

Building Services Division (905) 771-8810 Fax. (905) 771-5445

City of Richmond Hill 225 East Beaver Creek Road

Richmond Hill, Ontario Canada, L4B 3P4

GENERAL NOTES (PART 9 - RESIDENTIAL)

PERMIT NO. **RM#24-00017**

All construction must comply with the Ontario Building Code (OBC) 2012 as amended, including but not limited to the following. As a minimum, the following requirements **shall** be incorporated in the final construction:

- All footings shall rest on natural undisturbed soil or compacted granular fill with a minimum bearing capacity of 75 KPa (1570 psf) unless known capacity is less and provided for in the foundation design.
- 2. Step footings shall have a maximum rise of 600 mm (23 5/8") for firm soils, 400 mm (15 3/4") for sand or gravel and a minimum horizontal run of 600 mm (23 5/8").
- 3. Concrete for exterior steps, garage and carport floors and all exterior flat work shall have a minimum compressive strength of 32 MPa (4650 psi) at 28 days, with air entrainment of 5 to 8%. Concrete floors with no damp proofing shall have a minimum compressive strength of 25 MPa (3000 psi). All other concrete to be 15MPa (2200 psi).
- 4. Foundations and the soil beneath them shall be protected against freezing during winter construction. Where foundation walls require permanent lateral support, the wall shall be braced or laterally supported before backfilling.
- When the unsupported height of a foundation wall exceeds 3.0 m (9'-10"), the wall shall be designed by an engineer in accordance with OBC Part 4
- 6. Exterior concrete stairs with more than 2 steps shall be supported on unit masonry, concrete walls or piers not less than 150x150 (6"x6") with footings at 1.2 m (4') below grade.
- 7. Where the top of a foundation wall is reduced in thickness to permit the installation of masonry exterior facing, the reduced section shall be not less than 90 mm (3 ½") thick and tied to the facing material with metal ties conforming to Sentence 9.20.9.4. (3), spaced not more than 200 mm (7 7/8") o.c. vertically and 900 mm (2'-11") o.c. horizontally. The space between the wall and masonry veneer shall be filled with mortar.
- 8. Provide continuous lateral support to top flange of all steel beams. Steel beams shall have minimum 90 mm (3 1/2") bearing length. Connections to other steel beams shall have a minimum of 2-M20 (3/4" dia.) A325 steel bolts or a full welded connection (with full shear capacity of beam). Steel beams supported on wood shall be designed by an Engineer.
- Provide solid blocking support under all point loads and continue down to the foundation. Built-up columns shall comply with OBC 9.23.10.7.
 For engineered systems, follow manufacturer's specifications for correct blocking and bearing requirements.
- 10. Refer to the approved engineered layout drawings for engineered floor joist and roof truss systems, including beams and supports. Follow manufacturers specifications for bridging, bracing, bearing and connection requirements for built up beams or joists.
- 11. Tie the lower ends of roof rafters with continuous horizontal ties to the opposing rafters unless lateral thrust is otherwise specifically designed for.
- 12. Guards shall be constructed in accordance with Supplementary Standard 7 of the OBC or in conformance with OBC Part 4 (including design loads on guards). Min. guard height to comply with OBC 9.8.8. All guards to be non-climbable.
- All masonry veneer ties shall be corrosion-resistant, minimum of 0.76 mm (0.03") thick, 22 mm (7/8") wide and be spaced in accordance with Table 9.20.9.5 of the OBC
- 14. Ceramic floor tile and its supporting floor shall be constructed in accordance to OBC 9.30.6.
- 15. For insulation values, window and door U-values and efficiency of appliances refer to SB-12 requirements: Prescriptive or Performance design or values specified by Energy Star requirements.
- 16. Foundation walls enclosing heated spaces shall be insulated to not more than 8" above the basement slab and an approved drainage layer is required on the exterior.
- 17. Exterior Insulated Finished System (EIFS) over wood framed wall and other moisture sensitive substrates shall consist of dual barrier with drained joints (DB/DJ). They shall be constructed in accordance to OBC 9.27.13 and shall conform to CAN/ULC-S716.1. All other exterior applied stucco finishes shall be constructed in accordance with OBC 9.28.
- 18. Stairs serving a house or dwelling unit shall have min. headroom of 1950 mm (6'-5"), min. width of 860 mm (2'-10"), max. rise of 200 mm (7 7/8") & min. 125 mm (4 7/8") and a min. run of 255 mm (10"). Tapered stairs shall have a min. average run of 255 mm (10") at the point of 300mm measured from the center of the handrail. The tolerance of stair dimensions shall conform to OBC 9.8.4.4. Secure stair stringers at top and bottom.

- 19. Basement ceiling height shall be min. 2.1 m. (6'-11") over at least 75% of the area and 1.95 m. (6'-5") under beams and ducts.
- 20. Every floor level containing a bedroom shall be provided with at least 1 outside window with an operable unobstructed opening having a minimum area of 0.35 sq. m. (3.8 sq. ft.), with no dimension less than 380 mm (15"). Every floor level, requiring travel of more than 1 storey to an exit door, shall be provided with an unobstructed escape window opening of not less than 1 m. (3'-3") in height and 0.55 m (21 5/8") in width with the sill not more than 1 m (3'-3") above the floor and 7 m. (23') above adjacent ground level or that floor shall be provided with a balcony. Except for basement locations, all windows shall have a maximum sill height of 1 m. (3'-3") above the floor.
- Provide window protection to minimize the hazard to children in accordance with OBC 9.7.1.6.
- 22. Exterior walls, which are less than 1.2 m (4'-0") from the lot line, shall have no unprotected opening and be constructed with a ¾ hr. fire resistance rating. These walls shall be rated from the interior. Exterior walls, which are less than 0.6 m (2'-0") from the lot line, shall in addition have non-combustible cladding.
- 23. All entrance doors, doors between the dwelling unit and the attached garage, patio doors and windows within 2m (6'-7") of adjacent ground level shall conform to OBC Subsections 9.6.8 & 9.7.6 'Resistance to Forced Entry'.
- 24. Roof vents shall be provided on the basis of 1 sq. ft./300 sq. ft. of insulated ceiling area. Where the roof slope is less than 1 in 6 or in cathedral ceilings, roof vents shall be provided on the basis of 1 sq. ft./150 sq. ft. of insulated ceiling area. Roof vents shall be uniformly distributed to ventilate each roof space with a minimum of 25% of the required vent space to be located at the top and the bottom of the roof.
- 25. Eave protection is required, beneath the start strip, from the edge of the roof to a minimum distance of 900 mm (3'-0") up the roof slope to not less than 300 mm (12") inside the inner face of the exterior wall on shingled, shake or tile roofs except as provided by 9.26.5.1.(2).
- 26. Foamed plastic insulation shall be protected with interior finishes according to OBC 9.10.17.10.
- 27. The wall and ceiling between an attached garage and the dwelling unit shall be constructed and sealed so as to provide an effective barrier to exhaust fumes. Door between the garage and the dwelling unit shall be tight fitting, weather-stripped and equipped with a self closing device.
- 28. Smoke alarms shall be provided on each floor level and be located within each bedroom. Smoke alarms shall be interconnected and hard wired with no disconnect switch. Smoke alarms are required to have a visual signaling component conforming to NFPA 72.
- 29. A carbon monoxide detector conforming to CAN/CGA-6.19 or UL 2034 shall be installed on every building containing a fuel burning appliance or an attached garage in conformance with the OBC 9.33.4.
- 30. In addition to the above carbon monoxide detectors, Town of Richmond Hill By-law No. 245-99 requires that a carbon monoxide detector, equipped with an alarm that is audible within bedrooms when the intervening doors are closed and conforming to CAN/CGA-6.19 or UL 2034, be installed in accordance with the manufacturer's instructions in every dwelling unit. Where the carbon monoxide detector is electrically powered, it must be approved by the Canadian Standards Association and be equipped with a visual indicator indicating that it is in operating condition and have NO switch between the carbon monoxide alarm and the power distribution panel.
- 31. A mechanical ventilation system is required in every dwelling. An exhaust only' ventilation system is permitted only where forced air heating is used, there is no electric heating or fireplace (other than a direct vent gas fireplace), and where a mechanically vented induced draft or direct vented furnace and hot water tank are used. A ventilation system with a heat recovery ventilator or Part 6 design is required in all other cases.
- 32. All exterior doors greater than 600mm above grade which do not exit onto a deck shall be permanently adjusted to prevent opening as per 9.6.4.1(2) of the OBC or be guarded as per 9.8.8 of the OBC
- 33. The main bathroom shall have stud reinforcement to accommodate future installation of grab bars adjacent to water closets and shower or bathtub as per OBC 9.5.2.3.
- 34. Slopes on roof surfaces shall comply with OBC 9.26.3.1.
- 35. Windows shall comply with OBC 9.7
- 36. Exhaust ducts connected to laundry drying equipment shall comply with OBC 6.2.3.8. (7)

Strip Footings

For Singles and Semi-Detached Houses up to 2 storeys

For 8" or 10" foundation walls with 2x8 / 2x10 floor joists

' wide x 6" thick concrete strip footings below foundation walls

24" wide x 8" thick concrete strip footings below party walls.

Foundation walls with engineered joists over 16' spans

24" wide x 8" thick concrete strip footings below party walls.

24" wide x 8" thick concrete strip footings with reinforcing below exterior walls. 30" wide x 8" thick concrete strip footings with reinforcing below party walls. refer to the footings details on engineered fill)

Assume the larger footing size when two conditions apply.

Assumed 120 kPa (18 psi) soil bearing capacity or 90 kPa engineered soil fill. Bearing capacity to be verified on site, by a soil engineer repo

Concrete Pad Footing Sizes

120 kPa Native Soil	90 kPa Engineered
F1 = 42" x 42" x 28"	F1 = 48" x 48" x 24"
F2 = 36" x 36" x 18 "	$F2 = 40'' \times 40'' \times 26''$
F3 = 30" x 30" x 15 "	$F3 = 34'' \times 34'' \times 17''$
F4 = 24" x 24" x 12"	F4 = 28" x 28" x 14 "
F5 = 16" x 16" x 8"	F5 = 18" x 18" x 8"

Refer to the floor plans for non-standard footing sizes.

Brick Veneer Cuts

When the brick veneer cut is greater than 26" a 10" thick poured concrete foundation wall is required.

Exterior Concrete Slabs

All garage slabs, porch slabs, poured concrete stairs and exposed concrete flat work to be 32 MPa with 5-8% air entrainment.

Ceramic Tile over Joists

Space conventional floor joists @ 12" o/c below all ceramic tile areas. Provide 1 row of bridging for spans of 5'-7" and 2 rows for spans greater than 7'-0".

Engineered Roof Trusses

fer to the roof truss shop drawings for all roof framing information.

Engineered Floor Joists

Refer to the floor framing shop drawings for engineered framing layouts, hardware

Steel Column Notes

C1 = 4" x 4" x $\frac{1}{4}$ " HSS w/ 10" x 8" x $\frac{1}{2}$ " base plate and 2 - $\frac{3}{4}$ " dia. anchor bolts.

C2 = 5" x 5" x $\frac{1}{4}$ " HSS w/ 12" x 12" x $\frac{1}{2}$ " base plate and 4 - $\frac{3}{4}$ " dia. anchor bolts.

Use 4 bolts for moment connection

"M" = Moment connection at beam and column = 35 kN-m

Grading

Plans and elevations are not drawn to accurate grade elevations. Refer to final grading plan.

Door Schedule

No.	No. Width		Ceiling Heights		Type
			8' to 9'	10' or more	
1	2'-10'	' (34'')	6'-8"	8'-0''	Insulated entrance door
1A	2'-8"	(32")	6'-8"	8'-0''	Insulated entrance door
2	2'-8"	(32")	6'-8"	8'-0''	Wood and glass door
3	2'-8''	(32")	6'-8"	8'-0''	Exterior slab door
4	2'-8"	(32")	6'-8"	8'-0''	Interior slab door
5	2'-6"	(30'')	6'-8"	8'-0''	Interior slab door
6	2'-2"	(26")	6'-8"	8'-0''	Interior slab door
7	1'-6"	(18")	6'-8"	8'-0"	Interior slab door

Garage Wall - 2x4 Stud Design

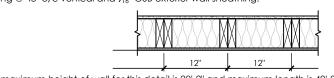
Studs	Spacing	Maximum Height		
2x4	16" o/c	8'-0	(2.44m)	
2x4	12" o/c	8'-10"	(2.69m)	
2-2x4	16" o/c	10'-1"	(3.07m)	
2-2x4	12" o/c	10'-9"	(3.28m)	
3-2x4	16" o/c	11'-2"	(3.40m)	
3-2x4	12" o/c	12'-4"	(3.76m)	
l				

- For roof design snow loads of 2.6kPa Supported roof truss length of 6.0m
- Supported floor joist length of 2.5m

Studs exceeding 3.0m in height shall be installed per OBC 9.23.10.1.(2)

Two Storey Height Wall Details - max. 18'-0" tall

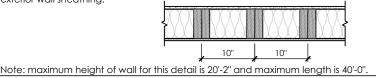
2 - 2 x 6 stud wall nailed together and spaced at 12" o/c full height c/w solid blocking @ 48" o/c vertical and $\frac{7}{16}$ " OSB exterior wall sheathing



Note: maximum height of wall for this detail is 20'-2" and maximum length is 40'

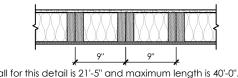
Two Storey Height Wall Detail - max. 20'-2" tall

2 - 1 1/2" x 5 1/2" Laminated strand lumber (LSL) 1.5E stud wall glued and nailed together and spaced at 10" o/c full height c/w solid blocking @ 8'-0" o/c vertical and $\frac{7}{6}$ " OSB exterior wall sheathing.



Two Storey Height Wall Detail - max. 21'-5" tall

2 - 1 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " Laminated strand lumber (LSL) 1.5E stud wall glued and nailed together and spaced at 9" o/c full height c/w solid blocking @ 8'-0" o/c vertical and $\frac{7}{6}$ " OSB exterior wall sheathing.



Note: maximum height of wall for this detail is 21'-5" and maximum length is 40'-0"

Steel Angles and Wood Beam Schedules

Brick Veneer Steel Lintels + Wood Lintels and Beams

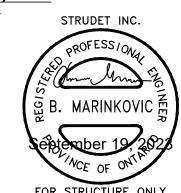
Label	Steel Angle Size $(v \times h \times t)$	teel Angle Size $(v \times h \times t)$ Wood Size (members + w + h)					
WL1 =	3½" x 3½" x½" (89 x 89 x 6.4) [2]	+	2 - 2 x 8	(2 - 38 x 184) S.P.F. No. 2			
WL2 =	4" x 3½" x 5/6" (102 x 89 x 7.9) [?]	+	2 - 2 x 8	(2 - 38 x 184) S.P.F. No. 2			
WL3 =	5" x 3½" x ½" (127 x 89 x 7.9) [4]	+	2 - 2 x 10	(2 - 38 x 235) S.P.F. No. 2			
WL4 =	6" x 3 ½" x ¾" (152 x 89 x 9.5) [?]	+	2 - 2 x 12	(2 - 38 x 286) S.P.F. No. 2			
WL5 =	6" x 4" x 3/8" (152 x 102 x 9.5) [?]	+	2 - 2 x 12	(2 - 38 x 286) S.P.F. No. 2			
WL6 =	5" x 3½" x 5/6" (127 x 89 x 7.9) [4]	+	2 - 2 x 12	(2 - 38 x 286) S.P.F. No. 2			
WL7 =	5" x 3½" x 5/6" (127 x 89 x 7.9) [4]	+	3 - 2 x 10	(3 - 38 x 235) S.P.F. No. 2			
WL8 =	5" x 3½" x ½" (127 x 89 x 7.9) [4]	+	3 - 2 x 12	(3 - 38 x 286) S.P.F. No. 2			
WL9 =	6" x 4" x 3/8" (152 x 102 x 9.5) [?]	+	3 - 2 x 12	(3 - 38 x 286) S.P.F. No. 2			
l							

Wood Lintels and Beams

Label		Beam Size	(members +	w + h)
WB1	=	2 - 2 x 8	(2 - 38 x 184)	S.P.F. No. 2
WB2	=	3 - 2 x 8	(3 - 38 x 184)	S.P.F. No. 2
WB3	=	2 - 2 x 10	(2 - 38 x 235)	S.P.F. No. 2
WB4	=	3 - 2 x 10	(3 - 38 x 235)	S.P.F. No. 2
WB5	=	2 - 2 x 12	(2 - 38 x 286)	S.P.F. No. 2
WB6	=	3 - 2 x 12	(3 - 38 x 286)	S.P.F. No. 2
WB7	=	5 - 2 x 12	(5 - 38 x 286)	S.P.F. No. 2
WB11	=	4 - 2 x 10	(4 - 38 x 235)	S.P.F. No. 2
WB12	=	4 - 2 x 12	(4 - 38 x 286)	S.P.F. No. 2

Laminated Veneer Lumber (LVL) Beams

			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Label		Beam Size (mer	nbers + w + h
L VL1A	=	1 - 1 ¾" x 7 ½"	(1 - 45 x 184)
L VL1	=	2 - 1 ¾" x 7 ½"	(2 - 45 x 184)
LVL2	=	3 - 1 ¾" x 7 ½"	(3 - 45 x 184)
LVL3	=	4 - 1 ¾" x 7 ½"	(4 - 45 x 184)
LVL4A	=	1 - 1 ¾" x 9 ½"	(1 - 45 x 240)
LVL4	=	2 - 1 ¾" x 9 ½"	(2 - 45 x 240)
LVL5	=	3 - 1 ¾" x 9 ½"	(3 - 45 x 240)
LVL5A	=	4 - 1 ¾" x 9 ½"	(4 - 45 x 240)
LVL6A	=	1 - 1 ¾" x 11 ½"	(1 - 45 x 300)
LVL6	=	2 - 1 ¾" x 11 ½"	(2 - 45 x 300)
LVL7	=	3 - 1 ¾" x 11 ½"	(3 - 45 x 300)
LVL7A	=	4 - 1 ¾" x 11 ½"	(4 - 45 x 300)
LVL8	=	2 - 1 ¾" x 14"	(2 - 45 x 356)
LVL9	=	3 - 1 ¾" x 14"	(3 - 45 x 356)
LVL10	=	2 - 1 ¾" x 18"	(2 - 45 x 456)



FOR STRUCTURE ONLY

Loose Steel Lintels

Name

		OICCI OILC T X I	1 X 1 J
L1	=	3½" x 3½" x½"	(89 x 89 x 6.4) [2]
L2	=	4" x 3 ½" x ¾6"	(102 x 89 x 7.9) [?]
L3	=	5" x 3½" x ¾"	(127 x 89 x 7.9) [4]
L4	=	6" x 3 ½" x ¾"	(152 x 89x 9.5) [?]
L5	=	6" x 4" x 3/8"	(152 x 102 x 9.5) [?]
L6	=	7" x 4" x 3/8"	(178 x 102 x 9.5) [?]

Glue-Laminated Floor Beams

.abel		Beam Size (w x h)
GLU1	=	31/8" x 11 7/8" (80 x 300)
GLU2	=	5½" x 11½" (130 x 300)

Minimum Thermal Performance

The minimum thermal performance of building envelope and equipment shall conform to the following

Prescriptive Package A1

<= 600 mm Below Grade

Edge of Below Grade Slab

	R	Max. U	R
component	Max. Nominal		Min. Effective
Ceiling with Attic Space	60	0.017	59.22
Ceiling without Attic Space	31	0.036	27.65
xposed Floor	31	0.034	29.80
Valls Above Grade	22	0.059	17.03
asement Walls	20 ci	0.047	21.12
elow Grade Slab Entire Surface 600 mm Below Grade	-	-	-
eated Slab or Slab	10	0.090	11.13

= 600 mm Below Grade 10 /indows and Sliding Glass Doors Energy rating: 25 Max. U: 0.28 Skylights Max. U:

Min. AFAU: Space Heating Equipment HRV Min SRF 75% Domestic Water Heater Min. EF:

Area Calculations Rose 2-1

Ground Floor

1317 sq ft, 122.35 sq m 1688 sq ft, 156.82 sq m 3005 sq ft, 279.17 sq m econd Floor Total floor area

Total open to below 0 sa ft. 0.00 sa m 0 sq ft, 0.00 sq m Finished basement 3005 sq ft, 279.17 sa m Total gross floor area

Coverage Areas Ground floor 1317 sq ft, 122.35 sq m Garaae 397 sq ft, 36.88 sq m 58 sq ft, 5.39 sq m Porch Other structures 0 sa ft . 0 00 sa m 1714 sq ft, 159.24 sq m Coverage w/o porch Coverage w/ porch 1772 sa ft. 164 62 sa m

Area Calculations

Rose 2-2

1317 sa ft. 122.35 sa m Ground Floor Second Floor 1682 sq ft, 156.26 sq m 2999 sq ft, 278.62 sq m Total floor area

0 sa ft . 0 00 sa m Total open to below 0 sq ft, 0.00 sq m Finished basement Total gross floor area 2999 sq ft, 278.62 sq m

Coverage Areas Ground floor 1317 sa ft. 122.35 sa m 397 sq ft, 36.88 sq m 58 sq ft, 5.39 sq m Garage Porch Other structures 0 sa ft, 0.00 sa m 1714 sq ft, 159.24 sq m Coverage w/o porch Coverage w/ porch 1772 sq ft. 164.62 sq m

1317 sa ft. 122.35 sa m 1681 sq ft, 156.17 sq m 2998 sq ft, 278.52 sq m

0 sq ft, 0.00 sq m 2998 sq ft, 278.52 sq m

Coverage Areas Ground floor

397 sq ft, 36.88 sq m 59 sq ft, 5.48 sq m Garage Porch Other structures 0 sa ft, 0.00 sa m 1714 sq ft, 159.24 sq m Coverage w/o porch Coverage w/ porch 1773 sq ft, 164.72 sq m

SB-12 Calculations

Wall Area

714.5 sa ft (66.4 sa m)

1097.2 sq ft (101.9 sq m)

1101.6 sq ft (102.3 sq m)

3618.2 sq ft (336.1 sq m)

Rose 2-1

Elevation

Front

Total

Left side

Right side

SB-12 Calculations Rose 2-2

Total

Elevation 714.5 sq ft (66.4 sq m) Left side 1097.2 sq ft (101.9 sq m) Right side 1101.6 sq ft (102.3 sq m)

3618.2 sq ft (336.1 sq m) 260.8 sq ft (24.2 sq m)

Percentage **Window Area** 107.4 sq ft (10.0 sq m) 65.4 sq ft (6.1 sq m) 5.96% 0.0 sq ft (0.0 sq m) 88.0 sq ft (8.2 sq m) 0.00%

OPTIONAL 8'-6" FOUNDATION POUR HEIGHT

BASEMENT FLOOR TO FLOOR HEIGHT

BASEMENT STAIRS

10" THICK CONCRETE FOUNDATION WALLS (15 MPa)

9 1/5" FLOOR JOISTS = 9'-2" (2.79m) HEIGHT

II %" FLOOR JOISTS = 9'-4" (2.84m) HEIGHT

Window Area

98.1 sa ft (9.1 sa m)

0.0 sq ft (0.0 sq m)

251.5 sq ft (23.4 sq m)

Percentage

13.72%

5.96%

0.00%

6.95%

7.21%

Percentage

15 23%

5.96%

0.00%

• 15 RISERS (EXTRA RISER ADDED TO BASE OF STAIR)

Area Calculations

Rose 2-3

Second Floor Total floor area

Total open to below 0 sq ft, 0.00 sq m Finished basement Total gross floor area

1317 sq ft, 122.35 sq m

SB-12 Calculations Rose 2-3

Elevation Wall Area

Front Left side Riaht side **Total**

704.9 sq ft (65.5 sq m) 1097.2 sq ft (101.9 sq m) 1097.2 sa ft (101.9 sa m) 3604.2 sq ft (334.8 sq m)

Window Area 107.3 sq ft (10.0 sq m) 65.4 sq ft (6.1 sq m) 0.0 sq ft (0.0 sq m)

260.7 sq ft (24.2 sq m) 7.23%

W Architect Inc. **DESIGN CONTROL REVIEW** NOV. 01, 2023 FINAL BY: All.

CITY OF RICHMOND HILL BUILDING DIVISION 08/21/2024

REVISED

Per: KER

Rose 2 Compliance Package A1

Description By JM 2023-07-18 Issued for client review Coord. floor and roof 2023-09-11 2023-09-11 Issued for permit JM

Contractor shall check all dimensions and elevations before commencing with work and report any discrepancies to the Designer. Prints are not to

he undersigned has reviewed and takes responsibility for this design, as well as having the qualifications and requirements mandated by th Ontario Building Code (O.B.C.) to be a Designer.

Qualification Information

Jamie Mack **BCIN**

Mackitecture



Tel: 416-735-8190 Email: info@mackitecture.ca

General Notes and Charts Elevation 1

2023-09-11 40' Single 22-016



www.greenparkgroup.ca

Trinigroup Developments Inc.

0

