

STRUCTURAL REPORT Change of Use Suitability

Date: May 20, 2025 **No. of Pages:** 2 + Encl.

Project: Hesselink Accessory Dwelling Conversion Project No.: TE-02207-25

Address: 2026 Reidsville Road, Ayr

Client: Ed Hesselink

Distribution: Ed Hesselink @gmail.com

Background

Tacoma Engineers has been retained by Ed Hesselink to provide a structural review of the original design drawings for the existing accessory building located at 2026 Reidsville Road, Ayr.

It is our understanding that the property owner is applying to sever the existing lot, which would require renovating this existing accessory building to be a single dwelling unit.

As part of the planning pre-consultation process, the Township has requested that an engineer confirm that the building is suitable for conversion (refer to attached Pre-Consultation Letter dated June 13, 2024).

Comments

Tacoma Engineers has been provided with the original design drawings for the existing accessory building (see the attached drawing set). The original design was carried out by Gerrard's Design & Drafting Inc. and the drawings include the BCIN stamp under the "small buildings" classification. The drawings are dated Jan 2017 and BCIN stamped Feb 27, 2017. It is noted on the drawing set that the design was carried out to the latest Ontario Building Code (OBC 2012 was current in 2017).

For this accessory building to be suitable for conversion to a single dwelling unit, it would need to have been designed in general conformance with the design requirements laid out in Part 9 (Housing and Small Buildings) of the Ontario Building Code (OBC). Tacoma Engineers has completed a structural review of the original building drawings to confirm the major structural elements are in general conformance with Part 9 of the Ontario Building Code.

As per the "Lintel Schedule" included on drawing A-2, the design was carried out using a ground snow load of 1.5 kPa. This correlates to a max Ss value of 2.0 when using part 9 design (Cb = 0.55). Ss values of nearby surrounding towns and cities are as follows:

- Cambridge, Ss = 1.6 kPa (11 km away from subject property)
- Paris, Ss = 1.4 kPa (15 km away from subject property)
- Platsville, Ss = 1.9 kPa (15 km away from subject property)
- Kitchener, Ss = 2.0 kPa (15 km away from subject property)

Based on our review, we have determined that the original structural design of the accessory building appears to have been completed to be in compliance with Part 9 of the Ontario Building Code in place in 2017.

It is our understanding that a renovation permit would be required for the successful conversion of this building from an accessory building to a single family dwelling unit. Any architectural requirements or changes to the existing building in order to accommodate conversion to a single family dwelling unit would be reviewed and incorporated into the renovation permit drawings.

Tacoma Engineers has not completed a site review of the existing framing of the accessory building. It is our understanding that a permit was obtained for the construction of the original accessory building (Permit No. 2017-0030). It is our understanding that the permit was issued for a 'farm building', however, as indicated above, the original drawings indicate that the building was designed using the Ontario Building Code 2012 as opposed to the National Farm Building Code 1995 (which was applicable at the time of design & construction).

It is unknown whether framing reviews were completed during construction by the local building department. If additional framing reviews are required to confirm the original building was constructed as per the 2017 design drawings and OBC best practices, Tacoma Engineers may be retained to perform that work.



Per

Emily van Riesen, P.Eng., CAHP Intern Structural Engineer Tacoma Engineers

Encl. Pre-Consultation Proposed Consent Application for 2026 Reidsville Road – Township of North Dumfries – June 13, 2024 – 4 Pages

New Detached Barn at the Hesselink Residence – Gerrards Design & Drafting Inc. – Feb 27, 2017 – 9 Pages

2026 Reidsville Road Permit Card (No. 2017-0030) – Township of North Dumfries – March 29, 2017 – 1 Page



June 13, 2024

Ed and Janet Hesselink 2026 Reidsville Road North Dumfries, ON N0B 1E0

Email:edlhesselink@gmail.com

Re: Pre-Consultation

Proposed Consent Application for 2026 Reidsville Road

Pt Lt 31 Con 10 North Dumfries As In 1342252; North Dumfries

Roll No.: 300102000601001

File No: PC-09/24

Dear Mr. Hesselink,

Thank you for your interest in investing in the Township of North Dumfries. A pre-consultation application was circulated to agencies and departments on May 13th, 2024. The Township and agencies have provided specific comments pertaining to your application, which are attached to this letter for your information. Please contact the appropriate representative for any questions you may have.

It may be determined during the review of the formal application submission that additional studies or information is required as a result of issues arising during the processing of the application. The applicant will be required to provide technical studies and necessary information as identified by the Township and agencies at their expense.

Please note that comments provided as part of this pre-consultation are valid for a period of up to two years subject to changes in legislation/policies.

PROPOSAL

It is understood that the applicant proposes to sever the subject property, creating one new rural residential lot. The proposed retained lot will contain the existing residential dwelling. An addition is proposed to the existing accessory building on the proposed severed lot to be converted into a residential dwelling.

The proposed retained lot, situated at the north end of the subject property will be approximately 1.22 acres (4,963 m²) in size with a frontage of 136.5 ft (41.6 m) on Reidsville Road. The proposed severed lot, situated at the south end of the subject property will be approximately 0.77 acres (3,145 m²) in size with a frontage of 57.4 ft (17.5 m) on Reidsville

Telephone: 519-632-8800 Fax 519-632-8700 E-mail: planning@northdumfries.ca

Website: www.northdumfries.ca



Road.

The subject property is zoned Z.3 – Rural Residential under General Zoning By-law No. 689-83 and designated Settlement Residential and Ancillary in the Township Official Plan.

TOWNSHIP PLANNING COMMENTS

Staff have reviewed the pre-consultation submission regarding the proposed Consent and offer the following comments:

The following planning applications are required to permit this proposal:

- Consent Application
- Minor Variance Application (Severed Lot)

Required Variances (ZBL Section)	Required	Proposed
8.3.2: Lot Width	30 m	+/- 17.5 m
8.3.3: Minimum side yard	1.8 m (1 storey) 2.4 m (1 1/2+ storey)	Confirmation required
9.2.3(a): Accessory Building	To be accessory to a residential dwelling	To remain and be converted to a residential dwelling

A detailed concept plan will be required that identifies the following items:

- Existing/proposed buildings/structures
 - All dimensions and setbacks required
- Existing/proposed wells
- Existing/proposed septic systems,

It appears that the existing accessory building on the proposed severed lot, proposed to be converted into the primary residential dwelling, will be 1 ½ storeys in height. Confirmation of the number of storeys will be required upon the submission of formal applications to confirm the required side yard setback. This has been listed above as a required variance until the required side yard setback is determined.

As per section 9.2.3 of the General Zoning By-law, accessory buildings may only be accessory to permitted uses (residential dwelling). A minor variance will be required to permit the accessory building on the proposed severed lot until such time that it is converted into the primary residential dwelling. Please ensure compliance with Section 8.3.6 (Minimum Floor Area) for the future conversion to the primary residential dwelling.

Section 8.3.7(a) of the General Zoning By-law permits all accessory buildings/structures to have a maximum floor area of 4% of the total lot coverage. Planning staff will require

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further review of any existing accessory buildings/structures to confirm that they are within the 4% lot coverage of the proposed new lot sizes. Additional variances may be required if the accessory building sizes exceed 4% of the total lot coverage.

To convert the existing accessory building on the proposed severed lot into the primary residential dwelling, the building department will require an engineer's confirmation that the accessory building is suitable for conversion.

The subject property currently consists of two driveway entrances. The building department recommends that one entrance be closed prior to the establishment of a new entrance for the severed lot. This may be a condition to provisional approval of the consent application. It is also recommended that the access to the proposed severed lot be located along the southern property line.

CONSENT APPLICATION REQUIREMENTS

- 1) Cover Letter
- 2) Complete Consent Application Form
- 3) Concept Plan/Consent Sketch
 - Including existing/proposed buildings/structures with setbacks, existing/proposed wells, existing/proposed septic systems,
- 4) Minor Variance Application (Severed Lot)
- 5) Grading Plan
- 6) Septic Analysis
- 7) Limiting Distance Calculations
- 8) Confirmation that accessory building may be converted to dwelling
- 9) Scoped Hydrogeological Assessment

2024 Fees:

- Township Fees
 - Consent Creation of New Lot: \$3,400.00
 - Refundable Peer Review Deposit (New Lot): \$5,000.00
 - o Minor Variance (Severed): \$1,350.00
- Additional Township Fees if Application Approved
 - Administration Fee for Approval: \$335.00
 - o Cash in lieu of Parkland: \$7,500.00
 - Preparation of Development Agreement: \$2,075.00
- Regional Fees
 - o Consent: \$350.00
 - Peer Review (Scoped Hydrogeological): TBD

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TOWNSHIP AND AGENCY COMMENTS

Comments were provided by the following commenting agencies:

- Bell Canada: <u>CA.Circulations@wsp.com</u> Comments provided on May 13, 2024
- 2. Canada Post Neil Mazey: neil.mazey@canadapost.postescanada.ca Comments Received on May 13, 2024
- 3. GRCA John Brum: jbrum@grandriver.ca Comments provided on May 13, 2024
- 4. Regional Municipality of Waterloo Matthew Colley: MColley@regionofwaterloo.ca Comments provided on May 21, 2024
- 5. Waterloo Catholic District School Board Jordan Neale: <u>Jordan.Neale@wcdsb.ca</u> Comments provided on May 24, 2024
- Engineering and Public Works Department Sandy Bucholtz: <u>sbucholtz@northdumfries.ca</u> Comments provided on May 27, 2024
- 7. Building Department Shannon Black: sblack@northdumfries.ca Comments Received on May 29, 2024

Should you have any questions, please do not hesitate to contact me at cblazinovic@northdumfries.ca or by telephone at 519-632-8800 ext 131.

Yours sincerely,

Christina Blazinovic

Christina Blazinovic
Planner I/GIS Technician



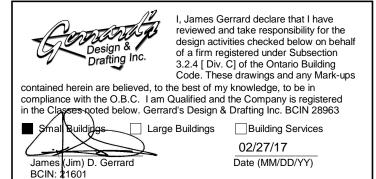
NEW DETACHED BARN AT THE HESSELINK RESIDENCE

2026 REIDSVILLE ROAD AYR, ONTARIO

LIST OF DRAWINGS

DRAWING NUMBER	DRAWING NAME
A-0	TITLE PAGE RENDERINGS, OBC NOTES
A-1	CONSTRUCTION NOTES AND SCHEDULES
A-2	CONSTRUCTION NOTES AND SCHEDULES
A-3	FOUNDATION LAYOUT
A-4	MAIN FLOOR
A-5	SECOND FLOOR
A-6	BUILDING ELEVATIONS
A-7	BUILDING ELEVATIONS
A-8	BUILDING SECTION

WEST CORNER

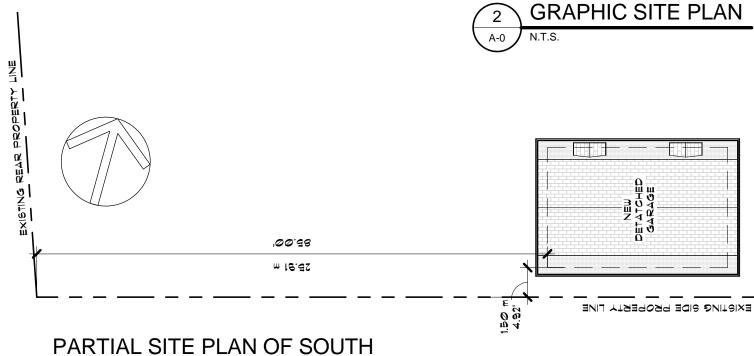












NEW DETACHED BARN
THE HESSELINK RESIDENCE
2026 REIDSVILLE ROAD
AYR, ONTARIO Status PERMIT Date JAN. 20/1 Folder -2026 Reidsville.rvt

No Date Issue

TITLE PAGE RENDERINGS, OBC NOTES

Drawn J. D. GERRARD Chck'd J. D. GERRARD Scale 1/16" = 1'-Ø" Job # 17GD@@2

I, James Gerrard declare that I have reviewed and take responsibility for the design activities checked below on behalf of a firm registered under Subsection 3.2.4 [Div. C] of the Ontario Building Code. These drawings and any Mark-ups e best of my knowledge, to be in tualified and the Company is registered its Design & Drafting Inc. BCIN 28963 Building Services 02 얼

GENERAL NOTES FOR CONSTRUCTION

- ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE ONTARIO BUILDING CODE INCLUDING ALL AMENDMENTS
- WHERE INFORMATION CONTAINED ON THE DRAWINGS AND THE OBC DO NOT AGREE. THE MORE STRINGENT CONDITIONS SHALL APPLY.
- THESE DRAWINGS AND OUTLINE PERFORMANCE BASED SPECIFICATIONS ARE INTENDED TO PROVIDE FOR A FULL AND COMPLETE PROJECT FROM START TO COMPLETION. THE CONTRACTOR SHALL VISIT THE SITE AND MAKE CERTAIN TO REVIEW THE EXISTING SITE CONDITIONS AND CONSTRAINTS.
- THE CONTRACTOR COMPLETING THIS WORK SHALL HAVE SUFFICIENT PAST EXPERIENCE IN COMPLETING WORK OF A SIMILAR NATURE AND BE CAPABLE OF PROVING SUCH EXPERIENCE IF REQUESTED
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO:
 - USE FIGURED DIMENSIONS IN PREFERENCE TO SCALING.
 - YERIFY AND CHECK ALL DIMENSIONS PRIOR TO AND DURING CONSTRUCTION.
 - DETERMINE LOCATIONS OF SERVICES.
 - WHERE DISCREPANCIES OCCUR, CONSULT WITH THE DESIGNER OR BUILDING DEPARTMENT PRIOR TO EXECUTION OF THE WORK.
- EXECUTION OF WORK ASSUMES RESPONSIBILITY FOR PREVIOUS WORK COMPLETED WHERE EXISTING CONCRETE FOUNDATION WALLS, FOOTINGS, AND SLABS ARE TO REMAIN, CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT COLLAPSE OF EXISTING WALLS DURING CONSTRUCTION. WHERE CONSULTANT OR BUILDING DEPARTMENT REQUIRE CONFIRMATION OF SUB-SURFACE CONDITIONS, CONTRACTOR SHALL FACILITATE REMOVALS AS DIRECTED TO EXPOSE CONDITIONS REQUIRED.
- THIS GARAGE IS TO BE UNHEATED AND NOT INSULATED. THREFORE THE GARAGE IS NOT REQUIRED TO CONFORM TO THE APPLICABLE SECTIONS OF THE ONTARIO BUILDING CODE FOR INSULATION OR VAPOUR BARRIER REQUIREMENTS.

EXCAVATION AND BACKFILL

- EXCAYATION, WHERE REQUIRED, SHALL BE UNDERTAKEN IN SUCH A MANNER SO AS TO PREVENT DAMAGE TO EXISTING STRUCTURES ADJACENT PROPERTIES AND UTILITIES BOTH BURIED AND ABOVE GROUND.
- TOPSOIL, VEGETATION AND OTHER ORGANIC MATTER IN UNEXCAVATED AREAS UNDER THE BUILDING SHALL BE REMOVED.
- THE BOTTOM OF ALL EXCAVATIONS FOR FOUNDATIONS SHALL BE FREE FROM ORGANIC MATERIAL OR THER MATERIALS THAT WOULD PREVENT ADEQUATE BEARING CAPACITY FOR THE STRUCTURE.
- 4. BACKFILL WITHIN 24" OF FOUNDATIONS SHALL BE FREE FROM DELETERIOUS DEBRIS AND STONES OVER 9" IN DIAMETER. PREVENT DAMAGE TO FOUNDATION WALLS AND MEMBRANES ATTACHED TO FOUNDATION WALLS.
- 5. COMPACT BACKFILL IN 12" LIFTS TO 95% PROCTOR DENSITY
- 6. EXCAYATION AT EXISTING FOUNDATIONS SHALL BE PERFORMED IN A CAREFUL MANNER SO AS TO NOT DISTURB THE EXISTING FOUNDATIONS. DO NOT EXCAVATE BELOW EXISTING FOUNDATIONS UNLESS UNDERPINNING HAS BEEN PERFORMED.
- THESE DRAWINGS AND SPECIFICATIONS DO NOT COVER UNDERPINNING OF EXISTING FOUNDATION WALLS, IF UNDERPINNING IS REQUIRED, THE DESIGN MUST BE PERFORMED BY A PROFESSIONAL ENGINEER

FOOTINGS, FOUNDATIONS, AND CONCRETE SLABS

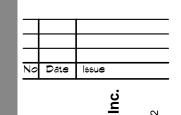
- FOOTINGS AND FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL.
- KEEP TOPSIDE OF FOOTING MINIMUM 4'-0" BELOW FINISHED GRADE CONTINUOUSLY
- STEP UNDERSIDE OF FOOTINGS IN ACCORDANCE WITH APPROVED LOT GRADING PLAN, BUT NOT GREATER THAN 24" YERTICALLY (MAX.) IN EACH 48" HORIZONTAL (MIN.) SPAN.
- 4. NEW CONCRETE STRIP FOOTINGS SHALL BE PROVIDED WITH 2-15M REBAR IN FOOTING AND 2"X4" KEY FOR FOUNDATION WALLS. NO KEY FOR INTERIOR LOAD BEARING WOOD STUD WALLS
- 5. COLUMN FOOTINGS SHALL BE NON-REINFORCED. CONCRETE SHALL BE MINIMUM 25 MPA STRENGTH, SIZE AS NOTED ON THE PLANS.
- 6. FOUNDATION WALL CONCRETE TO BE MINIMUM 25 MPA CONCRETE WITH 6% AIR. PROVIDE 3-15M CONTINUOUS HORIZONTAL REBAR EQUALLY SPACED WITHIN WALL. CONCRETE BLOCK OR PRESSURE TREATED WOOD FOUNDATIONS WILL NOT BE PERMITTED. ICF FOUNDATIONS MAY BE USED AS AN ALTERNATIVE PROVIDED ADEQUATE DESIGN HAS BEEN COMPLETED BY THE SYSTEM MANUFACTURER, PROVIDE SHOP DRAWINGS FOR BUILDING DEPARTMENT AND CONSULTANTS REVIEW
- CONCRETE SLAB-ON-GRADE:
- A. GARAGE: 3" THICK, MINIMUM 25 MPA. SLOPE GARAGE SLABS TO EXTERIOR AT MINIMUM OF 1%. SLOPE BASEMENT FLOORS TO BASEMENT DRAIN IS PROVIDED.
- 8. 2"X4" OR 2"X6", AS REQUIRED, SILL PLATE ON WATERPROOF GASKET ON TOP OF FOUNDATION WALL. ANCHOR WITH 1/2" DIAMETER BOLTS AT A SPACING OF NOT GREATER THAN 7'-0"
- 9. CURE ALL CONCRETE AS REQUIRED BY THE CSA STANDARD FOR PLACEMENT OF CONCRETE

WOOD FRAMING NOTES

- ALL WOOD MEMBERS (FROM NOMINAL SAWN LUMBER STOCK) SHALL BE CONSTRUCTED FROM NUMBER 1 OR NUMBER 2 GRADE SPRUCE UNLESS OTHERWISE NOTED.
- ENGINEERED WOOD PRODUCT SIZES SHALL BE VERIFIED BY WOOD SUPPLIER PRIOR TO ORDERING. IF SIZES DIFFER FROM THOSE STATED, NOTIFY DESIGNER.
- WHERE ENGINEERED WOOD PRODUCTS ARE USED, PROVIDE AND FOLLOW INSTALLATION DOCUMENTATION FROM THE ENGINEERED WOOD SUPPLIER. IF DRAWINGS CALL FOR WOOD PRODUCTS TO BE DESIGNED BY ENGINEERED WOOD SUPPLIER, PROVIDE A COPY OF THE APPROVED SHOP DRAWINGS ON SITE AND TO THE DESIGNER. NO WORK SHALL PROCEED UNTIL APPROVED DRAWINGS ARE ON-SITE AND IN THE POSSESSION OF THE DESIGNER.
- ALL ENGINEERED WOOD JOISTS SHALL HAVE APPROPRIATE LEVEL OF SQUASH BLOCKS AND OTHER SUPPORTS ARE REQUIRED FOR THE SPECIFIC CONDITIONS REQUIRED FOR THIS INSTALLATION, CONSULT WITH THE ENGINEERED WOOD JOIST SUPPLIER.
- WOOD TRUSSES SHALL BE STORED, ERECTED AND INSTALLED ACCORDING TO THE MANUFACTURERS WRITTEN DIRECTIONS AND TO THE CANADIAN WOOD COUNCIL INFORMATION ON WOOD TRUSSES.
- WHERE WOOD COMES IN DIRECT CONTACT WITH CONCRETE SURFACES, SUCH AS ON SLABS OR BASEMENT WALLS FOR INSULATION, WOOD PLATES SHALL BE PRESSURE TREATED. OR ADEQUATELY SEPARATED FROM THE CONCRETE BY MEANS OF AN IMPERVIOUS BARRIER, LIKE 6MILL POLY.
- NOTCHING AND DRILLING OF ANY STRUCTURAL MEMBER SHALL BE AS PER THE ONTARIO BUILDING CODE, OR THE ENGINEERED WOOD SUPPLIERS INFORMATION FOR THE MEMBER BEING NOTCHED OR DRILLED.
- 8. ALL BUILT-UP WOOD BEAMS AND LINTELS SHALL BE CONSTRUCTED FROM NUMBER 1 OR NUMBER 2 GRADE SPRUCE WOOD FREE FROM ABOVE NORMAL DEFECTS SUCH AS CHECKS. SPLINTERS, LOOSE KNOTS, ETC.
- 9. ALL BUILT-UP WOOD BEAMS, LINTELS AND DOUBLE JOISTS SHALL BE GLUED WITH PL PREMIUM CONSTRUCTION ADHESIVE LAID IN A CONTINUOUS 'S' PATTERN WITH 8" MAX DISTANCE BETWEEN THE RIDGES AND NAILED OR SCREWED WITH NON-CORRODING FASTENERS AT 8" O.C. IN A STAGGERED PATTERN. FASTENER LENGTH SHALL BE LONG ENOUGH TO FULLY PENETRATE THE FIRST LAYER OF A BUILT-UP BEAM AND PENETRATE INTO THE SECOND LAYER A MINIMUM OF 95% OF THE TOTAL THICKNESS. FASTENERS FOR 3 PLY OR GREATER BEAMS ARE PERMITTED TO BE LONGER TO PENETRATE INTO THE BACK PLYS. FASTENERS SHALL NOT PROTRUDE OUT THE BACK SIDE OF ANY OUTSIDE EXPOSED LAYER.
- 10. WOOD BEAMS SHALL BE OF APPROPRIATE SIZE AS DETERMINED BY THE OBC TABLES A-8, A-9, A-10, A-11 AND A-12. PROVIDE REQUIRED MINIMUM END BEARING.
- WOOD LINTELS SHALL CONFORM TO OBC TABLE A-15
- 12. COLUMNS:
 - A. WOOD COLUMNS MAY SUPPORT WOOD BEAMS ONLY. STEEL COLUMNS WITH TOP AND BOTTOM WOOD PLATES MAY SUPPORT WOOD OR STEEL BEAMS. WOOD COLUMNS SHALL NOT BE PERMITTED TO SUPPORT STEEL BEAMS.
 - B. WOOD COLUMNS SHALL HAVE BEARING EQUAL TO THAT OF THE SUPPORTED BEAM WIDTH, NO SHIMMING OF COLUMNS WITH WOOD SHIMS WILL BE PERMITTED, USE ONLY STEEL SHIMS IF NEEDED.
 - C. STEEL COLUMNS SHALL BE 3" H.S.S. WITH A WALL THICKNESS OF 3/16", WITH A RATING OF 30.000 LBS OR GREATER, APPROVED MANUFACTURER S.T.S. SUPER POSTS. TELEPOSTS ARE NOT PREFERRED DUE TO LIMITED WEIGHT BEARING CAPABILITIES. TELEPOST MAY BE PERMITTED, HOWEVER ONLY IF THEY CAN BE PROVEN TO SUPPORT THE FLOOR AND ROOF LOADS IMPOSED AND BEAR A STAMP FROM THE MANUFACTURER ATTESTING TO THIS RATING, BEARING PLATES SHALL BE PROVIDED AT THE TOP AND BOTTOM OF THE COLUMNS WITH A STEEL PLATE 4" BY 4" BY 1/4" THICK WHERE THE COLUMN SUPPORTS A 3 PLY BUILT-UP WOOD BEAM, AND 4" BY 6" BY 3/16" THICK WHERE THE COLUMN SUPPORTS A 4 PLY BEAM OR STEEL BEAM.

EXTERIOR CLADDING

- VERTICAL, HORIZONTAL AND SHAKE SIDING SHALL BE PREFINISHED ALUMINUM, VINYL, COMPOSITE, OR OTHER MATERIAL AS SELECTED BY THE OWNER THAT IS DURABLE AND 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. APPROVED MANUFACTURER IS JAMES HARDIE.
- PROVIDE AN AIR SPACE BETWEEN THE SIDING AND THE AIR BARRIER. THIS SHALL BE COMPLETED BY EITHER INSTALLING 1"X3" WOOD STRAPPING IN THE OPPOSITE DIRECTION TO THE SIDING, OR BY USING A PRODUCT DESIGNED TO PROVIDE AN AIR / DRAINAGE SPACE. SUCH PRODUCT COULD BE 10MM DRIWAL BY KEENE BUILDING PRODUCTS, OR
- PROVIDE AN AIR BARRIER MEMBRANE FASTENED TO THE EXTERIOR WALL SHEATHING PRIOR TO THE APPLICATION OF THE EXTERIOR CLADDING. APPROVED PRODUCTS: TYVEK, 2 HOUSE WRAP. TAPE AND SEAL ALL JOINTS. ENSURE CONNECTIONS TO WINDOWS, DOORS AND OTHER PENETRATIONS ARE SEALED AND ADEQUATE.



Drafting Design & Drafting and **Design a** erdale Creso Gerrard's D

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AND SCHEDULES W DETACHED: HESSELINK F CONSTR

> Status PERMI Date JAN. 20/1 Folder

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2026 Reidsville.rvt Drawn J. D. GERRARD Chck'd J. D. GERRARD

Scale 1/4" = 1'-Ø' Job # 17GD@@2

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DRAWING

WINDOWS

- 1. ALL NEW WINDOWS SHALL HAVE A MINIMUM U-VALUE OF 1.6 W/M2*K (0.32 BTU/H*FT2*°F) UNLESS THERWISE STATED IN THE ENERGY EFFICIENCY DESIGN TABLE AT THE BEGINNING OF THIS DRAWING PACKAGE
- PROVIDE NEW WINDOWS OF THE HIGHEST POSSIBLE QUALITY AND WITH A MINIMUM 10 YEAR WARRANTY ON ALL PARTS INCLUDING GLAZING.
- 3. WINDOWS 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.
- 5. PROVIDE THE OWNER WITH OUT SAMPLES INDICATING ALL REQUIRED OPTIONS AND GIVE AMPLE TIME FOR OWNER TO MAKE APPROPRIATE SELECTIONS THAT WILL NOT DELAY THE CONSTRUCTION OF THE BUILDING.
- 6. ENSURE WINDOWS ARE ORDERED AND AVAILABLE ON SITE IN A TIMELY BASIS
- FOLLOW INSTALLATION RECOMMENDATIONS BY WINDOW MANUFACTURER.
- INSTALL LOW EXPANSION FOAM INSULATION AROUND ALL WINDOW PERIMETERS. ENSURE CAVITY BETWEEN WINDOW FRAME AND RSO ARE COMPLETELY FILLED, BUT NOT TO EXCESS.
- 9. SEALANTS;
 - A. PROVIDE CLOSED CELL FOAM BACKER ROD AND CAULKING AROUND ALL WINDOW AND DOOR PERIMETERS AND WHERE SIDING BUTTS AGAINST MASONRY
 - B. ENSURE PROPER CAULKING JOINT WIDTH TO DEPTH RATIO OF 2:1 IS MAINTAINED.
 - C. FOLLOW MANUFACTURERS RECOMMENDED METHODS FOR INSTALLATION OF CAULKING
 - D. USE ONLY HIGH QUALITY MATERIALS AS MANUFACTURED BY TREMCO OR EQUIVALENT. DO NOT USE MONO OR DAP

ROOFING, EAVES AND SOFFITS

- 1. ENSURE ROOF AND ALL JUNCTURE POINTS WHERE THE NEW MEETS THE EXISTING ARE WATER TIGHT, IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THE STRUCTURE IS WATER TIGHT AT ALL TIMES.
- INSTALL 25 YEAR FIBREGLASS SHINGLES OVER ROOF SHEATHING.
- PROVIDE PEAL AND STICK MEMBRANE PROTECTION OVER ENTIRE ROOF SURFACE FOR LOW SLOPE APPLICATION. IN REGULAR SLOPE APPLICATION, PROVIDE A MINIMUM OF 60" WIDE PEAL AND STICK MEMBRANE PROTECTION UP FROM THE EDGE OF THE EAVES, THIS MEANS A MINIMUM OF 2 WIDTHS OF ROLL MEMBRANE, MINIMUM.
- 4. AT VALLEYS AND CONNECTIONS TO EXISTING ROOFS, PROVIDE PEEL AND STICK MEMBRANE ALONG THE VALLEY WITH PREFINISHED METAL VALLEY FLASHING INSTALLED OVER THE MEMBRANE FLASHING. FINISH ALL SHINGLES TO THE CENTER OF THE VALLEY FLASHING
- 5. PROVIDE GALYANIZED OR PRE-FINISHED ALUMINUM EAVES STARTER AT BOTTOM EDGE OF ROOF.
- 6. 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.
- 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.
- WHERE CEILING MEMBRANE IS FASTENED TO ROOF JOISTS, ENSURE EACH JOIST CAVITY IS VENTED AT BOTH THE RIDGE AND SOFFIT, OR PROVIDE CROSS FRAMING ON TOP OF ROOF JOISTS
- 9. PROVIDE PREFINISHED BENT ALUMINUM FASCIA AND SOFFITS INCLUDING ALL APPROPRIATE AND REQUIRED TRIMS, SOFFITS SHALL HAVE CONTINUOUS AIR VENTS FOR ATTIC VENTILATION
- 10. EAVESTROUGHING AND DOWNSPOUTS SHALL BE SEAMLESS PREFINISHED ALUMINUM AND INSTALLED TO PREVENT MOVEMENT AND DISLODGEMENT FROM ICE, WIND AND SNOW. ENSURE TROUGHS AND DOWNSPOUTS ARE 5" IN WIDTH.
- 11. ROOF LEADERS SHALL BE WALL MOUNTED AND DISCHARGE ONTO GRADE, PROVIDE A MINIMUM OF 48" DOWNSPOUT EXTENSION AT GRADE TERMINATING AT A PRE-CAST CONCRETE SPLASH PAD UNDER EACH RAIN WATER LEADER

ELECTRICAL

- ALL ELECTRICAL WORK SHALL COMPLY WITH THE GANADIAN ELECTRICAL GODE AND THE ELECTRICAL SAFETY AUTHORITY
- 2. CONTRACTOR SHALL APPLY FOR AND OBTAIN AN ELECTRICAL PERMIT FROM THE ELECTRICAL SAFETY AUTHORITY.
- ALL ROOMS SHALL HAVE CEILING MOUNTED LIGHTS CONTROLLED WITH AT LEAST ONE
- AN EXTERIOR LIGHT CONTROLLED BY AN INTERIOR SWITCH SHALL BE PROVIDED AT EVERY ENTRANCE
- STAIRS SHALL BE LIGHTED AND CONTROLLED BY A THREE-WAY SWITCH AT THE TOP AND BOTTOM OF THE STAIRS.
- RECEPTACLES SHALL BE LOCATED ALONG THE WALLS ACCORDING TO THE REQUIREMENTS OF THE CANADIAN ELECTRICAL CODE.
- 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 COMPLETION OF THE FINAL ELECTRICAL INSPECTION.

LINTEL SCHEDULE

1.5KPA SNOW LOAD, NON-STRUCTURAL SHEATHING, FROM TABLE A-15

ROOF & CEILING SUPPORT ONLY (MAIN FLOOR) EXTERIOR WALLS INTERIOR WALLS

MAX. SPAN	LINTEL SIZE	MAX. SPAN	LINTEL SIZE
5'-5"	2 - 2"×6"	4'-5"	2 - 2"×6"
6'-6"	2 - 2"×8"	5'-4"	2 - 2"×8"
8'-1"	2 - 2"×1Ø"	6'-7"	2 - 2"×1Ø"
9'-5"	2 - 2"×12"	7'-8"	2 - 2"×12"

ROOF, CEILING AND 1 FLOOR SUPPORT ONLY (BASEMENT FLOOR)

EXTERIOR WALLS INTERIOR WALLS

MAX. SPAN	LINTEL SIZE	MAX. SPAN	LINTEL SIZE
4'-5"	2 - 2"×6"	3'-4"	2 - 2"×6"
5'-5"	2 - 2"×8"	3'-11"	2 - 2"×8"
6'-8"	2 - 2"×1Ø"	4'-9"	2 - 2"×1Ø"

ROOF, CEILING AND 2 FLOORS SUPPORT ONLY (NOT REQUIRED FOR THIS PROJECT) EXTERIOR WALLS INTERIOR WALLS

MAX. SPAN	LINTEL SIZE	MAX. SPAN	LINTEL SIZE
4'-2"	2 - 2"×6"	8'-11"	2 - 2"×6"
5'-Ø"	2 - 2"×8"	3'-5"	2 - 2"×8"
6'-2"	2 - 2"×1Ø"	4'-2"	2 - 2"×1Ø"



I, James Gerrard declare that I have reviewed and take responsibility for the design activities checked below on behalf of a firm registered under Subsection 3.2.4 [Div. C] of the Ontario Building Code. These drawings and any Mark-ups

contained herein are believed, to the best of my knowledge, to be in compliance with the O.B.C. I am Qualified and the Company is registered in the Classes noted below. Gerrard's Design & Drafting Inc. BCIN 28963

Ruildida James (Jim) D. Gerrard

Large Buildings Building Services 02/27/17 Date (MM/DD/YY)

INTENDED <u>ග</u> DRAWING

B

ΑT

VIEWED

No Date issue

> <u>၂</u> Drafting **Design** a Clover S Gerrard

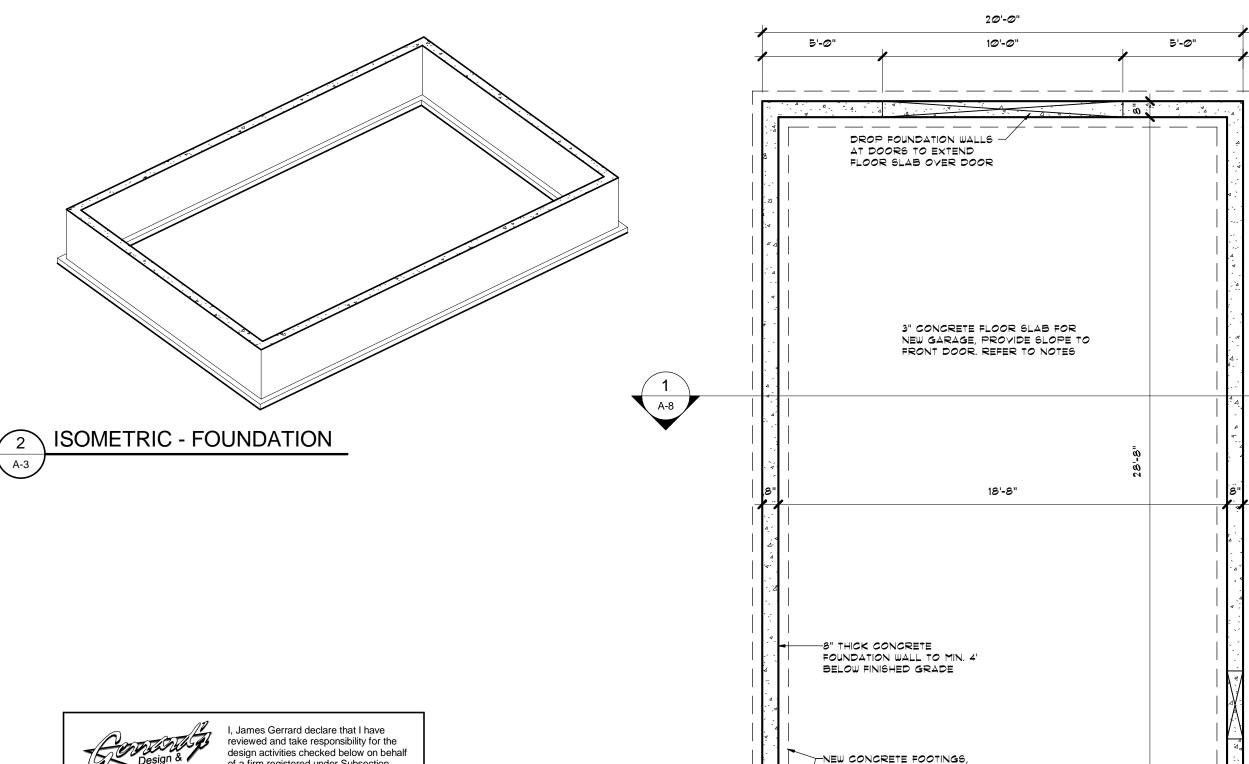
IED BARN K RESIDENCE EROAD AND ES W DETACHED: HESSELINK F CONSTR

Status PERMIT Date JAN. 20/1 Folder -2026 Reidsville.rvt Drawn J. D. GERRARD Chck'd J. D. GERRARD

Scale 1/4" = 1'-Ø'

Job # 17GD@@2

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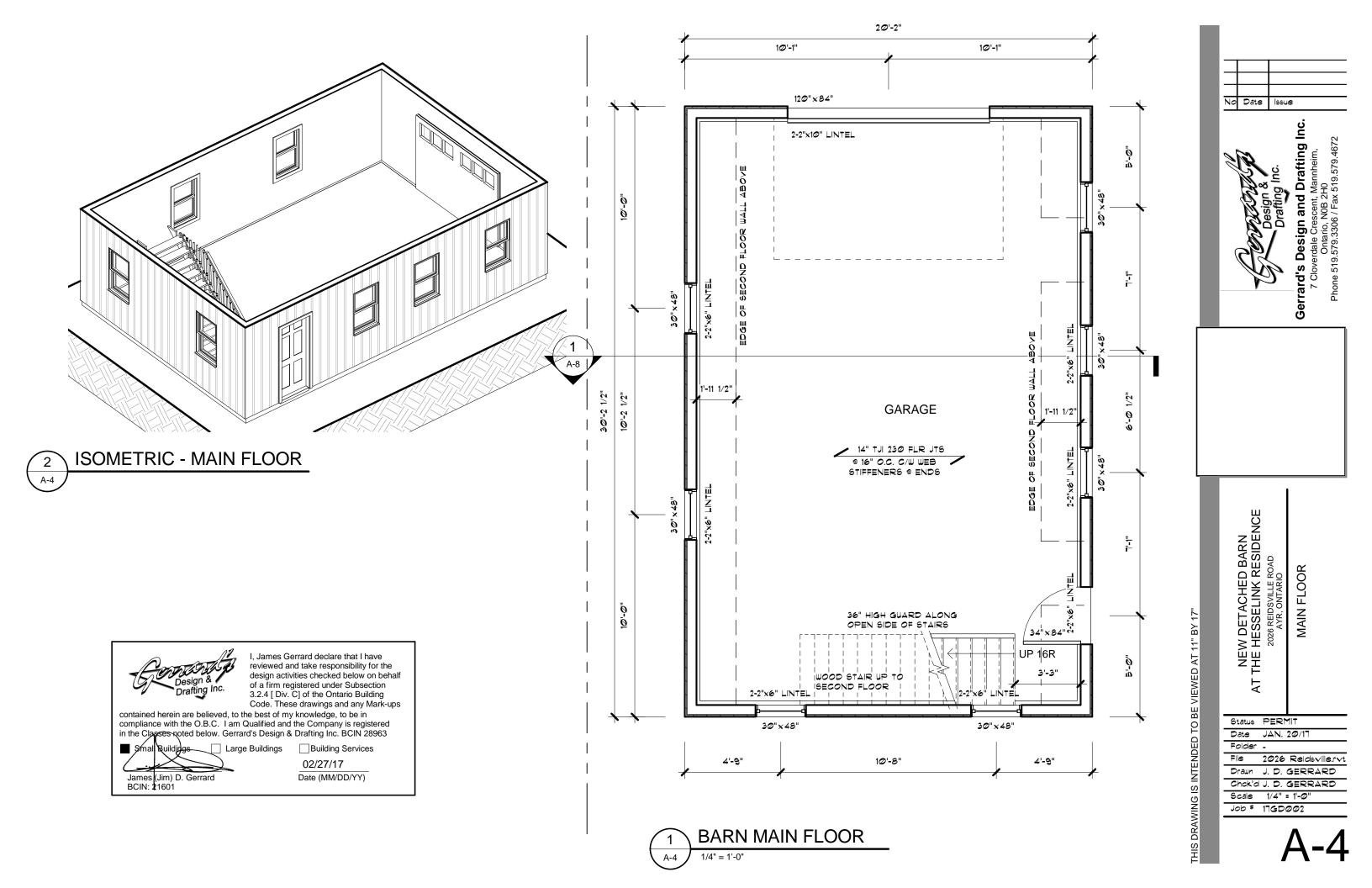
of a firm registered under Subsection 3.2.4 [Div. C] of the Ontario Building Code. These drawings and any Mark-ups contained herein are believed, to the best of my knowledge, to be in compliance with the O.B.C. I am Qualified and the Company is registered in the Classes noted below. Gerrard's Design & Drafting Inc. BCIN 28963 Large Buildings Building Services 02/27/17 Date (MM/DD/YY) James (Jim) D. Gerrard BCIN: 21601

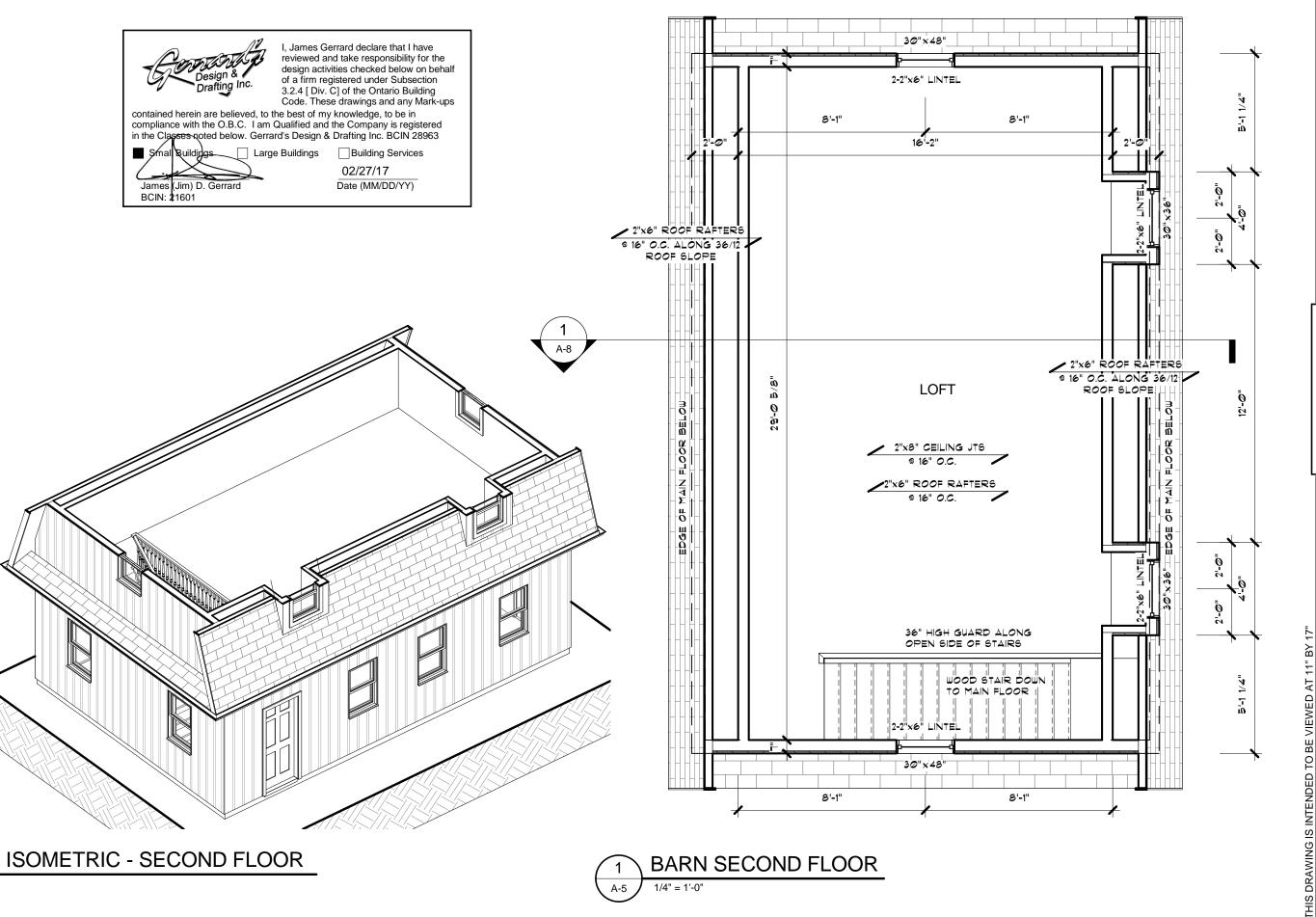
BARN FOUNDATION

18"x6", TYP. OF ALL

No Date Issue Gerrard' NEW DETACHED BARN
THE HESSELINK RESIDENCE
2026 REIDSVILLE ROAD
AYR, ONTARIO FOUNDATION LAYOUT Status PERMIT Date JAN. 20/17 THIS DRAWING IS INTENDED Folder -File 2026 Reidsville.rvt Drawn J. D. GERRARD Chck'd J. D. GERRARD

Scale 1/4" = 1'-Ø" Job # 17GD@@2



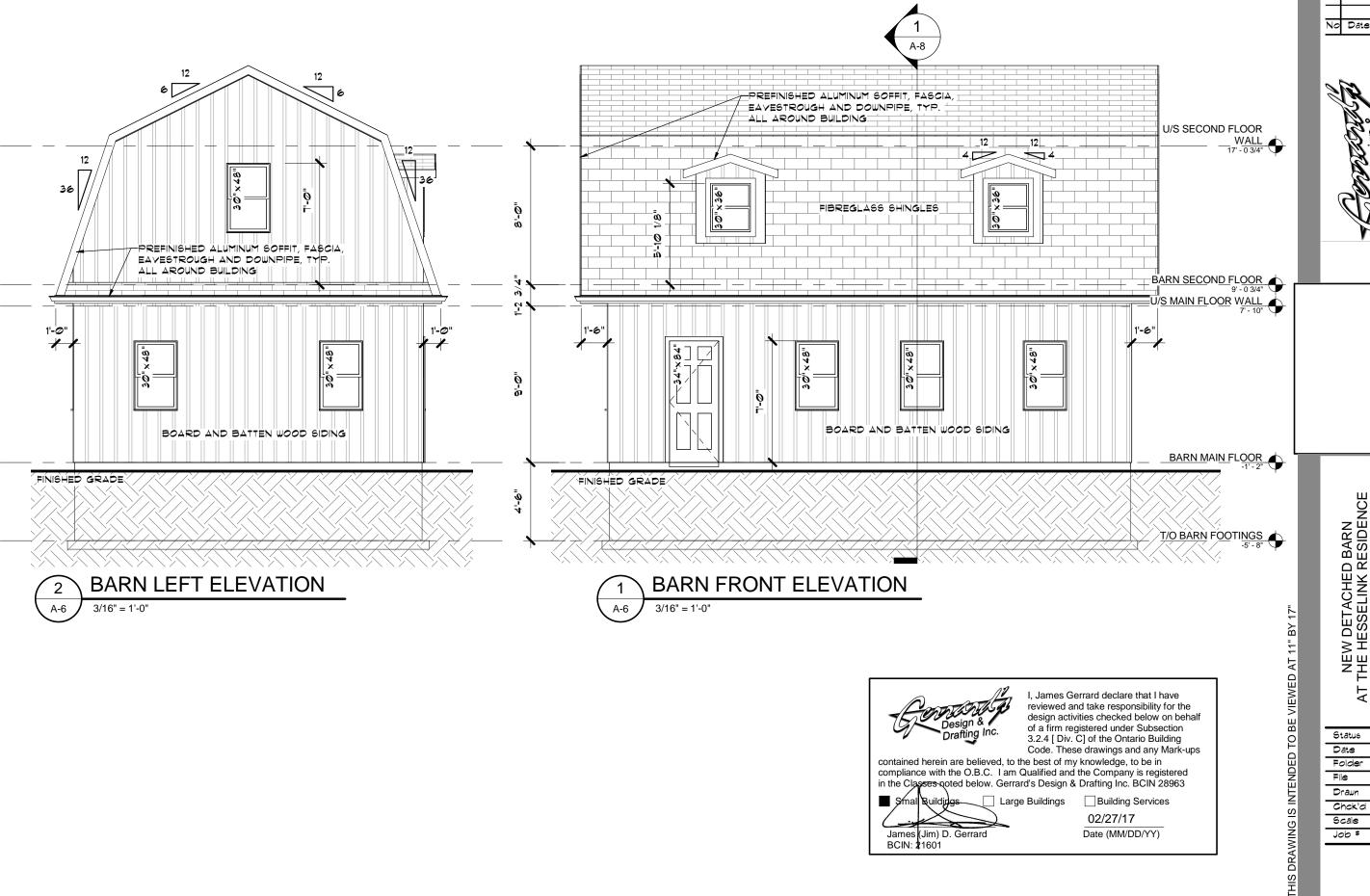


No Date Issue Gerrard' NEW DETACHED BARN
THE HESSELINK RESIDENCE
2026 REIDSVILLE ROAD
AYR, ONTARIO SECOND FLOOR $\mathsf{A}\mathsf{T}$ Status PERMIT Date JAN. 20/1 Folder -File 2026 Reidsville.rvt

1/4" = 1'-0"

Drawn J. D. GERRARD Chck'd J. D. GERRARD Scale 1/4" = 1'-Ø"

Job # 17GD002



reviewed and take responsibility for the design activities checked below on behalf of a firm registered under Subsection 3.2.4 [Div. C] of the Ontario Building Code. These drawings and any Mark-ups contained herein are believed, to the best of my knowledge, to be in compliance with the O.B.C. I am Qualified and the Company is registered in the Classes noted below. Gerrard's Design & Drafting Inc. BCIN 28963 Large Buildings Building Services 02/27/17 Date (MM/DD/YY) James (Jim) D. Gerrard BCIN: 21601

No Date Issue

Gerrard'

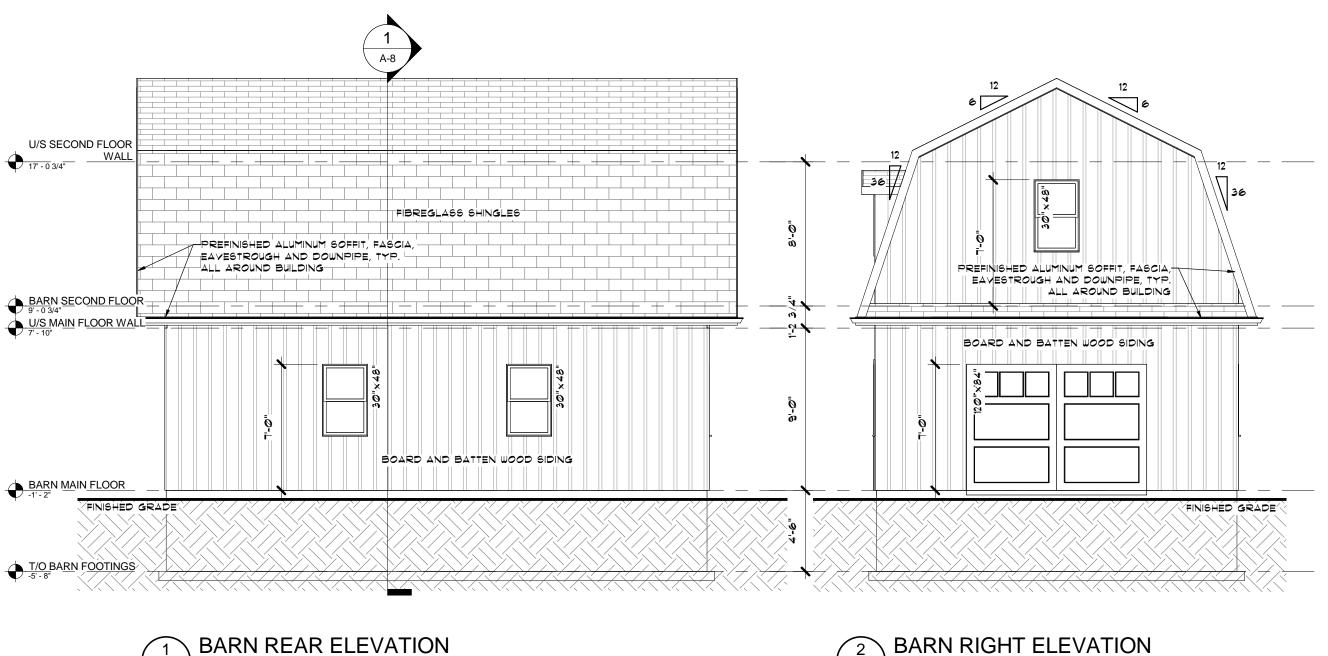
NEW DETACHED BARN
THE HESSELINK RESIDENCE
2026 REIDSVILLE ROAD
AYR, ONTARIO **BUILDING ELEVATIONS**

Status PERMIT Date JAN. 20/17

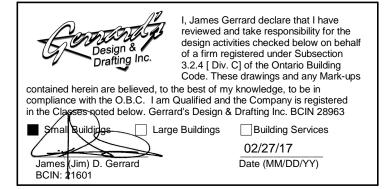
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Drawn J. D. GERRARD Chck'd J. D. GERRARD Scale 3/16" = 1'-Ø"

Job # 17GD@@2







No Date Issue

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NEW DETACHED BARN
THE HESSELINK RESIDENCE
2026 REIDSVILLE ROAD
AYR, ONTARIO

BUILDING ELEVATIONS

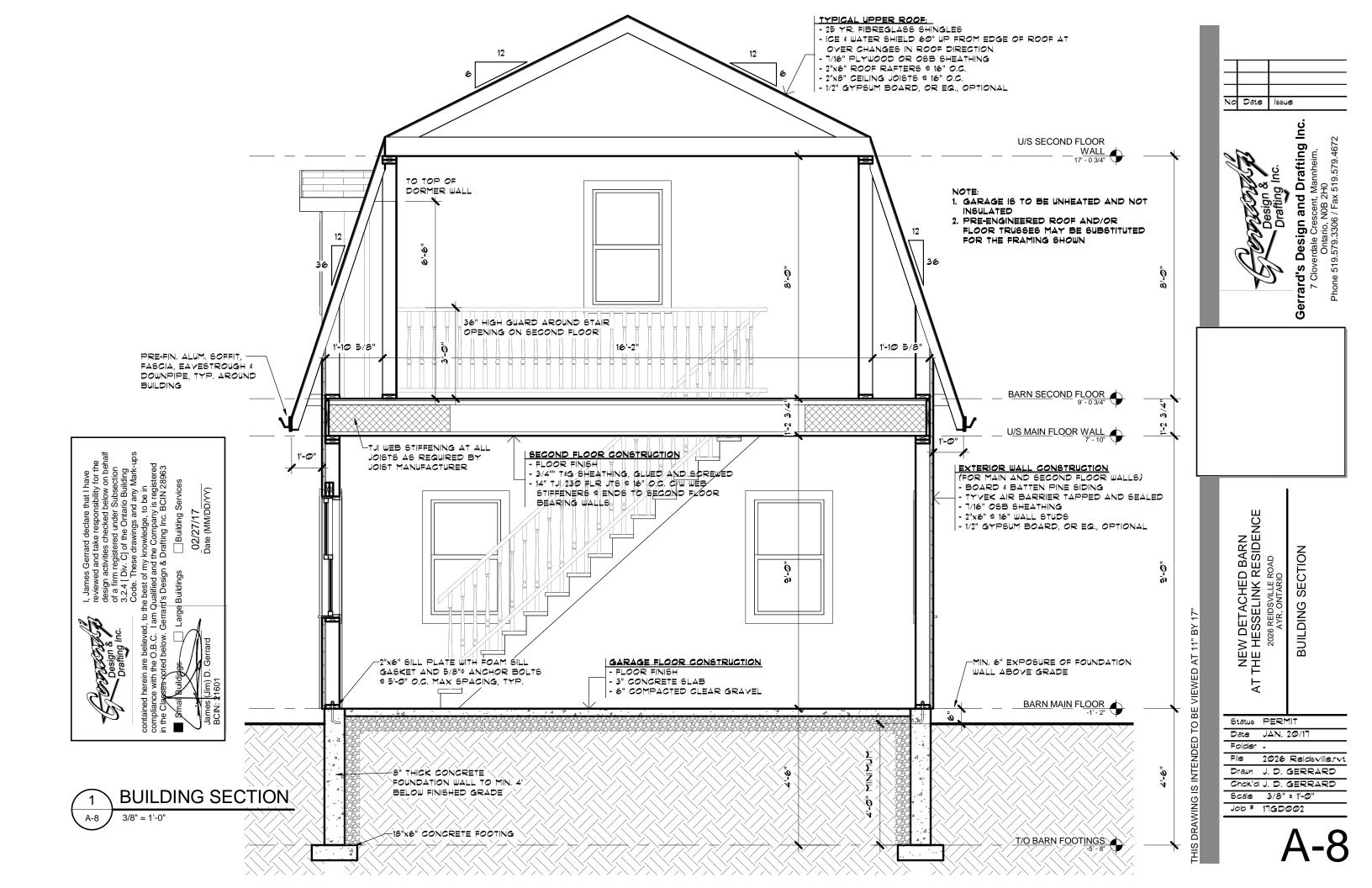
Status PERMIT Date JAN. 20/17 Folder -

 AT

THIS DRAWING IS INTENDED TO BE VIEWED AT 11" BY

2026 Reidsville.rvt Drawn J. D. GERRARD Chck'd J. D. GERRARD

Scale 3/16" = 1'-Ø" Job # 17GD@@2



Township Of North Dumfries 2958 Greenfield Rd. P.O. Box 160 Ayr, Ontario,

NOB 1E0 (519) 632-8800

Contact Amy Ferguson Phone (800) 563-5595 or (519) 632-8800

Fax (519) 632-8700

Permit No.

2017-0030

Farm Building

<u>Action</u>	Assessment Roll No.		<u>Issued to</u>			Date Issued
Erect	3001-020-006-01001-0000	ı	Hesselink, Ed			March 29, 2017
Owner(s)	HESSELINK JANET		2026 REIDSVILLE RD			,
	HESSELINK EDWIN		AYR ON	NOB 1E0		
Contractor						
Property Add	dress 2026 REIDSVILLE RD		Lot Ar	ea 27	Acres	
Legal Descr	ption CON 10 PT LOT 31		Lot Fr	ontage 19	4	
Value	\$40,000.00	Permit Fee	\$425.60			
Brief Project Description	New Detached Barn2026 Rei	dsville Road	I			
Structure	TYPE I BARN		Length	30.00	Width	20.00
			Height	17.00	Permit Area	11,452 Sq. Feet
Zoning	Z.3 (Residential)					

The personal information on this permit was collected pursuant to the Building Code Act. Information contained herein may be available to the public in accordance with the provisions of the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA), RSO 1990, c. M.56, s. 14(1)(c). Questions regarding this collection and its release under the Act should be directed to the municipal Clerk during normal business hours

The person to whom this permit has been issued shall notify the Chief Building Official in advance of the stages of construction specified in Building Code R.S.O. 1992 Reg 332/12, Division C, Part 1, s.1.3.5.1 (2) or attached

BUILDING CODE, O. Reg. 332/12 as amended

Adam Miller, Deputy, Chief Building Official

STAGES OF CONSTRUCTION REQUIRING NOTICE

- Plans Exam
- Readiness to construct footings, before concrete is poured
- Completion of footings and foundations prior to commencement of backfilling.
- Completion of insulation, vapour barriers and air barriers.
- Completion of the project.