#### GENERAL

- NATIONAL BUILDING CODE ONTARIO BUILDING CODE
- LOCAL REGULATIONS OHSA REGULATIONS
- THE STRUCTURAL ENGINEERING REVIEW BY WADDELL ENGINEERING LTD (WEL) IS FOR THE STRUCTURAL ITEMS NOTED ON THE STAMPED DRAWINGS FOR WHICH THERE ARE NO ONTARIO BUILDING CODE (OBC) PART 9 PROVISIONS.
- THE SEALED DRAWINGS ARE ONLY FOR USE BY THE PARTY WITH WHOM WEL HAS ENTERED INTO A CONTRACT (THE CLIENT) AND ARE NOT TO BE USED BY OTHERS.
- WEL'S REVIEW IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AT THE TIME OF OUR REVIEW. WEL IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS FROM THIS INFORMATION. IT IS THE CLIENT'S RESPONSIBILITY TO INFORM US OF ANY CHANGES, ADDITIONS OR CORRECTIONS REQUIRED ON OUR
- DRAWINGS. THIS SPECIFICATION SHEET IS TO SUPPLEMENT THE STAMPED DRAWINGS AND OBC PART 9 REQUIREMENTS. PLEASE CONTACT THE LOCAL BUILDING DEPARTMENT OR WEL, IF FURTHER CLARIFICATION IS REQUIRED.
- WEL ASSUMES THAT ALL REQUIRED INSPECTIONS WILL BE DONE BY THE LOCAL BUILDING DEPARTMENT. IF WEL IS REQUIRED TO PERFORM AN INSPECTION, CALL (519) 267-6789. ALLOW 48 HOURS NOTICE FOR ALL
- INSPECTIONS NO CHANGES SHALL BE MADE TO THE STAMPED DRAWINGS WITHOUT NOTIFYING WEL PRIOR TO MAKING
- THOSE CHANGES 8. THE CLIENT SHALL CHECK AND VERIFY ALL SITE CONDITIONS AND MEASUREMENTS, AND REPORT ANY
- DISCREPANCIES TO THE ENGINEER.

## DESIGN LOADS

1. DESIGN LOADS UNFACTORED UNLESS NOTED OTHERWISE

- ROOF DESIGN LOADS DEAD LOAD = 0.29 = 0.29 kPa (6 psf) (ROOF RAFTERS / JOISTS OR TRUSS TOP CHORDS = Cb x Ss + 0.4 kPa; NOT LESS THAN 1 kPa (20.9 psf), AS PER OBC 9.4.2.2. SNOW LOAD Cb = 0.55 kPa FOR ROOF WIDTH > 4.3m Cb = 0.45 kPa FOR ROOF WIDTH <= 4.3
- Ss = 1-IN-50 GROUND SNOW LOAD in kPa

CEILING DESIGN LOADS ATTIC OR ROOF SPACE WITH LIMITED ACCESSIBILITY (CEILING JOISTS/TRUSS BOTTOM CHORDS), AS PER OBC 9.4.2.4.(1) TOTAL SPECIFIED LOAD = 0.35 kPa (7.3 psf)

# ACCESSIBLE ATTIC = SEE FLOOR LOADING BELOW

FLOOR DESIGN LOADS DEAD LOAD = 0.57 = 0.57 kPa (12 psf) = 1.92 kPa (40 psf) (TYP. U.N.O.) LIVE LOAD

BEDROOMS = 1.44 kPa (30 psf) ACCESSIBLE EXTERIOR PLATFORMS. AS PER OBC 9.4.2.3

LIVE LOAD = GREATER OF 1.92 kPa (40 psf) OR SNOW LOAD

# GUARD LOADS: AS PER OBC 2012 4.1.5.14.(1).

## ENERGY EFFICIENCY DESIGN

- ENERGY EFFICIENCY DESIGN BASED ON THE FOLLOWING COMPLIANCE PACKAGE ZONE 1 FROM TABLE 3.1.1.11. OF SB-12 (CITY????) - XXXX HDD
- MINIMUM R-VALUES (MIN) / U-VALUES (MAX CEILING WITH ATTIC SPACE
- R-60 CEILING WITHOUT ATTIC SPACE - R-31 EXPOSED FLOOR - R-31 WALLS ABOVE GRADE - R19 + R5ci HEATED SLAB ≤ 24" BELOW GRADE - R-10
- EDGE OF SLAB ≤ 24" BELOW GRADE WINDOWS / SLIDING GLASS DOORS
- SKYLIGHTS 3. FENESTRATION CALCULATIONS
- GROSS WALL AREA GROSS GLAZING AREA
- MATERIALS
- 1. MATERIALS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS U.N.O. ON THE STAMPED DRAWINGS

- R-10

- 0.32 Btu/(h·ft<sup>2</sup>·F

- 0.49 Btu/(h·ft2·F

- XXXX ft<sup>2</sup>

- XXX ft<sup>2</sup> (XX%)

CONCRETE	- OBC 9.3.1.
REINFORCING STEEL	- CSA G30
LUMBER & WOOD PRODUCTS	- OBC 9.23.
STEEL BEAMS	- OBC 9.23.4.3.
STEEL COLUMNS	- OBC 9.17.
ANCHOR BOLTS, STEEL PLATES & ROLLED SECTIONS	- CAN/CSA-G40.21
STEEL HSS & W-BEAMS	- CAN/CSA-G40.21M-350W
ALL OTHER STEEL	- CAN/CSA-G40.21M-300W
STRUCTURAL BOLTS	- ASTM A325

# FOOTINGS AND FOUNDATIONS

- 1. ALL FOOTINGS AND FOUNDATIONS SHALL CONFORM TO OBC 9.15. UNLESS NOTED OTHERWISE (U.N.O.) ON THE STAMPED DRAWINGS
- 2. FOOTINGS TO BEAR ON SOUND SUB-GRADE SUITABLE FOR 75 kPa (1,500 psf) ALLOWABLE SOIL BEARING
- CAPACITY. THE CLIENT IS TO INFORM WEL IF THE REQUIRED BEARING CAPACITY CANNOT BE ACHIEVED. FOUNDATION WALLS SUPPORTING DRAINED EARTH HAVE BEEN DESIGNED FOR THE LOADS PROVIDED IN
- 9.4.4.6.(1)(a). ENSURE PROVISIONS ARE MADE FOR APPROPRIATE DRAINAGE OF GROUNDWATER.
   ENSURE ALL FOUNDATION WALLS ARE LATERALLY SUPPORTED PRIOR TO BACKFILLING.
- ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF CAN/CSA-G30. REINFORCING BARS SHALL BE DEFORMED HI-BOND HARD GRADE WITH MINIMUM YIELD STRENGTH OF Fy = 400MPa

# WOOD-FRAME CONSTRUCTION

- ALL WOOD-FRAME CONSTRUCTION SHALL CONFORM TO OBC 9.23. U.N.O. ON THE STAMPED DRAWINGS. 2. ALL STRUCTURAL COMPOSITE LUMBER (SCL) SHALL BE 2.0E WITH Fb=2950 OR BETTER. FASTEN MULTI-PLY
- SCL BEAMS AS PER MANUFACTURER'S SPECIFICATIONS. PROVIDE 3" MIN. BEARING LENGTH AT ENDS, U.N.O. ALL PRE-ENGINEERED SYSTEMS (I.E. ROOF TRUSSES, FLOOR JOISTS, ETC.) ARE TO BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OF ONTARIO. PROVIDE LAYOUTS AND STAMPED DRAWINGS TO WEL
- AND THE LOCAL BUILDING DIVISION. ENSURE THE EXTERIOR WALLS ARE BRACED AS PER OBC 9.23.10.2. TO PROVIDE LATERAL SUPPORT FOR THE BUILDING.
- PROVIDE SUFFICIENT LATERAL SUPPORT FOR THE TOP OF ALL DROPPED BEAMS AND LINTELS TO PREVENT LATERAL TORSIONAL BUCKLING A. AN EXAMPLE OF SUFFICIENT LATERAL SUPPORT IS (2) 3 1/4" NAILS PER JOIST FOR LEDGER STRIP TO
- WOOD BEAM CONNECTION (AS PER OBC 1 6. ALL WOOD COLUMNS SHALL CONFORM TO OBC 9.17. U.N.O. PROVIDE A BUILT-UP WOOD STUD COLUMN EQUAL TO THE WIDTH OF BEAM/GIRDER TRUSS UNDER ALL BEAM/GIRDER TRUSSES MIN, U.N.O. CONTINUE ALL COLUMNS DOWN TO FOUNDATION OR FULL BEARING ON BEAMS, BLOCK SOLID IN JOIST SPACES, TYPICAL
- ALL LINTELS TO HAVE 1 JACK STUD. 1 KING STUD AT ENDS U.N.O.
- 8. ALL WOOD SHALL BE NO. 2 SPRUCE OR BETTER. 9. ALL GUARDS SHALL CONFORM TO OBC 9.8.8. AND SUPPLEMENTARY STANDARD SB-7 U.N.O.

#### ROOF AND CEILING FRAMING

- 1. ALL ROOF AND CEILING FRAMING SHALL CONFORM TO OBC 9.23.13. U.N.O. ON THE STAMPED DRAWINGS. 2. ALL ROOF RAFTERS/JOISTS AND CEILING JOISTS SHALL CONFORM TO THE SPANS SHOWN IN OBC PART 9 TABLES A-3 TO A-7.
- WHERE REQUIRED, PROVIDE INTERMEDIATE SUPPORT FOR ROOF RAFTERS/JOISTS AS PER OBC 9.23.13.7. A. WEL ASSUMES THAT COLLAR TIES WILL BE USED TO PROVIDE INTERMEDIATE SUPPORT INSTEAD OF STRUTS OR DWARF WALLS U.N.O. (I.E. ALL ROOF RAFTERS/JOISTS BEAR ON EXTERIOR WALLS ONLY AND
- INTERIOR WALLS SUPPORT CEILING JOISTS ONLY U.N.O.). WHERE THE RIDGE IS UNSUPPORTED, ROOF RAFTERS/JOISTS ARE TO BE TIED TO THE CEILING JOISTS (OR SOLID BLOCKING AT 3'-11" o.c. MAX.) AT THEIR BASE AND NAILED AS PER OBC TABLE 9.23.13.8. TO PREVENT
- OUTWARD MOVEMENT 5. OVER-FRAMED AREAS ARE TO BE SUPPORTED ON LOWER ROOF RAFTERS/JOISTS BY 2x4 STRUTS @ 24" EACH WAY MIN., TYPICAL U.N.O..
- WOOD ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH OBC 9.23.13.11., OR PART 4 IF THEIR SPAN EXCEEDS 40'-0" (AS PER OBC 9.23.1.1) A. IF THE TRUSSES ARE DESIGNED IN ACCORDANCE WITH OBC PART 4, THE DESIGN OF UPLIFT ANCHORS
- SHALL BE PROVIDED BY THE TRUSS SUPPLIER ALONG WITH LAYOUTS AND STAMPED DRAWING

# STRUCTURAL STEEL

- 1. ALL WELDING SHALL BE PERFORMED BY A CANADIAN WELDING BUREAU CERTIFIED WELDER AND CONFORM
- 2. PROVIDE SUFFICIENT LATERAL SUPPORT FOR STEEL BEAMS TO PREVENT LATERAL TORSIONAL BUCKLING. SUFFICIENT LATERAL SUPPORT EXAMPLES: DROPPED STEEL BEAM - AS PROVIDED IN OBC 9.23.4.3.(3) OR 2x6 TOP PLATE w/ 13mm (1/2") dia. THRU BOLTS c/w NUTS & WASHERS OR HILTI X-U FASTENERS @ 600mm (24") o.c., STAGGERED INTO THE TOP
- FLANGE & (2) 3-1/4" TOE-NAILS FROM EACH FRAMING MEMBER INTO THE TOP PLATE. FLUSH STEEL BEAM - SOLID BLOCKING (2x LUMBER AND PLYWOOD) BOLTED TO THE BEAM WEB WITH 13mm (1/2") dia. THRU BOLTS @ 600mm (24") o.c. (MAX. MATCH JOIST SPACING). STAGGERED TOP AND BOTTOM AND APPROVED FACE MOUNT HANGERS FOR THE FRAMING MEMBER TO BLOCKING CONNECTION.
- WHERE A STEEL PLATE SUPPORTING MASONRY VENEER IS SPECIFIED, WELD 1/2" STEEL PLATE TO THE TOP OR BOTTOM FLANGE OF THE BEAM WITH (2) ROWS OF 50mm (2") LONG FILLET WELDS @ 300mm (12") o.c. MIN.
- STAGGERED. 4. ALL STEEL COLUMNS ARE TO BE LATERALLY SUPPORTED TOP & BOTTOM ILE. BY CONCRETE SLAB ON GRADE. (2) 13mm (1/2") dia. BOLTS OR 50mm (2") OF 6.4mm (1/4") FILLET WELD MINIMUM]. CONTINUE ALL COLUMNS
- DOWN TO FOUNDATION OR FULL BEARING ON BEAMS, BLOCK SOLID IN JOIST SPACES. (TYP. U.N.O.). ALL STRUCTURAL STEEL TO BE FINISHED AS APPROVED BY GENERAL CONTRACTOR

#### EXTERIOR CLADDING

- 1. VERTICAL OR HORIZONTAL SIDING SHALL BE PREFINISHED ALUMINUM, VINYL, COMPOSITE, OR OTHER MATERIAL (AS SELECTED BY OWNER) THAT WILL PROVIDE LONG LASTING DURABILITY. ALL SIDINGS SHALL BE INSTALLED WITH ALL TRIMS, FLASHINGS AND TERMINATIONS AS RECOMMENDED BY THE MANUFACTURER. ENSURE A WEATHER TIGHT
- FINISH 2. PROVIDE AN AIR BARRIER MEMBRANE FASTENED TO THE EXTERIOR WALL SHEATHING PRIOR TO THE APPLICATION OF THE EXTERIOR CLADDING. APPROVED PRODUCTS: TYVEK, HOUSE WRAP OR ZIP SHEATHING WITH JOINTS TAPED, OR OTHER PRODUCTS AS APPROVED. TAPE AND SEAL ALL JOINTS. ENSURE CONNECTIONS TO WINDOWS, DOORS AND OTHER PENETRATIONS ARE SEALED AND ADEQUATE

#### WINDOWS & DOORS

- ALL NEW WINDOWS SHALL HAVE A MINIMUM U-VALUE AS PER ENERGY EFFICIENCY DESIGN NOTES. PROVIDE NEW WINDOWS OF THE HIGHEST POSSIBLE QUALITY AND WITH A MINIMUM 10 YEAR WARRANTY ON ALL
- PARTS INCLUDING GLAZING. WINDOW'S SHALL CONFORM TO THE CAN/CSA A440-M94 WINDOW STANDARD AND CARRY MINIMUM RATINGS OF A3, B3 AND C3. HIGHER WINDOW RATINGS ARE PREFERRED. PROVIDE WRITTEN MANUFACTURER TESTING DATA UPON
- REQUEST GLAZING MUST BE FROM AN IGMAC CERTIFIED MANUFACTURER AND CARRY A MINIMUM 10 YEAR WARRANTY PROVIDE WINDOW SILLS COMPLETE WITH DRIP EDGE TO DIRECT WATER AWAY FROM THE BUILDING FACE. PROVIDE THE OWNER WITH CUT SAMPLES INDICATING ALL REQUIRED OPTIONS AND GIVE AMPLE TIME FOR OWNER
- TO MAKE APPROPRIATE SELECTIONS THAT WILL NOT DELAY THE CONSTRUCTION OF THE BUILDING. ENSURE WINDOWS ARE ORDERED AND AVAILABLE ON SITE IN A TIMELY BASIS.
- FOLLOW INSTALLATION RECOMMENDATIONS BY WINDOW/DOOR MANUFACTURER. COORDINATE ALL ROUGH STUD OPENING DIMENSIONS WITH MANUFACTURER. INSTALL LOW EXPANSION FOAM INSULATION AROUND ALL WINDOW PERIMETERS. ENSURE CAVITY BETWEEN WINDOW FRAME AND RSO ARE COMPLETELY FILLED, BUT NOT TO EXCESS.
- PROVIDE WEATHER-STRIPPING AND SELF CLOSING DEVICE ON DOOR FROM GARAGE INTO HOUSE.
   EXTERIOR DOORS & WINDOWS WITHIN 6'-7" FROM GRADE LEVEL SHALL BE CONSTRUCTED TO RESIST FORCED
- ENTRY. DOORS SHALL HAVE A DEAD-BOLT LOCK. 12. SEALANTS: PROVIDE CLOSED CELL FOAM BACKER ROD AND CAULKING AROUND ALL WINDOW AND DOOR PERIMETERS AND WHERE SIDING BUTTS AGAINST MASONRY.
- ENSURE PROPER CAULKING JOINT WIDTH TO DEPTH RATIO OF 2:1 IS MAINTAINED. FOLLOW MANUFACTURERS RECOMMENDED METHODS FOR INSTALLATION OF CAULKING SEALANTS. USE ONLY HIGH QUALITY MATERIALS AS MANUFACTURED BY TREMCO OR EQUIVALENT. DO NOT USE MONO OR

## ROOFING, EAVES AND SOFFITS

- 1. ENSURE ROOF AND ALL JUNCTURE POINTS WHERE THE NEW MEETS THE EXISTING ARE WATER TIGHT. IT IS THE
- CONTRACTOR'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS WATER TIGHT AT ALL TIMES. INSTALL 25 YEAR FIBREGLASS SHINGLES OVER ROOF SHEATHING. ROOFING, FLASHING & ACCESSORIES SHALL BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
- PROVIDE PEEL AND STICK MEMBRANE PROTECTION OVER ENTIRE ROOF SURFACE FOR LOW SLOPE APPLICATION. IN REGULAR APPLICATION PROVIDE A MINIMUM OF 60" WIDE PEEL AND STICK MEMBRANE PROTECTION UP FROM THE EDGE OF THE EAVES, THIS MEANS A MINIMUM OF 2 WIDTHS OF ROLL MEMBRANE
- PROVIDE GALVANIZED / PREFINISHED EAVES STARTER AT BOTTOM EDGE OF ROOF PROVIDE CONTINUOUS RIDGE AND SOFFIT VENTING OF ALL ROOFS. ENSURE FREE OPENING OF VENTS COMPLIES WITH OBC (1/300 OF INSULATED ROOF AREA, MINIMUM). INSTALL MOORE TYPE VENTING AT THE EAVES, BETWEEN EVERY RAFTER OR TRUSS SPACE.
- 6. WHERE THERE IS A VAULTED ROOF, PROVIDE 2"x3" OR 2"x4" WOOD FRAMING AS PURLINS OVER ROOF TRUSSES OR RAFTERS TO PROVIDE AIR MOVEMENT AROUND JOISTS. DO NOT FILL ENTIRE CAVITY WITH BATT INSULATION
- 7. WHERE CEILING MEMBRANE IS FASTENED TO ROOF JOISTS, ENSURE EACH JOIST CAVITY IS VENTED AT BOTH THE RIDGE AND SOFFIT, OR PROVIDE 2"x2" CROSS FRAMING ON TOP OF ROOF JOISTS 8. PROVIDE PREFINISHED BENT ALUMINUM FASCIA AND SOFFITS (IN COLOUR AS SELECTED BY OWNER) INCLUDING ALL
- APPROPRIATE AND REQUIRED TRIMS. SOFFITS SHALL HAVE CONTINUOUS AIR VENTS FOR ATTIC VENTILATION. 9. EAVESTROUGHING AND DOWNSPOUTS (IN COLOUR AS SELECTED BY OWNER) SHALL BE SEAMLESS PREFINISHED ALUMINUM AND INSTALLED TO PREVENT MOVEMENT AND DISLODGEMENT FROM ICE, WIND AND SNOW. ENSURE
- TROUGHS AND DOWNSPOUTS ARE 5" WIDTH. 10. ROOF LEADERS SHALL BE WALL MOUNTED AND DISCHARGE ONTO GRADE. PROVIDE A MINIMUM OF 48" DOWNSPOUT EXTENSION AT GRADE TERMINATING ONTO A PRE-CAST CONCRETE SPI ASH PAD UNDER FACH RAIN WATER I FADER

#### DRAINAGE

- PROVIDE TROWEL OR ROLL APPLIED DAMPPROOFING ON EXTERIOR FOUNDATION WALLS (PER OBC 9.13.). BITUMAS SPRAY APPLIED WATERPROOFING IS NOT PREFERRED UNLESS IT CAN BE SHOWN TO PROVIDE A HIGH FILM THICKNESS.
- 2. PROVIDE RIGID DRAINAGE BOARD FROM GRADE TO WEEPING TILE. ENSURE SYSTEM IS ADEOUATELY FASTENED TO THE FOUNDATION AND TERMINATED WITH A TERMINATION BAR AT GRADE LEVEL. SUCH ACCEPTABLE SYSTEM IS PLATON.
- 3. CONNECT DRAINAGE TILE TO A PLASTIC SUMP BASIN AS LOCATED ON THE DRAWINGS, OR TO AN EXISTING SUMP PIT ELSEWHERE IN THE HOUSE. (PER OWNER PREFERENCE)
- PROVIDE A SUBMERSIBLE PUMP THAT WILL DISCHARGE SUMP BASIN TO THE EXTERIOR OF THE HOUSE (AWAY FROM THE BUILDING), PROVIDE A PRE-CAST CONCRETE SPLASH PAD UNDER DISCHARGE PIPE. PROVIDE ADEQUATE SLOPE AWAY FROM THE BUILDINGS FOUNDATION WALLS. IN THE ABSENCE OF AN APPROVED GRADING PLAN, SLOPE SHALL BE A MINIMUM OF 2%

## PROVIDE 4" PERIMETER WEEPING TILE c/w 6" CLEAR STONE COVER & GEO-TEXTILE FABRIC (PER OBC 9.14., WHERE APPLICABLE)MECHANICAL

- THESE NOTES DO NOT APPLY TO HEATING OR COOLING SYSTEMS. A VENTILATION, MECHANICAL HEATING (AND POSSIBLY COOLING) SYSTEM ARE REQUIRED. VENTILATION, HEATING AND COOLING SYSTEMS SHALL BE DESIGNED BY OTHERS. PROVIDE EXHAUST FANS VENTED TO THE EXTERIOR IN ALL WASHROOMS AND KITCHENS
- IN LAUNDRY ROOMS, ENSURE DRYER IS VENTED TO THE EXTERIOR WALL. MINIMIZE LONG RUNS AND ELBOWS IN VENT LINES. EXCESSIVELY LONG RUNS WILL REQUIRE AN IN-LINE BOOSTER FAN.
- 5. DO NOT EXHAUST ANY EXHAUST FANS INTO THE ATTIC SPACE. ALL EXHAUST FANS SHALL EXTEND WITHIN THE FLOOR STRUCTURE OR BELOW THE STRUCTURE WITHIN A BULKHEAD TO THE EXTERIOR WALL.
- TERMINATE ALL VENTS AND EXHAUST FANS WITH AN APPROVED VENT COVER THAT DOES NOT PERMIT VERMIN FROM ENTERING THE BUILDING.
- 7. WHERE NATURAL GAS FIREPLACE IS INSTALLED, TYPE 'B' GAS VENTS MUST BE INSTALLED WITH REQUIRED CLEARANCE FROM COMBUSTIBLE MATERIAL PER OBC

## PLUMBING

- 1. THIS SCOPE AND OUTLINE SPECIFICATIONS DO NOT INCLUDE FOR THE INSTALLATION OF A NEW POTABLE DRINKING SOURCE. CONNECTION SHALL BE MADE TO THE EXISTING SERVICE SERVING THE EXISTING BUILDING. IT IS ASSUMED THAT THE EXISTING SERVICE HAS SUFFICIENT CAPACITY TO PROVIDE ADEQUATE WATER VOLUME AND PRESSURE TO THE NEW BUILDING/ADDITION.
- THIS SCOPE AND OUTLINE SPECIFICATION DO NOT INCLUDE FOR THE DESIGN NOR INSTALLATION OF A SEPTIC HIS STEM. WASTE WATER SHALL BE CONNECTED TO THOUGHE SISTING SANITARY LINES THAT SERVE THIS BUILDING.

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE CANADIAN ELECTRICAL CODE AND THE ELECTRICAL SAFETY

ALL BOOMS SHALL HAVE CEILING MOUNTED LIGHTS CONTROLLED WITH AT LEAST ONE SWITCH

COMPLETION OF THE FINAL ELECTRICAL INSPECTION

CONTRACTOR SHALL APPLY FOR AND OBTAIN AN ELECTRICAL PERMIT FROM THE ELECTRICAL SAFETY AUTHORITY.

PROVIDE SMOKE ALARMS AND CARBON MONOXIDE DETECTORS ON EACH FLOOR AND INTERCONNECT ALARMS AS

MINIMUM (1) EXTERIOR LIGHT CONTROLLED BY AN INTERIOR SWITCH SHALL BE PROVIDED AT EVERY ENTRANCE.
 ALL STAIRS SHALL BE LIGHTED AND CONTROLLED BY A THREE-WAY SWITCH AT THE TOP AND BOTTOM OF THE

7. THE ELECTRICAL CONTRACTOR SHALL WORK WITH THE OWNER IN SELECTING THE APPROPRIATE LOCATION FOR LIGHT FIXTURES AND SWITCHES. 8. PROVIDE OWNER WITH FINAL CERTIFICATE OF APPROVAL FROM THE ELECTRICAL SAFETY AUTHORITY AT THE

1. DRYWALL SHALL BE 1/2" THICK (UNLESS OTHERWISE NOTED) WITH JOINTS TAPED AND FILLED. SAND SMOOTH AND

INSTALLATION. IN NO CIRCUMSTANCES SHALL THE INSTALLATION DEVIATE UNLESS SPECIFICALLY APPROVED BY THE

FLOORS, ETC, SHALL HAVE A WATERPROOFING MEMBRANE INSTALLED UNDER THE TILES. MEMBRANE SHALL BE A SYSTEM AS PROVIDED BY A SINGLE MANUFACTURER. FOLLOW THE MANUFACTURERS SPECIFIC INSTALLATION

WHERE THERE IS AN ATTACHED GARAGE, PROVIDE SMOKE TIGHT SEAL BETWEEN WALLS OF THE LIVING AREA AND THE GARAGE. INSTALL DOOR WITH A SELF CLOSING DEVICE AND WEATHERSTRIPPING AS PER O.B.C. SECTION

PROVIDE PRIME COAT OF PAINT. PROVIDE MINIMUM 'LEVEL 4' FINISH, WITH A 'LEVEL 5' FINISH PREFERR

2. THE OWNER SHALL BE RESPONSIBLY FOR SELECTING FINISH MATERIALS AND COLOURS FOR WALLS. FLOORS

4. CERAMIC TILE IN AREAS OF WATER SUBMERSION (ACTUAL OR PROBABLE) SUCH AS SHOWERS, LAUNDRY ROOM

6. PROVIDE A ROOF ATTIC HATCH ACCESS IN EACH ROOF AREA (22"x36" MIN.). ENSURE ROOF ACCESS HATCH IS

7. PROVIDE SOLID WOOD BLOCKING AT TUBS, SHOWERS, AND TOILETS FOR THE FUTURE INSTALLATION OF GRAB BAR.

GUARDS REQUIRED ON EXTERIOR BALCONIES AND PORCHES IF OVER 2'-0" ABOVE FINISHED GRADE MUST BE A

4. GUARDS SHALL HAVE NO OPENING GREATER THAN 4", AND NO MEMBER BETWEEN 4" & 2'-11" THAT WILL FACILITATE

3. ALL FINISH MATERIALS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS PRINTED METHODS FOR

MANUFACTURER WHO SHALL PROVIDE WRITTEN ACCEPTANCE OF THE METHODS FOR INSTALLATION.

INSTRUCTIONS, SUCH ACCEPTABLE SYSTEMS INCLUDE: SCHLUTER, BLUE SEAL.

PROVIDE ADEQUATE SLOPE TO ALL WASTE PIPING IN ACCORDANCE WITH THE OBC. ALL FIXTURES USED SHALL BE NEW AND SHALL BEAR A CSA OR CAN/CSA, OR ULC RATING CONFIRMING THEY HAVE BEEN TESTED AND MEET MINIMUM STANDARDS. WHERE POSSIBLE FIXTURES SHALL BE ENERGY EFFICIENT AND REDUCE THE AMOUNT OF ENVIRONMENTAL WASTE.

#### ELECTRICAL

PER 9.10.19

FINISHING NOTES

<u>STAIRS</u>

CEILINGS, MILLWORK, ETC

INSULATED AND WEATHER SEALED

MAXIMUM RISE

MINIMUM WIDTH

RAIL @ STAIR

CLIMBING

MIN. HEADROOM

MINIMUM HEIGHT OF 3'-6".

MINIMUM RUN

MAX. NOSING

STAIRS ARE TO BE FINISHED AS PER OWNER.

2. STAIRS ARE TO CONFORM TO OBC PART 9 & SB-7. SEE BELOW

- 7-7/8"

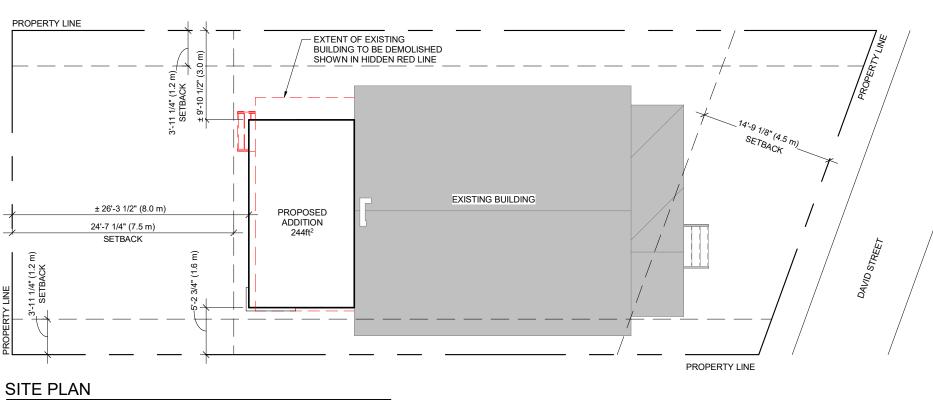
- 2'-10"

- 6'-5"

- 3'-0"

- 10"

# **170 DAVID DUPLEX CONVERSION 170 DAVID STREET** KITCHENER, ON N2G 1Y4

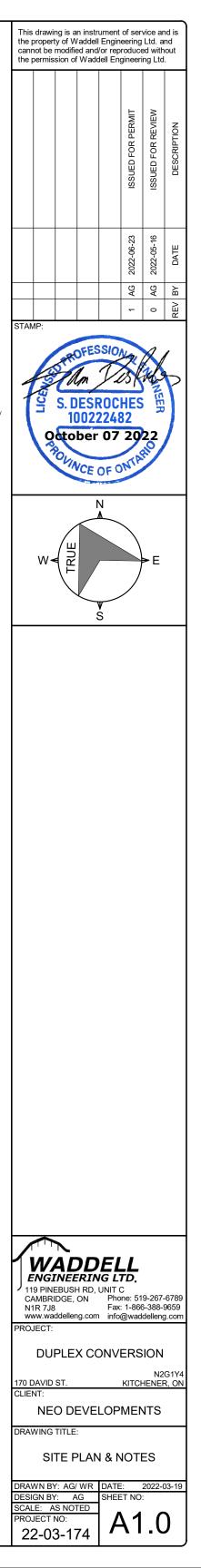


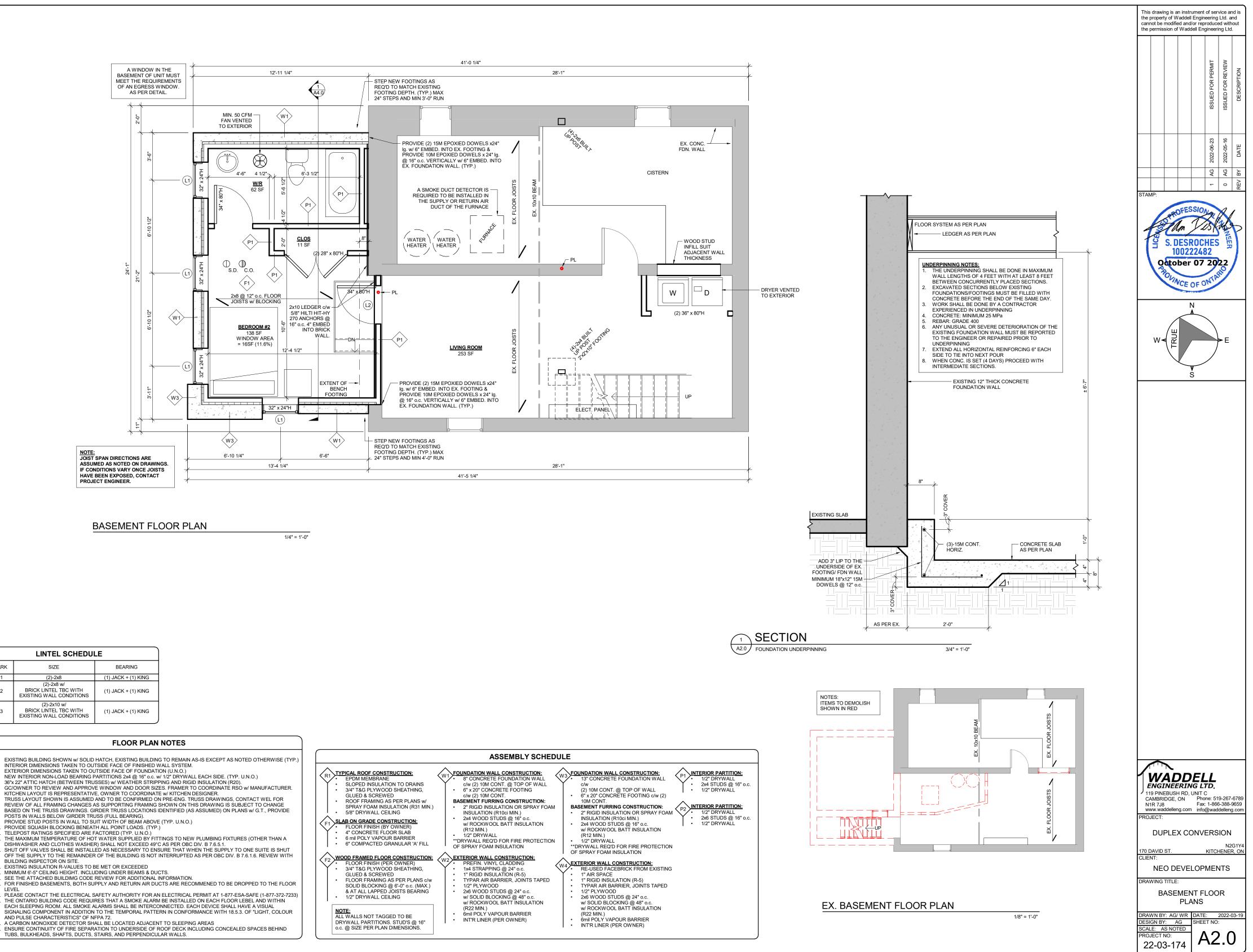
3/32" = 1'-0

SPATIAL SEPARATION - CONSTRUCTION OF EXTERIOR WALLS (RESIDENTIAL - T9.10.15.4.):									
WALL	EBF AREA (m²)	LIMITING DIST. (m)	L/H or H/L	PERMITTED MAX.% of OPENINGS	PROPOSED % of OPENINGS	F.R.R. (HOURS)	LISTED DESIGN or DESC.	N.C. CLAD?	N.C. CONST?
NORTH	76.3	3	N/A	15.4%	8.7%	0	N/A	NO	NO
SOUTH	76.3	1.6	N/A	8.3%	6.3%	0	N/A	NO	NO
EAST	N/A	N/A	N/A	N/A	N/A	0	N/A	NO	NO
WEST	58.3	8	N/A	92.7%	10.1%	0	N/A	NO	NO

SPATIAL SEPARATION

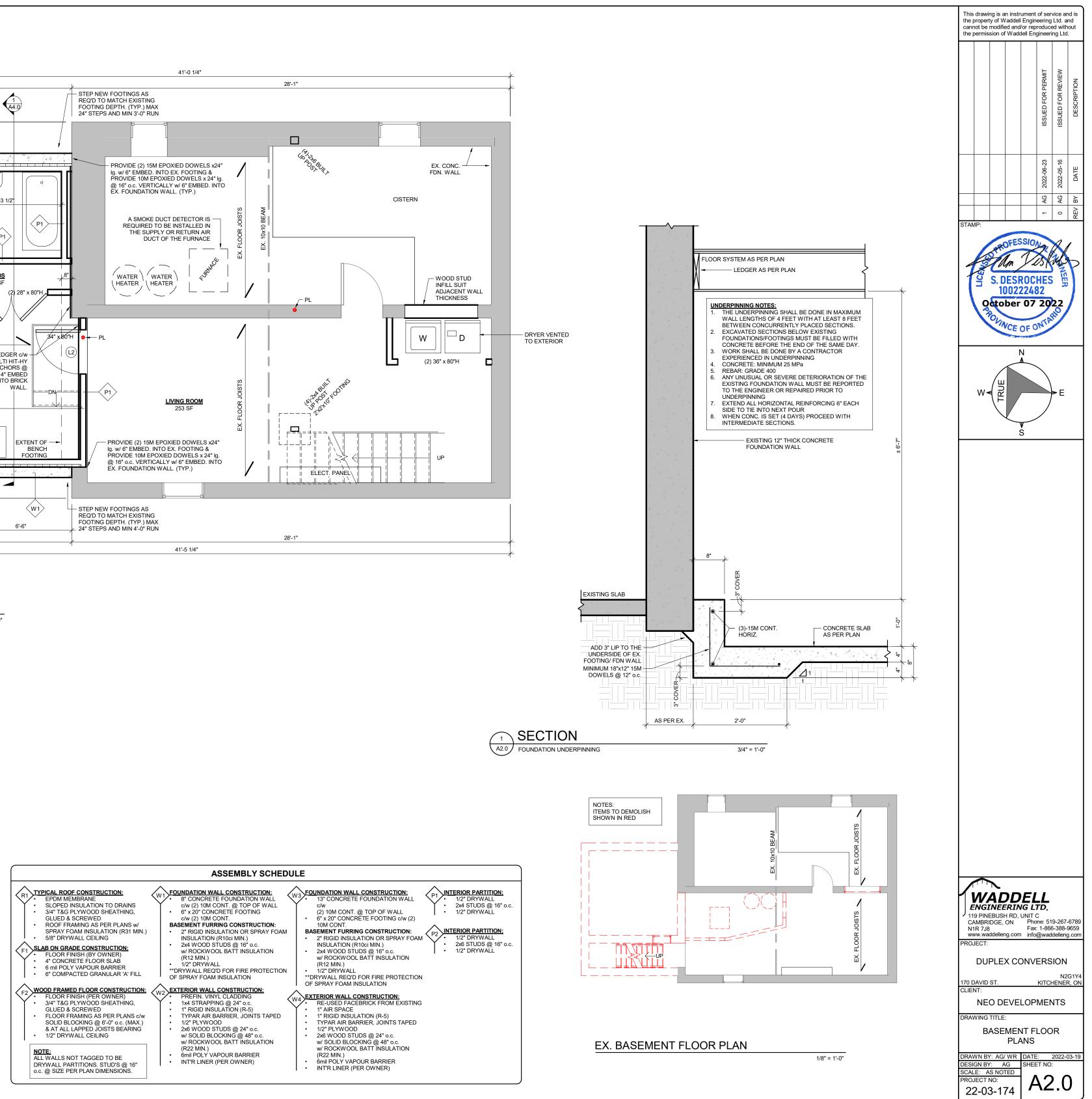
12" = 1'-0

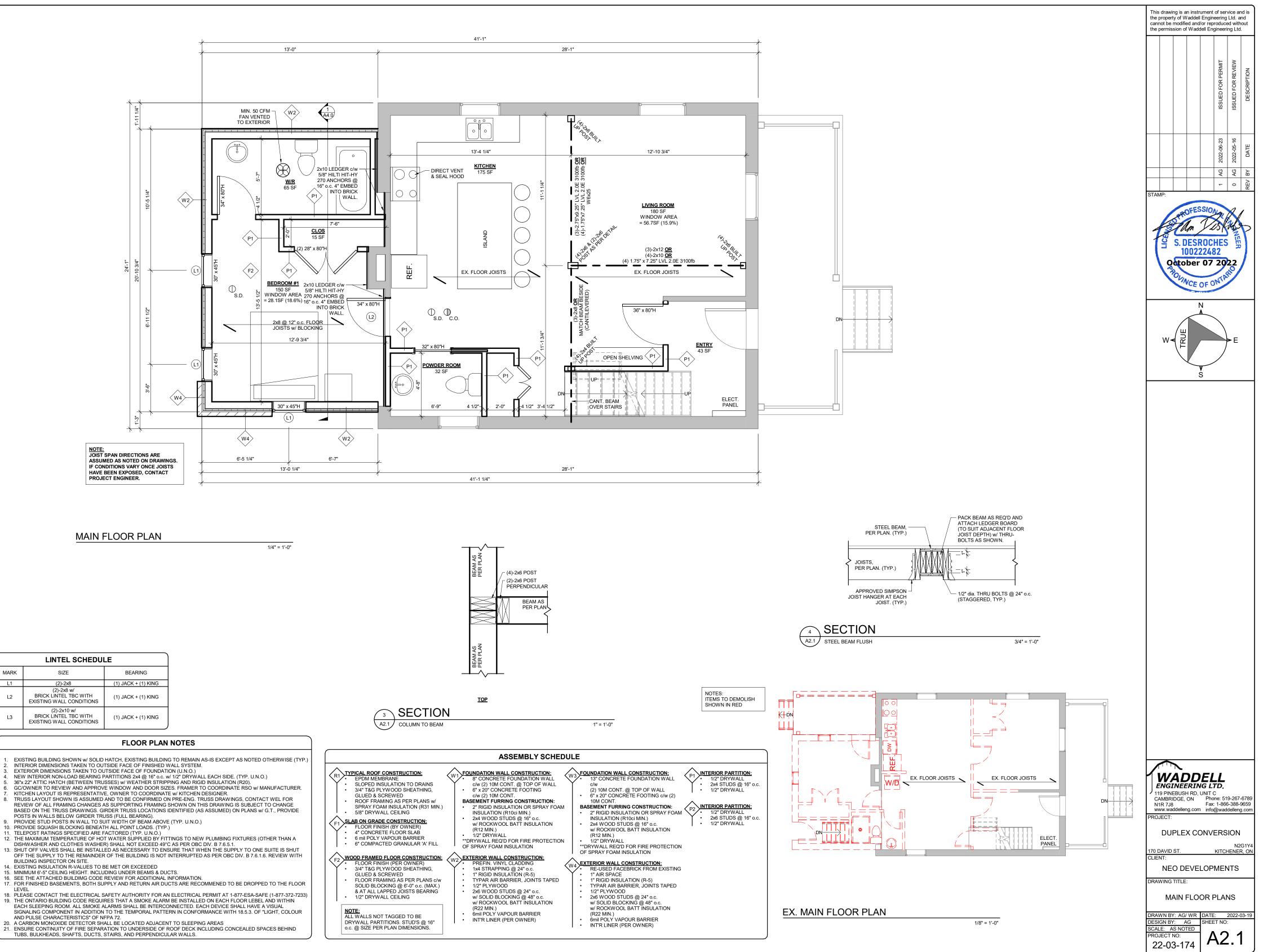




LINTEL SCHEDULE				
MARK	SIZE	BEARING		
L1	(2)-2x8	(1) JACK + (1) KING		
L2	(2)-2x8 w/ BRICK LINTEL TBC WITH EXISTING WALL CONDITIONS	(1) JACK + (1) KING		
L3	(2)-2x10 w/ BRICK LINTEL TBC WITH EXISTING WALL CONDITIONS	(1) JACK + (1) KING		

- INTERIOR DIMENSIONS TAKEN TO OUTSIDE FACE OF FIUSHED WALL SYSTEM. EXTERIOR DIMENSIONS TAKEN TO OUTSIDE FACE OF FOUNDATION (U.N.O.)
- GC/OWNER TO REVIEW AND APPROVE WINDOW AND DOOR SIZES. FRAMER TO COORDINATE RSO W/ MANUFACTURER.
- KITCHEN LAYOUT IS REPRESENTATIVE, OWNER TO COORDINATE W/ KITCHEN DESIGNER TRUSS LAYOUT SHOWN IS ASSUMED AND TO BE CONFIRMED ON PRE-ENG. TRUSS DRAWINGS, CONTACT WEL FOR REVIEW OF ALL FRAMING CHANGES AS SUPPORTING FRAMING SHOWN ON THIS DRAWING IS SUBJECT TO CHANGE
- POSTS IN WALLS BELOW GIRDER TRUSS (FULL BEARING). PROVIDE STUD POSTS IN WALL TO SUIT WIDTH OF BEAM ABOVE (TYP. U.N.O.)
- 10. PROVIDE SQUASH BLOCKING BENEATH ALL POINT LOADS. (TYP.) TELEPOST RATINGS SPECIFIED ARE FACTORED (TYP. U.N.O.)
- 12. THE MAXIMUM TEMPERATURE OF HOT WATER SUPPLIED BY FITTINGS TO NEW PLUMBING FIXTURES (OTHER THAN A
- 13. SHUT OFF VALVES SHALL BE INSTALLED AS NECESSARY TO ENSURE THAT WHEN THE SUPPLY TO ONE SUITE IS SHUT OFF THE SUPPLY TO THE REMAINDER OF THE BUILDING IS NOT INTERRUPTED AS PER OBC DIV. B 7.6.1.6. REVIEW WITH BUILDING INSPECTOR ON SITE. 14. EXISTING INSULATION R-VALUES TO BE MET OR EXCEEDED
- 15. MINIMUM 6'-5" CEILING HEIGHT, INCLUDING UNDER BEAMS & DUCTS.
- 16. SEE THE ATTACHED BUILDIMG CODE REVIEW FOR ADDITIONAL INFORMATION. 17. FOR FINISHED BASEMENTS, BOTH SUPPLY AND RETURN AIR DUCTS ARE RECOMMENED TO BE DROPPED TO THE FLOOR
- LEVEL 18. PLEASE CONTACT THE ELECTRICAL SAFETY AUTHORITY FOR AN ELECTRICAL PERMIT AT 1-877-ESA-SAFE (1-877-372-7233) THE ONTARIO BUILDING CODE REQUIRES THAT A SMOKE ALARM BE INSTALLED ON EACH FLOOR LEBEL AND WITHIN EACH SLEEPING ROOM. ALL SMOKE ALARMS SHALL BE INTERCONNECTED. EACH DEVICE SHALL HAVE A VISUAL SIGNALING COMPONENT IN ADDITION TO THE TEMPORAL PATTERN IN CONFORMANCE WITH 18.5.3. OF "LIGHT, COLOUR
- 20. A CARBON MONOXIDE DETECTOR SHALL BE LOCATED ADJACENT TO SLEEPING AREAS 21. ENSURE CONTINUITY OF FIRE SEPARATION TO UNDERSIDE OF ROOF DECK INCLUDING CONCEALED SPACES BEHIND TUBS, BULKHEADS, SHAFTS, DUCTS, STAIRS, AND PERPENDICULAR WALLS.

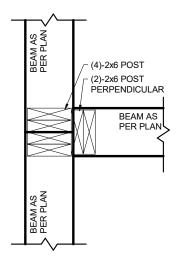




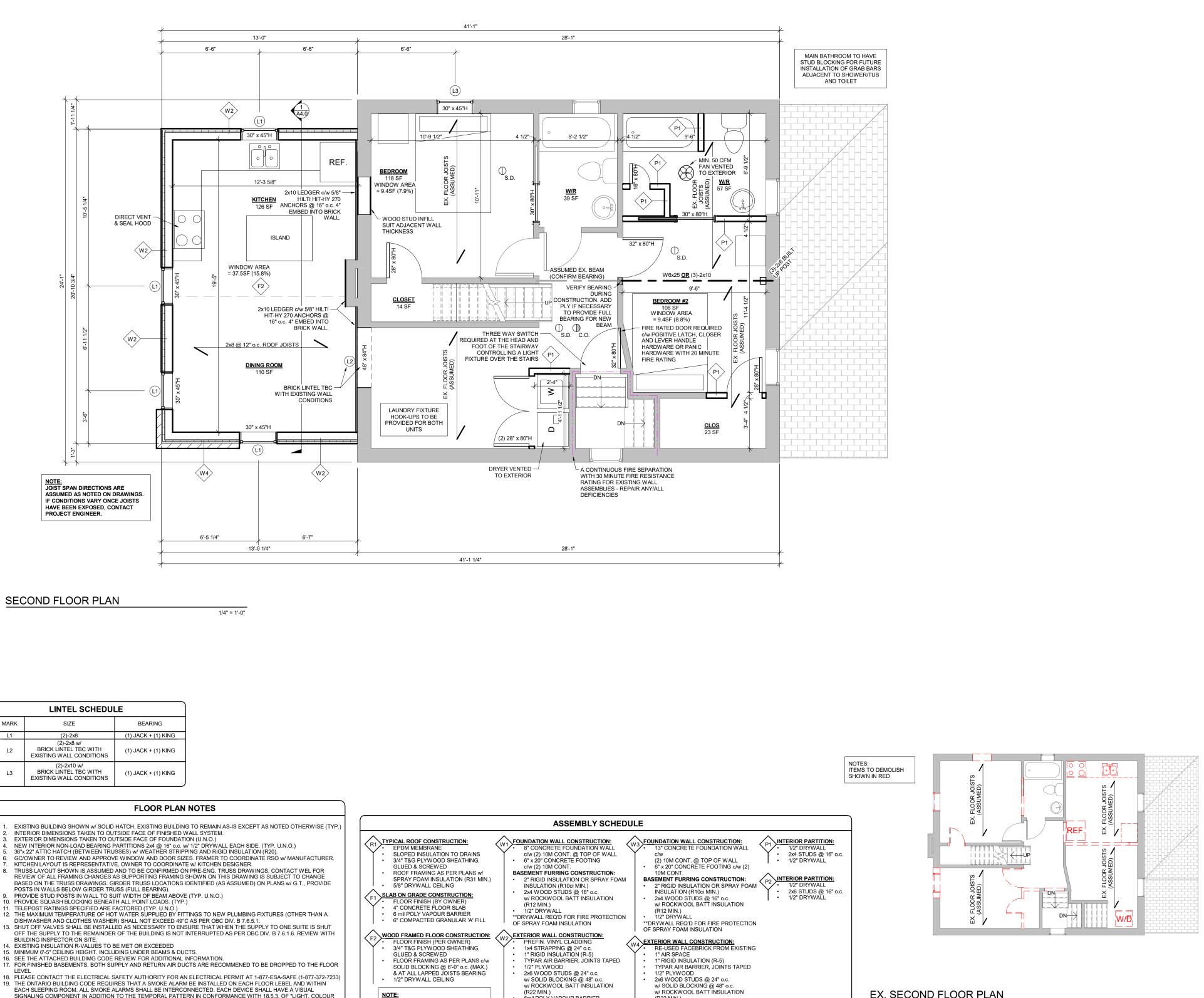
MAIN FLOOR PLAN

LINTEL SCHEDULE				
MARK	SIZE	BEARING		
L1	(2)-2x8	(1) JACK + (1) KING		
L2	(2)-2x8 w/ BRICK LINTEL TBC WITH EXISTING WALL CONDITIONS	(1) JACK + (1) KING		
L3	(2)-2x10 w/ BRICK LINTEL TBC WITH EXISTING WALL CONDITIONS	(1) JACK + (1) KING		

- BASED ON THE TRUSS DRAWINGS. GIRDER TRUSS LOCATIONS IDENTIFIED (AS ASSUMED) ON PLANS w/ G.T., PROVIDE POSTS IN WALLS BELOW GIRDER TRUSS (FULL BEARING). PROVIDE STUD POSTS IN WALL TO SUIT WIDTH OF BEAM ABOVE (TYP. U.N.O.)
- 10. PROVIDE SQUASH BLOCKING BENEATH ALL POINT LOADS. (TYP.)
- OFF THE SUPPLY TO THE REMAINDER OF THE BUILDING IS NOT INTERRUPTED AS PER OBC DIV. B 7.6.1.6. REVIEW WITH BUILDING INSPECTOR ON SITE.
- 15. MINIMUM 6'-5" CEILING HEIGHT. INCLUDING UNDER BEAMS & DUCTS.
- 16. SEE THE ATTACHED BUILDIMG CODE REVIEW FOR ADDITIONAL INFORMATION.
- LEVEL 18. PLEASE CONTACT THE ELECTRICAL SAFETY AUTHORITY FOR AN ELECTRICAL PERMIT AT 1-877-ESA-SAFE (1-877-372-7233)
- THE ONTARIO BUILDING CODE REQUIRES THAT A SMOKE ALARM BE INSTALLED ON EACH FLOOR LEBEL AND WITHIN EACH SLEEPING ROOM. ALL SMOKE ALARMS SHALL BE INTERCONNECTED. EACH DEVICE SHALL HAVE A VISUAL SIGNALING COMPONENT IN ADDITION TO THE TEMPORAL PATTERN IN CONFORMANCE WITH 18.5.3. OF "LIGHT, COLOUR AND PULSE CHARACTERISTICS" OF NFPA 72.
- TUBS, BULKHEADS, SHAFTS, DUCTS, STAIRS, AND PERPENDICULAR WALLS.



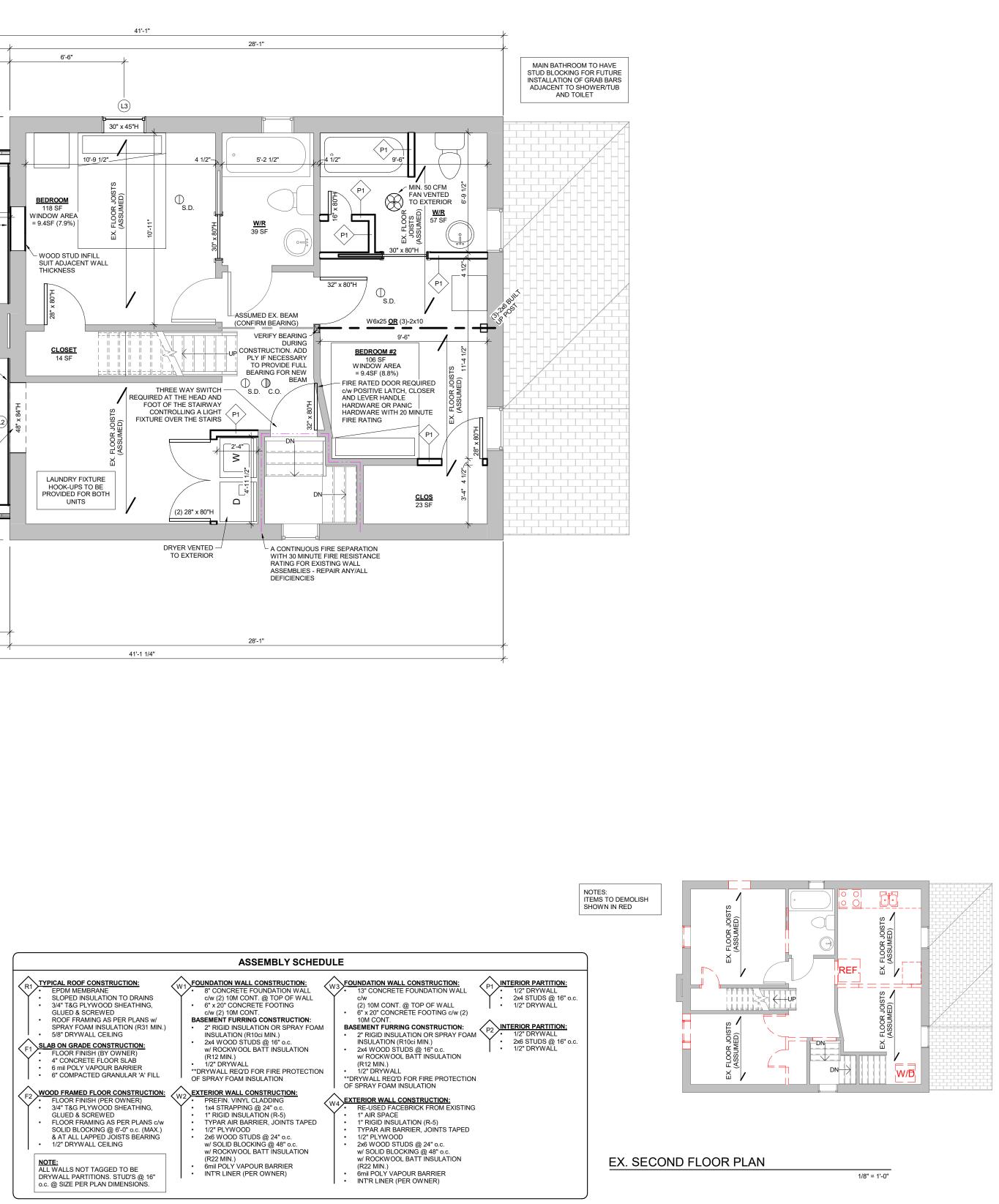
	ASSEMBLY SCHEDULE
R1       • EPDM MEMBRANE         • SLOPED INSULATION TO DRAINS         • 3/4" T&G PLYWOOD SHEATHING,         GLUED & SCREWED         • ROOF FRAMING AS PER PLANS W/         SPRAY FOAM INSULATION (R31 MIN.)         • 5/8" DRYWALL CEILING <b>F1</b> • FLOOR FINISH (BY OWNER)         • 4" CONCRETE FLOOR SLAB         • 6 mil POLY VAPOUR BARRIER         • 6" COMPACTED GRANULAR 'A' FILL <b>F2 WOOD FRAMED FLOOR CONSTRUCTION:</b> • FLOOR FINISH (PER OWNER) • 3/4" T&G PLYW OOD SHEATHING, GLUED & SCREWED • FLOOR FRAMING AS PER PLANS c/w SOLID BLOCKING @ 6"-0" o.c. (MAX.) & AT ALL LAPPED JOISTS BEARING • 1/2" DRYWALL CEILING <b>NOTE:</b> ALL WALLS NOT TAGGED TO BE         DRYWALL PARTITIONS. STUD'S @ 16"         •.c. @ SIZE PER PLAN DIMENSIONS.	<ul> <li>INSULATION (R10ci MIN.)</li> <li>2x4 WOOD STUDS @ 16" o.c. w/ ROCKWOOL BATT INSULATION (R12 MIN.)</li> <li>1/2" DRYWALL</li> <li>**DRYWALL REQ'D FOR FIRE PROTECTION OF SPRAY FOAM INSULATION</li> <li>1/2" DRYWALL</li> </ul>

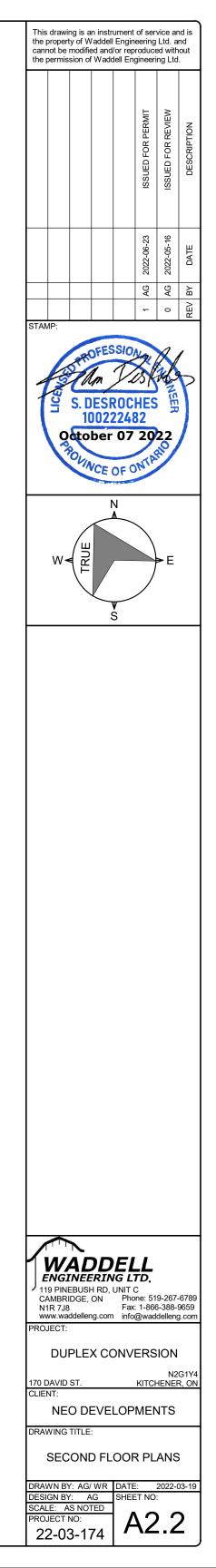


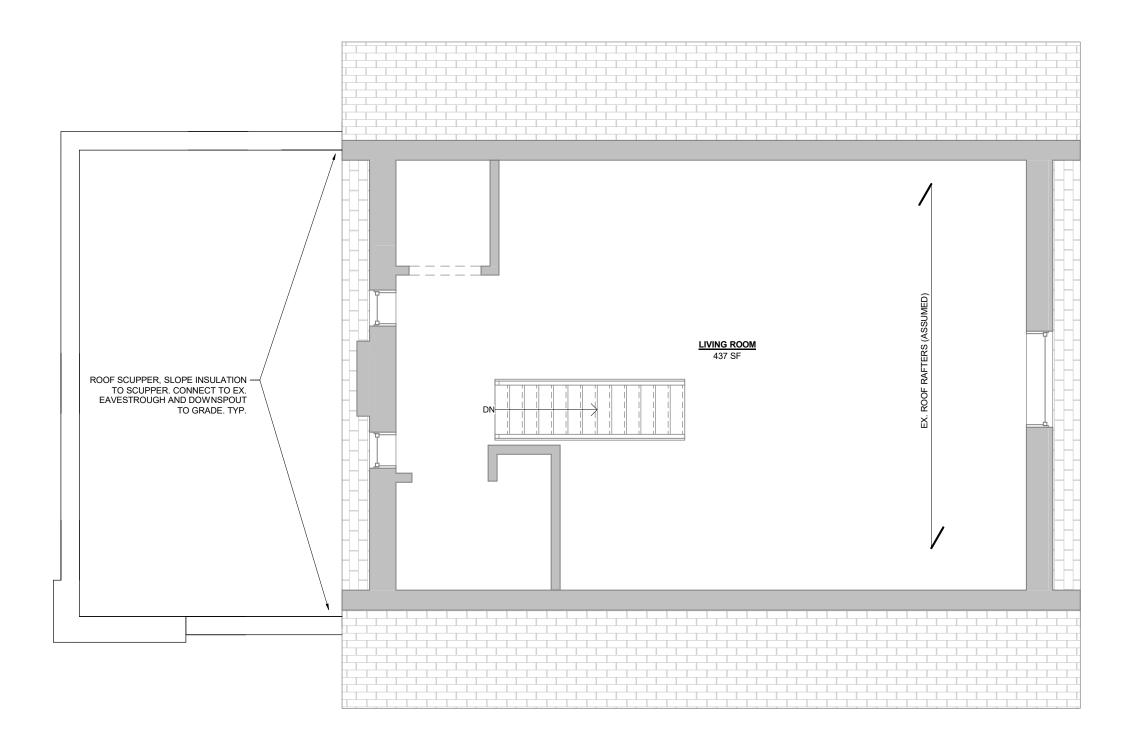
SECOND FLOOR PLAN

LINTEL SCHEDULE			
MARK	SIZE	BEARING	
L1	(2)-2x8	(1) JACK + (1) KING	
L2	(2)-2x8 w/ BRICK LINTEL TBC WITH EXISTING WALL CONDITIONS	(1) JACK + (1) KING	
L3	(2)-2x10 w/ BRICK LINTEL TBC WITH EXISTING WALL CONDITIONS	(1) JACK + (1) KING	

- REVIEW OF ALL FRAMING CHANGES AS SUPPORTING FRAMING SHOWN ON THIS DRAWING IS SUBJECT TO CHANGE BASED ON THE TRUSS DRAWINGS. GIRDER TRUSS LOCATIONS IDENTIFIED (AS ASSUMED) ON PLANS W/ G.T., PROVIDE
- 10. PROVIDE SQUASH BLOCKING BENEATH ALL POINT LOADS. (TYP.) 11. TELEPOST RATINGS SPECIFIED ARE FACTORED (TYP. U.N.O.)
- THE MAXIMUM TEMPERATURE OF HOT WATER SUPPLIED BY FITTINGS TO NEW PLUMBING FIXTURES (OTHER THAN A DISHWASHER AND CLOTHES WASHER) SHALL NOT EXCEED 49°C AS PER OBC DIV. B 7.6.5.1.
- BUILDING INSPECTOR ON SITE. 14. EXISTING INSULATION R-VALUES TO BE MET OR EXCEEDED
- 17. FOR FINISHED BASEMENTS, BOTH SUPPLY AND RETURN AIR DUCTS ARE RECOMMENED TO BE DROPPED TO THE FLOOR LEVEL
- EACH SLEEPING ROOM. ALL SMOKE ALARMS SHALL BE INTERCONNECTED. EACH DEVICE SHALL HAVE A VISUAL SIGNALING COMPONENT IN ADDITION TO THE TEMPORAL PATTERN IN CONFORMANCE WITH 18.5.3. OF "LIGHT, COLOUR AND PULSE CHARACTERISTICS" OF NFPA 72.
- 20. A CARBON MONOXIDE DETECTOR SHALL BE LOCATED ADJACENT TO SLEEPING AREAS 21. ENSURE CONTINUITY OF FIRE SEPARATION TO UNDERSIDE OF ROOF DECK INCLUDING CONCEALED SPACES BEHIND TUBS, BULKHEADS, SHAFTS, DUCTS, STAIRS, AND PERPENDICULAR WALLS.

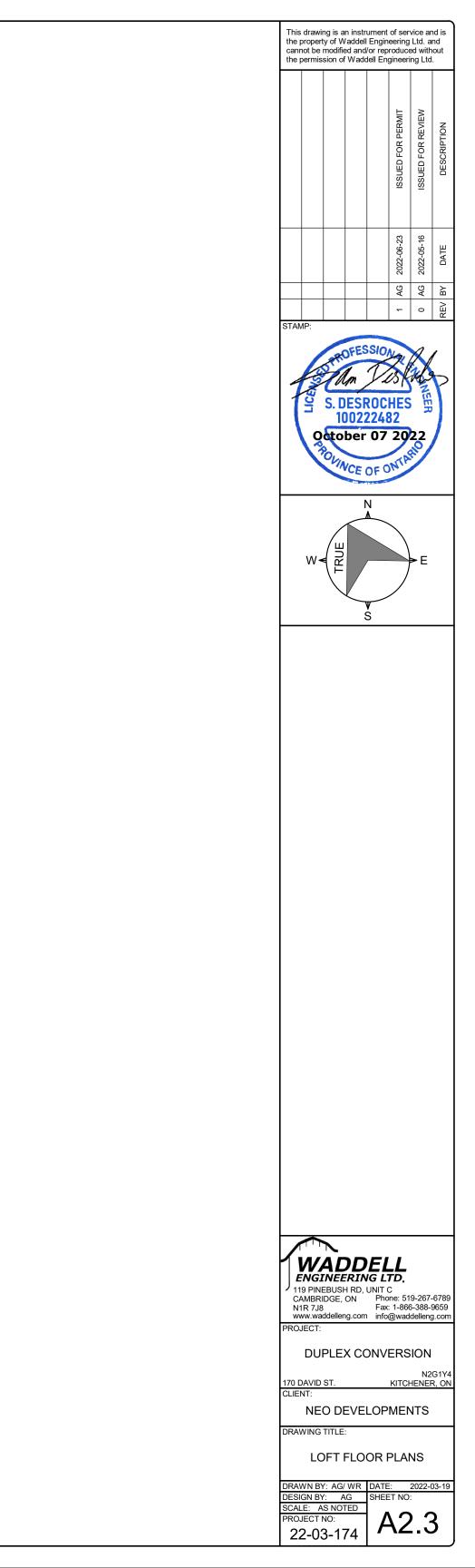






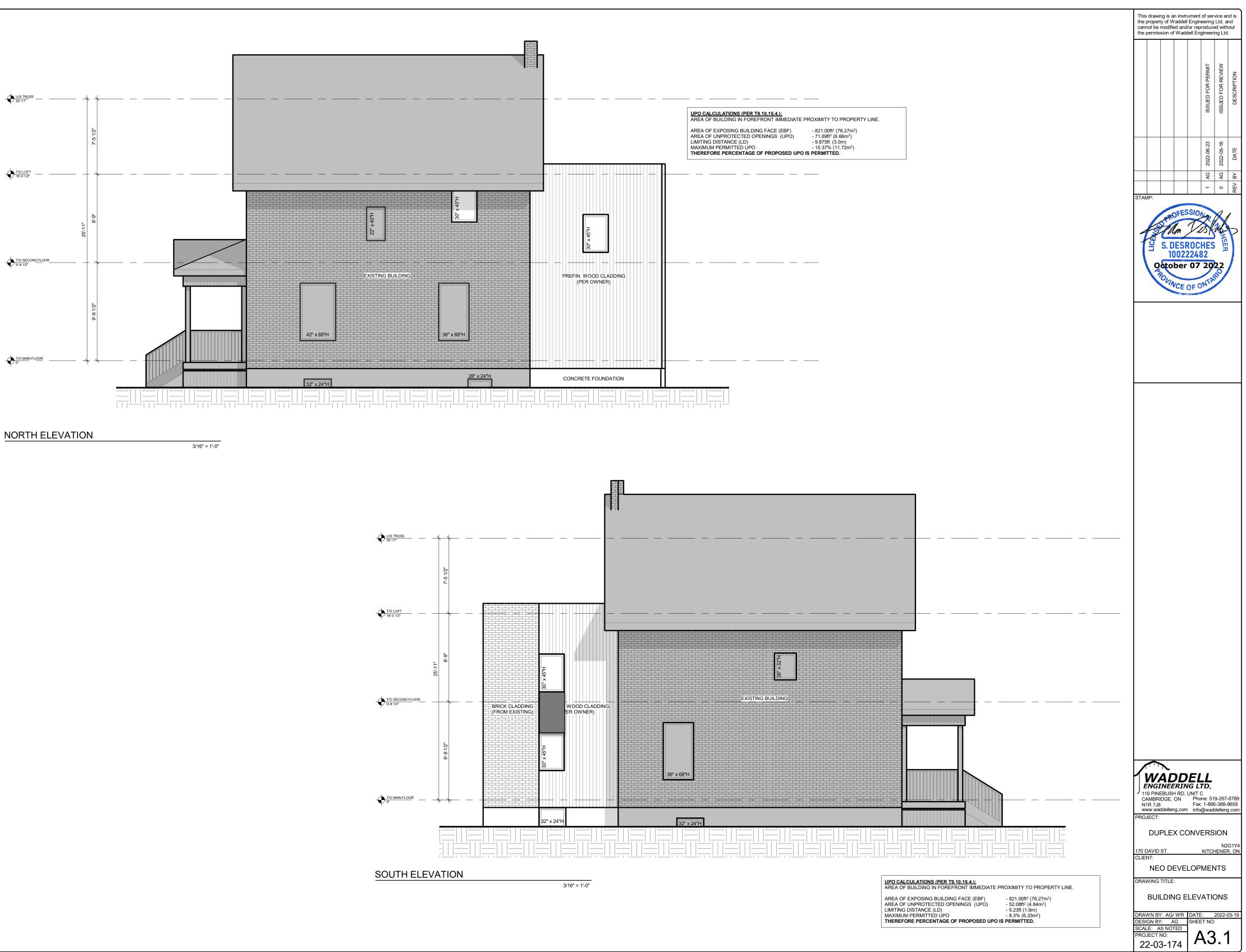
# LOFT PLAN

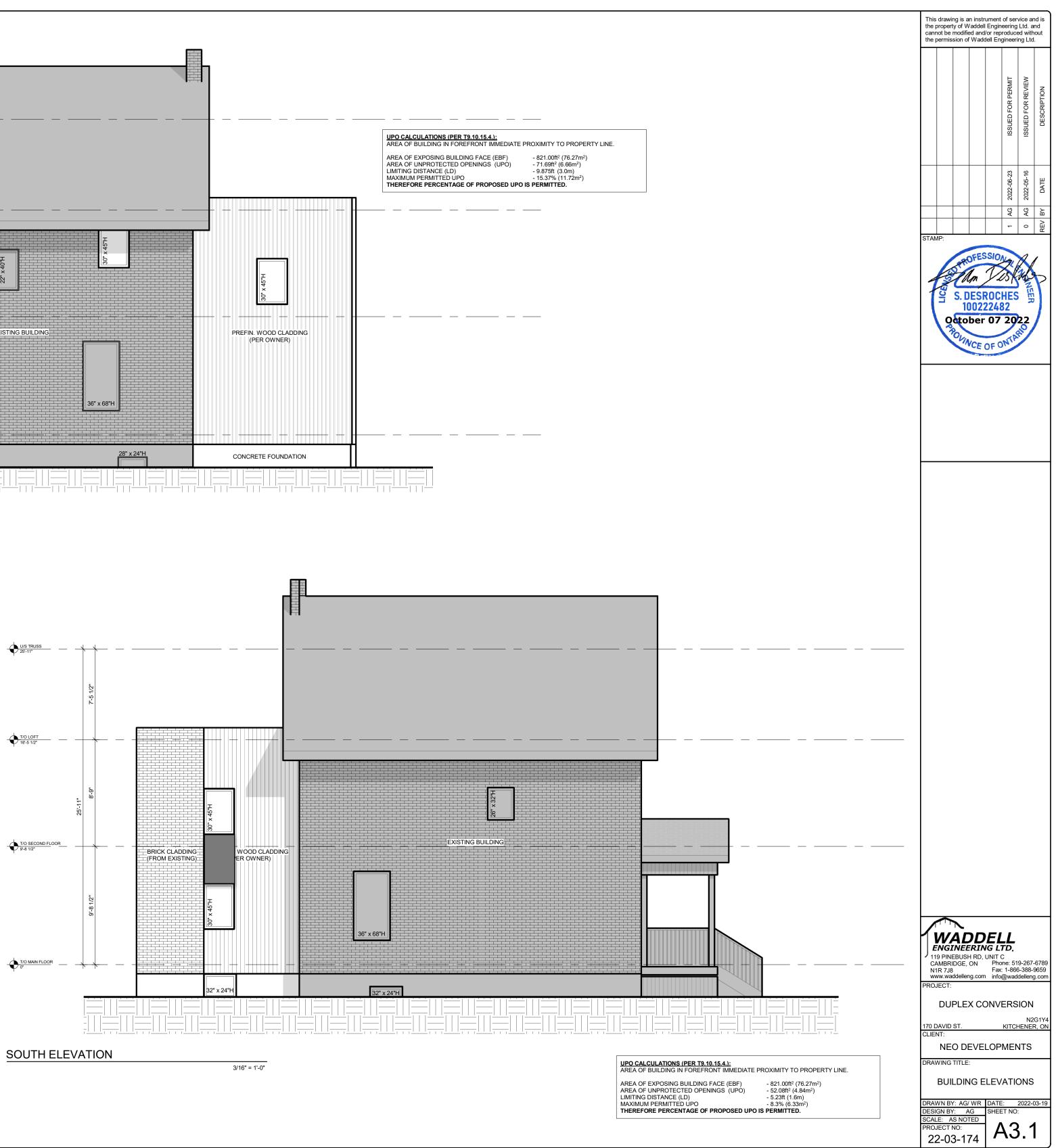
1/4" = 1'-0"

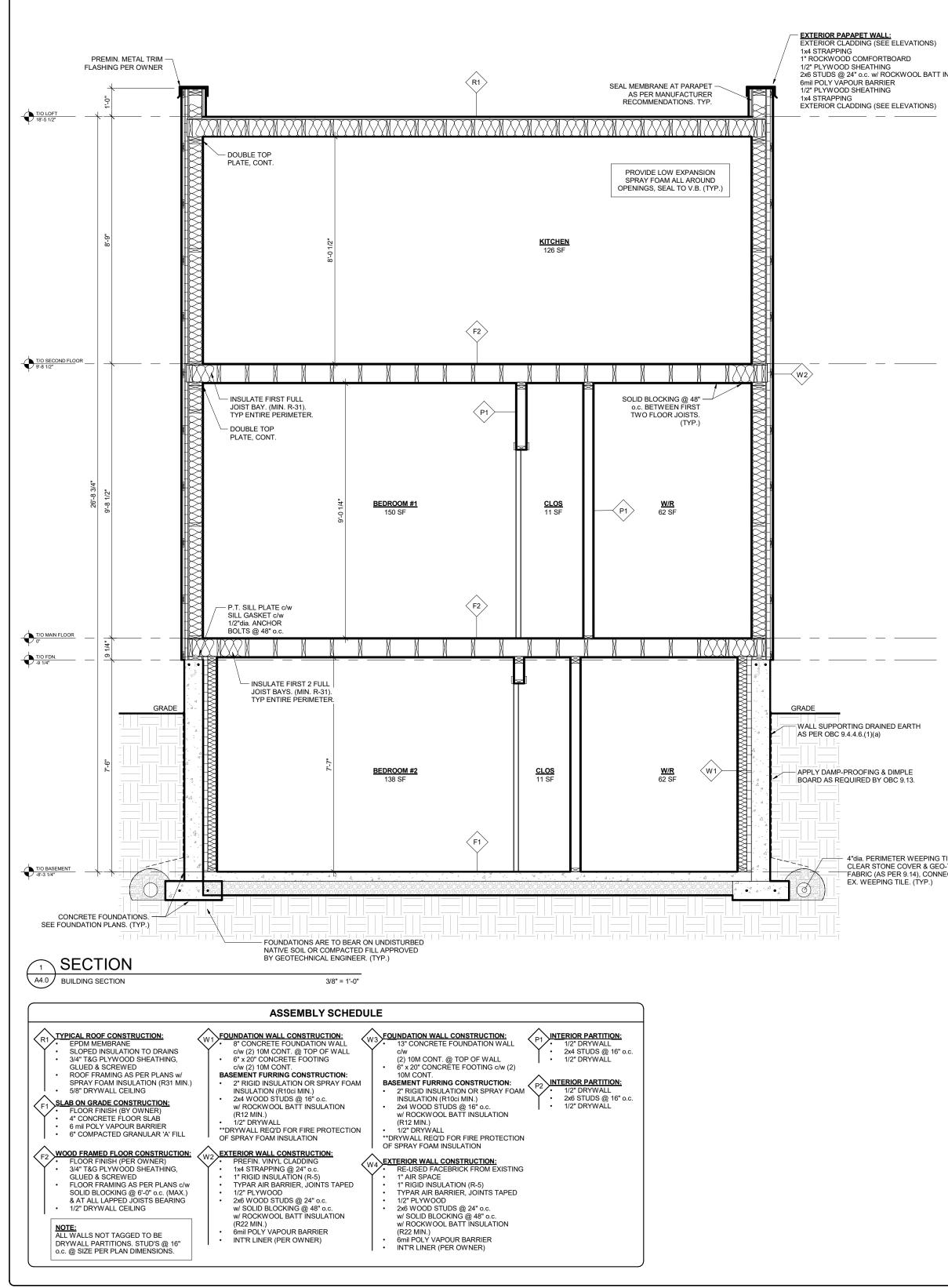












		This drawing is an instrument of service and is the property of Waddell Engineering Ltd. and cannot be modified and/or reproduced without the permission of Waddell Engineering Ltd.
T INSULATION (R22)	NOTES:         FOUNDATION WALL TO BE LATERALLY         SUPPORTED AT TOP AS PER OBC 9.15.         WINDOW OPENING AND 48" o.c. FOR         8'-0" o.c. EACH SIDE OF WINDOW.	ISSUED FOR PERMIT ISSUED FOR REVIEW DESCRIPTION
	4-0" (MAX.) THUR WOULD AND AND AND AND AND AND AND AND AND AN	anssi anssi
	2 A4.0 BASEMENT WINDOW REINFORCING 1/2" = 1'-0"	
G TILE c/w 6"		
O-TEXTILE NECT INTO		
		PROJECT: DUPLEX CONVERSION
		N2G1Y4 KITCHENER, ON CLIENT: NEO DEVELOPMENTS DRAWING TITLE: BUILDING SECTIONS & DETAILS
		DETAILS DRAWN BY: AG/WR DATE: 2022-03-19 DESIGN BY: AG SCALE: AS NOTED PROJECT NO: 22-03-174 A4.0