G R E E R
GALLOWAY
CONSULTING
ENGINEERS

1620 Wallbridge Loyalist Road
R.R. #5
Belleville, Ontario
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September 10, 2024

Mike Earnshaw
1450 Mill Line Road
Norwood, ON
K0L 2V0

Re: Wetland Assessment for the property located at 1450 Mill Line Road, Township of Douro - Dummer, County of Peterborough, Ontario

Dear Mr. Earnshaw,

I am pleased to provide this letter with the results of the site assessment carried out on August 27th, 2024 on your property located at 1450 Mill Line Road, Norwood, Township of Douro - Dummer, County of Peterborough.

According to the Township Douro -Dummer Comprehensive Zoning By-law (July 2024) the property is zoned Honey House. You are applying for an amendment of the Zoning By-law to change the zoning from Honey House to Rural (RU).

Also, you want to build an addition on the east side of the existing dwelling. See site layout in Appendix A. Based on the County of Peterborough online mapping, wetland is present on your property and adjacent land to the west and north. According to the Ministry of Natural Resources and Forestry online Mapping, part of the Ouse (East) River North Provincially Significant Wetland and the Area of Natural and Scientific Interest (ANSI) – Life Science Provincially/Regionally are within the property.

Prior to approval of any development on the property, the Township of Douro - Dummer is requesting to provide information regarding determination of wetland boundaries and application of required setbacks, as well as a statement that the property has sufficient space to accommodate the proposed addition and that significant natural heritage features will not be impacted by the proposed addition.

The property is triangle - shaped, approximately 2.5-ha (6.35 acres) in size. The property is bounded to the north and west by wetland and forest, and to the south by Mill Line Road, wetland and rural residential. See attached property map.

The area where the property is located is relatively undulated with a maximum elevation of 233 metres above see level (mASL). Based on onsite observation, it is suggested that drainage in the area is to the east and west. The highest elevation in the property was observed on the northwest part and the lowest on the northcentral part.

The bedrock geology in the area where the property is located consists of shales and limestones of the middle Ordovician age. This sedimentary sequence was laid down over older Precambrian-age rock of the Grenville Province beginning in the middle Ordovician (approximately 460 million years ago) as part of a continent-wide marine transgression that deposited, in order, the Shadow Lake, Gull River, Bobcaygeon, Verulam and Lindsay Formations (Armstrong and Carter, 2010). The Bobcaygeon Formation overlies the Gull River Formation and it is the uppermost bedrock unit beneath the subject site. It is a light grey-brown to blue-grey to grey-

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brown, fine- to coarse-textured fossiliferous limestone. Thin shale interbeds and partings are encountered within the limestone and these increase in abundance upward while crinoidal grainstones and nodular textures are more common in the lower part of the Formation. The overburden geology is composed of shallow deposits of very stony, calcareous, recessional moraine till overlying the limestone bedrock. The thickness of the overburden is between 30 and 50 cm.

The property is located approximately 6 km north of the Village of Norwood. The land use in the area is rural and agricultural. On August 27th, 2024 a site visit was performed by Yazmin Ramirez, Biologist from the Greer Galloway Group to confirm presence of wetland in and adjacent to the subject property. The property is covered with vegetation except where the dwelling, proposed addition, sheds, and driveway are located. Most of the property is covered with meadow vegetation with forest vegetation found along the west property boundary. Wetland vegetation within the property is found on the southwest corner of the property. The wetland extent to adjacent land to the west and north. Treed hedgerows are found along the north and south property lines and middle of the property in a north to south direction. Tree species found include eastern white cedar (*Thuja occidentalis*), white spruce (*Picea glauca*), balsam fir (*Abies balsamea*), and eastern red cedar (*Juniperus virginiana*). A photolog showing the existing conditions of the property is included in Appendix B.

Access to the property is via Mill Line Road. There is a driveway in the property that provides access to the dwelling. In the forest on the west side of the property, the slope is steep, and a lot of boulders are found exposed and covered with moss. Tree species observed included white spruce, balsam fir, eastern white cedar, bur oak (*Quercus macrocarpa*), American basswood (*Tilia americana*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), paper birch (*Betula papyrifera*), red oak (*Quercus rubra*), eastern hemlock (*Tsuga canadensis*), easter white pine (*Pinus strobus*), and white ash (*Fraxinus americana*). The shrub layer is almost absent or composed mainly of saplings of the tree species. Herbaceous species found include poison ivy (*Toxicodendron radicans*), western brackenfern (*Pteridium aquilinum*), wild sarsaparilla (*Aralia nudicaulis*), Canada mayflower (*Maianthemum canadense*), common helleborine (*Epipactis helleborine*), gay wings (*Polygala paucifolia*), sedges and seedlings of the tree species.

The wetland in the property and adjacent land to the west is a marsh dominated with cattail species. Species observed include narrow-leaved cattail (*Typha angustifolia*) and broad-leaved cattail (*Typha latifolia*), slender willow (*Salix petiolaris*), reed canary grass (*Phalaris arundinacea*), Canada bluejoint (*Calamagrotis canadensis*), redtop grass (*Agrostis gigantea*), eastern marsh fern (*Thelipteris palustris*), bitter nightshade (*Solanum dulcamara*), sensitive fern (*Onoclea sensibilis*), spotted touch-me-not (*Impatiens capensis*), white meadowsweet (*Spiraea alba*), and riverbank grape (*Vitis riparia*).

Wetland was found on adjacent land to the north. The type of wetland observed is swamp. The wetland is in a low area that is separated from the property by a line of trees that are present along the property line. Plant species found in the wetland include eastern white cedar, balsam fir, black ash (*Fraxinus nigra*), spotted touch-me-not, slender white aster (*Aster borealis*), lady fern (*Athyrium filix-femina*), sensitive fern, Canada nettle (*Laportea canaddensis*), bitter nightshade, horsetail (*Equisetum sp.*), water plantain (*Alisma plantago-aquatica*), and water hemlock (*Cicuta douglasii*).

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In the area where the lowest elevation was observed, moist-wet conditions were observed. This area is approximately 90 m² and surrounded by upland herbaceous species. Species found include slender willow, slender white aster, redtop grass, red-osier dogwood (*Cornus sericea*), white meadowsweet, spotted joe-pye-weed (*Eutrochium maculatum*), and green bulrush (*Scirpus atrovienis*).

As previously mentioned, the property is mostly covered with herbaceous species. Herbaceous species found include smooth brome (*Bromus inermis*), Canada goldenrod (*Solidago canadensis*), elmleaf goldenrod (Solidago ulmifolia), bird's-foot trefoil (*Lotus corniculatus*), goat's beard (*Tragopodon dubius*), tufted vetch (*Vicia cracca*), common milkweed (*Asclepsias syriaca*), butter-and-eggs (*Linaria vulgaris*), poison ivy, wild carrot (*Daucus carota*), dog-strangling vine (*Vincetoxicum rossicum*), and riverbank grape.

During the site investigation the wetland boundary was identified and a 30 setback was established to protect the wetland and its ecological functions. See attached property plan. Any development in the property should be outside the 30 m setback. You are proposing an addition on the east side of the existing dwelling. The addition is outside the wetland setback. Impacts to wetlands as a result of the addition are not expected. The proposed addition will be within the ANSI – Life Science; however, significant impacts are not expected as most of the property is covered with meadow vegetation as the property no longer is used for agricultural activities.

We trust that this brief letter is complete and sufficient for your present requirements.

All of which is respectfully submitted.

THE GREER GALLOWAY GROUP INC.
CONSULTING ENGINEERS

Yazmin Ramirez, M.Sc.
Senior Biologist/Ecologist

Figure

GREER GALLOWAY
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NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH RELEVANT CODES AND GUIDELINES.
2. ALL DRAWINGS AND ADDENDA ARE TO BE READ AS, AND IN CONJUNCTION WITH THE SPECIFICATIONS.
3. ALL EQUIPMENT SHALL BE INSTALLED AS SPECIFIED OR APPROVED EQUIVALENT.
4. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH WORK AND BE RESPONSIBLE FOR SAME.
5. CONTRACTOR MUST REPORT ANY DISCREPANCIES TO ENGINEER FOR RESOLUTION BEFORE COMMENCING THE WORK.
6. ANY CHANGES MUST BE APPROVED BY THE ENGINEER.

A / B — A DETAIL NO. / B DRAWING NO. – WHERE DETAILED

- PROPERTY BOUNDARY
- OUSE (EAST) RIVER NORTH PSW
- 30M SETBACK
- WETLAND BOUNDARY
- LOW AREA

REVISION	DESCRIPTION	DATE
01	–	YY/MM/DD

NORTH

STAMP

PROJECT
1450 MILL LANE
ROAD ADDITION

NORWOOD, ONTARIO

DRAWING TITLE
WETLAND BOUNDARY
& PROPOSED ADDITION

DESIGNED BY
Y. RAMIREZ

DRAWN BY
B. CRUZ-FUENTES

REVIEWED BY
Y. RAMIREZ

APPROVED BY
Y. RAMIREZ

PROJECT DATE
2024/09/03
(YYYY/MM/DD)

PROJECT #
24-1-5723

SCALE 1:1250 — 20m 0 20m 40m

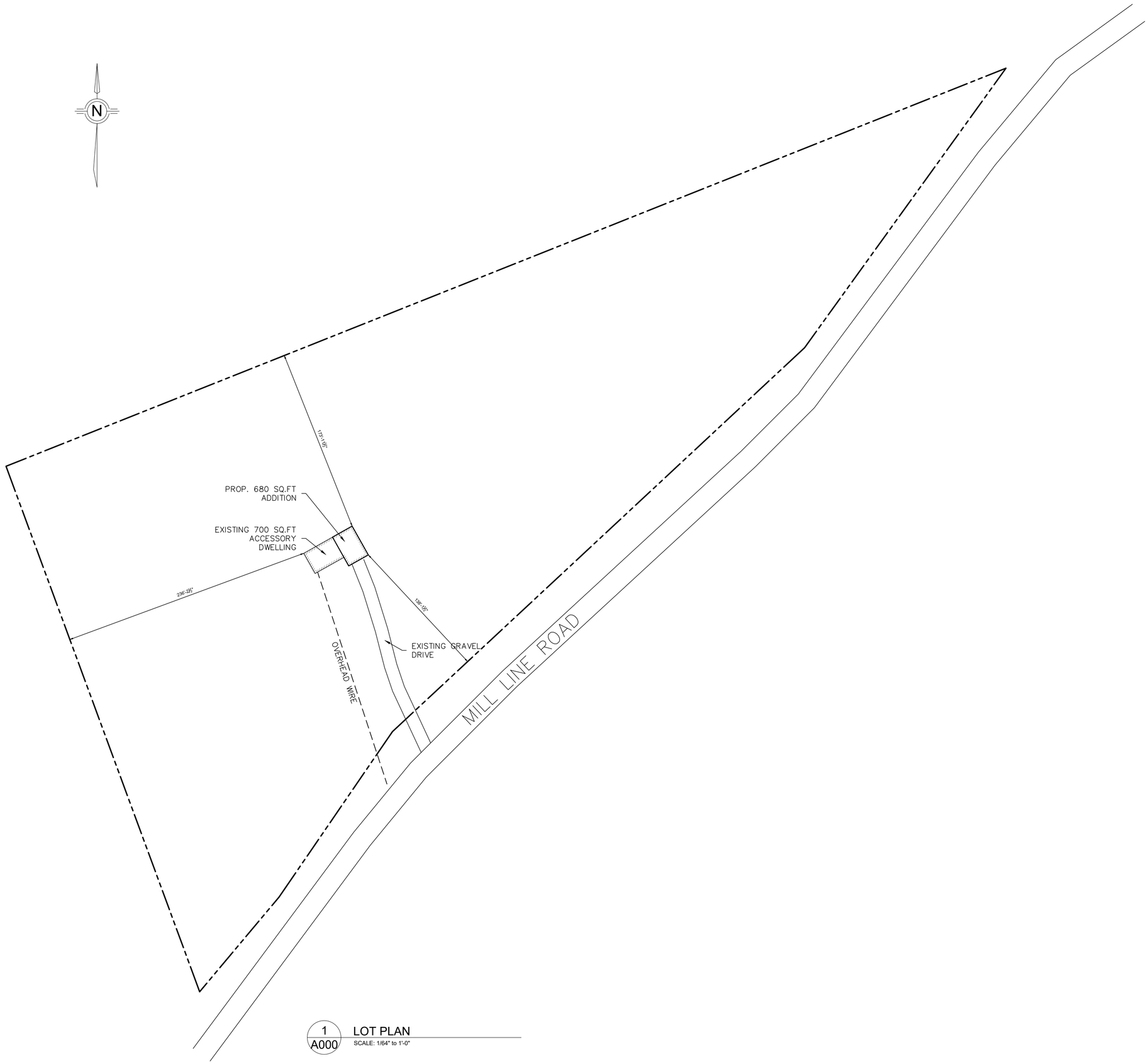
DRAWING #
SP1

DRAWING SCALE (ISO A1)
HOR: 1 : 1250
VER: N/A

BORDER SIZE: ISO A1 (841mm x 594mm) DATE PLOTTED: 2024 / 09 / 10 @ 02:44 PM PLOT SCALE: 1:1 FILE PATH: P:\Belleville Project\4000\24-1-5723-Report Figures.dwg CAD PLOTTER: Bernardo Cruz-Fuentes

(METRIC SCALE – ALL DIMS IN METERS U.N.O.)

Appendix A
Site Layout



1 / A000 LOT PLAN
SCALE: 1/64" to 1'-0"

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

LICENSED PROFESSIONAL ENGINEER
M.C. VREUGDENHIL
100166947
06/28/2024
PROVINCE OF ONTARIO

THREEHILLS ENGINEERING LTD
233 FRONT ST
BELLEVILLE, ON
K8N 2Z4
613.902.0036
844.4.3HILLS
INFO@THREEHILLS.CO
WWW.THREEHILLSENGINEERING.COM

PROJECT:
1450 MILL LINE RD,
NORWOOD, ON.

DWG TITLE:
SITE LAYOUT

PROJECT # 1132405199

DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED	J.B.		
DRAWN	J.B.	PROJ. MGR.	J.B.
CHECKED	M.C.V.	CREATED ON	11 MAY 2024

DWG. NO.
A000

FRAMING NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO START OF CONSTRUCTION.
2. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE.
3. WHERE NOT NOTED ON DRAWINGS, SPACING OF FRAMING MEMBERS TO BE TO THE LATEST EDITION OF THE ONTARIO BUILDING CODE.
4. ALL WOOD FRAMING TO BE MIN. No. 2 SPRUCE.
5. ANY POINT LOADS ON BEAMS OR LINTELS INDICATED ON PLAN TO BE CONFIRMED BY ENGINEER.
6. FLOOR JOIST MANUFACTURER TO PROVIDE FLOOR JOIST FRAMING PLAN AND ALL SPECIFICATIONS FOR REVIEW BY BUILDING OFFICIAL.
7. FLOOR JOIST MANUFACTURER TO PROVIDE ALL RATED HANGERS AS REQUIRED.
8. ROOF TRUSS MANUFACTURER TO PROVIDE ROOF TRUSS LAYOUT PLAN AND SHOP DRAWINGS WITH STAMP OF STRUCTURAL ENGINEER LICENSED IN ONTARIO.
9. ROOF TRUSS MANUFACTURER TO PROVIDE ALL REQUIRED RATED HANGERS.
10. ALL WALL LINTELS TO BE (2) 2x10 UNLESS OTHERWISE NOTED ON PLAN.
11. WINDOW MANUFACTURER TO PROVIDE ALL ROUGH FRAME OPENING SIZES.
12. ALL BEAMS TO BE UNDER FLOOR CONSTRUCTION UNLESS OTHERWISE NOTED.
13. PRIME AND PAINT ALL EXPOSED STEEL BEAMS, LINTELS AND COLUMNS.
14. STEEL POSTS FROM ALL LEVELS TO BE CARRIED DOWN TO THE FOUNDATION OR TO SUPPORTING BEAMS. SOLID BLOCKING TO BE PROVIDED WHERE REQUIRED.
15. ALL INTERIOR PARTITIONS TO BE 2x4 OR 2x6 STUDS @ 16" O.C. WITH 1/2" GYPSUM BOARD BOTH SIDES UNLESS OTHERWISE NOTED.
16. SUBFLOOR TO BE 3/4" T&G OSB GLUED AND NAILED MIN.
17. BACKING REQUIRED IN MAIN BATH AT TUB/SHOWER AND TOILET FOR FUTURE GRAB BAR INSTALLATION AS PER 9.5.2.3. OF THE ONTARIO BUILDING CODE.
18. GYPSUM BOARD AT TUB/SHOWER WALLS TO BE WATER RESISTANT.
19. PLYWOOD ROOF SHEATHING SHALL BE INSTALLED WITH THE SURFACE GRAIN AT RIGHT ANGLES TO THE ROOF FRAMING. JOINTS PERPENDICULAR TO ROOF RIDGE SHALL BE STAGGERED, WITH EDGES SUPPORTED ON TRUSSES. EDGES PARALLEL TO ROOF RIDGE SHALL BE SUPPORTED BY METAL "H" CLIPS IN EACH TRUSS SPACE.

MECHANICAL NOTES

1. CONTRACTOR TO PROVIDE HEATING AND MECHANICAL VENTILATION SPECIFICATIONS.
2. MECHANICAL VENTILATION REQUIRED TO CONFORM TO OBC 9.32. WITH ALL MECHANICAL VENTS TO EXHAUST OUTSIDE.
3. SMOKE ALARMS TO BE INSTALLED AS PER OBC 9.10.19.1. AND HAVE A VISUAL SIGNALING COMPONENT CONFORMING TO 18.5.3. OF NFPA 72.
4. THE SOUND PATTERN OF SMOKE ALARMS SHALL MEET THE TEMPORAL PATTERNS OF ALARM SIGNALS OR BE A COMBINATION OF TEMPORAL PATTERN AND VOICE RELAY. 9.10.19.2.
5.LOCATION FOR SMOKE /CO2/STROBE LIGHT ALARM WILL BE INSTALLED WITH PERMANENT CONNECTIONS TO AN ELECTRICAL CIRCUIT 9.10.19.4. SMOKE ALARMS ARE TO BE LOCATED WITHIN ALL SLEEPING UNITS AND IN THE CORRIDOR BETWEEN SLEEPING UNITS, ONE SMOKE ALARM ON EACH FLOOR INCLUDING BASEMENT 9.10.19.3.
6. CARBON MONOXIDE DETECTORS TO BE INSTALLED AS PER OBC 9.33.4.
7. ALL ATTIC SPACES TO BE PROVIDED WITH UNOBSTRUCTED VENT AREA NOT LESS THAN 1/300 OF THE INSULATED CEILING AREA.
8. ROOF TO BE EQUALLY VENTILATED BETWEEN SOFFIT AND TOP OF ROOF SPACE WITH VENTED SOFFITS, ROOF OR GABLE VENTS.
9. LOOSE CEILING INSULATION TO BE BLOCKED AT EAVES WITH BATT INSULATION AND ATTIC VENTS.
10. ALL WALLS, CEILINGS, AND FLOORS SEPARATING HEATED SPACE FROM UNHEATED SPACE SHALL BE INSULATED.
11. ALL POLY VAPOUR/MOISTURE BARRIER TO CONFORM TO OBC 9.25.3. OR 9.25.4. AND SB-12. CAULK AND SEAL ALL JOINTS WITH 4" MIN. LAP.
12. AN AIR BARRIER SYSTEM CONFORMING TO OBC 9.25.3. TO BE INSTALLED BETWEEN GARAGE AND THE REMAINDER OF THE BUILDING PROVIDING AN EFFECTIVE BARRIER TO GAS AND EXHAUST FUMES.
13. ALL PLUMBING AND OTHER PENETRATIONS THROUGH GARAGE AND LIVING SPACE SHALL BE CAULKED.
14. ALL DOORS BETWEEN GARAGE AND HOUSE TO BE PROVIDED WITH SELF CLOSURES AND AIR TIGHT WEATHERSTRIPPING.
15. ALL DOORS THAT SEPARATE HEATED SPACE FROM UNHEATED SPACE SHALL HAVE A THERMAL RESISTANCE OF NOT LESS THAN R4 (RSI 0.7).
16. CAULK ALL PERIMETERS, INSIDE AND OUTSIDE OF ALL EXTERIOR DOORS AND WINDOWS.
17. FLASHING TO BE INSTALLED AT EVERY HORIZONTAL JUNCTION OF CLADDING, EVERY HORIZONTAL OFFSET IN THE CLADDING AND EVERY HORIZONTAL LINE WHERE THE CLADDING SUBSTRATE CHANGES AND CONDENSATION CAN OCCUR OR THE SUBSTRATE MAY COMPROMISE THE DRAINAGE OF MOISTURE.
18. PROVIDE VALLEY FLASHING AT ROOF PITCH INTERSECTIONS AS PER OBC 9.26.4.3.
19. PROVIDE FLASHING AT ALL INTERSECTIONS OF ROOF AND WALLS AS PER 9.26.4.
20. DWHR TO BE INSTALLED ON DRAIN LINE FROM SHOWER IF INSTALLATION IS POSSIBLE.
21. ELECTRICAL VEHICLE CHARGING SYSTEM REQUIRES 200A PANEL MIN. AND 27mm CONDUIT TO ALLOW FOR FURTURE CABLE AND A 4-11/16" TRADE SIZE ELECTRICAL OUTLET BOX INSTALLED IN THE GARAGE OR ADJACENT TO THE DRIVEWAY.
22. VENTING REQUIREMENTS AND EQUIPMENT FOR WOOD BURNING FIREPLACE AND CHIMNEY SHALL CONFORM TO SECTION 6.3 OF DIV. B OF THE OBC.
23. UNHEATED CRAWLSPACE TO BE MECHANICALLY VENTED.
24. DRAIN WATER HEAT RECOVERY UNIT TO BE INSTALLED MEETING CSA B55,1-12 MINIMUM EFFICENCY TO BE 42% DWHR UNIT TO RECEIVE DRAIN WATER FROM AT LEAST 2 SHOWERS WHERE THERE ARE 2 OR MORE SHOWERS.
25. MIXING VALVE TO BE LOCATED OFF THE HOT WATER TANK TO REGULATE HOT WATER TEMPERATURE (TYPICAL IN ALL UNITS).
26. FURNACE, HRV, HOT WATER TANK, SUMP PIT LOCATION IN MECHANICAL ROOM TO BE ADJUSTED BASED ON MECHANICAL DESIGN AND ON SITE CONDITIONS.

CONCRETE & FOUNDATION NOTES

1. FOUNDATION WALLS TO BE REINFORCED POURED CONCRETE, UNLESS OTHERWISE NOTED. SEE DRAWINGS FOR TYPE AND THICKNESS.
2. FOUNDATION WALLS TO EXTEND A MINIMUM 8" ABOVE GRADE FOR EXTERIOR STUCCO WALLS.
3. CONCRETE FOOTINGS SHALL BEAR UNDISTURBED OR COMPACTED SOIL TO A MINIMUM 4' (1220mm) DEPTH BELOW FROST PENETRATION.
4. GRADE LINES SHOWN ON THESE PLANS ARE ASSUMED.
5. WHERE EXTERIOR GRADE IS HIGHER THAN THE GROUND LEVEL INSIDE, THE EXTERIOR SURFACE OF FOUNDATION WALLS BELOW GRADE SHALL BE DAMPPROOFED. WHERE HYDROSTATIC PRESSURE OCCURS, THE WALLS SHALL BE WATERPROOFED.
6. PROVIDE A DRAINAGE LAYER SYSTEM TO THE EXTERIOR SURFACE OF FOUNDATION WALLS BELOW GRADE WHERE DAMPPROOFING OR WATERPROOFING IS REQUIRED.

POURED CONCRETE:
1. CONCRETE SHALL BE DESIGNED, MIXED, PLACED, CURED AND TESTED IN ACCORDANCE WITH CAN/CSA-A438-00, "CONCRETE CONSTRUCTION FOR HOUSING AND SMALL BUILDINGS".
2. THE COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE AFTER 28 DAYS SHALL NOT BE LESS THAN:
   a) 32MPa FOR GARAGE FLOORS, CARPORT FLOORS AND ALL EXTERIOR FLATWORK.
   b) 20MPa FOR INTERIOR FLOORS OTHER THAN THOSE FOR GARAGES AND CARPORTS, AND FOUNDATION WALLS AND FOOTINGS.
   c) 15MPa FOR ALL OTHER APPLICATIONS.

FOUNDATION INFORMATION
1. ALL SONO TUBES, FLOORING AND BIG FOOT FOOTINGS TO BE BRACED TO ENSURE THEY ARE LEVEL/PLUM. THE ELEVATION OF ALL THE SONO TUBES ARE TO BE THE SAME, UNLESS FINISHED GRADES REQUIRES THERE TO BE DIFFERENCES. TOPS OF THE SONO TUBE TO HAVE A PROPER FINISH. SONO TUBES TO BE LOCATED ACCURATELY, SO THE POSTS ARE IN CONTACT WITH SONO TUBES WITHIN THE CENTER LINE OF THE TUBES.
2. NOTE: ALL INTERIOR STRIP FOOTINGS ARE TO BE 6" X 16" UNLESS OTHERWISE NOTED

GENERAL NOTES

1. GUARDS ARE TO BE DESIGNED TO MEET THE REQUIREMENTS OF THE ONTARIO BUILDING CODE SUPPLEMENT SB-7.
2. ALL WATER CLOSETS ARE TO HAVE A MAXIMUM OF 4.8 LITERS PER FLUSH.
3. PROVIDE AND INSTALL AT LEAST ONE SMOKE ALARM ON EACH FLOOR LEVEL AS INDICATED IN ADDITION TO ONE SMOKE ALARM WITHIN EACH SLEEPING UNIT. 9.10.16.1. TO 9.10.16.3.
4. SMOKE DETECTORS AND CARBON MONOXIDE DETECTORS SHALL BE WIRED SO THAT ALL ALARMS WILL SOUND.
5. ALL ALARMS SHALL HAVE VISUAL SIGNALS AS WELL AS AUDITORY SIGNALS.
6. ALL DOORS TO BE 32" WIDE UNLESS OTHERWISE NOTED.

GUARDS, HANDRAILS AND STAIRS

1. GUARDS SHALL BE PROVIDED WHEN THE DIFFERENCE IN ELEVATION IS MORE THAN 24" BETWEEN THE WALKING SURFACE AND THE ADJACENT SURFACE, ALL INTERIOR STAIRS MORE THAN 2 RISERS, LANDINGS OR FLOOR LEVEL AROUND THE STAIRWELL THAT IS NOT PROTECTED BY A WALL.
2. ALL GUARDS ARE A MINIMUM 42" HIGH, EXCEPT FOR WHERE THE EXTERIOR WALKING SURFACE AND THE ADJACENT GROUND LEVEL IS NOT GREATER THAN 5' 11" OR WHERE GUARDS ARE WITHIN THE DWELLING UNIT, MAY BE A MINIMUM 36" HIGH.
4. OPENINGS BETWEEN GUARD PICKETS MUST BE SPACED LESS THAN 4".
5. ALL GUARDS TO BE DESIGNED ACCORDING TO SUPPLEMENT SB-7 GUIDELINES.
6. HANDRAIL REQUIRED ON ONE SIDE OF STAIR ONLY, TO BE CONTINUOUS THROUGHOUT THE LENGTH OF STAIR.
7. A CLEARANCE OF NOT LESS THAN 2" SHALL BE PROVIDED BETWEEN HANDRAIL AND THE SURFACE BEHIND IT.
8. HANDRAIL SHALL NOT PROJECT MORE THAN 4" INTO REQUIRED MINIMUM WIDTH OF STAIR.
9. STAIR TO BE SECURELY FASTENED AT TOP AND BOTTOM. WHERE WALL IS PROVIDED ALONG SIDE OF STRINGER, FASTEN STRINGER TO WALL STUDS.
10. RISERS AND TREADS SHALL BE UNIFORM IN ANY ONE FLIGHT, WITH A MAXIMUM TOLERANCE OF 1/4" BETWEEN ADJACENT TREADS OR LANDINGS, AND A MAXIMUM OF 1/4" BETWEEN THE DEEPEST AND SHALLOWEST TREADS IN A FLIGHT.
11. MAXIMUM AND MINIMUM STAIR RISE, RUN AND TREADS TO COMPLY WITH 9.8.4.1. OF THE OBC. SEE TABLE.

STAIR TYPE	RECTANGULAR TREADS			
	MAX. RUN	MIN. RUN	MAX. RISE	MIN. RISE
PRIVATE	14"	10"	7 3/4"	5"

e4

Table 3.1.1.2.C (IP)
ZONE 1 - Compliance Packages for Electric Space Heating
Forming Part of Sentence 3.1.1.2.(3)

Component	Thermal Values[8]	Compliance Package			
		C1	C2	C3	C4
Ceiling with Attic Space	Min. Nominal R[1]	60 + HH	60 + HH	50	50
	Max. U[2]	0.016	0.016	0.020	0.020
	Min. Effective R[2]	59.90	59.90	49.23	49.23
Ceiling Without Attic Space	Min. Nominal R[1]	31	31	31	31
	Max. U[2]	0.036	0.036	0.036	0.036
	Min. Effective R[2]	27.65	27.65	27.65	27.65
Exposed Floor	Min. Nominal R[1]	31	31	35	35
	Max. U[2]	0.034	0.034	0.031	0.031
	Min. Effective R[3]	29.80	29.80	32.02	32.02
Walls Above Grade	Min. Nominal R[1]	19 + 10 ci	22 + 10 ci	22 + 10 ci	22 + 7.5 ci
	Max. U[3]	0.040	0.038	0.038	0.042
	Min. Effective R[3]	25.32	26.40	26.40	23.90
Basement Walls[6]	Min. Nominal R[1]	20 + 8 ci	20 ci	20 ci	20 ci
	Max. U[4]	0.044	0.047	0.047	0.047
	Min. Effective R[4]	22.71	21.12	21.12	21.12
Below Grade Slab Entire Surface > 600 mm Below Grade	Min. Nominal R[1]	7.5	—	—	—
	Max. U[4]	0.116	—	—	—
	Min. Effective R[4]	8.63	—	—	—
Heated Slab or Slab ≤ 600 mm Below Grade	Min. Nominal R[1]	10	10	10	10
	Max. U[4]	0.090	0.090	0.090	0.090
	Min. Effective R[4]	11.13	11.13	11.13	11.13
Edge of Below Grade Slab ≤ 600 mm Below Grade	Min. Nominal R[1]	10	10	10	10
Windows and Sliding Glass Doors	Max. U[5]	0.25	0.21	0.21	0.28
	Energy Rating	29	34	34	25
Skylights	Max. U[5]	0.49	0.49	0.49	0.49
Space Heating Equipment	Min.	—	—	—	ASHP: 7.1 HSPF
HRV	Min. SRE	81%	75%	81%	55%
Domestic Water Heater[7]	Min. EF	—	—	—	—
Column 1	2	3	4	5	6

Notes to Table 3.1.1.2.C (IP):
The following definitions applies: HH = 10 inch high heel
(1) The values listed are minimum Nominal R values for the thermal insulation component only.
(2) U-Value and effective R value shall include entire ceiling assembly components, from interior air film to vented space air film above insulation.
(3) U-Value and effective R value shall include entire exposed floor or above grade wall assembly components, from interior air film to exterior air film.
(4) U-Value and effective R value shall include entire basement wall or slab assembly components and interior air film.
(5) U-Value is the *overall coefficient of heat transfer* for a window assembly, sliding glass door assembly or skylight assembly expressed in Btu/(h•ft²•F).
(6) In the case of *basement* wall assemblies, where R20 ci is required R12 + 10 ci is permitted to be used or vice versa; or where R12 + 5 ci is required, R15 ci is permitted to be used or vice versa.
(7) If an EF of a water tank is not indicated in a compliance package, there is no EF requirement for water tank for that specific compliance package.
(8) Nominal and effective R values are expressed in (h•ft²•F)/Btu. U-Values are expressed in Btu/(h•ft²•F).

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

LICENSED PROFESSIONAL ENGINEER
M.C. VREUGDENHIL
10016947
06/28/2024
PROVINCE OF ONTARIO

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PROJECT:
1450 MILL LINE RD,
NORWOOD, ON.

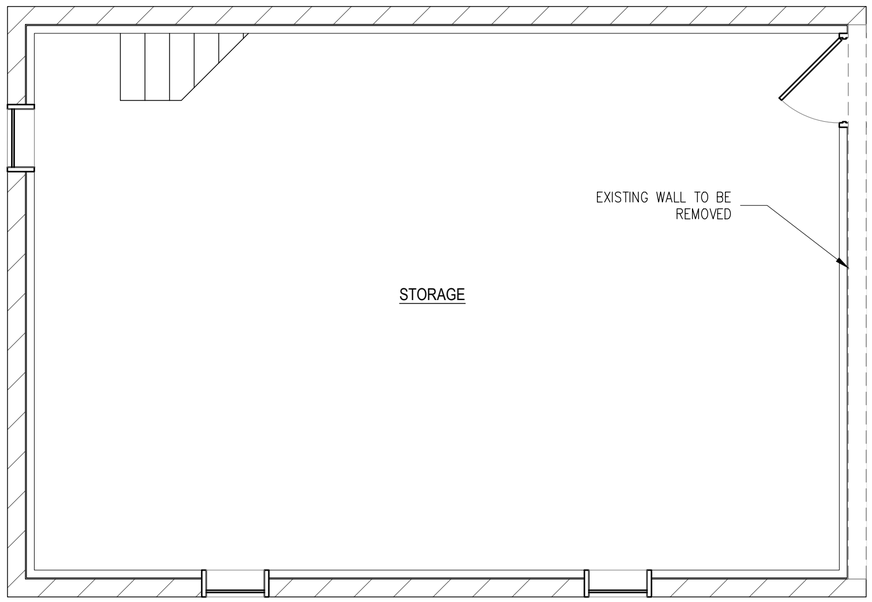
DWG TITLE:
SITE LAYOUT

PROJECT # 1132405199

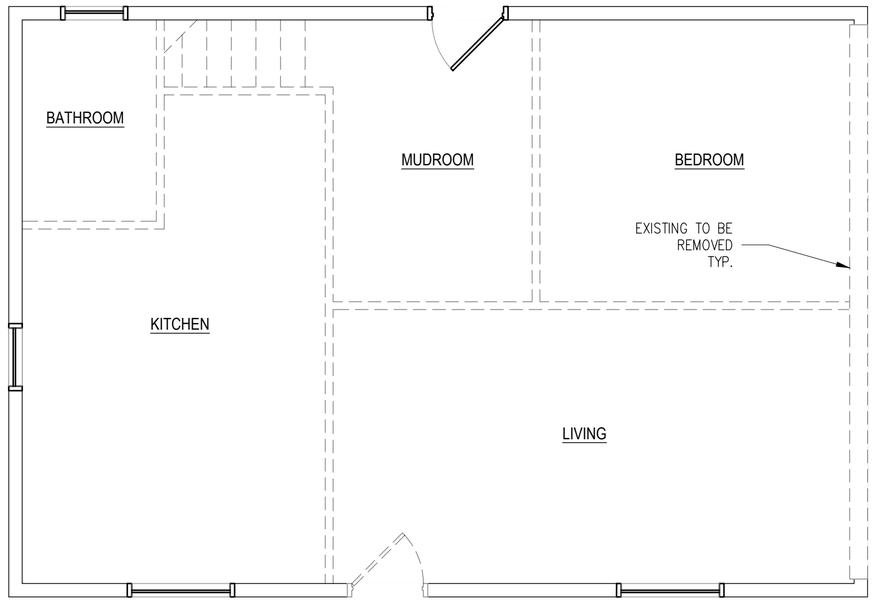
DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED	J.B.		
DRAWN	J.B.	PROJ. MGR.	J.B.
CHECKED	M.C.V.	CREATED ON	11 MAY 2024

DWG. NO. A001



1 A100 EXISTING MAIN FLOOR PLAN
SCALE: 1/4" to 1'-0"



2 A100 EXISTING SECOND FLOOR PLAN
SCALE: 1/4" to 1'-0"

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

LICENSED PROFESSIONAL ENGINEER
M.C. VREUGDENHIL
100168947
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PROJECT:
1450 MILL LINE RD,
NORWOOD, ON.

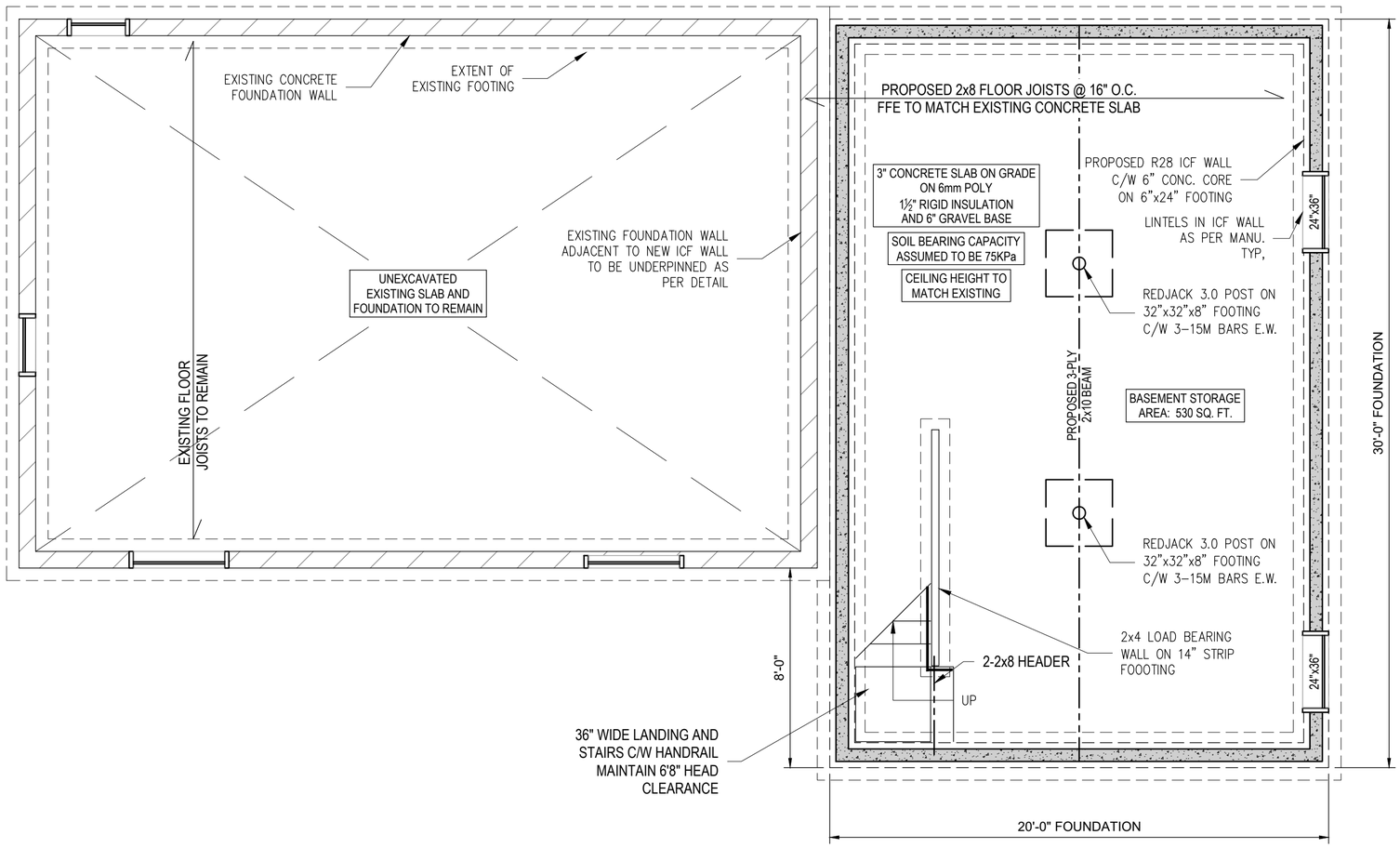
DWG TITLE:
SITE LAYOUT

PROJECT # 1132405199

DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED		
J.B.		
DRAWN		PROJ. MGR.
J.B.		J.B.
CHECKED	CREATED ON	
M.C.V.	11 MAY 2024	

DWG. NO.
A100



1 A101 PROPOSED FOUNDATION PLAN

SCALE: 1/4" to 1'-0"

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

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PROJECT:

1450 MILL LINE RD,
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DWG TITLE:

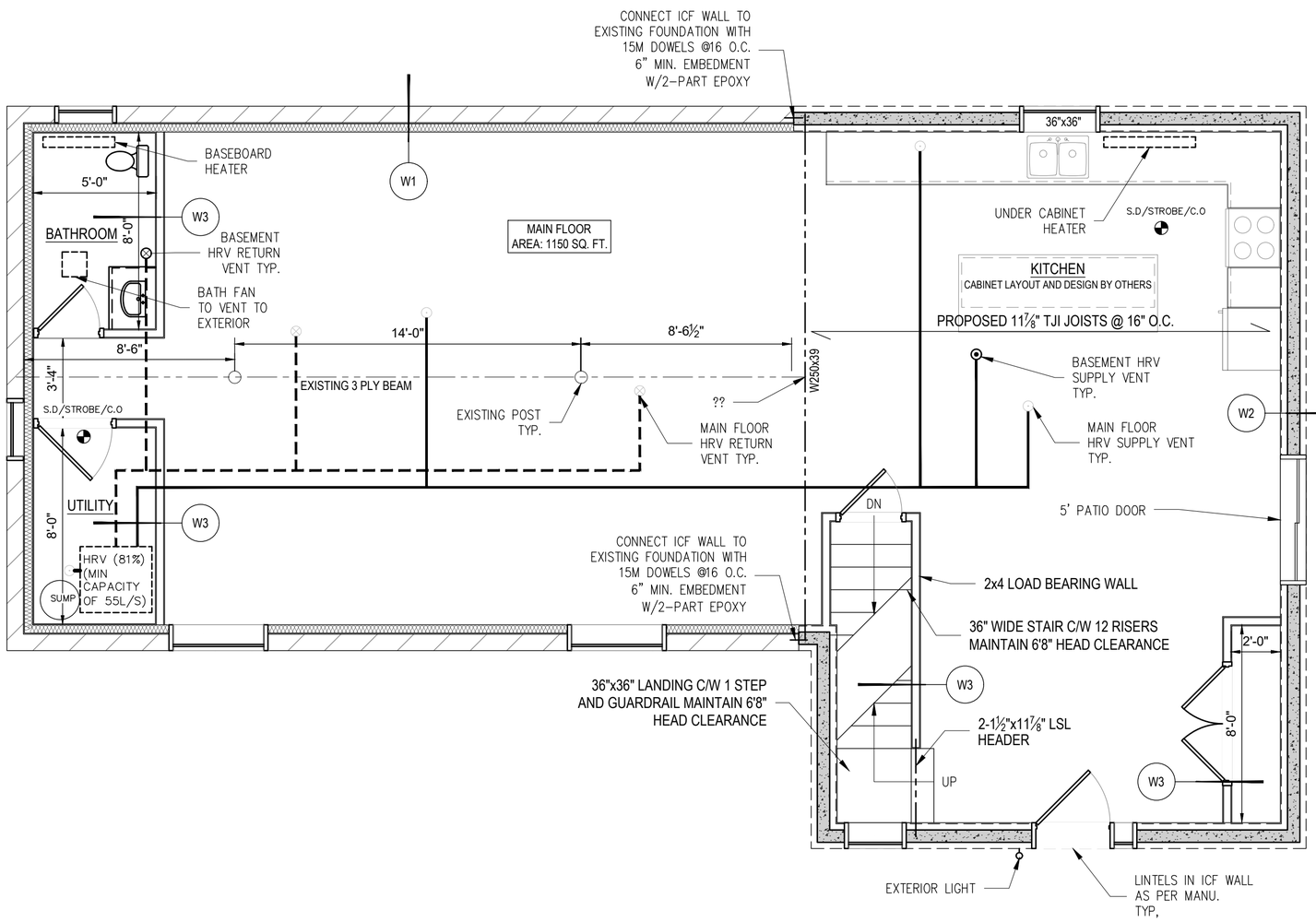
SITE LAYOUT

PROJECT # 1132405199

DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED	J.B.		
DRAWN	J.B.		PROJ. MGR. J.B.
CHECKED	M.C.V.	CREATED ON	11 MAY 2024

DWG. NO. A101

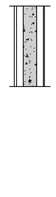


1 A102 PROPOSED MAIN FLOOR PLAN

SCALE: 1/4" to 1'-0"

8" CONC. FOUNDATION
2"x4" WOOD STUDS @16" O.C.
C/W INSULATION
AIR BARRIER
½" DRYWALL

W1 WALL ASSEMBLY



SIDING TO MATCH EXISTING
R29 ICF WALL C/W 6" CONC. CORE
½" DRYWALL

W2 WALL ASSEMBLY

½" DRYWALL
2x4 STUDS @ 16" O.C.
½" DRYWALL

W3 WALL ASSEMBLY

LEGEND:

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PROJECT:

1450 MILL LINE RD,
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DWG TITLE:

SITE LAYOUT

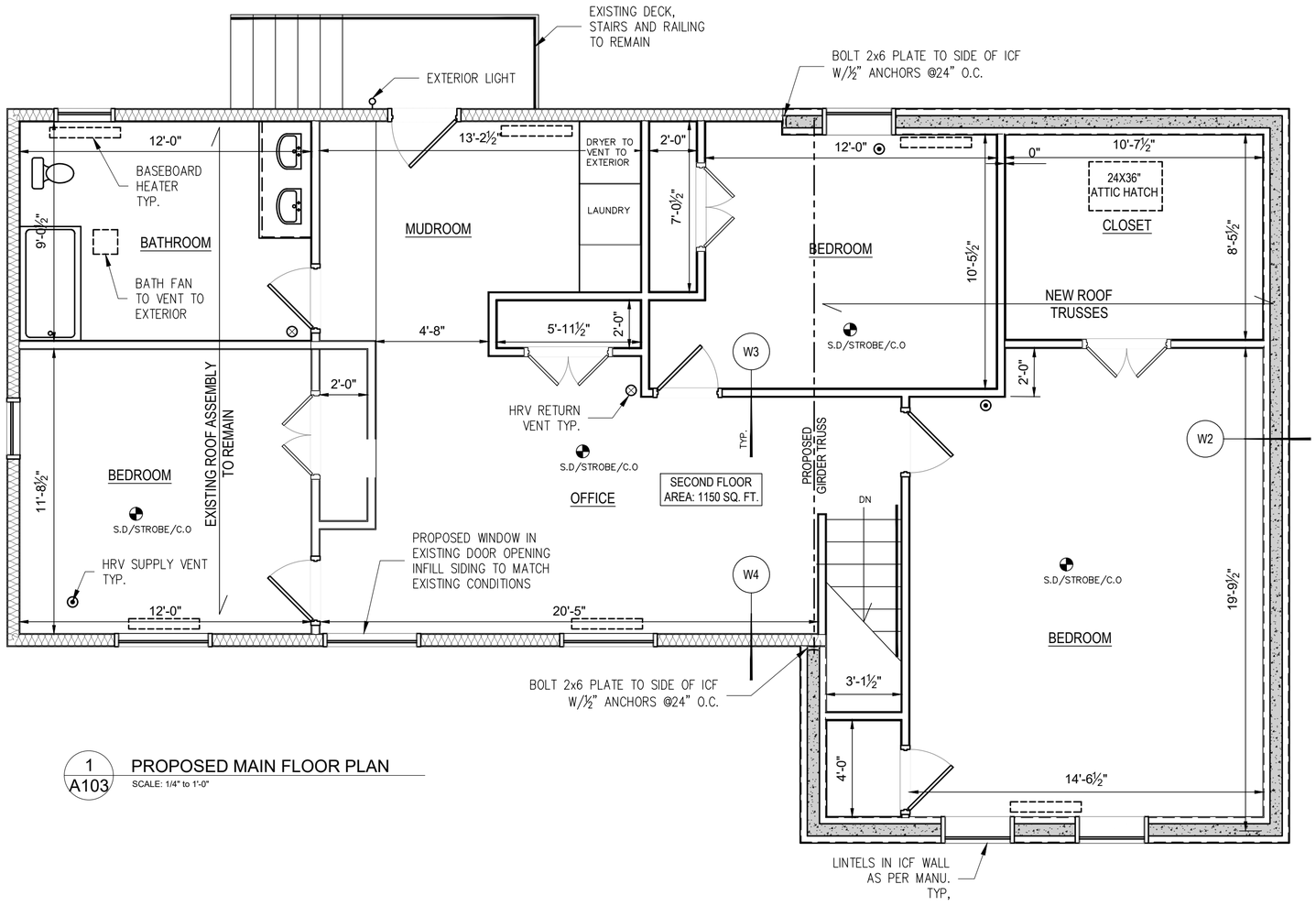
PROJECT # 1132405199

DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED	J.B.		
DRAWN	J.B.	PROJ. MGR.	J.B.
CHECKED	M.C.V.	CREATED ON	11 MAY 2024

DWG. NO.

A102



1 A103 PROPOSED MAIN FLOOR PLAN

SCALE: 1/4" to 1'-0"

SIDING TO MATCH EXISTING
R29 ICF WALL C/W 6" CONC. CORE
½" DRYWALL

W2 WALL ASSEMBLY

½" DRYWALL
2x4 STUDS @ 16" O.C.
½" DRYWALL

W3 WALL ASSEMBLY

EXISTING SIDING
EXISTING STUDS @16" O.C.
C/W INSULATION
AIR BARRIER
½" DRYWALL

W4 WALL ASSEMBLY

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

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PROJECT:

1450 MILL LINE RD,
NORWOOD, ON.

DWG TITLE:

SITE LAYOUT

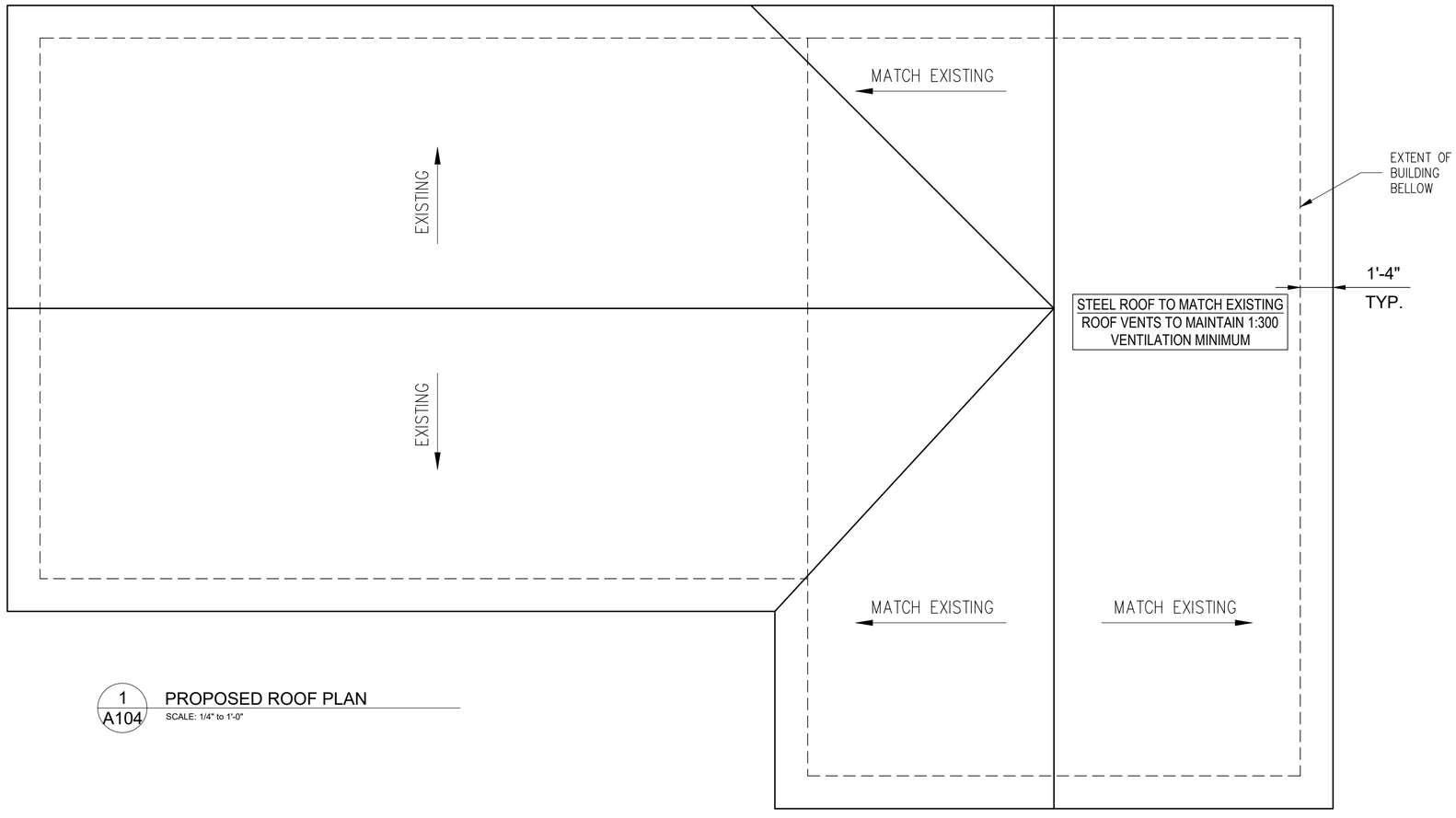
PROJECT # 1132405199

DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED	J.B.		
DRAWN	J.B.		PROJ. MGR. J.B.
CHECKED	M.C.V.	CREATED ON	11 MAY 2024

DWG. NO.

A103



1 A104 PROPOSED ROOF PLAN

SCALE: 1/4" to 1'-0"

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

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PROJECT:

1450 MILL LINE RD,
NORWOOD, ON.

DWG TITLE:

SITE LAYOUT

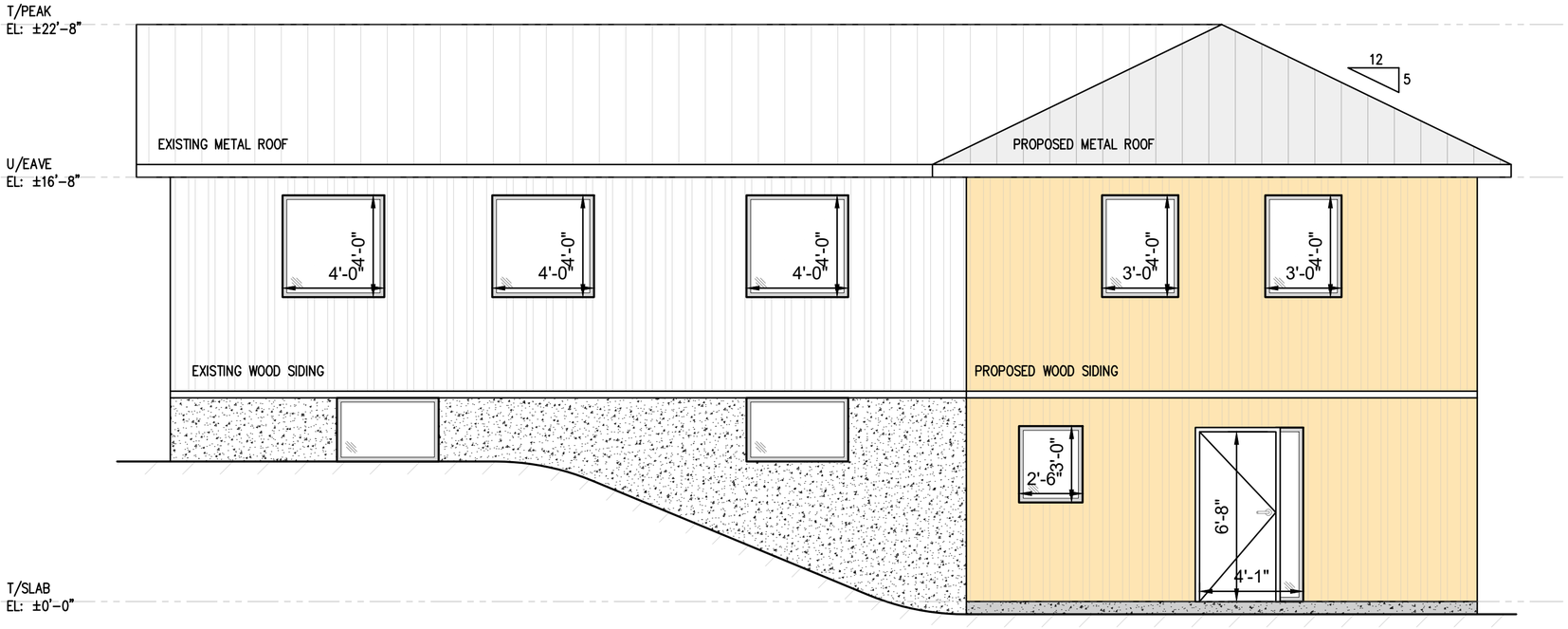
PROJECT # 1132405199

DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED		
J.B.		
DRAWN		PROJ. MGR.
J.B.		J.B.
CHECKED	CREATED ON	
M.C.V.	11 MAY 2024	

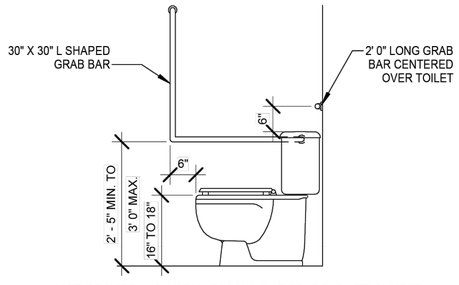
DWG. NO.

A104

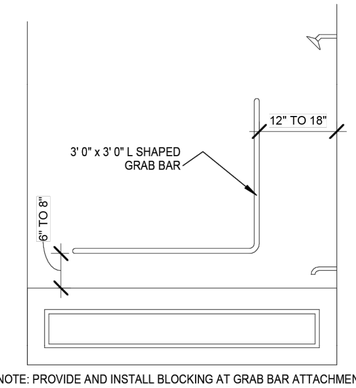


1 A200 PROPOSED FRONT ELEVATION

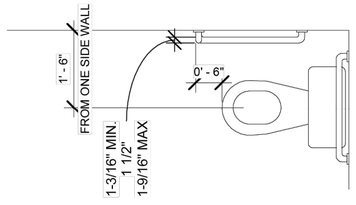
SCALE: 1/4" to 1'-0"

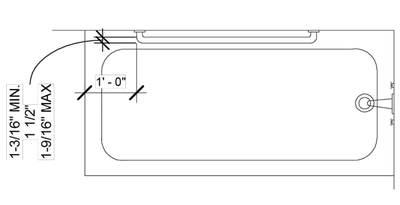


NOTE: PROVIDE AND INSTALL BLOCKING AT GRAB BAR ATTACHMENT POINTS AS REQUIRED FOR POSSIBLE FUTURE USE



NOTE: PROVIDE AND INSTALL BLOCKING AT GRAB BAR ATTACHMENT POINTS AS REQUIRED FOR POSSIBLE FUTURE USE





2 A200 TYPICAL RESIDENTIAL GRAB BAR DETAILS

SCALE: NTS

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

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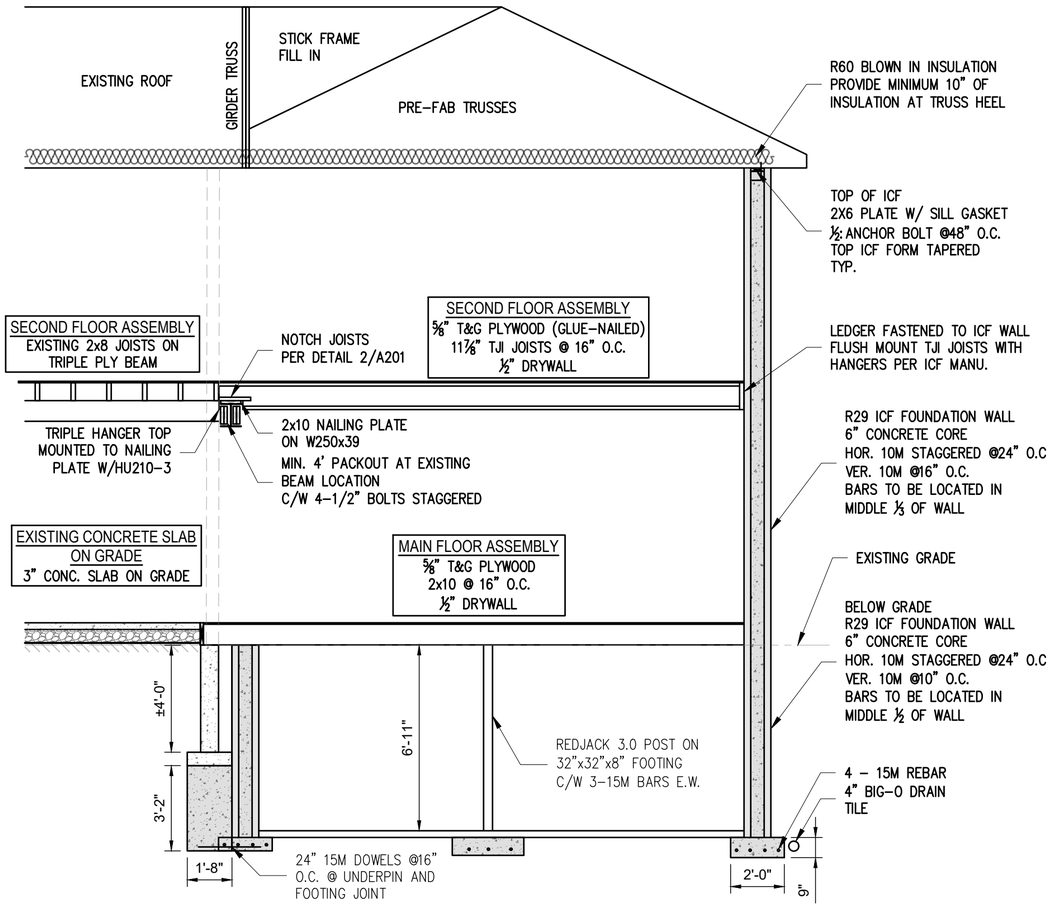
PROJECT:

1450 MILL LINE RD,
NORWOOD, ON.

DWG TITLE:

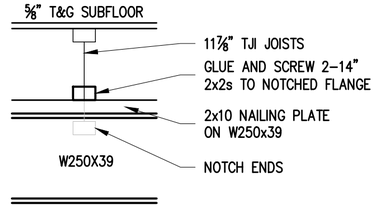
SITE LAYOUT

PROJECT #	1132405199
DISCIPLINE:	ARCHITECTURAL - STRUCTURAL
DESIGNED	J.B.
DRAWN	J.B.
PROJ. MGR.	J.B.
CHECKED	M.C.V.
CREATED ON	11 MAY 2024
DWG. NO.	A200



1 A201 PROPOSED SECTION

SCALE: 1/4" to 1'-0"



2 A201 NOTCH DETAIL

SCALE: 1" to 1'-0"

LEGEND:

NO.	DATE	REVISION	APPR.
1	06/28/2024	ISSUED FOR REVIEW	M.C.V.

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DWG TITLE:

SITE LAYOUT

PROJECT # 1132405199

DISCIPLINE: ARCHITECTURAL - STRUCTURAL

DESIGNED		
J.B.		
DRAWN		PROJ. MGR.
J.B.		J.B.
CHECKED	CREATED ON	
M.C.V.	11 MAY 2024	

DWG. NO.

A201

Appendix B
Site Photolog

Photo 1. Looking south the existing dwelling and the area where the addition is proposed.

Photo 2. A view of the Cattail Marsh present in the property and adjacent land to the west.

Photo 3. A view of the Forest present on the west side of the property.

Photo 4. A view of the Wetland Swamp located north of the property on adjacent land.

Photo 5. A view of the Meadow vegetation covering most of the property.

Photo 6. A view of the vegetation present on the area where the lowest elevation was observed.