

New Construction

Part 9 National Building Code

refers to Housing and Small Buildings that are 3 storeys or less in height, having a building area not more than 600 square metres and used for residential, business and personal service, mercantile and medium to low hazard industrial occupancies

Application Checklist & Submission Package



This document and all attachments are provided as assistance to persons seeking certain approvals and permits as required by various by-laws of the City of Saint John and other acts and regulations. Should there be a discrepancy between this document, and all attachments, and the associated by-law, act or regulations, the associated by-law, act or regulation shall prevail.

Building & Development Permit Application

Checklist required for a complete application for:

➤ New Construction (Part 9 National Building Code)

HERITAGE: If building is in a “Heritage Conservation Area” please contact the Heritage Officer for requirements, analysis and approval prior to applying for a building permit. All aspects of exterior work / alteration to the building require Heritage approval.

FLOOD RISK AREA: If the building is located within the Flood Risk Area, construction of a new building may require analysis and purchase of compensatory storage. Please contact us for Flood Risk Area Development approval prior to applying for a building permit.

Applicant must submit all that are applicable:

- ☐ Completed **Application Form** signed
- ☐ **Permit Fee** and **Refundable Deposit**
- ☐ **Floor Plans**
- ☐ **Foundation Plans**
- ☐ **Cross Section**
- ☐ **Elevations** (all 4 sides)
- ☐ **Deck Construction Details**
- ☐ **Site Plan** showing
 - size of lot
 - dimensions from each property line to building(s)
 - driveway access / width
 - deck (if applicable)
 - landscaping (if applicable)
- ☐ **Storm Water / Rough Grading Plan** (1 unit, 2 units or semi-detached residential building) if there is an approved Grading Plan previously approved for the subdivision / lot



- ❑ **Storm Water Drainage Sketch** (1 unit, 2 units or semi-detached residential building) on site plan show storm water arrows indicating the direction of drainage / slope of lot (must include any ditches and swales).
 - ❑ **Storm Drainage Submission** (3 or more dwelling units, townhouses, commercial, industrial, institutional)
- Or
- ❑ **Professional Engineer stamped certification letter** where practical
 - ❑ **Energy Efficiency Information**
 - **Energy Code Compliance** form must be completed.
 - Additional energy efficiency information (our Prescriptive Energy Efficiency Design Detail form filled in or info may be on drawings)
 - ❑ **Window** information
 - ❑ **Door** information
 - ❑ **Ventilation** information / **Mechanical** information (if applicable)
 - ❑ **Truss Layouts** (for roof and floor)
 - ❑ If adding a 4th dwelling unit, Barrier Free Regulations apply / please contact the One Stop Development Shop for any questions
 - ❑ **Other information** may also be required to complete the application. It is therefore strongly recommended that the applicant consult with City staff prior to submission.
 - ❑ You may be subject to **Fire Marshall / Saint John Fire Prevention** approval – please contact them directly for inquiries at (506)658-2962 or fireprevention@saintjohn.ca

Additional Permits which may be required:

- ❑ **Water and Sewer Permit** (any alteration / connection to city water and/or sewer services)
- ❑ **Excavation Permit** (any alteration within the street right of way)
 - cutting the curb to create, relocate or widen driveway
 - create / install culvert
 - any water and sewer connection into the city water / sewer main



LOCATION	CIVIC ADDRESS :			PID # :	
STAFF USE	HERITAGE AREA: Y / N INTENSIFICATION AREA: Y / N FLOOD RISK AREA: Y / N APPROVED GRADING PLAN: Y / N				
	APPLICATION #:		DATE RECEIVED:		
			RECEIVED BY:		
APPLICANT INFORMATION	APPLICANT		EMAIL	PHONE	
	MAILING ADDRESS		POSTAL CODE		
	CONTRACTOR		EMAIL	PHONE	
	MAILING ADDRESS		POSTAL CODE		
	OWNER		EMAIL	PHONE	
	MAILING ADDRESS		POSTAL CODE		
PRESENT USE: PROPOSED USE:					
CHECK ALL THAT APPLY	BUILDING		PLANNING	INFRASTRUCTURE	HERITAGE
	<input type="checkbox"/> INTERIOR RENOVATION	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> VARIANCE	<input type="checkbox"/> STREET EXCAVATION	<input type="checkbox"/> HERITAGE DEVELOPMENT
	<input type="checkbox"/> EXTERIOR RENOVATION	<input type="checkbox"/> ACCESSORY BLDG	<input type="checkbox"/> PLANNING LETTER	<input type="checkbox"/> DRIVEWAY CULVERT	<input type="checkbox"/> HERITAGE SIGN
	<input type="checkbox"/> ADDITION	<input type="checkbox"/> POOL	<input type="checkbox"/> PAC APPLICATION	<input type="checkbox"/> DRAINAGE	<input type="checkbox"/> HERITAGE INFILL
	<input type="checkbox"/> DECK	<input type="checkbox"/> DEMOLITION	<input type="checkbox"/> COUNCIL APP	<input type="checkbox"/> WATER & SEWERAGE	<input type="checkbox"/> HERITAGE DEMO
	<input type="checkbox"/> CHANGE OF USE	<input type="checkbox"/> SIGN	<input type="checkbox"/> SUBDIVISION	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER
	<input type="checkbox"/> MINIMUM STANDARDS	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER		
REQUIRED:		BUILDING SPRINKLERED: Y / N	FIRE ALARM: Y / N		
DESCRIPTION OF WORK					
	PROJECT ESTIMATE (IF APPLICABLE)				

☐ I consent to the City of Saint John sending to me commercial electronic messages, from time to time, regarding City initiatives and incentives.

General Collection Statement

This information is being collected in order for the City of Saint John to deliver an existing program / service; the collection is limited to that which is necessary to deliver the program / service. Unless required to do so by law, the City of Saint John will not share your personal information with any third party without your express consent.

The legal authority for collecting this information is to be found in the Municipalities Act and the Right to Information and Protection of Privacy Act. For further information or questions regarding the collection of personal information, please contact the Access & Privacy Officer:

City Hall Building
 15 Market Square Saint
 John, NB E2L 1E8
commonclerk@saintjohn.ca
 (506) 658-2862



I, the undersigned, hereby apply for the permit(s) or approval(s), indicated above for the work described on plans, submissions and forms herewith submitted. This application includes all relevant documentation necessary for the applied for permit(s) or approval(s). I agree to comply with the plans, specifications and further agree to comply with all relevant City By-laws and conditions imposed.

Applicant Name

Applicant Signature

Date



Schedule F: Tiers

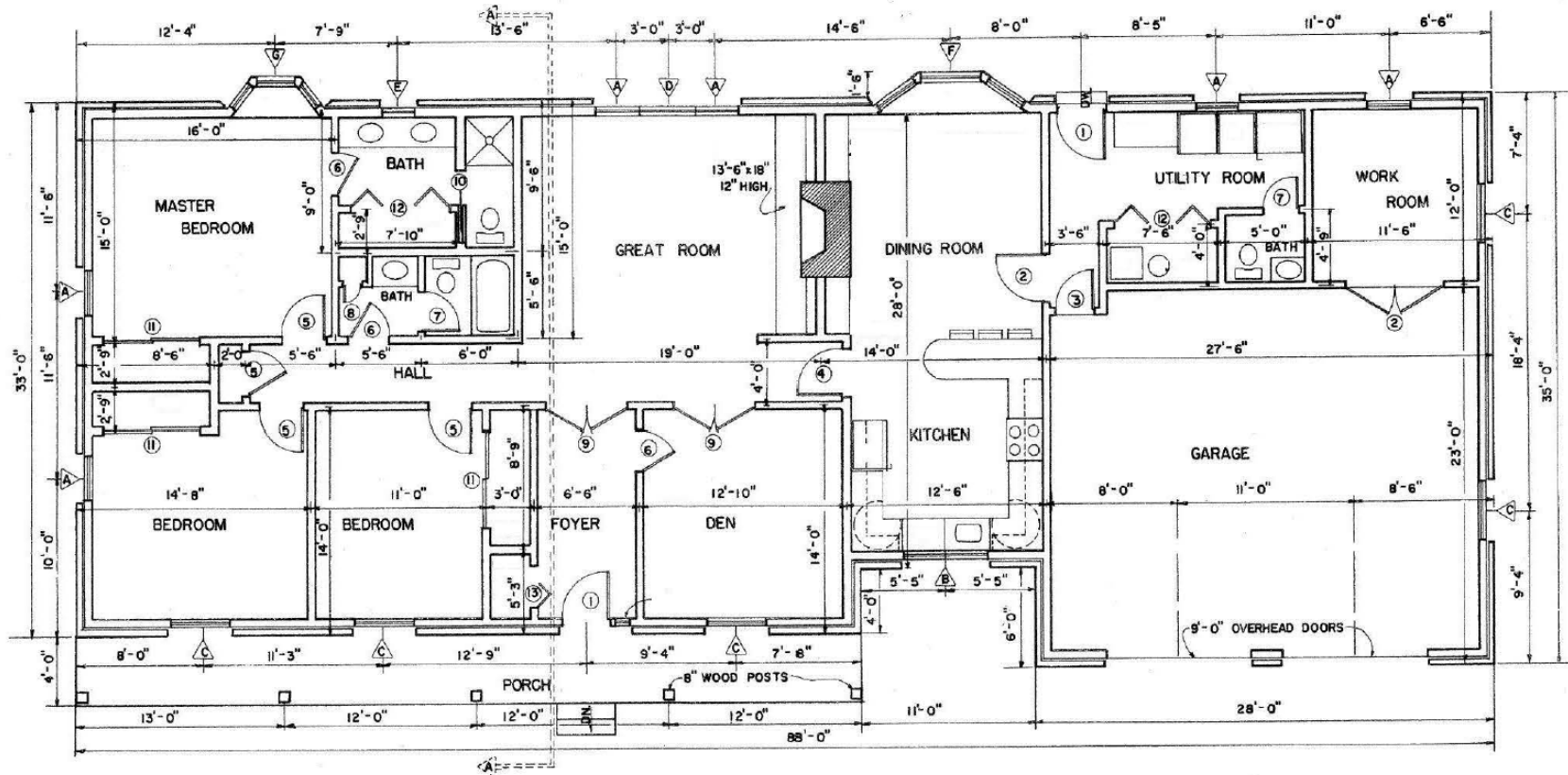
For the purposes of this schedule MICI means:
Multi-unit dwellings of 3 units and above;
Industrial buildings or structures;
Commercial buildings or structures;
Institutional buildings or structures;
And any other building or structure that is not a Minor and Medium Residential.

TIER 1
Minor and Medium Residential Window and Door
Minor and Medium Residential Deck
Minor and Medium Residential Siding
Minor and Medium Residential - Interior Renovations Value less than \$20,000
Minor and Medium Residential - Exterior Renovations Value less than \$20,000
Minor and Medium Residential - Accessory Building and Garage
All Demolitions
Electrical

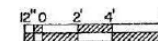
TIER 2
Minor and Medium Residential – New
Minor and Medium Residential - New dwelling unit or secondary suite
Minor and Medium Residential - Addition
Minor and Medium Residential- Interior Renovations Value \$20,000 and greater
Minor and Medium Residential - Exterior Renovations Value \$20,000 and greater
MICI - Interior Renovations Value less than \$25,000
MICI - Exterior Renovations Value less than \$25,000
MICI - Change of Occupancy, no renovations
Mobile Home
Tents

TIER 3
MICI - New
MICI - Addition
MICI - New dwelling unit
MICI - Interior Renovations Value \$25,000 and greater
MICI - Exterior Renovations Value \$25,000 and greater

FLOOR PLANS EXAMPLE



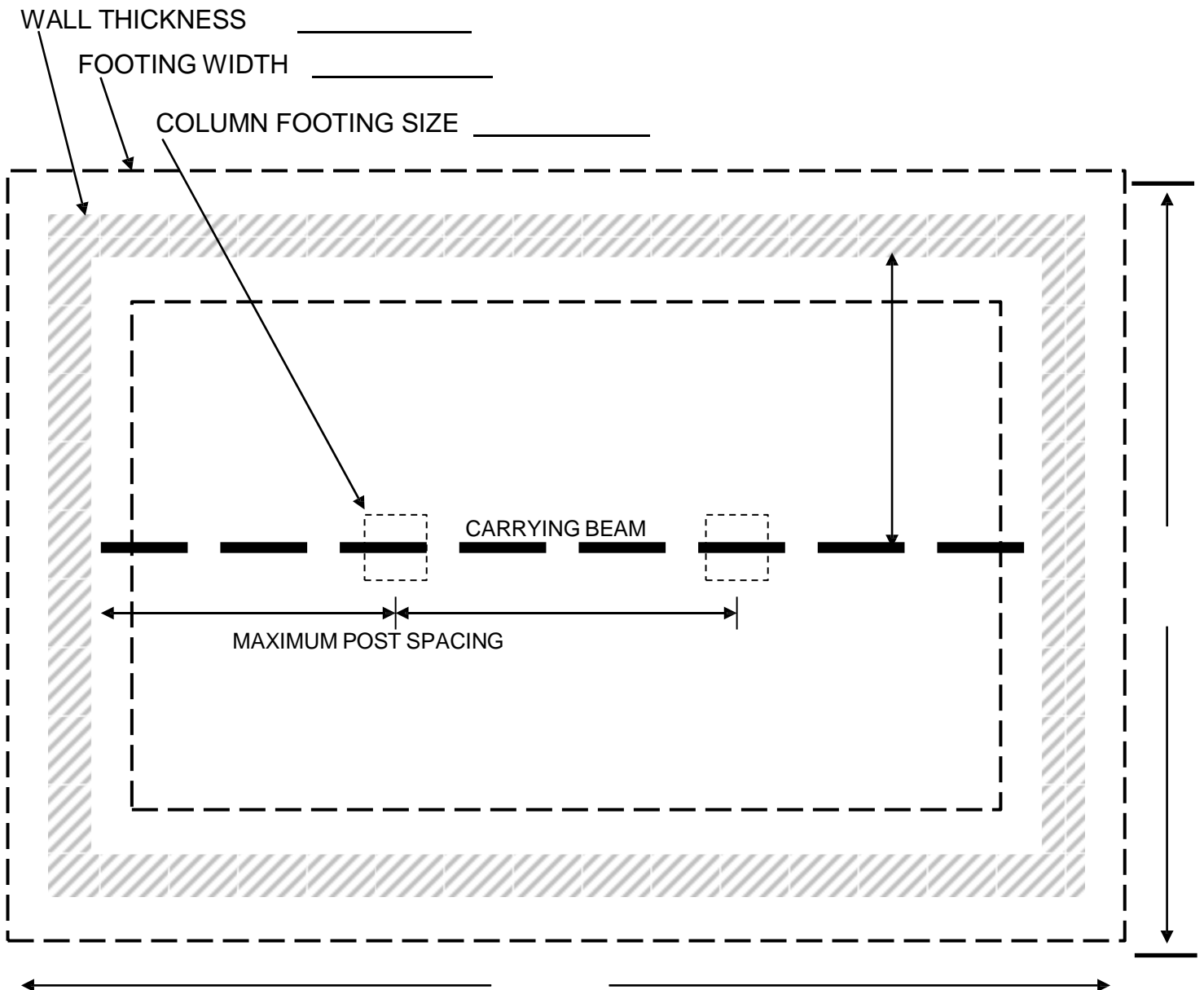
FLOOR PLAN



SCALE 3/16" = 1' - 0"

FOUNDATION - TYPICAL **(Part 9 National Building Code – Residential)**

NUMBER OF FLOORS SUPPORTED	
CARRYING BEAM SIZE	
FLOOR JOIST SIZE	
FLOOR JOIST SPACING	
FLOOR JOIST SPAN	See diagram
MAXIMUM POST SPACING	See diagram



TYPICAL WALL SECTION (EXTERIOR) - TWO STOREY (RESIDENTIAL)

Roof Construction

FINISH: Shingles____ Metal____ Other:_____

SHEATHING: OSB____ Plywood____ Boards:_____

Thickness:_____

TRUSSES: Yes____ No____ (If no enter rafter info)

RAFTERS: Size____ Spacing_____

INSULATION: Type:_____ R Value_____

VAPOUR BARRIER: 6mm Poly____ Other:_____

CEILING FINISH: Gyproc____ Other:_____

Type:_____ Thickness_____

Wall Construction

EXTERIOR CLADDING:

Vinyl____ Metal____ Clapboard____ Other:_____

HOUSE WRAP:

Tyvek____ Tytar____ Tarpaper____ Other:_____

EXTRUDED POLYSTYRENE_____

EXPANDED POLYSTYRENE_____ (If Applicable)

SHEATHING: OSB____ Plywood____ Boards_____

Thickness:_____

WALL STUD: Size____ Spacing_____

INSULATION: Type_____ R-Value_____

VAPOUR BARRIER: 6mm Poly____ Other:_____

INTERIOR FINISH: Gyproc____ Other:_____

Type_____ Thickness_____

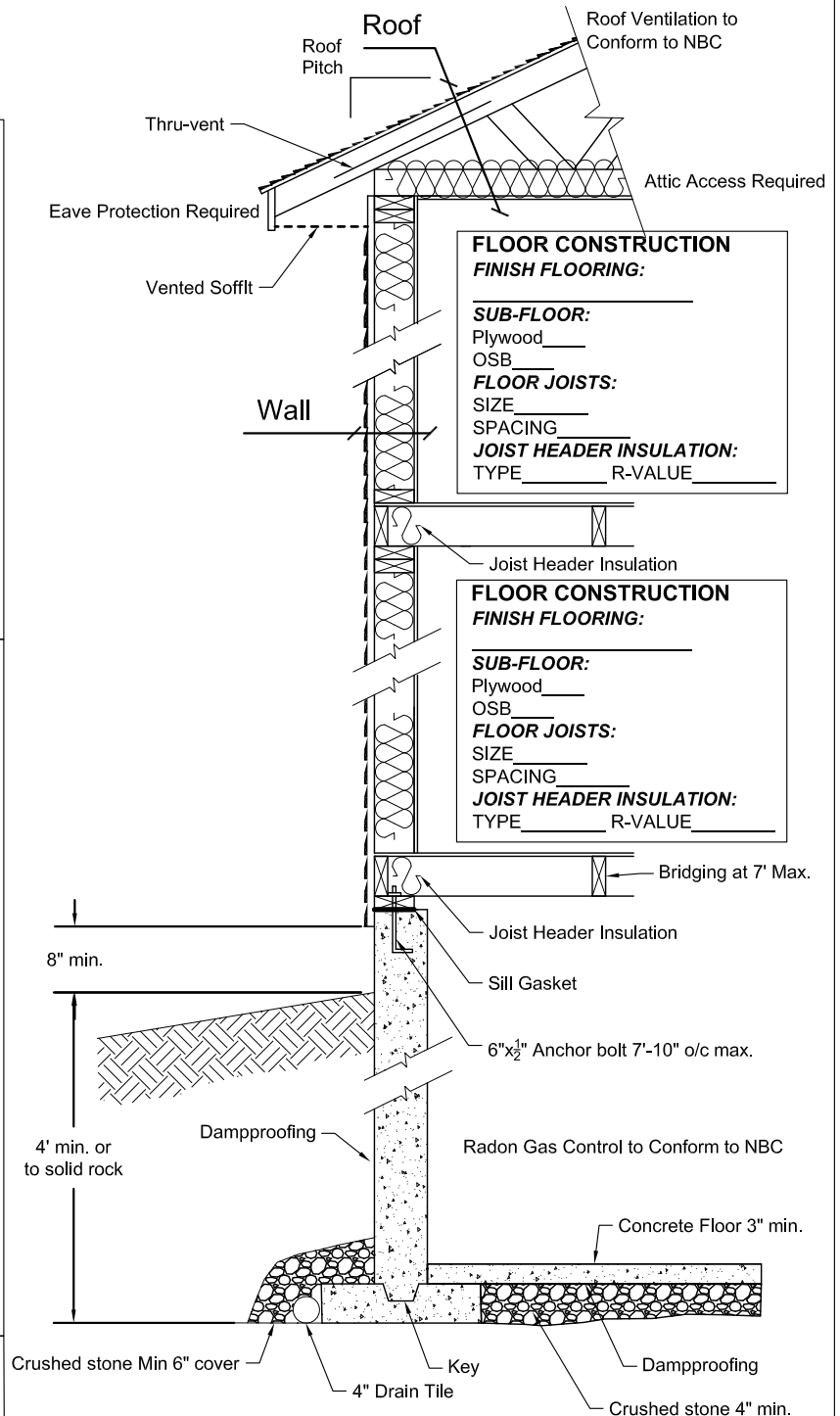
FOUNDATION

FOUNDATION WALL THICKNESS:_____

FOOTING WIDTH:_____

BELOW GRADE WALL ASSEMBLY: _____

BELOW SLAB INSULATION:_____



TYPICAL WALL SECTION (EXTERIOR) - SINGLE STOREY (RESIDENTIAL)

Roof Construction

FINISH: Shingles____ Metal____ Other:_____

SHEATHING: OSB____ Plywood____ Boards:_____

Thickness:_____

TRUSSES: Yes____ No____ (If no enter rafter info)

RAFTERS: Size____ Spacing_____

INSULATION: Type:_____ R Value_____

VAPOUR BARRIER: 6mm Poly____ Other:_____

CEILING FINISH: Gyproc____ Other:_____

Type:_____ Thickness_____

Wall Construction

EXTERIOR CLADDING:

Vinyl____ Metal____ Clapboard____ Other:_____

HOUSE WRAP:

Tyvek____ Typar____ Tarpaper____ Other:_____

EXTRUDED POLYSTYRENE_____

EXPANDED POLYSTYRENE_____ (If Applicable)

SHEATHING: OSB____ Plywood____ Boards_____

Thickness:_____

WALL STUD: Size____ Spacing_____

INSULATION: Type_____ R-Value_____

VAPOUR BARRIER: 6mm Poly____ Other:_____

INTERIOR FINISH: Gyproc____ Other:_____

Type_____ Thickness_____

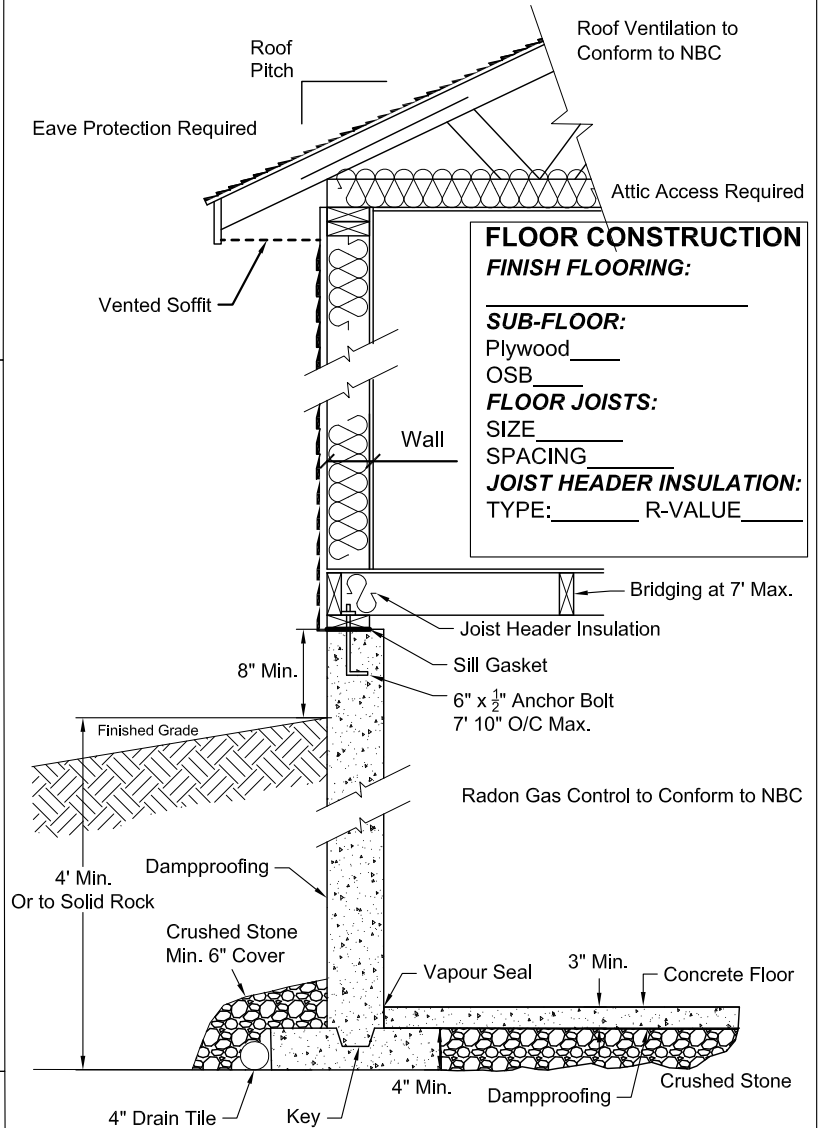
FOUNDATION

FOUNDATION WALL THICKNESS:_____

FOOTING WIDTH:_____

BELOW GRADE WALL ASSEMBLY: _____

BELOW SLAB INSULATION:_____



FLOOR CONSTRUCTION FINISH FLOORING:

SUB-FLOOR:

Plywood____

OSB____

FLOOR JOISTS:

SIZE_____

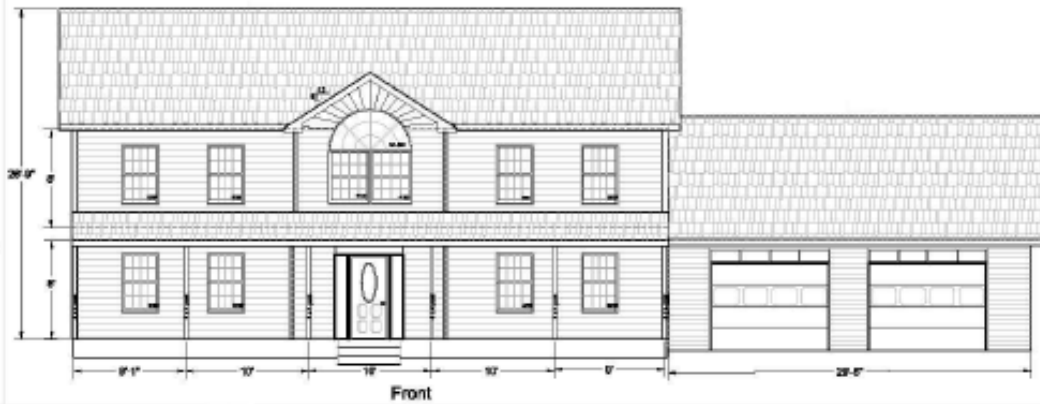
SPACING_____

JOIST HEADER INSULATION:

TYPE:_____ R-VALUE_____

Drawings are not to scale

ELEVATIONS EXAMPLE

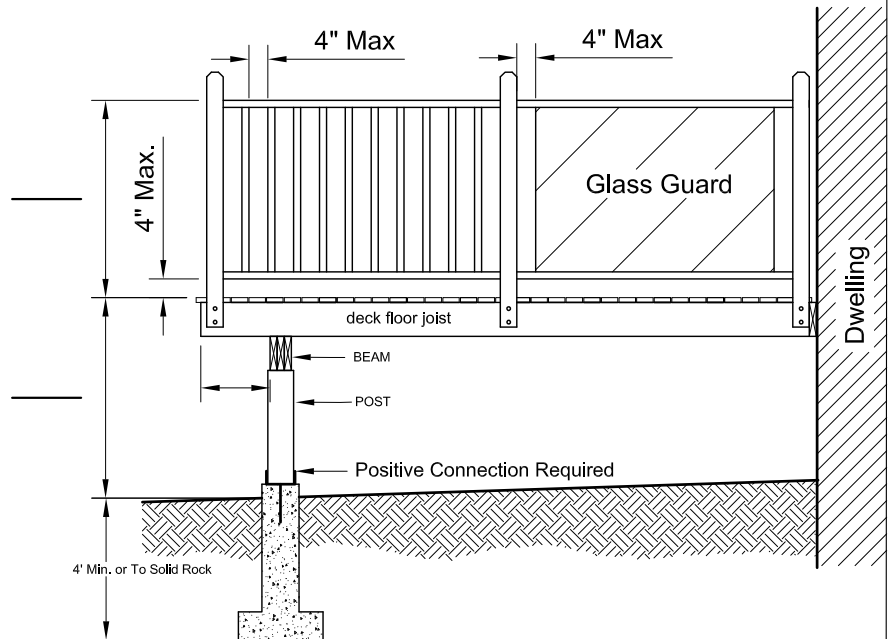


CONSTRUCTION DETAILS FOR RESIDENTIAL ATTACHED DECKS

Construction details about the deck are required. Please complete the following details.

JOIST CANTILEVER			
Joist Size	Joist Spacing		
	12"	16"	24"
2x6	28	20	16
2x8	30	24	20
2x10	39	30	24

- Galvanized fasteners must be used
- All materials to be weather treated
- DECK BLOCKS ARE NOT ALLOWED FOR ATTACHED DECKS



DECK DETAILS

DIMENSIONS: _____ X _____

HEIGHT (GROUND TO FLOOR):

RAILING HEIGHT:

JOIST SIZE & SPACING:

JOIST SPAN:

JOIST CANTILEVER:

BEAM SIZE:

BEAM SPAN:

BEAM CANTILEVER:

POST SIZE:

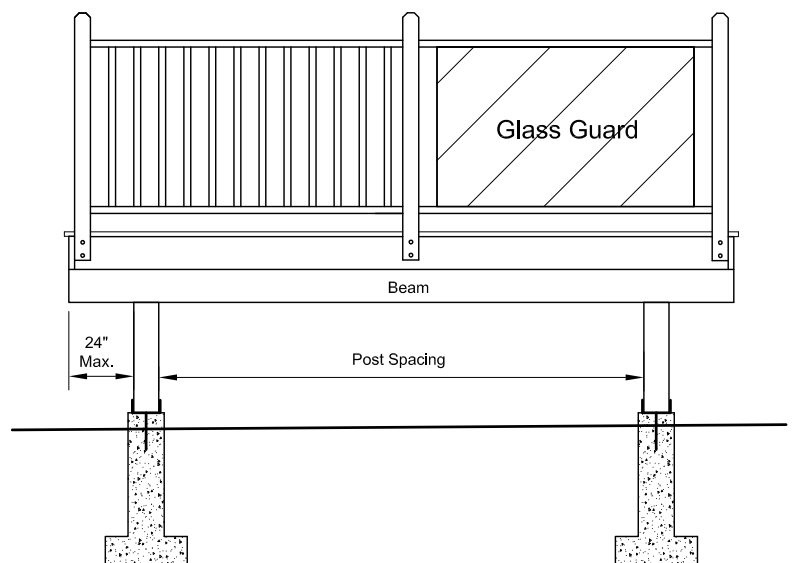
POST SPACING:

FOUNDATION: ☐ SONO TUBE DIAMETER:

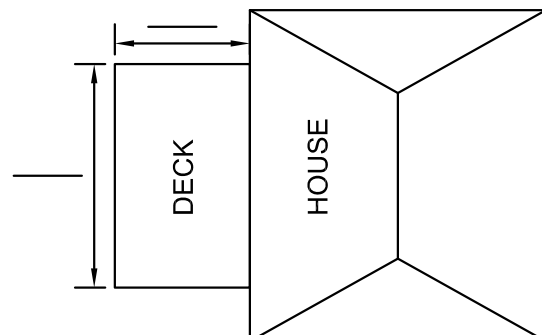
☐ BIG FOOT

☐ SCREW PILES

FOUNDATION DEPTH:



Drawings are not to scale



CONSTRUCTION DETAILS FOR RESIDENTIAL ATTACHED DECKS- 2 STOREY

Construction details about the deck are required. Please complete the following details.

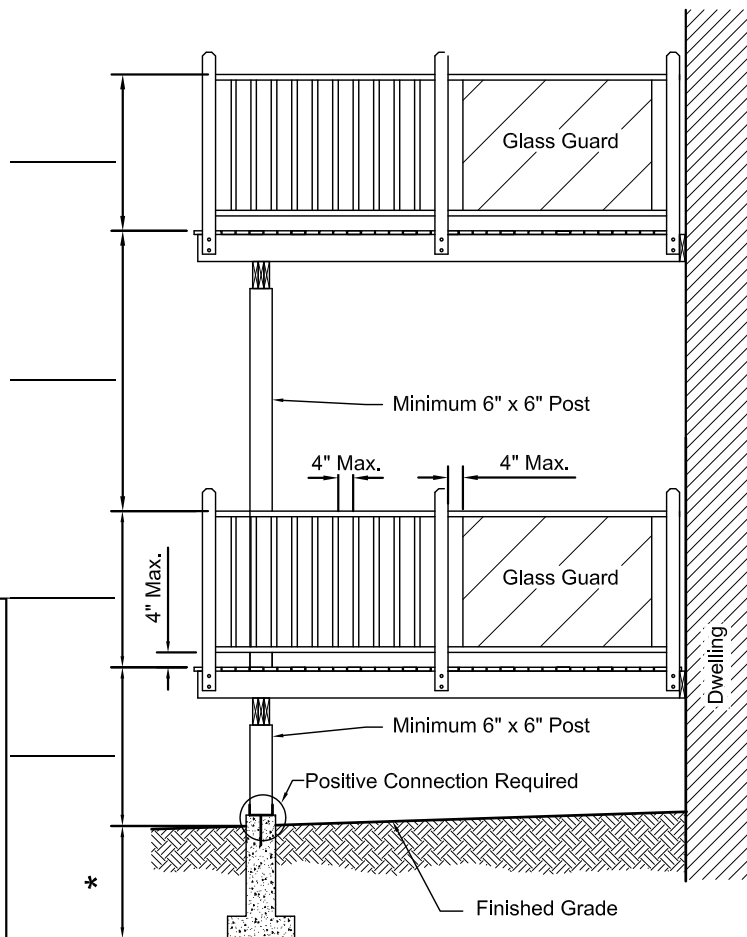
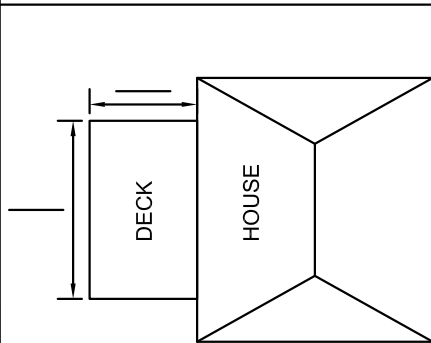
JOIST CANTILEVER

Joist Size	Joist Spacing		
	12"	16"	24"
2x6	28	20	16
2x8	30	24	20
2x10	39	30	24

-Galvanized fasteners must be used
-All materials to be weather treated
-DECK BLOCKS ARE NOT ALLOWED FOR ATTACHED DECKS

Post Size

- ☐ Sonotube Diameter _____
☐ Big Foot



* 4' Minimum or to solid rock

Drawings are not to scale

UPPER DECK DETAILS

LOWER DECK DETAILS

DIMENSIONS: _____ X _____

DIMENSIONS:

HEIGHT (GROUND TO FLOOR):

HEIGHT (GROUND TO FLOOR):

RAILING HEIGHT:

RAILING HEIGHT:

JOIST SIZE & SPACING:

JOIST SIZE & SPACING:

JOIST SPAN:

JOIST SPAN:

JOIST CANTILEVER:

JOIST CANTILEVER:

BEAM SIZE:

BEAM SIZE:

BEAM SPAN:

BEAM SPAN:

BEAM CANTILEVER:

BEAM CANTILEVER:

POST SIZE (MIN. 6" X 6"):

POST SIZE (MIN. 6" X 6"):

POST SPACING:

POST SPACING:

FOUNDATION: ☐ SONO TUBE DIAMETER: _____

FOUNDATION: ☐ SONO TUBE DIAMETER:

☐ BIG FOOT

☐ BIG FOOT

☐ SCREW PILES

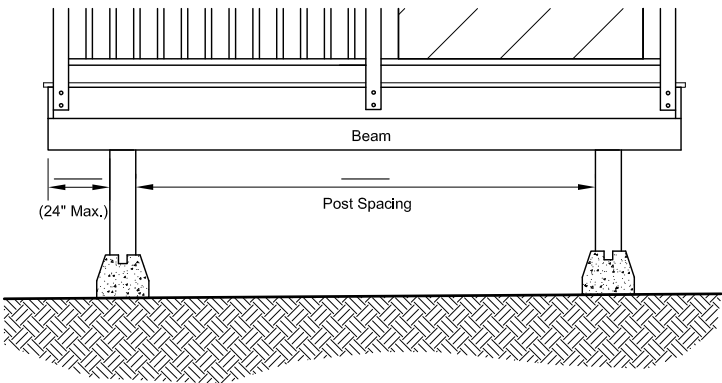
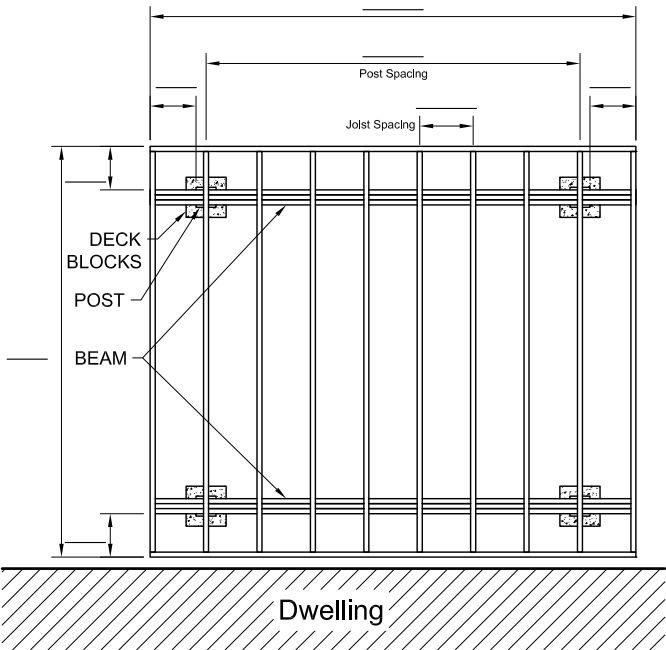
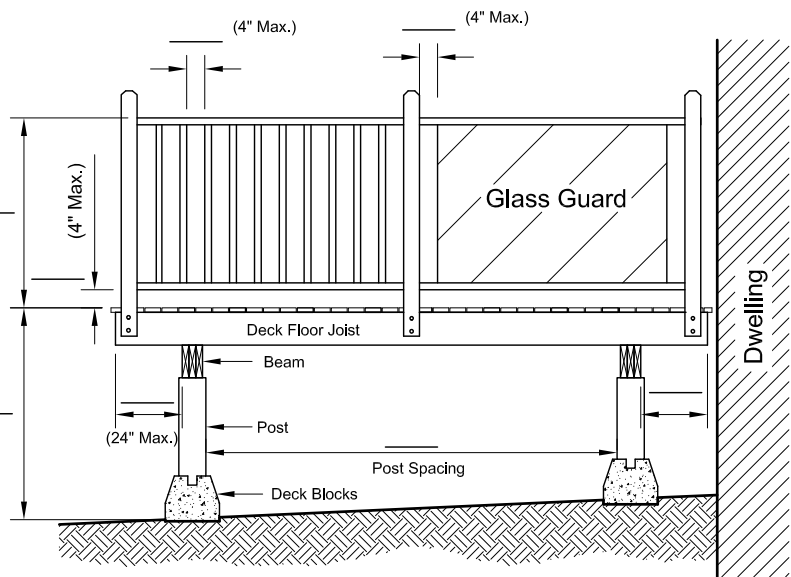
☐ SCREW PILES

FOUNDATION DEPTH:

FOUNDATION DEPTH:

CONSTRUCTION DETAILS FOR DETACHED DECKS (SINGLE DWELLING UNIT ONLY)

Construction details about the deck are required. Please complete the following details.



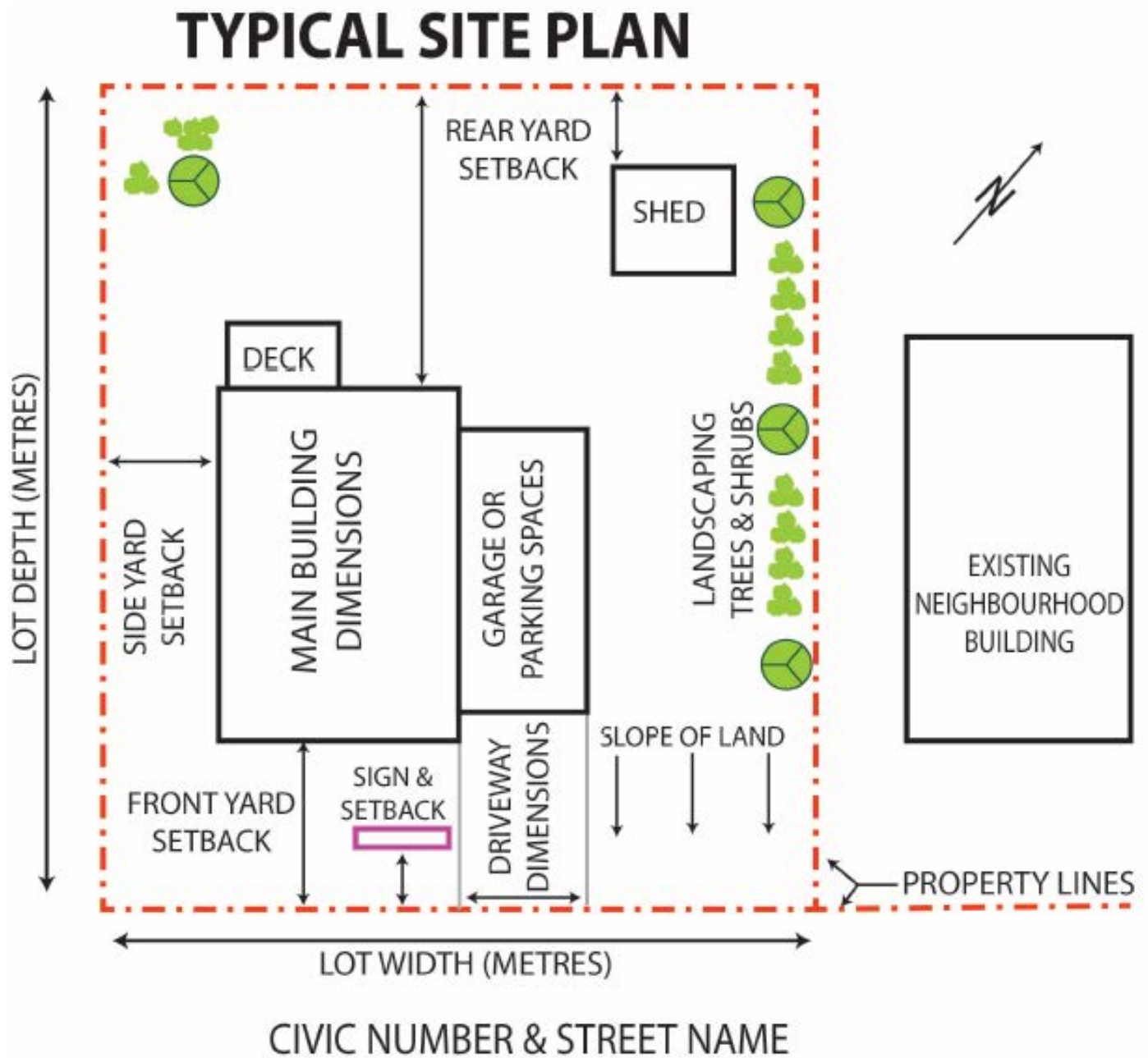
- Galvanized fasteners must be used
- All materials to be weather treated

DECK DETAILS	
DIMENSIONS: _____ X _____	
HEIGHT (GROUND TO FLOOR)(MAX. 1.8m):	
RAILING HEIGHT:	
JOIST SIZE & SPACING:	
JOIST SPAN:	
JOIST CANTILEVER:	
BEAM SIZE:	
BEAM SPAN:	
BEAM CANTILEVER:	
POST SIZE:	
POST SPACING:	
FOUNDATION:	<input type="checkbox"/> SONO TUBE DIAMETER:
	<input type="checkbox"/> BIG FOOT
	<input type="checkbox"/> SCREW PILES
	<input type="checkbox"/> DECK BLOCKS - DIMENSIONS:
FOUNDATION DEPTH:	
MAX. DISTANCE BETWEEN SUPPORT COLUMNS:	

Drawings are not to scale

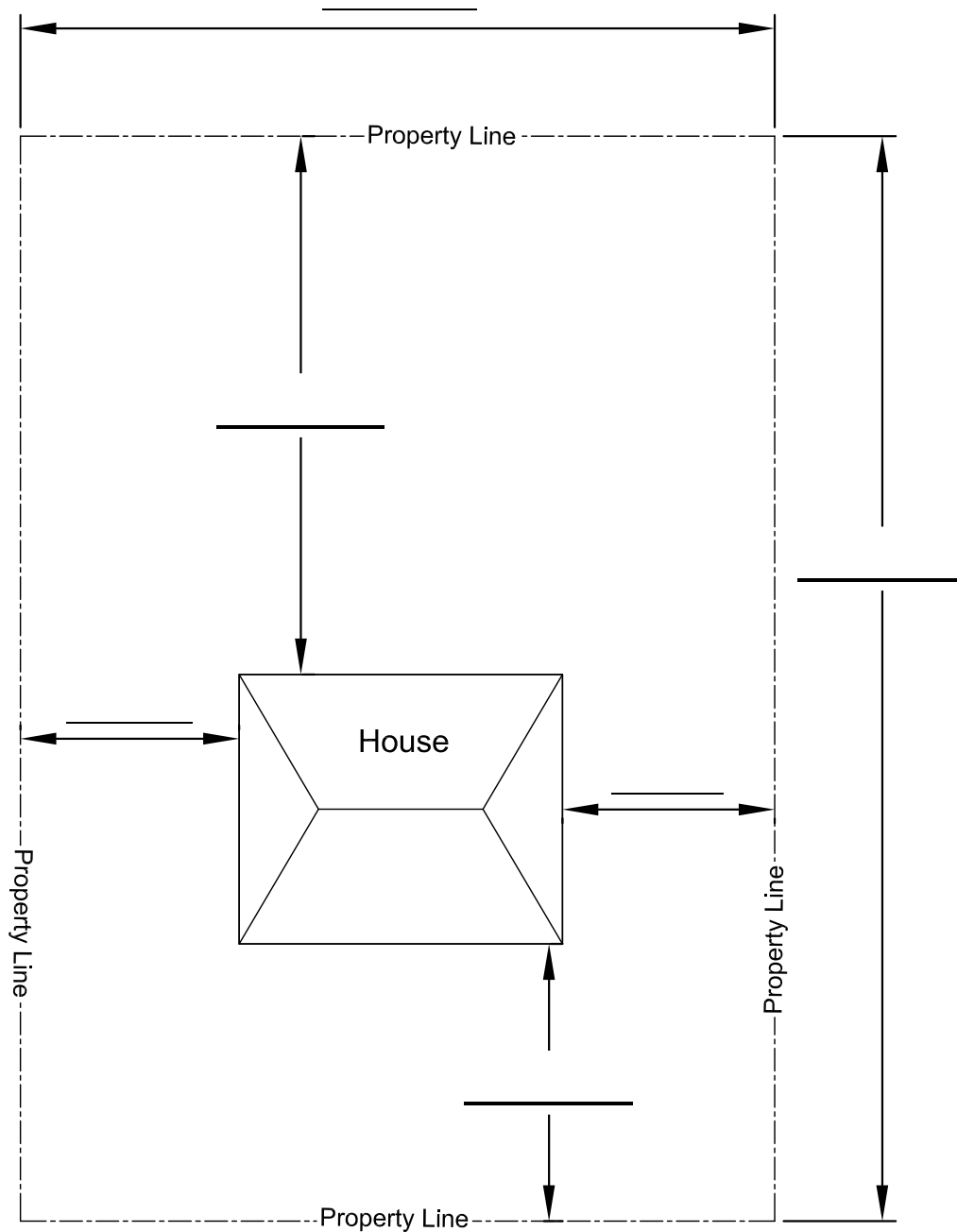
JOIST CANTILEVER			
Joist Size	Joist Spacing		
	12"	16"	24"
2x6	28	20	16
2x8	30	24	20
2x10	39	30	24

TYPICAL SITE PLAN EXAMPLE



TYPICAL SITE PLAN

(ADD ACCESSORY BUILDING(S) and/or DECK(S) AS NEEDED)



Street Name : _____ *Drawings are not to scale*

(If the lot is a corner lot then indicate the intersecting street)

Number of Units : _____

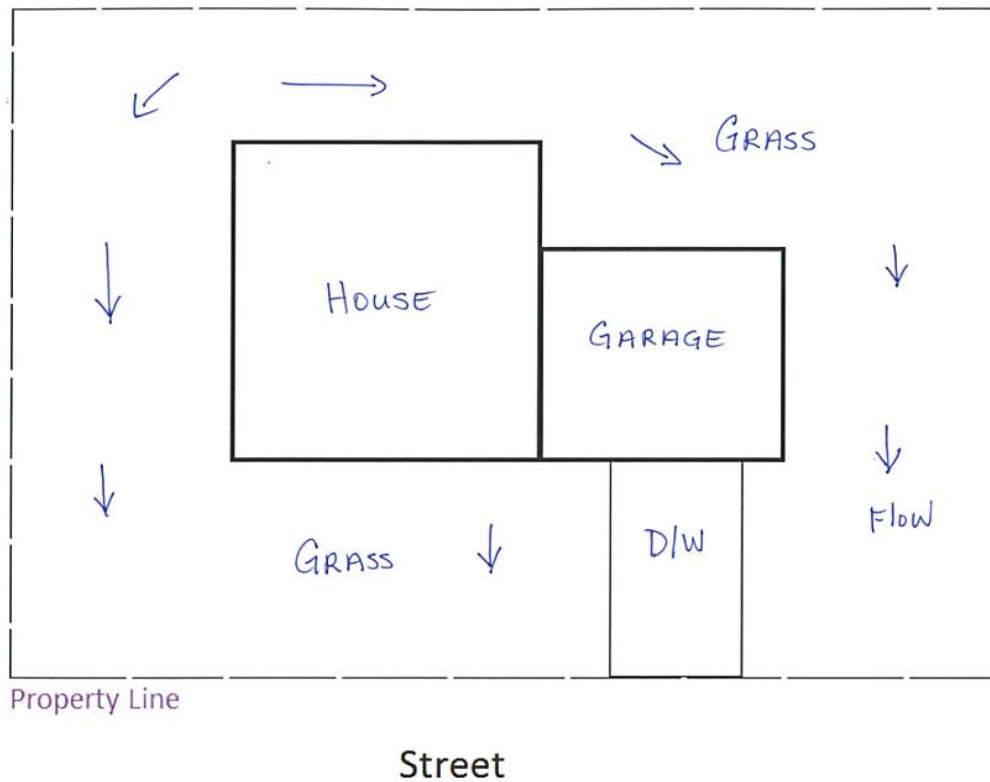
LOT DRAINAGE SKETCH

Sketch must include direction of Stormwater flow and location and grade of Surface Drainage Features. (*Building By-law; Section 9(4)*)

APPLICANT/OWNER: _____

PID #: _____

ADDRESS: _____





LOT DRAINAGE SKETCH

Sketch must include direction of Stormwater flow and location and grade of Surface Drainage Features. (*Building By-law; Section 9(4)*)

APPLICANT/OWNER: _____

PID #: _____

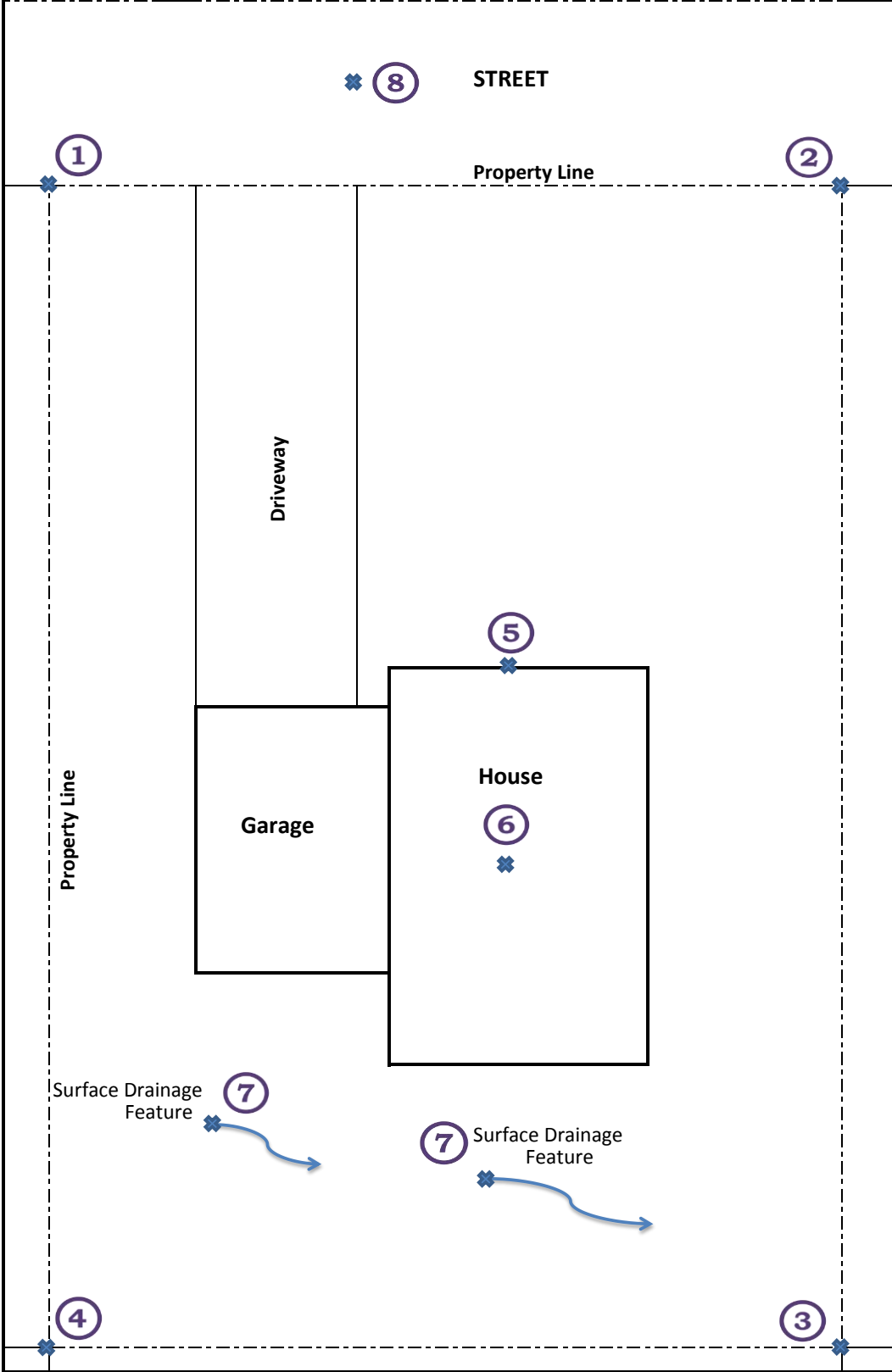
ADDRESS: _____

Property Line

Property Line



SAMPLE SKETCH



RESIDENTIAL ROUGH GRADING PLAN

APPLICANT/OWNER: _____

PID #: _____

ADDRESS: _____

APPROVED SUBDIVISION/LOT GRADING PLAN: _____

INFORMATION REQUIRED: All elevations to be geodetic; All elevations to be in metres; All elevations to be to three decimal places. Benchmark and Reference Location: _____		Approved Grading Plan Elevation (metres)	Building Permit Application Proposed Elevation (metres)	Occupancy Permit Approval As-Built Elevation (metres)	Difference (Proposed vs As-Built) (+/- 100mm)
1	Elevation at the corner of the Lot				
2	Elevation at the corner of the Lot				
3	Elevation at the corner of the Lot				
4	Elevation at the corner of the Lot				
5	Top of foundation wall elevation				
6	Basement floor elevation				
7	Location and grade of all Surface Drainage Features (swales, depressions in finished grades, etc.)				
7	Location and grade of all Surface Drainage Features				
8	Elevation at centreline of Street				

PROFESSIONAL ENGINEER OR LAND SURVEYOR CERTIFICATION:

Company Information:

Name: _____

Address: _____

Phone: _____

E-mail: _____

In accordance with the Saint John Building By-law,

I, _____

print name

confirm the rough grading of the Lot is in general conformance with the Approved Grading Plan and within the accepted tolerance.



Professional Seal



SKETCH

✖ ⑧ STREET

①

Property Line

②

Property Line

④

③

RESIDENTIAL ROUGH GRADING PLAN

APPLICANT/OWNER: _____

PID #: _____

ADDRESS: _____

APPROVED SUBDIVISION/LOT GRADING PLAN: _____

INFORMATION REQUIRED:

All elevations to be geodetic;
All elevations to be in metres;
All elevations to be to three decimal places.
Benchmark and Reference Location:

		Approved Grading Plan Elevation (metres)	Building Permit Application Proposed Elevation (metres)	Occupancy Permit Approval As-Built Elevation (metres)	Difference (Proposed vs As-Built) (+/- 100mm)
1	Elevation at the corner of the Lot				
2	Elevation at the corner of the Lot				
3	Elevation at the corner of the Lot				
4	Elevation at the corner of the Lot				
5	Top of foundation wall elevation				
6	Basement floor elevation				
7	Location and grade of all Surface Drainage Features (swales, depressions in finished grades, etc.)				
7	Location and grade of all Surface Drainage Features				
8	Elevation at centreline of Street				

PROFESSIONAL ENGINEER OR LAND SURVEYOR CERTIFICATION:

Company Information:

Name: _____

Address: _____

Phone: _____

E-mail: _____

In accordance with the Saint John Building By-law,

I, _____
print name

confirm the rough grading of the Lot is in general conformance with the Approved
Grading Plan and within the accepted tolerance.

Professional Seal

Energy Code Compliance

Summary – 9.36 Prescriptive

PROJECT INFORMATION					
PID			PERMIT NUMBER		
CIVIC ADDRESS					
LOT		SUBDIVISION			
INSTRUCTIONS					
<p>Complete the table below based on your building plans and equipment specification.</p> <ul style="list-style-type: none"> RSI values for ceilings, walls, and floors are typically located on your building plans. Window, door, and skylight U values and ER values are located on the supplier quote sheet. HRV and heating/cooling equipment efficiency are typically located on the contractor's equipment specifications. <p>Points are generated for specific systems based on their performance. See the explanatory material section of this form for more explanation.</p>					
PRESCRIPTIVE PATH					
		Proposed RSI	Minimum RSI		
			Zone 6	Zone 7A	
Ceiling Below Attic			8.67	10.43	
Ceiling Without Attic			4.67	5.02	
Above Grade Walls <small>Section 1.1</small>			2.97	3.08	Points
Below Grade Walls <small>Section 1.2</small>			2.98	3.46	Points
Slab Above Frost Line			1.96	1.96	
Heated Slab			2.32	2.84	
Exposed Floors			4.67	5.02	
Windows and Doors <small>Section 1.3</small>			1.6U or 25ER		Points
Skylights			2.75U		
HRV <small>Section 1.4</small>	Make:		Model:		
	Efficiency at 0°C		60% Min.		Points
	Efficiency at -25°C		55% Min.		
Heating and Cooling	Make:		Model:		
	Efficiency:				
	<input type="checkbox"/> Oil	<input type="checkbox"/> Gas	<input type="checkbox"/> Pellet	<input type="checkbox"/> Electric	
	<input type="checkbox"/> Furnace	<input type="checkbox"/> Boiler	<input type="checkbox"/> Air Source Heat Pump		
	<input type="checkbox"/> Ground Source Heat Pump		<input type="checkbox"/> Electric Baseboard		
Water Heater <small>Section 1.5</small>	Make:		Model:		
	Efficiency:		<input type="checkbox"/> NB Power Rental		Points
	<input type="checkbox"/> Conserver		<input type="checkbox"/> Condensing		
	<input type="checkbox"/> Instantaneous		<input type="checkbox"/> Solar		
	<input type="checkbox"/> Indirect Fired		<input type="checkbox"/> Desuperheater		
Building Volume <small>Section 1.6</small>					Points
Air Tightness <small>Section 1.7</small>					Points
Total					10 Minimum

Explanatory Material for Prescriptive Path

This section provides details on how points can be achieved in the prescriptive path. Please note that improved building components must have a minimum of 10 points in total. These 10 points can be from a single area or can be a total from 2 or more areas. Before proceeding further, it is important to know what climactic zone your property is in. New Brunswick consists of both Zone 6 and 7A with the Southern portion of the province located in Zone 6 and the Northern portion of the province located in Zone 7A. Contact your local building department if you need clarification on what climate zone your project site falls in.

1.1 Above Grade Walls

The RSI values for above grade walls is the effective value of the insulation of the wall. This includes the impact of thermal bridging of repetitive framing members and contributions of other non-insulation products. This information is likely located on your plans. Common assemblies have been pre-calculated for convenience and is attached at the end of this document.

Effective RSI Value	Zone 6	Zone 7A
3.08	1.6	2.1
3.69	6.2	6.7
3.85	6.9	7.4
3.96	7.7	8.2
4.29	9.2	9.7
4.40	9.9	10.3
4.57	10.6	11.1
4.73	11.1	11.5
4.84	11.6	12.1
5.01	12.2	12.7
5.45	13.6	14.0

1.2 Below Grade Walls

The RSI values for below grade walls is the effective value of the insulation of the wall. This includes the impact of thermal bridging of repetitive framing members (if any) and contributions of other non-insulation products. This information is likely located on your plans.

Effective RSI Value	Zone 6	Zone 7A
3.09	0.2	0.2
3.46	0.8	0.6
3.90	1.4	1.1

1.3 Windows and Doors

Windows and doors are eligible for points based on the following table. In the event that you have units that perform at different levels, the worst performing unit will dictate the points achieved. NOTE: specifications from the supplier are required to verify the energy efficiency.

Maximum USI Value	OR	Minimum Energy Rating (ER)	Zone 6	Zone 7A
1.44		29	1.6	1.8
1.22		34	4.6	5.5
1.05		40	8.8	8.9
0.94		42	10.5	10.7
0.82		44	12.4	12.6

1.4 HRVs

Points may be awarded for higher performing heat recover ventilators in accordance with the following table.

HRV Sensible Recovery Efficiency	Zone 6	Zone 7A
60%	3.6	3.7
70%	4.2	4.2
80%	4.8	4.8
85%	5.1	5.0

1.5 Water Heaters

Points for water heaters are available for high performing oil, gas, and heat pump water heaters as follows:

Type of Equipment	Efficiency	Zone 6	Zone 7A
Oil or Gas Tankless	EF \geq 0.95 or UEF \geq 0.92	4.9	3.1
Oil or Gas Storage	EF \geq 0.80 or UEF \geq 0.83	4.9	3.1
Heat Pump Water Heater	EF \geq 2.35	3.8	3.0

1.6 Building Volume

Building volume is a measure of the conditioned space of the building. Areas that are not normally conditioned, like an attached garage, are not included in the calculation. Smaller buildings and units are also awarded points simply due to their smaller size. Multiple dwelling unit buildings with no suite exceeding 230 m² are awarded 10 points. Building volume is calculated based on all heated/cooled space in the building, regardless of if it is “finished” or not, and measured to the interior surface of exterior walls, ceilings, and floors. Single dwelling unit buildings are awarded points based on the following table:

Building Volume m ³	All Zones
\leq 390 (1721 ft ² for 8' ceiling)	1
\leq 380 (1677 ft ² for 8' ceiling)	2
\leq 370 (1633 ft ² for 8' ceiling)	3
\leq 360 (1589 ft ² for 8' ceiling)	4
\leq 350 (1545 ft ² for 8' ceiling)	5
\leq 340 (1501 ft ² for 8' ceiling)	6
\leq 330 (1457 ft ² for 8' ceiling)	7
\leq 320 (1412 ft ² for 8' ceiling)	8
\leq 310 (1368 ft ² for 8' ceiling)	9
\leq 300 (1324 ft ² for 8' ceiling)	10

1.7 Air Tightness

Note of Caution: air tightness can only be tested and confirmed at the end of the project, after the installation of almost all the items listed above. It is extremely risky to rely on achieving points in this category since missing the air tightness target would mean you need to add points another way. Adding points at this stage of the project in other categories likely involves substantial costs. For this reason, it should only be used by experienced builders who regularly have their projects air tested.

To achieve points in this category, a blower door test must be completed by a qualified technician at the end of construction and points are awarded based on the air tightness level achieved.

Guarded ACH	Zone 6	Zone 7A
2.0	3.5	4.6
1.5	7.0	9.3
1.0	10.5	13.9
0.6	13.4	17.8

INSTRUCTIONS

Complete the following chart with the construction details for the project.

Table 1 - Identify each different building envelope construction and indicate the matching assembly number from those available (see Energy Efficiency Assemblies Guide for details)
[City of Saint John Assemblies Guide](#)

If you will be providing your own assembly, a blank template is available for you to complete. A cross section of the assembly must be provided.

Table 2 - Identify the windows and doors in the construction, along with the model and either the ER value, the U value or the Energy Star Zone letter.
(Leave all labels on the windows for final pre-occupancy inspection.)

Table 3 – Identify the mechanical equipment of the building including the equipment’s associated efficiency information. A form for ventilation must also be submitted (see page 3).

Table 4 - Only needs to be completed if trade-offs are being used.

PROPERTY ADDRESS:

1.	Type of Assembly	Assembly number	RSI or R Value	For office use
Building Envelope	Ceilings			
	Ceilings (below attic)			
	Ceiling (cathedral and flat roof – if applicable)			
	Ceilings tray			
	Exterior Walls & location			
	Walls			
	Walls			
	Walls			
	Walls			
	Shared Garage Wall (if applicable)			
	Joist Headers			
	Floor Joist Cavity			
	Basement Walls			
	Basement wall			
	Basement wall			
	Floors			
	Slab			

City of Saint John
Prescriptive Energy Efficiency Design Detail

2.	In floor heating	Y/N		
	Model	Rating (ER, U or Energy Star)	Model	Rating (ER, U or Energy Star)
Windows, Doors and Skylights	Windows			
	Doors			
	Skylights			

3. MECHANICAL SYSTEMS

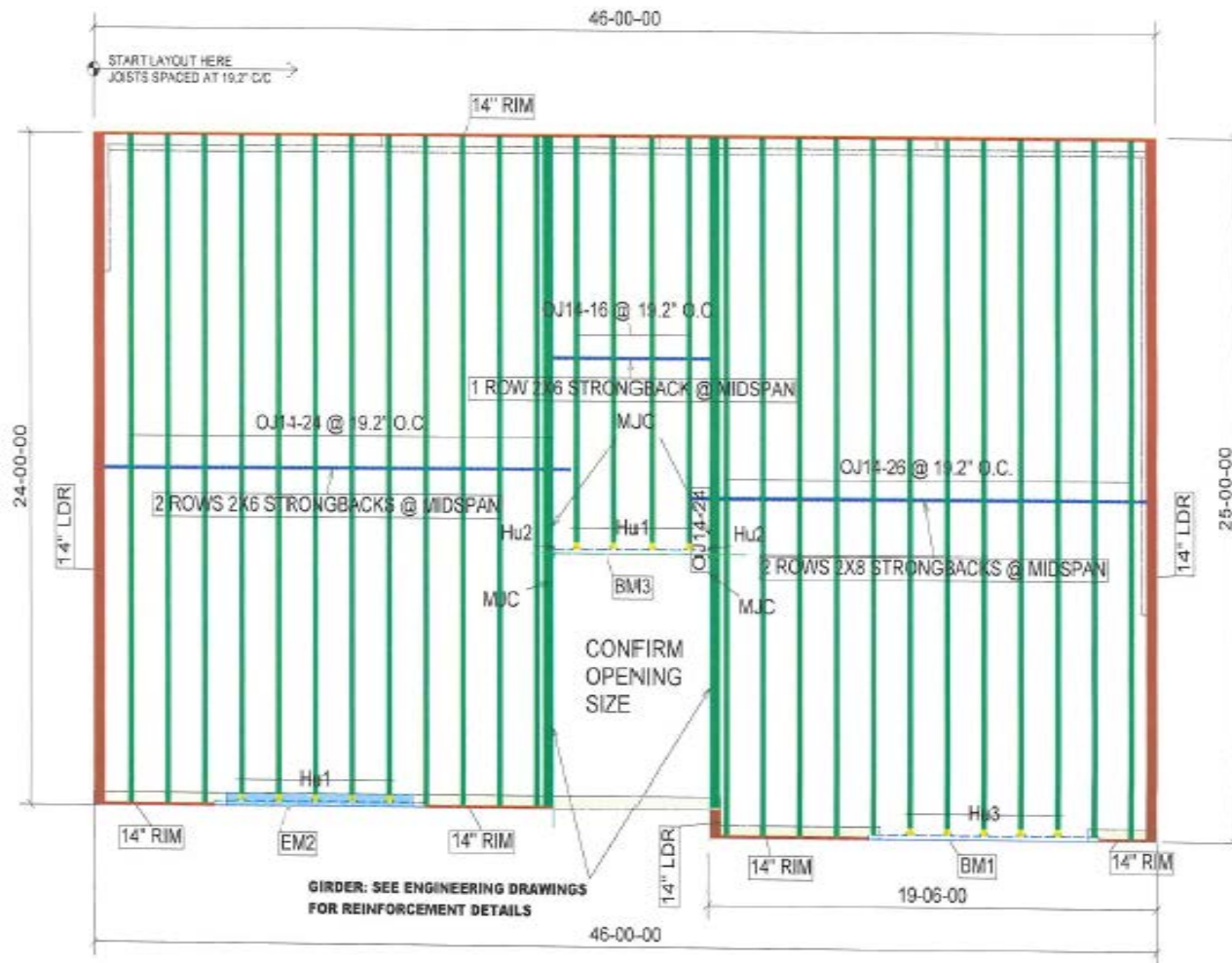
Ventilation System			
Manufacturer		Model	
Ventilation Rate		See attached ventilation form to complete (next page)	
OFFICE USE	Efficiency At 0°C	At -25°C	
Heating & Cooling Systems			
Main System		Manufacturer	
Fuel Type		Model	
Heat Pump	AHRI #		
OFFICE USE	Efficiency		
Secondary System		Manufacturer	
Fuel Type		Model	
OFFICE USE	Efficiency		
Other Systems		Manufacturer	
Fuel Type		Model	
OFFICE USE	Efficiency		
Hot Water System			
Type		Manufacturer	
Fuel Type		Model	
OFFICE USE	Efficiency		

Mechanical Ventilation Record – Residential (based on HRAI form)

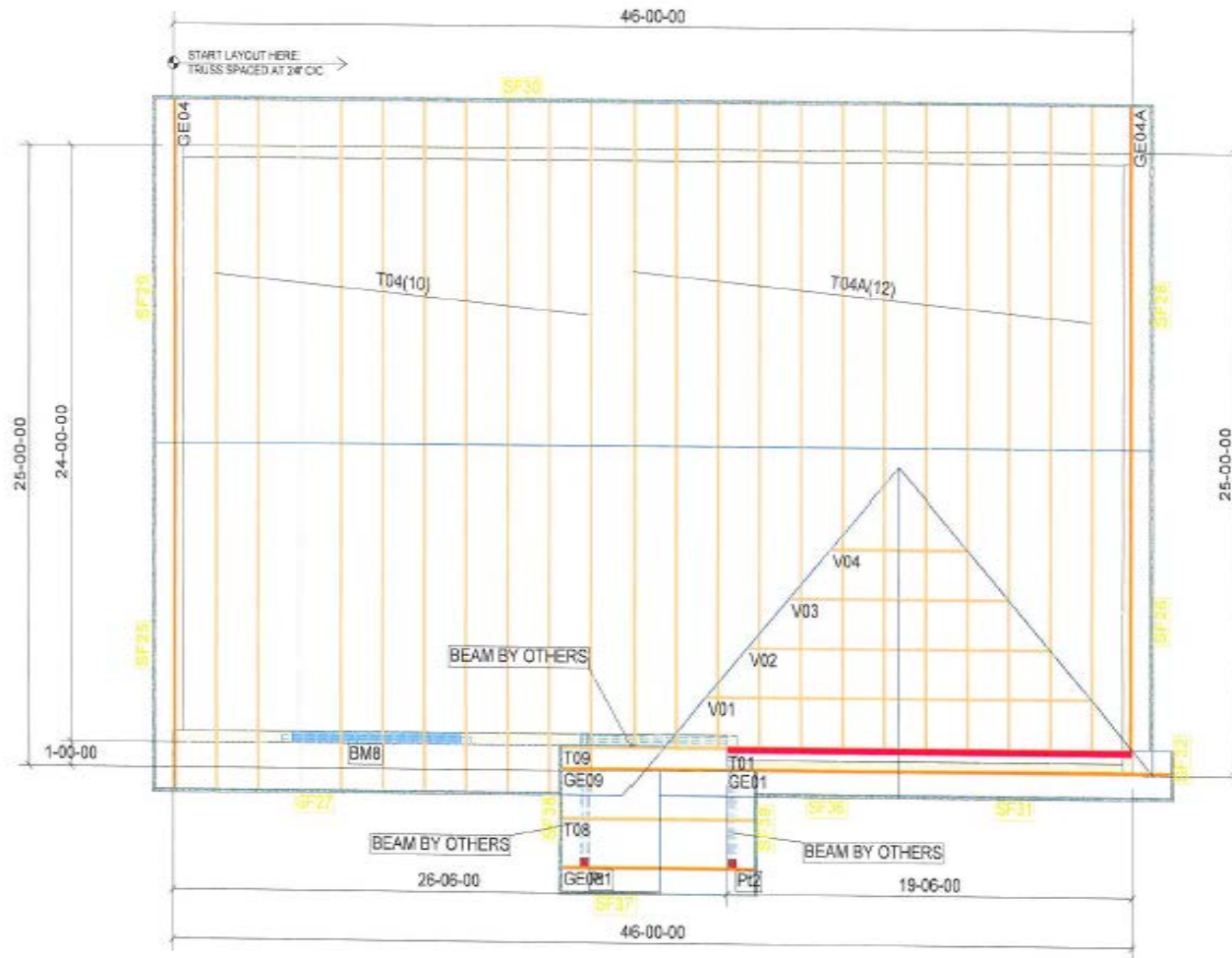
Installer Information			
Company			
Address			
Telephone			Cell
Contact name			
HRAI # (if applicable)			
Design method for Ventilation NBC 2010 (9.32) <input type="checkbox"/> CSA F326 <input type="checkbox"/>			
Ventilation Capacity Rate			
Room Type	Quantity	@	Ventilation Capacity
Unfinished Basement		L/s	L/s
Master Bedroom		L/s	L/s
Bedrooms		L/s	L/s
Kitchen		L/s	L/s
Living Room		L/s	L/s
Dining Room		L/s	L/s
Bathroom		L/s	L/s
Other Habitable Rooms		L/s	L/s
		L/s	L/s
Total Ventilation Capacity			L/s
Ventilation System			
Manufacturer		Model	
Design Air Flow			
Additional Exhaust			
Bathroom Fan (quantity x air change rate L/s) =			
Kitchen Range Hood (quantity x air change rate L/s) =			
Other			

4.	TRADE-OFFS	
	Only complete this form if you are using trade-offs. If you require additional room to complete the form, please attach to the application.	
	1. ABOVE GRADE EXTERIOR WALLS AND CEILINGS	
Above Grade Exterior walls & Ceilings	Detail the trade offs	
	2. WINDOWS	
	Trade-offs for windows must be in the same orientation and have same window surface areas. Doors cannot be traded. Only fill out the detail for the elevation you are trading.	
Windows		
	3. BUILDINGS WITH LOW CEILINGS (9.36.2.11.4)	

FLOOR TRUSS LAYOUT EXAMPLE



ROOF TRUSS LAYOUT EXAMPLE



ROOF TRUSS DRAWING EXAMPLE

