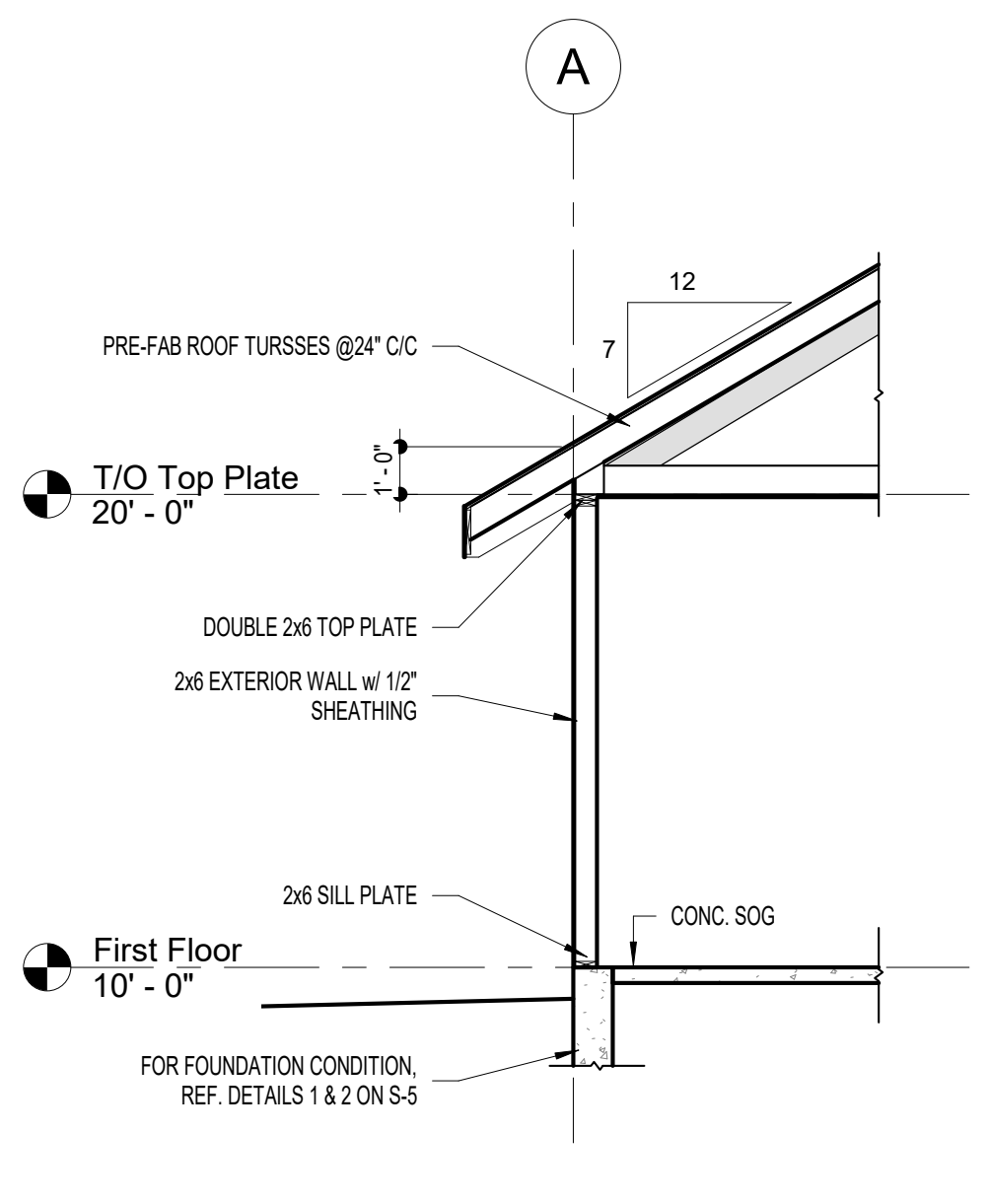
ISSUED FOR TENDER



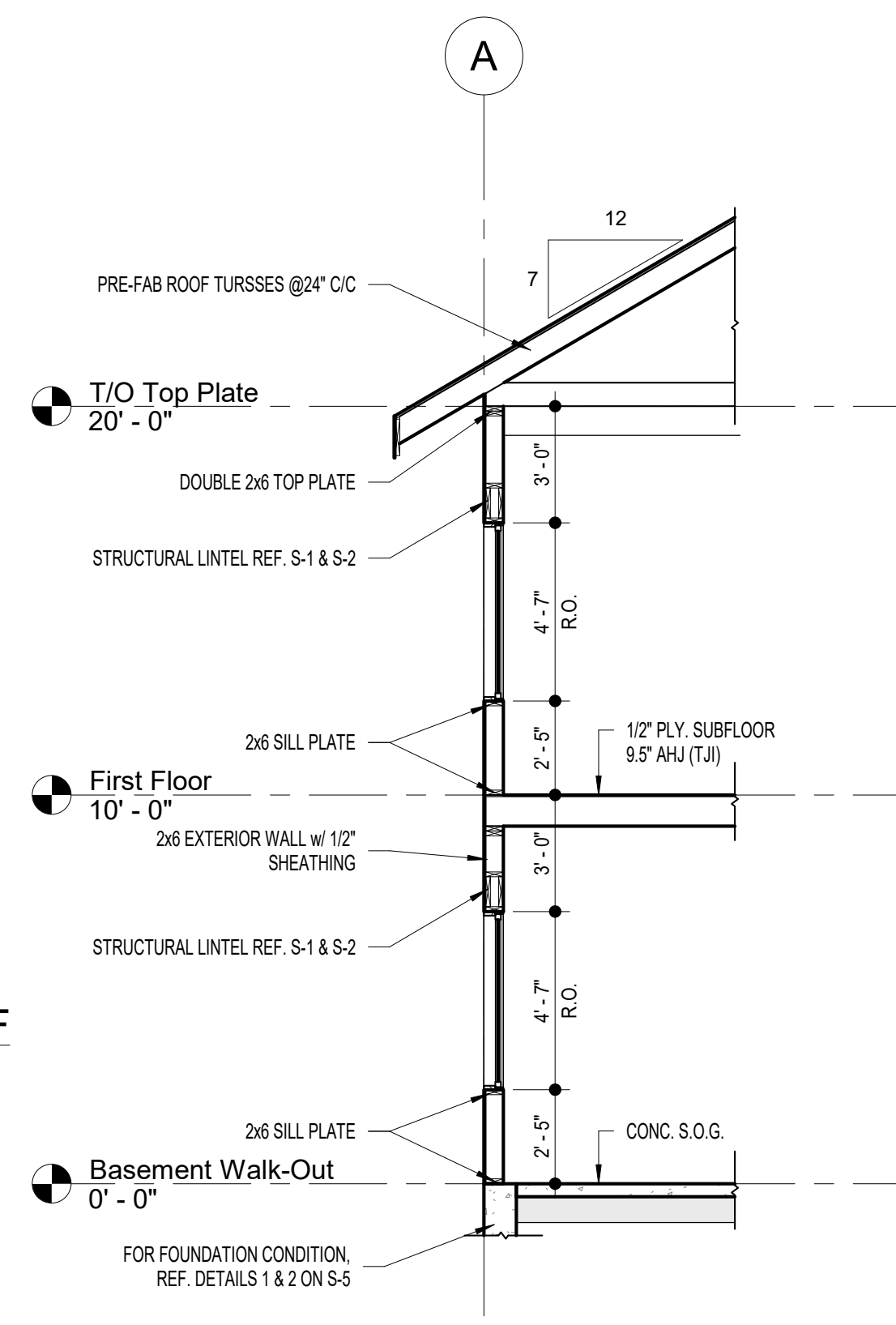
1 Roof Plan
 1" = 10'-0"



2 TYPICAL WALL SECTION - GABLE END
 1/4" = 1'-0"



3 TYPICAL WALL SECTION - HIP ROOF
 1/4" = 1'-0"



4 TYPICAL WALL SECTION - 2 STOREY
 1/4" = 1'-0"

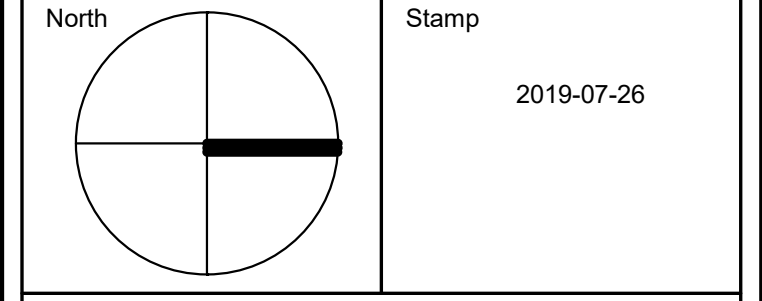
NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ELEMENTS NOT SHOWN OR OMITTED FOR CLARITY

No.	Description	Date
2	ISSUED FOR REVIEW	2020-02-21
3	ISSUED FOR 90% REVIEW	2021-01-06
4	ISSUED FOR 99% COORDINATION	2021-02-26
5	ISSUED FOR TENDER	2021-03-26

KENORA SUPPORTIVE HOUSING

Roof Plan - Structural Schematic

Reviewed for structural items only by Kewatin Group Ltd.



Date Jan 7/2020

Drawn by JTM

Checked by RN

Project number 19063

S-4

Scale As indicated

