Item: 1

HERITAGE VAUGHAN REPORT

DATE: Wednesday, April 18, 2018 **WARD(S):** 2

TITLE: NEW CONSTRUCTION – DETACHED GARAGE 50 CLARENCE STREET, WOODBRIDGE HERITAGE CONSERVATION DISTRICT

FROM:
Jason Schmidt-Shoukri, Deputy City Manager, Planning and Growth Management

ACTION: DECISION

Purpose

To seek a recommendation from the Heritage Vaughan Committee regarding the proposed construction of a detached garage located at 50 Clarence Street, a property located in the Woodbridge Heritage Conservation District "WHCD" and designated under Part V of the *Ontario Heritage Act.*

Report Highlights

- The Owner is proposing a detached garage to be located at 50 Clarence Street.
- The proposal is consistent with the relevant policies of the Woodbridge Heritage Conservation District Plan ("WHCD Plan").
- Heritage Vaughan review and Council approval is required under the *Ontario Heritage Act*.
- Staff is recommending approval of the proposal as it conforms with the policies of the Woodbridge Heritage Conservation District Plan ("WHCD Plan").

Recommendations

1. THAT Heritage Vaughan recommend approval to Council for the proposed detached garage at 50 Clarence Street under Section 42 of *Ontario Heritage Act*, subject to the following conditions:

    a) Any significant changes to the proposal by the Owner may require reconsideration by the Heritage Vaughan Committee, which shall be determined at the discretion of the Director of Development Planning and Manager of Urban Design and Cultural Heritage;

    b) That Heritage Vaughan Committee recommendations to Council do not constitute specific support for any Development Application under the *Ontario Planning Act* or permits or requirements currently under review or to be submitted in the future by the Owner as it relates to the subject application.

Background

The subject property is municipally known as 50 Clarence Street and is located on the southwest corner of Rosebury Lane and Clarence Street, as shown on Attachment #1. The subject property is noted as a "Contributing" property within the WHCD Plan. The existing one-storey building is identified as a "1940's cottage" in the WHCD Plan Inventory, and is further noted as being *"heavily modified, new additions and windows".*

Previous Reports/Authority

Not applicable.

Analysis and Options

Proposed Alterations

The proposal is for a new detached garage located in the rear/side yard of 50 Clarence Street. The garage will be accessed from the existing paved driveway off Rosebury Lane. The main elevation of the garage would face Rosebury Lane and be set back 4.64 m from the property line. The garage will be set back 10.3 m from the existing house and is 3.71 m in height with a gable roof and wood paneled garage doors. The exterior finish is brick veneer and pre-cast corner quoins to match the existing dwelling. The roof material is asphalt shingles.

Minor Variances

The applicant has confirmed with the Zoning Department that no variances will be required for this proposal.

Clarence Street and Park Drive Character Area

The subject property is located within the Clarence Street and Park Drive Character Area of the WHCD. The following is an analysis of the applicable WHCD policies:

5.3.2.5. Circulation, vehicular access and parking

"On-site parking, garages, and parking structures are generally concealed behind or below inhabited buildings."

- The proposed garage will be located behind the existing contributing building that fronts onto Clarence Street. The garage will be visible from Rosebury Lane, however this property is located on the border of the WHCD boundary, and other properties on Rosebury Lane are not included in the WHCD boundary.

6.1.5 Clarence Street and Park Drive Heritage Attributes – Guidelines:

"1. The Street should retain the existing residential character with a single family detached building type and be designed to support a pedestrian streetscape."

- The proposed garage will not impact the existing residential character, as the existing single family detached building type will remain and the detached garage will appear as a separate, secondary outbuilding. The proposed garage will be 3.71m in height, which will not impact the existing dweling which is approximately 4.5m in height.

Section 6.2.8 Appropriate Materials

"Doors: Wood doors and frames, panel construction, may be glazed; transom windows and paired sidelights with real glazing bars; wood french doors for porch entrances; single-bay, wood panelled garage doors."

- The proposed single-bay insulated steel garage doors will mimic the appearance of wood doors, as shown on the material sample in Attachment #6.

Section 6.6.3 – Tree Canopy and Vegetation – Guidelines:
"3. T*rees on public and private property, having a tree diameter of twenty (20) centimetres or more or having a base diameter of twenty (20) centimetres or more, must be conserved, and the requirements of the City of Vaughan Tree Bylaw 185-2007 must be adhered to."*

- The applicant has confirmed that the existing trees on the property will not be removed.

Based on the above analysis, the proposed detached garage is in conformity with the policies of the WHCD Plan.

Timeline

This application is subject to the 90 day review under the *Ontario Heritage Act*. This application was declared complete on March 6, 2018, and must be deliberated upon by June 4, 2018, to meet the 90 day timeline.

Financial Impact

There are no requirements for new funding associated with this report.

Broader Regional Impacts/Considerations

There are no broader Regional impacts or considerations.

Conclusion

The Urban Design and Cultural Heritage Division has reviewed the application to permit a new garage on the property municipally known as 50 Clarence Street and is satisfied that the proposed garage is consistent with the Woodbridge Heritage Conservation District Plan. Accordingly, the Urban Design and Cultural Heritage Division of the Development Planning Department can support the approval of the proposed alteration under Section 42 of the *Ontario Heritage Act*.

For more information, please contact: Shelby Blundell, Cultural Heritage Coordinator, ext. 8813

Attachments

1. Location Map
2. Subject Property
3. Site Photos
4. Site Plan, RN Design Ltd., March 5, 2018
5. Elevations, RN Design Ltd., March 5, 2018
6. Metal Garage Door Material Sample, provided by RN Design Ltd.

Prepared by

Shelby Blundell, Cultural Heritage Coordinator, ext. 8813

/CM

Attachment 1

Location Map

Woodbridge HCD (Yellow shaded area)

50 Clarence Street

Attachment 2

Subject Property

Approximate Location of Proposed Garage

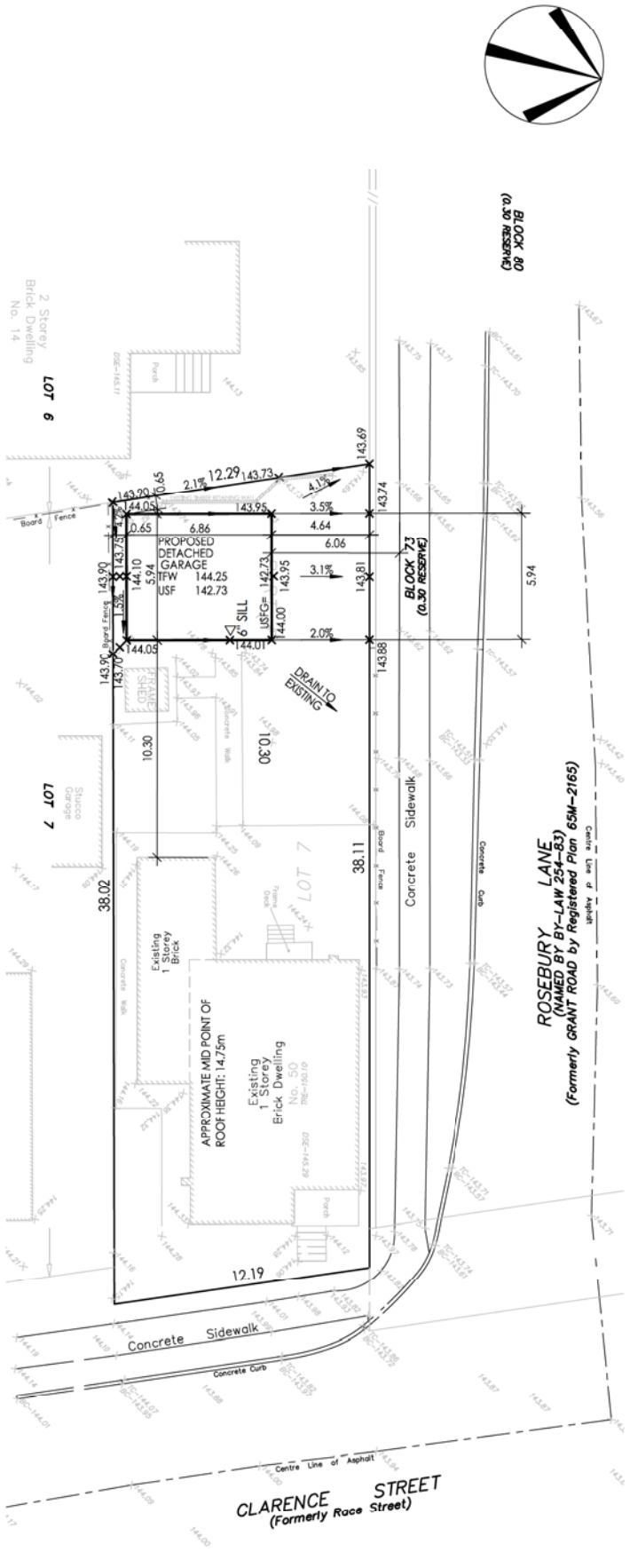
Attachment 3

Subject Property from Clarence Street

Existing Driveway – Location of Proposed Garage

Existing Fenced Backyard

Existing Fenced Backyard



NO TREES WILL BE REMOVED FOR THE DETACHED GARAGE

NOTE: BUILDER TO VERIFY LOCATION OF ALL HYDRANTS, STREET LIGHTS, TRANSFORMERS AND OTHER SERVICES. IF MIN. DIMENSIONS ARE NOT MAINTAINED BUILDER IS TO RELOCATE AT HIS OWN EXPENSE.

BUILDING STATISTICS

REG. PLAN No.	XXM-XXXX
ZONE	RXXX
LOT NUMBER	LOT 7
LOT AREA(m)^2	460.88
BLDG AREA(m)^2	NA
LOT COVERAGE(%)	NA
No. OF STOREYS	1
MEAN HEIGHT(m)	3.70m (GARAGE)
PEAK HEIGHT(m)	4.47m (GARAGE)
DECK LINE(m)	NA

LEGEND

FFE FINISHED FLOOR ELEVATION	BELL PEDESTAL
TFW TOP OF FOUNDATION WALL	CABLE PEDESTAL
TBS TOP OF BASEMENT SLAB	CATCH BASIN
USF UNDER SIDE FOOTING	DBL. CATCH BASIN
USFR UNDER SIDE FOOTING @ REAR	ENGINEERED FILL
USFG UNDER SIDE FOOTING @ GARAGE	HYDRO CONNECTION
TEF TOP OF ENGINEERED FILL	FIRE HYDRANT
R NUMBER OF RISERS TO GRADE	STREET LIGHT
WOD WALKOUT DECK	MAIL BOX
LOB LOOKOUT BASEMENT	TRANSFORMER
WOB WALK OUT BASEMENT	SEWER CONNECTIONS 2 LOTS
REV REVERSE PLAN	SEWER CONNECTIONS 1 LOT
STD STANDARD PLAN	WATER CONNECTION
DOOR	WATER VALVE CHAMBER
WINDOW	HYDRANT AND VALVE
AC AIR CONDITIONING	HYDRO METER
DOWN SPOUT TO SPLASH PAD	GAS METER
SWALE DIRECTION	MANHOLE - STORM
SP SUMP PUMP	MANHOLE - SANITARY

—X— CHAINLINK FENCE
—XX— PRIVACY FENCE
—XXX— SOUND BARRIER
FOOTING TO BE EXTENDED TO 1.22 (MIN) BELOW GRADE

ISSUED OR REVISION COMMENTS

NO.	DESCRIPTION	DATE	DWN	CHK
1	ISSUED FOR REVIEW	28-FEB-18	MA	MSA
2	RE-ISSUED AS PER HCD COMMENTS	5-MAR-18	MA	MSA

Imagine • Inspire • Create RN DESIGN LTD.
8395 JANE STREET, SUITE 203
VAUGHAN, ONTARIO. L4K 5Y2
T:905-738-3177 | F: 905-738-5449

I. DECLARE THAT I HAVE REVIEWED AND TAKEN DESIGN RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF **RN DESIGN LTD.**,UNDER DIVISION C,PART-3 SUBSECTION-3.2.4 OF THE BUILDING CODE. I AM QUALIFIED AND THE FIRM IS REGISTERED IN THE APPROPRIATE CLASSES / CATEGORIES.

QUALIFIED DESIGNER BCIN:
FIRM BCIN:
DATE:

SIGNATURE:

CLIENT
STEVE & TINA VOCELLA

PROJECT/LOCATION
VAUGHAN,
ONTARIO

DRAWING
Grading Plan

DRAWN BY	SCALE
MA	1:250
PROJECT No.	LOT NUMBER
18016	LOT 7

FRONT ELEVATION 'A'

Drawing List:

A0	TITLE SHEET
A1	FOUNDATION PLAN ELEV 'A'
	GROUND FLOOR ELEV 'A'
A2	REAR ELEVATION 'A'
	FRONT ELEVATION 'A'
	ROOF PLAN ELEV 'A'
A3	LEFT SIDE ELEVATION 'A'
	RIGHT SIDE ELEVATION 'A'
D1	CONSTRUCTION NOTES
D2	CONSTRUCTION NOTES
D3	CONSTRUCTION NOTES

Areas:

	ELEVATION 'A'	
	SF	SM
GARAGE COVERAGE	438.8	40.76

Steve & Tina Vocella

Detached Garage

client: Steve & Tina Vocella

location: VAUGHAN

project: Detached Garage

marketing name

#	revisions	date	dwn	chk	#	revisions	date	dwn	chk
1	ISSUED FOR CLIENT REVIEW	16-FEB-18	KK	MSA					
2	ISSUED FOR CLIENT REVIEW	28-FEB-18	MSA	MSA					
3	REVISED AS PER HCD COMMENTS	5-MAR-18	MSA	MSA					

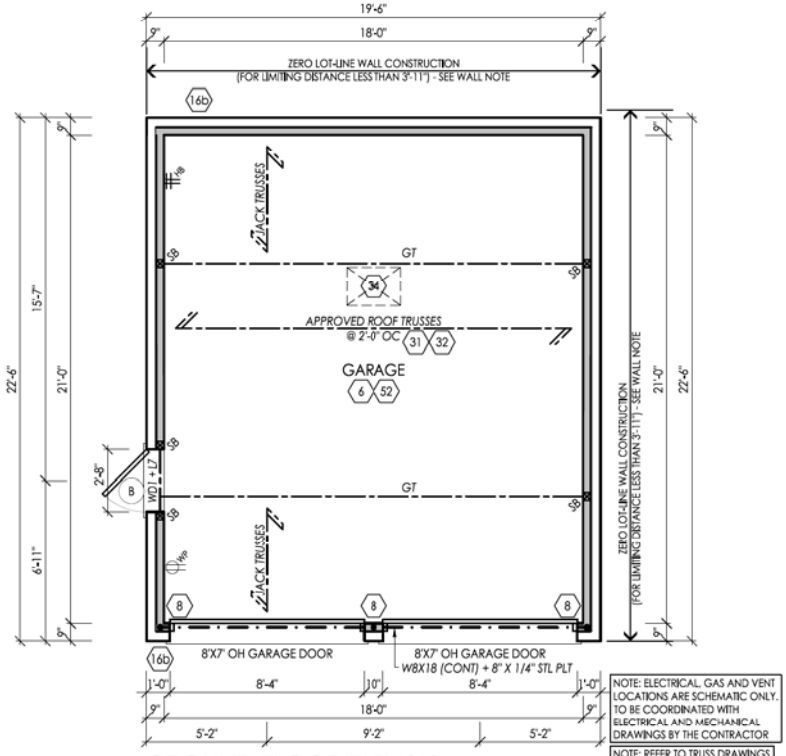
RN design
Imagine • Inspire • Create

model: DETACHED GARAGE

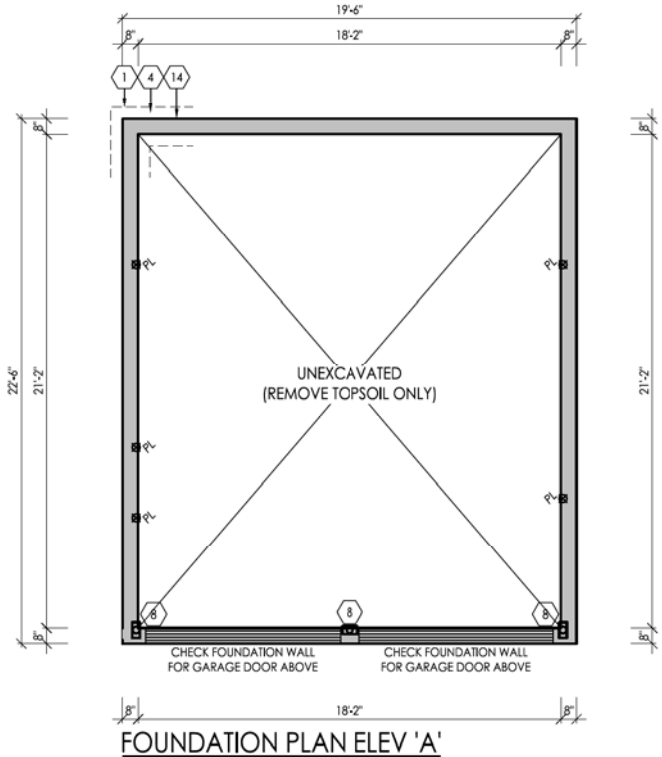
scale: 3/16" = 1'0"

project #: 18016

page: A0



GROUND FLOOR ELEV 'A'



FOUNDATION PLAN ELEV 'A'

client
Steve & Tina Vocella

location
VAUGHAN

project
Detached Garage

marketing name

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1	ISSUED FOR CLIENT REVIEW	16-FEB-18	KK	MSA					
2	ISSUED FOR CLIENT REVIEW	28-FEB-18	MSA	MSA					
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RN design
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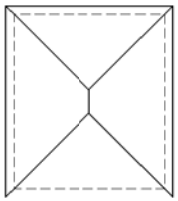
model
DETACHED GARAGE

scale
3/16" = 1'0"

project #
18016

page
A1

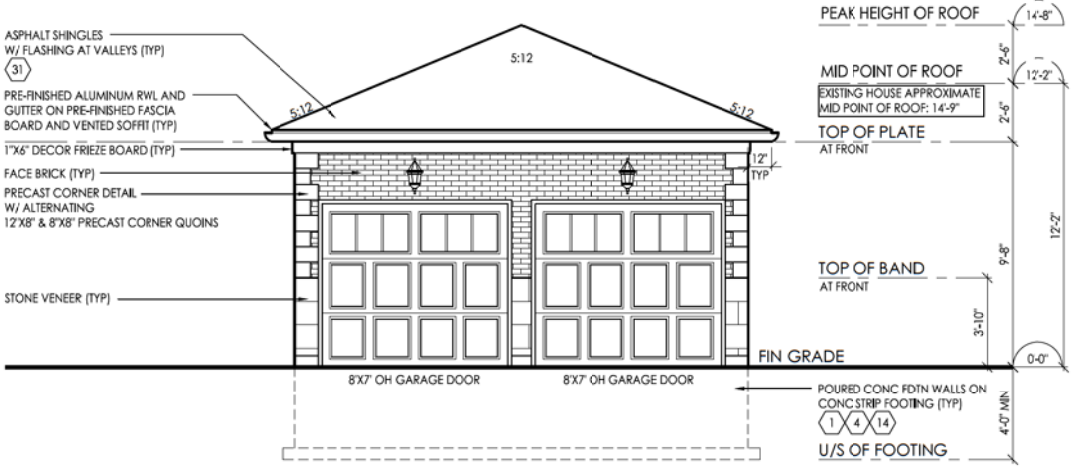


ROOF PLAN ELEV 'A'

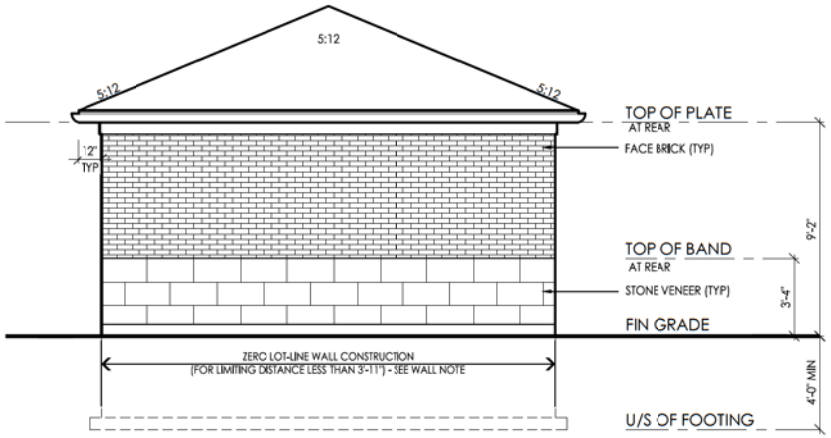
NOTE: ALL CONVENTIONAL ROOF FRAMING TO CONFORM TO PART 9 OF THE OBC. ROOF RAFTERS THAT MEET OR CROSS OVER TRUSSES ARE TO BE 2"X4" SPF @ 24" O.C. WITH A 2"X4" SPF VERTICAL POST TO THE TRUSS UNDER, AT EACH CROSS POINT. POSTS LONGER THAN 6' TO BE LATERALLY BRACED SO THAT THE DISTANCE BETWEEN END POINTS & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'.

NOTE: REFER TO TRUSS DRAWINGS FOR APPROVED TRUSS LAYOUT

NOTE: REFER TO STREET-SCAPES FOR POSSIBLE MINOR CHANGES DUE TO GRADING CONDITIONS



FRONT ELEVATION 'A'



REAR ELEVATION 'A'

client
Steve & Tina Vocella

project
Detached Garage

location
VAUGHAN

marketing name

#	revisions	date	dwn	chk
1	ISSUED FOR CLIENT REVIEW	14-FEB-18	KK	MGA
2	ISSUED FOR CLIENT REVIEW	28-FEB-18	MGA	MGA
3	REVISED AS PER HCD COMMENTS	5-MAR-18	MGA	MGA

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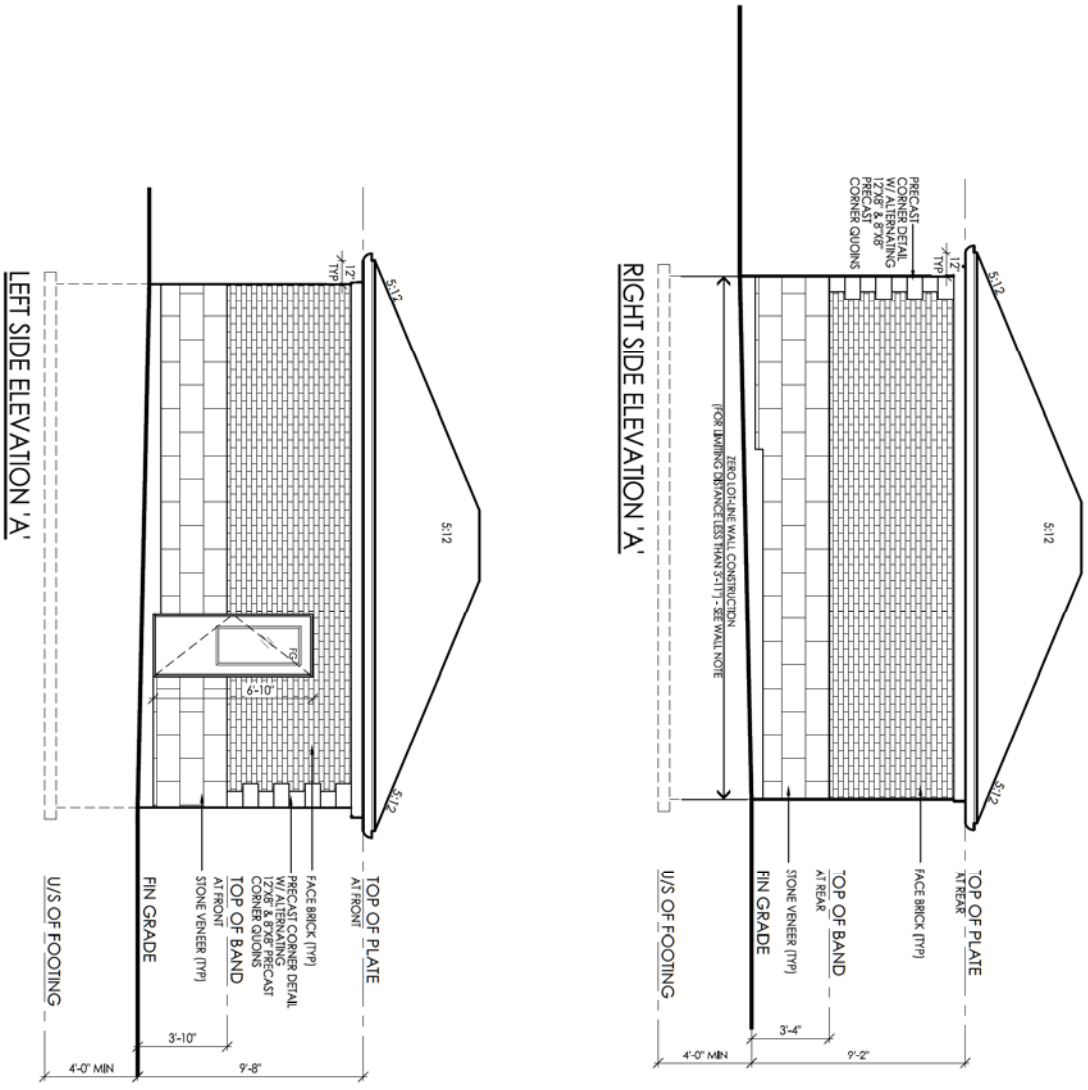
model
DETACHED GARAGE

scale
3/16" = 1'0"

project #
18016

page
A2



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I, DECLARE THAT I HAVE REVIEWED AND TAKEN DESIGN RESPONSIBILITY FOR THE DESIGN ON BEHALF OF **RN DESIGN LTD.** UNDER DIVISION C, SUBSECTION-3.2.4 OF THE BUILDING CODE. THE FIRM IS REGISTERED WITH THE BCIN AS A DESIGNER.

PRELIMINARY-NOT FOR CONSTRUCTION

SIGNATURE:

client
Steve & Tina Vocella

location
VAUGHAN

project
Detached Garage

marketing name

#	revisions	date	dwn	chk	#	revisions	date	dwn	chk
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model
DETACHED GARAGE

scale
3/16" = 1'0"

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18016

page
A3

COMPLIANCE PACKAGE A1 - OBC 2012 - 2017 ENACTMENT

(UNLESS OTHERWISE NOTED)
-ALL CONSTRUCTION TO CONFORM TO THE ONTARIO BUILDING CODE (O.B.C.) AND ALL OTHER CODES AND LOCAL AUTHORITIES HAVING JURISDICTION.
-ALL DIMENSIONS GIVEN FIRST IN IMPERIAL FOLLOWED BY METRIC.
-THERMAL RESISTANCE VALUES BASED ON ZONE 1

FOOTINGS / SLABS:

TYPICAL STRIP FOOTING:

O.B.C. 9.15.3.
-BASED ON 16'-1"(4.9m) MAX. SUPPORTED JOIST LENGTH
-MIN. 2200psi (15MPa) CONCRETE AFTER 28 DAYS
-SHALL REST ON UNDISTURBED SOIL, ROCK OR COMPACTED GRANULAR FILL W/ MIN. 10.9psi (75kPa) BEARING CAPACITY
-FIG. 1O HAVE CONTINUOUS KEY
-FTG. SIZES MAY BE REDUCED FOR SOILS W/ GREATER BEARING CAPACITY (AS PER SOILS ENGINEERING REPORT)
-REFER TO WORKING DRAWINGS FOR SPECIFIC SIZES THAT MAY SUPERSEDE NOTES #1 & #2 FOR FOOTING SIZES

1 **TYPICAL STRIP FOOTING: (EXTERIOR WALLS)**

O.B.C. 9.15.3.5.
-FTG. TO EXTEND MIN. 4'-0" (1200mm) BELOW GRADE

BRICK VENEER	-1 STOREY	- 13" X 4"	(330mm X 100mm)
	-2 STOREY	- 19" X 4"	(485mm X 155mm)
	-3 STOREY	- 26" X 9"	(660mm X 230mm)
SIDING-	-1 STOREY	- 10" X 4"	(255mm X 100mm)
	-2 STOREY	- 14" X 4"	(360mm X 100mm)
	-3 STOREY	- 18" X 5"	(460mm X 130mm)

2 **TYPICAL STRIP FOOTING: (INTERIOR BEARING WALLS)**

O.B.C. 9.15.3.6.

-1 STOREY MASONRY	- 16" X 4"	(410mm X 100mm)
-1 STOREY STUD	- 12" X 4"	(305mm X 100mm)
-2 STOREY MASONRY	- 26" X 9"	(650mmX 230mm)
-2 STOREY STUD	- 18" X 5"	(450mm X 130mm)
-3 STOREY MASONRY	- 36" X 14"	(900mm X 360mm)
-3 STOREY STUD	- 24" X 8"	(600mm X 200mm)

3 **STEP FOOTING:**

O.B.C. 9.15.3.9.
-23 5/8" (600mm) MAX. VERTICAL RISE & 23 5/8" (600mm) MIN. HORIZONTAL RUN.

4 **DRAINAGE TILE OR PIPE:**

O.B.C. 9.14.3.
-4" (100mm) MIN. DIA. LAID ON UNDISTURBED OR WELL COMPACTED SOIL W/ TOP OF TILE OR PIPE TO BE BELOW BOTTOM OF FLR. SLAB.
-COVER TOP & SIDES OF TILE OR PIPE W/ 5 7/8" (150mm) OF CRUSHED STONE OR OTHER COURSE CLEAN GRANULAR MATERIAL.
-TILE SHALL DRAIN TO A SEWER, DRAINAGE DITCH, OR DRY WELL.

5 **BASEMENT SLAB:**

O.B.C. 9.13. & 9.16.
-3" (75mm) CONCRETE SLAB
-2200psi (15MPa) AFTER 28 DAYS - O.B.C. 9.16.4.5.
-DAMPPROOF BELOW SLAB W/ MIN. 0.006" (0.15mm) POLYETHYLENE OR TYPE 'S' ROLL ROOFING W/ 4" (100mm) LAPPED JOINTS.
-DAMPPROOFING MAY BE OMITTED IF CONCRETE HAS MIN. 3600psi(25MPa) COMPRESSIVE STRENGTH AFTER 28 DAYS
-4" (100mm) OF COURSE GRANULAR MATERIAL
-PROVIDE BOND BREAKING MATERIAL BETWEEN SLAB & FTG.
-WHERE SLAB IS REQUIRED TO BE WATERPROOFED IT SHALL CONFORM TO O.B.C. 9.13.3.
-FLOOR DRAIN PER O.B.C.9.31.4.4.
-R10 (RSI 1.76) INSULATION AT PERIMETER OF SLAB WHERE GRADE IS WITHIN 23-1/2" (600mm) OF BASEMENT SLAB EDGE. INSULATION TO EXTEND TO NOT LESS THAN 23-1/2" (600mm) BELOW EXTERIOR GRADE LEVEL (OBC SB-12 - 3.1.1.7 (5))
- UNLESS IT CAN BE DEMONSTRATED THAT SOIL GAS DOES NOT CONSTITUTE A PROBLEM, SOIL GAS CONTROL SHALL CONFORM TO SUPPLEMENTARY STANDARD (O.B.C. SB-9)

5a **SLAB ON GROUND:**

-3" (75mm) CONCRETE SLAB - O.B.C. 9.16.4.3.
-2200psi (15MPa) AFTER 28 DAYS - O.B.C. 9.16.4.5.
-DAMPPROOF BELOW SLAB W/ MIN. 0.006" (0.15mm) POLYETHYLENE OR TYPE 'S' ROLL ROOFING W/ 4" (100mm) LAPPED JOINTS.
-DAMPPROOFING MAY BE OMITTED IF CONCRETE HAS MIN. 3600psi(25MPa) COMPRESSIVE STRENGTH AFTER 28 DAYS
-R10 (RSI 1.76) INSULATION UNDER ENTIRE SLAB WHERE THE ENTIRE SLAB IS WITHIN 23-1/2" (600mm) OF GRADE. (OBC SB-12 3.1.1.7.(6))
-4" (100mm) OF COURSE GRANULAR MATERIAL
-PROVIDE BOND BREAKING MATERIAL BETWEEN SLAB & FTG.
-WHERE SLAB IS REQUIRED TO BE WATERPROOFED IT SHALL CONFORM TO O.B.C. 9.13.3.
-FLOOR DRAIN PER O.B.C.9.31.4.4.
- UNLESS IT CAN BE DEMONSTRATED THAT SOIL GAS DOES NOT CONSTITUTE A PROBLEM, SOIL GAS CONTROL SHALL CONFORM TO SUPPLEMENTARY STANDARD (O.B.C. SB-9)

6 **GARAGE SLAB / EXTERIOR SLAB:**

-4"(100mm) CONCRETE SLAB
-4650psi (32MPa) COMPRESSIVE STRENGTH AFTER 28 DAYS FOR UNREINFORCED CONC. & W/ 5-8% AIR ENTRAINMENT - O.B.C. 9.3.1.6.
-6" X 6" (W2.9 X W 2.9) WIRE MESH LOCATED NEAR MID-DEPTH OF SLAB
-4" (100mm) OF COURSE GRANULAR MATERIAL
-ANY FILL PLACED UNDER SLAB , OTHER THAN COURSE CLEAN GRANULAR MATERIAL, SHALL BE COMPACTED.

7 **PILASTERS:**

O.B.C. 9.15.5.3.
PILASTER
-CONCRETE NIB - 4" X 12" (100mm X 300mm)
-BLOCK NIB - 4" X 12" (100mm X 300mm) BONDED & TIED TO WALL AS PER O.B.C. 9.20.11.2. TOP 7 7/8" (200mm) SOLID.
OR
BEAM POCKET
-4" (100mm) INTO FDN. WALL W/ WIDTH TO MATCH BEAM SIZE.
-1/2" (13mm) SPACE AROUND WOOD BEAMS (O.B.C. 9.23.2.2.)
STRUCTURAL COLUMNS
-SIZES BASED ON COLUMN SUPPORTING BEAMS CARRYING LOADS FROM NOT MORE THAN 2 WOOD FRAME FLOORS, WHERE THE LENGTHS OF JOISTS CARRIED BY SUCH BEAMS DO NOT EXCEED 16'-1" (4.9m) AND THE LIVE LOAD ON ANY FLOOR DOES NOT EXCEED 50psf (2.4kPa).

8 **STEEL PIPE COLUMN:**

O.B.C. 9.15.3.4. & 9.17.3.
-FIXED COLUMN
-MIN. 3 1/2" (90mm) DIA. W/ 3/16" (4.76mm) WALL THICKNESS
-FOR STEEL BEAMS, CLIPS @ TOP & MIN. 6" X 4" X 1/4" (152mmX 100mmx 6.35mm) STEEL BTM. PLATE
-FOR WOOD BEAMS, MIN. 4"X4"X1/4" (100mmX 100mm X 6.35mm) STEEL TOP & BTM. PLATES, OR TOP PLATE TO EXTEND MIN. WIDTH OF BEAM
-ADJUSTABLE COLUMNS TO CONFORM TO CAN//CGSB-7.2-M WHERE IMPOSED LOAD DOES NOT EXCEED 36 KN (O.B.C. 9.17.3.4.)

COL. SPACING:	FTG SIZE:
2 STOREY	
-MAX. 9'-10" (2997mm)	- 34" X 34" X 16" (860mmX 860mmX 400mm)
-MAX. 16'-0" (4880mm)	- 44" X 44" X 21" (1120mmX 1120mmX 530mm)
3 STOREY	
-MAX. 9'-10" (2997mm)	- 40" X 40" X 19" (1010mmX 1010mmX 480mm)
-MAX. 16'-0" (4880mm)	- 51" X 51" X 24" (1295mmX 1295mmX 610mm)

-WHERE COL. SITS ON FDN. WALL USE 4" X 8" X 5/8" (100mmX 200mmX 16mm) STEEL PLATE WITH 2-5/8" (16mm) ANCHOR BOLTS

9 **WOOD COLUMN:**

OBC 9.17.4.1 , 9.17.4.2, & 9.17.4.3.
-5 ½" x 5 ½" (140mm x 140mm) SOLID WOOD COLUMN - OR
-3-2"x6" (38mm x 140mm) BUILT UP COLUMN NAILED TOGETHER W/ 3" (76mm) NAILS SPACED NOT MORE THAN 12" (300mm) APART OR BOLTED TOGETHER W/ 3/8"(9.52mm) DIA BOLTS SPACED AT 18" (450mm) O.C.
-WRAP COLUMN BASE W/ 6 MIL POLY
-COLUMN TO SIT DIRECTLY ON CONC PAD (NOT ON CONC SLAB)
-25"x25"x12" (640mm x 640mm x 300mm) CONC PAD (1 FLOOR SUPPORTED W/ 9'-10" COL SPACING)
-34"x34"x14" (860mm x 860mm x 360mm) CONC PAD (2 FLOORS SUPPORTED W/ 9'-10" COL SPACING)

10 **BLOCK PARTY WALL BEAM END BEARING: (WOOD BEAM / GIRDER TRUSSES)**

-2"X8"X12" LEDGER BOARD FASTENED W/ 2/ 1/2" ANCHOR BOLTS @ 4' O.C.
-WHERE WOOD BEAMS BEAR ON FIREWALLS USE GENERAL NOTE 11 WHERE REQUIRED TO OBTAIN 5" SEPARATION DISTANCE BETWEEN ADJACENT BEAMS

11 **BLOCK PARTY WALL BEAM END BEARING: (STEEL BEAM)**

-12"X11 1"X 5/8" STL. PLATE ON TOP OF SOLID CONCRETE BLOCK WITH 2- 1/2"Ø x8" ANCHOR BOLTS.

WALL ASSEMBLIES:

14 **FOUNDATION WALL:**

O.B.C. 9.15.4.2.
-FOR WALLS NOT EXCEEDING 8'-2" (2500mm) IN LATERALLY SUPPORTED HEIGHT.
-8" (200mm) SOLID 2200psi (15MPa) CONCRETE
-MAX. UNSUPPORTED HEIGHT OF 3'-11" (1200mm) & MAX. SUPPORTED HEIGHT OF 7'-0" (2150mm) MEASURED FROM GRADE TO FINISHED BASEMENT FLOOR.
-FOR WALLS NOT EXCEEDING 9'-0" (2750mm) IN LATERALLY SUPPORTED HEIGHT.
-10" (250mm) SOLID 2200psi (15MPa) CONCRETE
-MAX. UNSUPPORTED HEIGHT OF 4'-7" (1400mm) & MAX. SUPPORTED HEIGHT OF 8'-6" (2600mm) MEASURED FROM GRADE TO FINISHED BASEMENT FLOOR.
-LATERAL SUPPORT PROVIDED BY ANCHORED SILL PLATE TO JOISTS.
-FOR CONDITIONS EXCEEDING THESE MAXIMUMS AN ALTERNATIVE IN CONFORMANCE TO O.B.C.- 9.15.4.2.A SHALL BE USED OR IT SHALL BE DESIGNED UNDER O.B.C.- PART 4
-WALL SHALL EXTEND A MIN. 5 7/8" (150mm) ABOVE GRADE
-INSULATE W/ R20 (RSI 3.52) CONTINUOUS INSULATION FROM UNDERSIDE OF SUBFLOOR TO NOT MORE THAN 8" (200mm) ABOVE FINISHED FLOOR OF BASEMENT (ZONE 1 OBC SB-12 T.3.1.1.2.A.)
- ALTERNATE INSULATION METHOD: 2" (51mm) R10 (RSI 1.76)RIGID INSULATION W/ 2"x4"(38mm X 89mm) WOOD STUD W/ R12 (RSI 2.11) BATT INSULATION
-BACK FILL W/ NON-FROST SUSCEPTIBLE SOIL

REDUCTION OF THICKNESS:

O.B.C. 9.15.4.7.
-WHERE THE TOP OF THE FOUNDATION WALL IS REDUCED IN THICKNESS TO ALLOW MASONRY FACING, THE MIN. REDUCED THICKNESS SHALL NOT BE LESS THAN 3-1/2" (90mm) THICK.
-TIE TO FACING MATERIAL WITH METAL TIES SPACED MAX. @ 7 7/8" (200mm) VERTICALLY O.C. & 2'-11" (900mm) HORIZONTALLY.
-FILL SPACE BETWEEN WALL AND FACING SOLID W/ MORTAR
-WHERE WALL IS REDUCED FOR JOISTS, THE REDUCED THICKNESS SHALL BE MAX. 13-3/4" (350mm) HIGH & MIN. 3-1/2" (90mm) THICK

DAMPPROOFING & WATERPROOFING:

-DAMPPROOF THE EXTERIOR FACE OF WALL BELOW GRADE AS PER O.B.C. 9.13.2.
-WHERE INSULATION EXTENDS TO MORE THAN 2'-11" (900mm) BELOW GRADE, A FDN. WALL DRAINAGE LAYER SHALL BE PROVIDED IN CONFORMANCE TO O.B.C. 9.14.2.1.(2) (3) (4)
-FINISHED BASEMENTS SHALL HAVE INTERIOR DAMPPROOFING EXTENDING FROM SLAB TO GRADE LEVEL & SHALL CONFORM TO O.B.C. 9.13.3.3.(3)
-WHERE HYDROSTATIC PRESSURE OCCURS, FDN. WALLS SHALL BE WATERPROOFED AS PER O.B.C. 9.13.3.
-WALLS THAT ARE WATERPROOFED DO NOT REQUIRE DAMPPROOFING.

14a **FOUNDATION WALLS @ UNSUPPORTED OPENINGS:**

-2-20M BARS IN TOP PORTION OF WALL (UP TO 8'-0" OPENING)
-3-20M BARS IN TOP PORTION OF WALL (8'-0" TO 10'-0" OPENING)
-4-20M BARS IN TOP PORTION OF WALL (10'-0" TO 15'-0" OPENING)
-BARS STACKED VERTICALLY AT INTERIOR FACE APPROX 4" TO 6" APART.
-BARS TO HAVE MIN. 2" (50mm) CONCRETE COVER
-BARS TO EXTEND 2'-0" (600mm) BEYOND BOTH SIDES OF OPENING.

15 **FRAME WALL CONSTRUCTION:**

O.B.C. 9.23.
-SIDING OR STUCCO AS PER ELEVATIONS, MIN. 7 7/8" (200mm) FROM FINISHED GRADE (O.B.C. 9.28.1.4. & 9.27.)
-WALL SHEATHING MEMBRANE AS PER O.B.C. 9.27.3.2.
-1/4" (6mm) PLYWOOD (EXTERIOR TYPE) OR EQUIVALENT AS PER O.B.C. 9.23.16.
-2" X 6" (38mm X 140mm) WOOD STUDS @ 16" (400mm) O.C.
-MIN. R22 (RSI 3.87) INSULATION (ZONE 1. OBC SB-12 T.3.1.1.2.A.)
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C. 9.25.3. & 9.25.4..
-1/2" (12.7mm) GYPSUM BOARD
NOTE - SUPPORT FOR 3 FLOORS ABOVE - O.B.C. T.9.23.10.1. =
-FOR 3 FLOORS SUPPORTED ABOVE, 2" X 6" (38mmX 140mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.

REQ. FOR FIRE RATING (LESS THAN 4'-0" LIMITING DISTANCE):

O.B.C. SB-3 WALL = EW1b (STC = N/A, FIRE = 45 MIN)
FOR 45 MINUTE FIRE RATED WALL REQUIREMENTS SUBSTITUTE THE FOLLOWING MATERIALS:
-REPLACE R22 (RSI 3.87) INSULATION WITH R22 (RSI 3.87) ABSORPTIVE INSULATING MATERIAL WITH A MASS OF AT LEAST 4.8 kg/ sq.m.
-REPLACE 1/2" (12.7mm) INTERIOR GYPSUM BOARD WITH 1/2" (12.7mm) TYPE 'X' GYPSUM BOARD.

REQ. FOR FIRE RATING (LESS THAN 2'-0" LIMITING DISTANCE):

-REFER TO REQUIREMENTS FOR LESS THAN 4'-0" LIMITING DISTANCE AND ADD/REPLACE THE FOLLOWING:
-NON-COMBUSTABLE SIDING OR STUCCO AS PER ELEVATIONS (REFER TO MANUFACTURER'S SPECIFICATIONS).
OR
-VINYL SIDING IS PERMITTED PER O.B.C. 9.10.15.5.(3). OVER SHEATHING PAPER OVER 1/2" (12.7mm) GYPSUM EXTERIOR SHEATHING ON EXTERIOR SIDE OF RIGID INSULATION

15a **ALTERNATE FRAME WALL CONSTRUCTION:**

O.B.C. 9.23.
-SIDING OR STUCCO AS PER ELEVATIONS, MIN. 7 7/8" (200mm) FROM FINISHED GRADE (O.B.C. 9.28.1.4. & 9.27.)
-1 1/2" (38mm) R8 (RSI 1.41) RIGID INSULATION W/ TAPED JOINTS (O.B.C. 9.27.3.4.)
-BRACE W/ CONT. 16 GAUGE STEEL 'T' BRACES FROM TOP PLATE TO BTM. PLATE FOR THE FULL LENGTH OF WALL, OR CONT. 2" X 4" (38mmX 89mm) SOLID WOOD BLOCKING @ APPROXIMATELY 45 DEG. FROM TOP PLATE TO BTM. PLATE FOR FULL LENGTH OF WALL.
-2" X 4" (38mmX 89mm) WOOD STUDS @ 16" (400mm) O.C. @ 12" (300mm) O.C. ON BOTTOM FLR. WHEN 3 STOREYS.
-R14 (RSI 2.46) INSULATION
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C.- 9.25.3. & 9.25.4.
-1/2" (12.7mm) GYPSUM BOARD.
NOTE - SUPPORT FOR 2 + 3 FLOORS ABOVE - O.B.C. T.9.23.10.1. =
-FOR 2 FLOORS SUPPORTED ABOVE, 2" X 4" (38mmX 89mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.
-FOR 3 FLOORS SUPPORTED ABOVE, 2" X 6" (38mmX 140mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.

REQ. FOR FIRE RATING (LESS THAN 4'-0" LIMITING DISTANCE):

O.B.C. SB-3 WALL = EW1b (STC = N/A, FIRE = 45 MIN)
FOR 45 MINUTE FIRE RATED WALL REQUIREMENTS SUBSTITUTE AND/OR ADD THE FOLLOWING MATERIALS:
-ADD 1/4" (6mm) PLYWOOD (EXTERIOR TYPE) OR EQUIVALENT AS PER O.B.C. 9.23.16. BETWEEN RIGID INSULATION AND WOOD STUD.
-REPLACE R14 (RSI 2.46) INSULATION WITH R14 (RSI 2.46) ABSORPTIVE INSULATING MATERIAL WITH A MASS OF AT LEAST 2.8 kg/ sq.m.
-REPLACE 1/2"(12.7mm) GYPSUM BD. W/ 1/2" (12.7mm) TYPE 'X' GYPSUM BD.

REQ. FOR FIRE RATING (LESS THAN 2'-0" LIMITING DISTANCE):

-REFER TO REQUIREMENTS FOR LESS THAN 4'-0" LIMITING DISTANCE AND ADD/REPLACE THE FOLLOWING:
-NON-COMBUSTABLE SIDING OR STUCCO AS PER ELEVATIONS (REFER TO MANUFACTURER'S SPECIFICATIONS).
OR
-VINYL SIDING IS PERMITTED PER O.B.C. 9.10.15.5.(3). OVER SHEATHING PAPER OVER 1/2" (12.7mm) GYPSUM EXTERIOR SHEATHING ON EXTERIOR SIDE OF RIGID INSULATION

15b **FRAME WALL CONSTRUCTION @ GARAGE:**

O.B.C. 9.23.
-SIDING OR STUCCO AS PER ELEVATIONS, MIN. 7 7/8" (200mm) FROM FINISHED GRADE (O.B.C. 9.28.1.4. & 9.27.)
-WALL SHEATHING MEMBRANE AS PER O.B.C. 9.27.3.2.
-1/4" (6mm) PLYWOOD (EXTERIOR TYPE) OR EQUIVALENT AS PER O.B.C. 9.23.16.
-2" X 4" (38mmX 89mm) WOOD STUDS @ 16" (400mm) O.C.
-1/2" (12.7mm) GYPSUM BOARD
NOTE - SUPPORT FOR 2 + 3 FLOORS ABOVE - O.B.C. T.9.23.10.1. =
-FOR 2 FLOORS SUPPORTED ABOVE, 2" X 4" (38mmX 89mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.
-FOR 3 FLOORS SUPPORTED ABOVE, 2" X 6" (38mmX 140mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.

REQ. FOR FIRE RATING (LESS THAN 4'-0" LIMITING DISTANCE):

O.B.C. SB-3 WALL = EW1b (STC = N/A, FIRE = 45 MIN)
FOR 45 MINUTE FIRE RATED WALL REQUIREMENTS SUBSTITUTE AND/OR ADD THE FOLLOWING MATERIALS:
-ADD ABSORPTIVE MATERIAL WITH A MASS OF AT LEAST 2.8 kg/ sq.m.
-REPLACE 1/2"(12.7mm) GYPSUM BD. W/ 1/2" (12.7mm) TYPE 'X' GYPSUM BD.

REQ. FOR FIRE RATING (LESS THAN 2'-0" LIMITING DISTANCE):

-REFER TO REQUIREMENTS FOR LESS THAN 4'-0" LIMITING DISTANCE AND ADD/REPLACE THE FOLLOWING:
-NON-COMBUSTABLE SIDING OR STUCCO AS PER ELEVATIONS (REFER TO MANUFACTURER'S SPECIFICATIONS).
OR
-VINYL SIDING IS PERMITTED PER O.B.C. 9.10.15.5.(3). OVER SHEATHING PAPER OVER 1/2" (12.7mm) GYPSUM EXTERIOR SHEATHING WHICH REPLACES EXTERIOR PLYWOOD OR EQUIV.

16 **BRICK VENEER CONSTRUCTION:**

O.B.C. 9.23.
-3-1/2" (90mm) FACE BRICK OR 4" (100mm) STONE @ 36'-1" (11m) MAX. HEIGHT
-MIN. 0.03" (0.76mm) THICK, 7/8" (22mm) WIDE CORROSION RESISTANT STRAPS @ MAX. 15 3/4" (400mm) O.C. HORIZONTAL & 23 5/8" (600mm) O.C. VERTICAL SPACING
-PROVIDE WEEP HOLES @ 2'-7" (800mm)O.C. @ BTM. COURSE & OVER OPENINGS
-BASE FLASHING UP TO 5 7/8" (150mm) BEHIND WALL SHEATHING MEMBRANE (O.B.C. 9.20.13.6.(2))
-BRICK OR STONE SILLS UNDER OPENINGS, FLASHING UNDER
-1" (25mm) AIR SPACE
-WALL SHEATHING MEMBRANE AS PER O.B.C. 9.27.3.2.
-1/4" (6mm) PLYWOOD (EXTERIOR TYPE) OR EQUIVALENT AS PER O.B.C. 9.23.16
-2" X 6" (38mmX 140mm) WOOD STUDS @ 16" (400mm) O.C.
-MIN. R22 (RSI 3.87) INSULATION (ZONE 1. OBC SB-12 T.3.1.1.2.A.)
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C.- 9.25.3. & 9.25.4.
-1/2" (12.7mm) GYPSUM BOARD
NOTE - SUPPORT FOR 3 FLOORS ABOVE - O.B.C. T.9.23.10.1. =
-FOR 3 FLOORS SUPPORTED ABOVE, 2" X 6" (38mmX 140mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.

REQ. FOR FIRE RATING (LESS THAN 4'-0" LIMITING DISTANCE):

O.B.C. SB-3 WALL = EW1b (STC = N/A, FIRE = 45 MIN)
FOR 45 MINUTE FIRE RATED WALL REQUIREMENTS SUBSTITUTE AND/OR ADD THE FOLLOWING MATERIALS:
-REPLACE R22 (RSI 3.87) INSULATION WITH R22 (RSI 3.87) ABSORPTIVE INSULATING MATERIAL WITH A MASS OF AT LEAST 4.8 kg/ sq.m.
-REPLACE 1/2"(12.7mm) GYPSUM BD. W/ 1/2" (12.7mm) TYPE 'X' GYPSUM BD.

16a **ALTERNATE BRICK VENEER CONSTRUCTION:**

O.B.C. 9.23.
-3-1/2" (90mm) FACE BRICK OR 4" (100mm) STONE @ 36'-1" (11m) MAX. HEIGHT
-MIN. 0.03" (0.76mm) THICK, 7/8" (22mm) WIDE CORROSION RESISTANT STRAPS @ MAX. 15 3/4" (400mm) O.C. HORIZONTAL & 23 5/8" (600mm) O.C. VERTICAL SPACING
-PROVIDE WEEP HOLES @ 2'-7" (800mm)O.C. @ BTM. COURSE & OVER OPENINGS
-BASE FLASHING UP TO 5 7/8" (150mm) BEHIND WALL SHEATHING MEMBRANE (O.B.C. 9.20.13.6.(2))
-BRICK OR STONE SILLS UNDER OPENINGS, FLASHING UNDER
-1" (25mm) AIR SPACE
-1 1/2" (38mm) R8 (RSI 1.41) RIGID INSULATION W/ TAPED JOINTS (O.B.C. 9.27.3.4.)
-2" X 4" (38mmX 89mm) WOOD STUDS @ 16" (400mm) O.C. @ 12" (300mm) O.C. ON BOTTOM FLR. WHEN 3 STOREYS
-BRACE W/ CONT. 16 GAUGE STEEL 'T' BRACES FROM TOP PLATE TO BTM. PLATE FOR THE FULL LENGTH OF WALL, OR
-CONT. 2" X 4" (38mmX 89mm) SOLID WOOD BLOCKING @ APPROXIMATELY 45 DEG. FROM TOP PLATE TO BTM. PLATE FOR FULL LENGTH OF WALL
-R14 (RSI 2.46) INSULATION
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C.- 9.25.3. & 9.25.4.
-1/2" (12.7mm) GYPSUM BOARD
NOTE - SUPPORT FOR 2 + 3 FLOORS ABOVE - O.B.C. T.9.23.10.1. =
-FOR 2 FLOORS SUPPORTED ABOVE, 2" X 4" (38mmX 89mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.
-FOR 3 FLOORS SUPPORTED ABOVE, 2" X 6" (38mmX 140mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.

REQ. FOR FIRE RATING (LESS THAN 4'-0" LIMITING DISTANCE):

O.B.C. SB-3 WALL = EW1b (STC = N/A, FIRE = 45 MIN)
FOR 45 MINUTE FIRE RATED WALL REQUIREMENTS SUBSTITUTE AND/OR ADD THE FOLLOWING MATERIALS:
-ADD 1/4" (6mm) PLYWOOD (EXTERIOR TYPE) OR EQUIVALENT AS PER O.B.C. 9.23.16. BETWEEN RIGID INSULATION AND WOOD STUD.
-REPLACE R14 (RSI 2.46) INSULATION WITH R14 (RSI 2.46) ABSORPTIVE INSULATING MATERIAL WITH A MASS OF AT LEAST 2.8 kg/ sq.m.
-REPLACE 1/2"(12.7mm) GYPSUM BD. W/ 1/2" (12.7mm) TYPE 'X' GYPSUM BD.

16b **BRICK VENEER CONSTRUCTION @ GARAGE:**

O.B.C. 9.23.
-3-1/2" (90mm) FACE BRICK OR 4" (100mm) STONE @ 36'-1" (11m) MAX. HEIGHT
-MIN. 0.03" (0.76mm) THICK, 7/8" (22mm) WIDE CORROSION RESISTANT STRAPS @ MAX. 15 3/4" (400mm) O.C. HORIZONTAL & 23 5/8" (600mm) O.C. VERTICAL SPACING
-PROVIDE WEEP HOLES @ 2'-7" (800mm)O.C. @ BTM. COURSE & OVER OPENINGS
-BASE FLASHING UP TO 5 7/8" (150mm) BEHIND WALL SHEATHING MEMBRANE (O.B.C. 9.20.13.6.(2))
-BRICK OR STONE SILLS UNDER OPENINGS, FLASHING UNDER
-1" (25mm) AIR SPACE
-WALL SHEATHING MEMBRANE AS PER O.B.C. 9.27.3.2.
-1/4" (6mm) PLYWOOD (EXTERIOR TYPE) OR EQUIVALENT AS PER O.B.C. 9.23.16
-2" X 4" (38mmX 89mm) WOOD STUDS @ 16" (400mm) O.C.
-1/2" (12.7mm) GYPSUM BOARD
NOTE - SUPPORT FOR 2 + 3 FLOORS ABOVE - O.B.C. T.9.23.10.1. =
-FOR 2 FLOORS SUPPORTED ABOVE, 2" X 4" (38mmX 89mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.
-FOR 3 FLOORS SUPPORTED ABOVE, 2" X 6" (38mmX 140mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.

THESE DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES MUST BE REPORTED DIRECTLY TO RN DESIGN LTD

♦ *CLIENT SPECIFIC REVISIONS*
ONTARIO REGULATION 332/12 OBC AMMENDMENT O. REG. 139/17 JAN 1, 2018

File:C:_RN_Standards\temp\AcPublish_10932\18016-DETACHED GARAGE-RNAL.dwg Plotted: Mar 05, 2018 By:Martha5

I, DECLARE THAT I HAVE REVIEWED AND TAKEN DESIGN RESPONSIBILITY FOR THE DESIG... ON BEHALF OF **RN DESIGN LTD.** UNDER D... TION-3.2.4 OF THE BUILDING... E FIRM IS REGIST... ES.

PRELIMINARY-NOT FOR CONSTRUCTION

SIGNATURE:

client: Steve & Tina Vocella
location: VAUGHAN
project: Detached Garage
marketing name

#	revisions	date	dwn	chk
1	ISSUED FOR CLIENT REVIEW	16-FEB-18	KK	MSA
2	ISSUED FOR CLIENT REVIEW	28-FEB-18	MSA	MSA
3	REVISED AS PER HCD COMMENTS	5-MAR-18	MSA	MSA

RN design
Imagine - Inspire - Create

model: DETACHED GARAGE
scale: 3/16" = 1'0"
project #: 18016
page: D1

REQ. FOR FIRE RATING (LESS THAN 4'-0" LIMITING DISTANCE):
O.B.C. SB-3 WALL = EW1b (STC = N/A, FIRE = 45 MIN)
FOR 45 MINUTE FIRE RATED WALL REQUIREMENTS SUBSTITUTE AND/OR ADD THE FOLLOWING MATERIALS:
-ADD R15 (RSI 2.64) ABSORPTIVE MATERIAL WITH A MASS OF AT LEAST 2.8 kg/sq.m.
-REPLACE 1/2"(12.7mm) GYPSUM BD. W/ 1/2" (12.7mm) TYPE 'X' GYPSUM BD.

17 **INTERIOR STUD WALLS:**
O.B.C. T.9.23.10.1.
-2" X 4" (38mmX 89mm) WOOD STUDS @ 16" (400mm) O.C. OR
-2" X 6" (38mmX 140mm) WOOD STUDS @ 16" (400mm) O.C. W/
- DOUBLE 2" X 4" OR 2" X 6" TOP PLATES AND SINGLE BOTTOM PLATE
-1/2" (12.7mm) GYPSUM BOARD BOTH SIDES.

18 **BEARING STUD WALL (BASEMENT):**
-2" X 4" (38mmX 89mm) WOOD STUDS @ 16" (400mm) O.C. OR
-2" X 6" (38mmX 140mm) WOOD STUDS @ 16" (400mm) O.C. W/
- DBL. 2" X 4" OR 2" X 6" TOP PLATE.
- 2" X 4" OR 2" X 6" BOTTOM PLATE ON DAMPPROOFING MATERIAL.
-1/2" (12.7mm) GYPSUM BOARD BOTH SIDES.
-1/2" (12.7mm) DIA. ANCHOR BOLTS @ 7'-10" (2400mm) O.C.
-FOOTING AS PER GENERAL NOTE #2 W/ 4" CONC. CURB

19 **PARTY WALL - BLOCK:**
O.B.C. SB-3 WALL = B6e (STC = 57, FIRE = 2 HR)
-MIN. 1HR FIRE-RESISTANCE RATING CONTINUOUS FROM TOP OF FOOTINGS TO THE U/S OF ROOF DECK
-SPACE BETWEEN TOP OF WALL & ROOF DECK SHALL BE TIGHTLY FILLED W/ MINERAL WOOL OR NONCOMBUSTIBLE MATERIAL & CAULKED TO PREVENT SMOKE PASSAGE
-1/2" (12.7mm) GYPSUM BOARD W/ TAPED JOINTS BOTH SIDES
-2" X 2" (38mmX 38mm) WOOD STRAPPING @ 24" (600mm) O.C. BOTH SIDES
-ABSORPTIVE MATERIAL ON BOTH SIDES FILLING A MINIMUM OF 90% OF THE CAVITY.
-7 1/2" (190mm) HOLLOW BLOCK (NORMAL WEIGHT AGGREGATE)
-STAGGER JOISTS & BEAMS MIN. 3 1/2" (90mm) @ PARTY WALLS AS PER O.B.C. 9.10.9.9.(1) & TABLE 2.1.1. SB-2
-ACOUSTICAL SEALANT AS PER O.B.C. SB-3 (NOTE (2) TO TABLE 1)

19a **PARTY WALL - BLOCK (AGAINST GARAGE):**
O.B.C. SB-3 WALL = B5c (STC = 51, FIRE = 2 HR)
-MIN. 1HR FIRE-RESISTANCE RATING CONTINUOUS
-1/2" (12.7mm) GYPSUM BOARD
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C.- 9.25.3. & 9.25.4.
-2" X 6" (38mmX 140mm) WOOD STRAPPING @ 16" (400mm) O.C.
-R22 (RSI 3.52) RIGID INSULATION
-7 1/2" (190mm) HOLLOW BLOCK (NORMAL WEIGHT AGGREGATE)
-1/2" (12.7mm) GYPSUM BOARD @ WALL & U/S OF CEILING BETWEEN HOUSE AND GARAGE
-TAPE AND SEAL ALL JOINTS GAS TIGHT

19b **FIREWALL:**
O.B.C. 9.10.11. & 3.1.10. & SB-3 WALL = B6e (STC = 57. FIRE = 2 HR)
- ONE FIREWALL IS REQUIRED FOR EVERY 6460 S.F. (600 SQ.M) OF BUILDING AREA, O.B.C. T.3.2.2.47.
-1/2" (12.7mm) GYPSUM BOARD W/ TAPED JOINTS
-2" X 2" (38mmX 38mm) WOOD STRAPPING @ 24" (600mm) O.C. ON BOTH SIDES OF WALL
-SOUND ABSORPTIVE MATERIAL EACH SIDE FILLING 90% OF THE CAVITY
-7 1/2" (190mm) CONC. BLOCK, MIN. 2 HR. FIRE-RESISTANT RATING
-EVERY FIREWALL SHALL BE CONTINUOUS THROUGH ALL BUILDING STOREYS
-STAGGER JOISTS & BEAMS MIN. 5" (130mm) @ FIRE WALLS AS PER O.B.C. 9.10.9.9.(1) & TABLE 2.1.1 SB-2
-ACOUSTICAL SEALANT AS PER O.B.C. SB-3 (NOTE (2) TO TABLE 1)
-PROTRUDE PAST FASCIA @ EAVES W/ BRICK CORBELLING
-EXTEND 5 7/8" (150mm) ABOVE ROOF SURFACES & HAVE ALUMINUM CAP W/ THROUGH WALL FLASHING PER O.B.C. 3.1.10.4.(1)
-WHERE THE DIFFERENCE IN HEIGHT BETWEEN ADJACENT ROOFS IS GREATER THAN 9'10" (3m), WALL NEED NOT EXTEND PAST UPPER ROOF SURFACE PER O.B.C. 3.1.10.4.(2)

20 **PARTY WALL - FOUNDATION:**
O.B.C. 9.15.4.2.
-7 7/8" (200mm) SOLID CONC. FOUNDATION WALL @ 2200psi (15MPa) COMPRESSIVE STRENGTH AFTER 28 DAYS
-FOUNDATION WALL TO REST ON FOOTING PER GENERAL NOTE #2

21 **PARTY WALL - WOOD STUD:**
O.B.C. SB-3 WALL = W13a (STC = 57, FIRE = 1 HR)
-MIN. 1HR FIRE-RESISTANCE RATING CONTINUOUS FROM TOP OF FOOTINGS TO THE U/S OF ROOF DECK
-2 ROWS 2"X4"(38mmX 89mm) STUDS @ 16"(400mm) O.C. W/ SEPARATE 2" X 4" (38mmX 89mm) BOTTOM PLATE & SEPARATE DOUBLE 2" X 4" (38mmX 89mm) TOP PLATES
-SOUND ABSORPTIVE MATERIAL ON BOTH SIDES FILLING A MINIMUM OF 90% OF THE CAVITY.
-5/8" (16mm) TYPE 'X' GYPSUM BOARD BOTH SIDES W/ JOINTS TAPED & FILLED.
-ACOUSTICAL SEALANT AS PER O.B.C. SB-3 (NOTE (2) TO TABLE 1)
NOTE - SUPPORT FOR 2 + 3 FLOORS ABOVE - O.B.C. T.9.23.10.1. =
-FOR 2 FLOORS SUPPORTED ABOVE, 2" X 4" (38mmX 89mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.
-FOR 3 FLOORS SUPPORTED ABOVE, 2" X 6" (38mmX 140mm) STUDS ARE REQUIRED TO BE SPACED @ 12" (300mm) O.C.
- IF 2"x6" STUDS ARE USED AT STAIR OPENING CONTINUE TO USE ON REMAINING FLOORS AT THE STAIR OPENING AT 16" O.C.

22 **GARAGE WALL & CEILING:**
O.B.C. 9.10.9.16.(3)
-1/2" (12.7mm) GYPSUM BOARD ON BOTH SIDES OF WALL & U/S OF CEILING BETWEEN HOUSE AND GARAGE
-TAPE AND SEAL ALL JOINTS GAS TIGHT
-R22 (RSI 3.87) INSULATION IN WALLS,
-R31 (RSI 5.41) INSULATION IN CEILINGS W/ FLOOR ABOVE
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C.- 9.25.3. & 9.25.4.. FOR FLOOR ABOVE.
-INSULATION AROUND DUCTS AND PIPING NOT TO ENCROACH MIN. REQUIRED GARAGE AREA (REFER TO MUNICIPAL STANDARDS).
-1/2" (12.7mm) GYPSUM BOARD
-ROOF FRAMING MEMBERS ARE FASTENED TO TOP PLATES WITH 4 - 3 1/4" (82mm) TOE NAILS
-BOTTOM PLATES ARE FASTENED TO FLOOR JOISTS, BLOCKING OR RIM JOIST WITH 3 1/4" (82mm) NAILS AT 7 7/8" (200mm) O.C.

22a **WALLS ADJACENT TO ATTIC SPACE:**
-1/2" (12.7mm) GYPSUM BOARD
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C.- 9.25.3. & 9.25.4.
-2" X 6" (38mmX 140mm) WOOD STUDS @ 16" (400mm) O.C.
-R22 (RSI 3.87) INSULATION
-1/2" (12.7mm) GYPSUM BOARD OR 1/4" (6mm) PLYWOOD SHEATHING ON ATTIC SIDE.
-ATTIC ACCESS TO BE PROVIDED AS PER O.B.C. 9.19.2.1.

23 **DOUBLE VOLUME WALLS:**
O.B.C. 9.23.10.1.
-3/8" (9.5mm) PLYWOOD, OSB OR WATERBOARD SHEATHING
-REFER TO PLAN FOR STUD SPECIFICATION
-STUDS FASTENED AT TOP & BOTTOM WITH 3/ 3-1/4" (82mm) TOE NAILS
-DOUBLE TOP PLATES FASTENED TOGETHER WITH 3" (76mm) AT 7 7/8" (200mm) O.C.
-SOLID BRIDGING AT 3'-11" (1200mm) O.C.
MIN. R22 (RSI 3.87) INSULATION (ZONE 1 OBC SB 12 T.3.1.1.2.A.)
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE WITH O.B.C. 9.25.3. & 9.25.9.

◆ *CLIENT SPECIFIC REVISIONS*

24 **EXPOSED FLOOR:**
-FLOOR AS PER NOTE # 28
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C.- 9.25.3. & 9.25.4.
-R31 (RSI 5.46) INSULATION
-VENTED ALUMINUM SOFFIT

24c **SUNKEN FINISHED AREAS:**
-USE SOLID BUILT-UP WOOD BEARING POST TO SUPPORT SUNKEN AREA AT FOUNDATION WALLS. EXTEND FOOTINGS TO SUPPORT POSTS.
- WHERE GRADING CONDITIONS WILL ALLOW, CHECK FOUNDATION WALLS INSTEAD OF USING BEARING POSTS.
-FLOOR STRUCTURE AS PER NOTE # 28.

25 **DOUBLE MASONRY WYTHE WALL:**
O.B.C. 9.20.8.2.
-3 1/2" MASONRY VENEER ON 2" MORTAR JOINT ON 3 1/2" MASONRY VENEER
-WYTHES TO BE TIED W/ METAL TIES INSTALLED AS PER O.B.C. 9.20.9.4.
SILL PLATE REQUIRED FOR ROOF AND CEILING FRAMING MEMBERS
-6" SILL W/ 2" BEARING ON EACH SIDE & ANCHOR BOLTS @ 4'-0" O.C.
NOTE: MASONRY TO BE SOLID & MORTAR JOINT FILLED SOLID FOR FLOOR JOISTS BEARING ON WYTHES. FLOOR JOISTS ARE NOT TO PROJECT INTO CAVITY AREA.

25c **CORBEL MASONRY VENEER:**
-MASONRY VENEER TO BE CORBELLED AS PER O.B.C. 9.20.12.3.(1)

FLOOR ASSEMBLIES:

26 **SILL PLATE:**
O.B.C. 9.23.7.
-2" X 4" (38mm X 89mm) PLATE
-1/2" (12.7mm) DIA. ANCHOR BOLTS @ 7'-10" (2400mm) O.C. FASTENED TO PLATE W/ NUTS AND WASHERS & SHALL BE EMBEDDED NOT LESS THAN 4" (100mm) INTO FOUNDATION WALL.
-SILL PLATE TO BE CAULKED, OR PLACED ON A LAYER NOT LESS THAN 1" (25mm) THICK BEFORE COMPRESSING, OR FOAM GASKET, OR PLACED ON FULL BED OF MORTAR.

27 **BRIDGING & STRAPPING:**
O.B.C. 9.23.9.4.
a) STRAPPING
-1" X 3" (19mmX 64mm) NAILED TO U/S OF JOISTS @ MAX. 6'-11" (2100mm) O.C.
-FASTENED TO SILL OR HEADER @ ENDS
b) BRIDGING
-1" X 3" (19mmX 64mm) OR 2" X 2" (38mmX 38mm) CROSS BRIDGING @ MAX. 6'-11" (2100mm) O.C.
c) BRIDGING & STRAPPING
- a) & b) USED TOGETHER OR
1 1/2" (38mm) SOLID BLOCKING @ MAX. 6' 11" (2100mm) O.C. USED WITH STRAPPING (a)
d) FURRING OR PANEL TYPE CEILING
-STRAPPING NOT REQUIRED IF FURRING STRIPS OR PANEL TYPE CEILING FINISH IS ATTACHED DIRECTLY TO JOISTS.

28 **FLOOR ASSEMBLY:**
O.B.C. 9.23.14.3, 9.23.14.4
-5/8" (15.9mm) WAFERBOARD (R-1 GRADE) OR EQUIVALENT
-FLOOR JOISTS AS PER FLOOR PLANS

29 **PORCH SLAB:**
O.B.C. 9.39.1.4.
-4 7/8" (125mm) 4650 psi (32 MPa) CONC. SLAB WITH 5 TO 8% AIR ENTRAINMENT
-REINFORCE WITH 10M BARS @ 7 7/8" (200mm) EACH WAY
-1 1/4" (30mm) CLEAR COVER FROM THE BOTTOM OF THE SLAB
-3" (75mm) END BEARING ON FOUNDATION WALL
-23 5/8" (600mm) X 23 5/8" (600mm) 10M DOWELS @ 23 5/8" (600mm) O.C.
-IF A COLD CELLAR IS LOCATED BELOW THE SLAB, SUPPORT ON FOUNDATION WALLS NOT TO EXCEED 8'-2"

30 **EXTERIOR BALCONY ASSEMBLY:**
-1 1/4" X 3 1/2" PRESSURE TREATED DECKING W/ 1/4" SPACING
-2"X4" WOOD PURLINS (CUT DIAGONALLY) @ 12" O.C. LAYING UNFASTENED ON SINGLE PLY WATERPROOF ROOF MEMBRANE OR EQUIVALENT ON 5/8" (15.9mm) EXTERIOR GRADE PLYWOOD SHEATHING ON 2"X4" WOOD PURLINS (CUT DIAGONALLY) @ 12" O.C. DIRECTLY ON 2"X8" ROOF JOISTS @ 12" O.C. (OR AS NOTED ON PLAN)
- EXTERIOR GUARD AS PER #36a
- SLOPE ASSEMBLY MINIMUM 2% TO ROOF SCUPPER
REQUIRED FOR OVER HEATED SPACES:
-ADD 2"x2" (38mm x 38mm) CROSS PURLINS @ 16" (400mm) O.C. FOR VENTILATION OVER JOISTS (OBC 9.19.1.2. VENTING NOT LESS THAN 1/150 OF CEILING AREA)
-ADD R31 (RSI 5.46) INSULATION BETWEEN JOISTS
-ADD CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C. 9.25.3. & 9.25.4.
-ADD 1/2" (12.7mm) GYPSUM BOARD W/ PAINTED CEILING OR
-ADD 5/8" (15.9mm) GYPSUM BOARD W/ TEXTURED CEILING (O.B.C.-T.9.29.5.3.)

30a **EXTERIOR FLAT ROOF ASSEMBLY:**
-SINGLE PLY WATERPROOF ROOF MEMBRANE OR EQUIVALENT INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
-1/4" EXTERIOR GRADE WOOD PANEL TYPE UNDERLAY TAPERED PURLINS SLOPED MIN. 2% TO ROOF SCUPPER.
-3/8" EXTERIOR GRADE PLYWOOD SHEATHING ON
-2"X8" ROOF JOISTS @ 12" O.C. (OR AS NOTED ON PLAN)
REQUIRED FOR OVER HEATED SPACES:
-ADD 2"x2" (38mm x 38mm) CROSS PURLINS @ 16" (400mm) O.C. FOR VENTILATION OVER JOISTS (OBC 9.19.1.2. VENTING NOT LESS THAN 1/150 OF CEILING AREA)
-ADD R31 (RSI 5.46) INSULATION BETWEEN JOISTS
-ADD CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C. 9.25.3. & 9.25.4.
-ADD 1/2" (12.7mm) GYPSUM BOARD W/ PAINTED CEILING OR
-ADD 5/8" (15.9mm) GYPSUM BOARD W/ TEXTURED CEILING (O.B.C. T.9.29.5.3.)

ROOF ASSEMBLIES

31 **TYPICAL ROOF:**
O.B.C. 9.26.
-NO. 210 (30. 5KG/m2) ASPHALT SHINGLES
-FOR ROOFS BETWEEN 4:12 & 8:12 PITCH PROVIDE EAVES PROTECTION TO EXTEND UP THE ROOF SLOPE MIN. 2'-11" (900mm) FROM EDGE TO A LINE NOT LESS THAN 12" (300mm) PAST THE INSIDE FACE OF EXTERIOR WALL.
-EAVES PROTECTION LAID BENEATH STARTER STRIP.
-EAVE PROTECTION NOT REQUIRED OVER UNHEATED SPACES.
-STARTER STRIP AS PER O.B.C. 9.26.7.2.
-STARTER STRIP NOT REQUIRED AS PER O.B.C. 9.26.7.2.(3)
-3/8" (10mm) PLYWOOD SHEATHING OR OSB (0-2 GRADE) WITH "H" CLIPS
-APPROVED WOOD TRUSSES @ 24" (600mm) O.C. (REFER TO MANUFACTURER'S LAYOUT)
-TRUSS BRACING AS PER TRUSS MANUFACTURER
-EAVESTROUGH ON PREFINISHED FASCIA AND VENTED SOFFIT (VINYL OR ALUMINUM)
-ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH, 50% AT SOFFIT.

32 **CEILING:**
-R60 (RSI 10.56) INSULATION
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE W/ O.B.C. 9.25.3. & 9.25.4.
-1/2" (12.7mm) GYPSUM BOARD W/ PAINTED CEILING OR
-5/8" (15.9mm) GYPSUM BOARD W/ TEXTURED CEILING (O.B.C. T.9.29.5.3.)

32a **VAULTED OR CATHEDRAL CEILING:**
O.B.C. 9.26. & TABLE A4
-NO. 210 (30. 5KG/m2) ASPHALT SHINGLES
-FOR ROOFS BETWEEN 4:12 & 8:12 PITCH PROVIDE EAVES PROTECTION TO EXTEND UP THE ROOF SLOPE MIN. 2'-11" (900mm) FROM EDGE TO A LINE NOT LESS THAN 12" (300mm) PAST THE INSIDE FACE OF EXTERIOR WALL.
-EAVES PROTECTION LAID BENEATH STARTER STRIP.
-EAVE PROTECTION NOT REQUIRED OVER UNHEATED SPACES OR WHERE ROOF SLOPES ARE 8:12 OR GREATER PER O.B.C. 9.26.5.1.
-STARTER STRIP AS PER O.B.C. 9.26.7.2.
-STARTER STRIP NOT REQUIRED AS PER O.B.C. 9.26.7.2.(3)
-3/8" (10mm) PLYWOOD SHEATHING OR OSB (0-2 GRADE) WITH "H" CLIPS.
-2"x8" (38mm x 184mm) @ 16" O.C. W/ 2"x2" (38mm x 38mm) CROSS PURLINS @ 24" O.C. MAX. SPAN 13'-3" (4050mm) OR
-2"x10" (38mm x 235mm) @ 16" O.C. W/ 2"x2" (38mm x 38mm) CROSS PURLINS @ 24" O.C. MAX. SPAN 17'-0" (5180mm)
-R31 (RSI 5.46) INSULATION
-MIN. 3" CLEARANCE FROM U/S OF ROOF SHEATHING TO INSULATION
-CONTINUOUS AIR/VAPOUR BARRIER IN CONFORMANCE WITH O.B.C. 9.25.3. & 9.25.4.
-1/2" (12.7mm) GYPSUM BOARD

33 **CONVENTIONAL FRAMING:**
O.B.C. TABLE A6 OR A7
-2" X 6" (38mm X 140mm) RAFTERS @ 16" (400mm) O.C. MAX. SPAN 12'-9" (3890mm)
-2"X4" (38mm X 89mm) COLLAR TIES AT MIDSPANS
-CEILING JOISTS TO BE 2" X 6" (38mmX 140mm) @ 16" (400mm) O.C. UNLESS OTHERWISE NOTED.
-HIP & VALLEY RAFTERS TO BE MIN. 2" (50mm) LARGER THAN COMMON RAFTERS & MIN. 1 1/2" (38mm) THICK.

34 **ATTIC ACCESS HATCH:**
OBC 9.19.2.1. & SB-12 3.1.1.8.(1)
-19 3/4" X 27 1/2" (500mm X 700mm) ATTIC HATCH WITH WEATHERSTRIPPING & BACKED W/ R20 (RSI 3.52) INSULATION.

GENERAL:

35 **PRIVATE STAIRS:**
O.B.C. 9.8.4.

-MAX. RISE	= 7-7/8"	(200mm)
-MIN. RUN	= 8-1/4"	(210mm)
-MIN. TREAD	= 9-1/4"	(235mm)
-MAX. NOSING	= 1"	(25mm)
-MIN. HEADROOM	= 6'-5"	(1950mm)
-MIN. WIDTH (BETWEEN WALL FACES)	= 2'-10"	(860mm)
-MIN. WIDTH (EXIT STAIRS, BETWEEN GUARDS)	= 2'-11"	(900mm)

ANGLED TREADS:

-MIN. RUN	= 5 7/8"	(150mm)
-MIN. AVG. RUN	= 7 7/8"	(200mm)

-FINISHED RAILING ON WOOD PICKETS MAX. 4" BETWEEN PICKETS
-EXTERIOR CONC. STEPS TO HAVE MIN. 9 1/4" (235mm) TREAD & MAX. 7 7/8" (200mm) RISE
-FOUND. WALL REQUIRED WHEN NUMBER OF RISERS EXCEEDS 2
-FTG. FOR FOUND. WALL TO BE MIN. 4'-0" (1220mm) BELOW GRADE

HANDRAILS:
O.B.C. 9.8.7
-ONE HANDRAIL REQUIRED WHERE STAIR WIDTH IS LESS THAN 3'-7" (1100mm)
-TWO HANDRAILS REQUIRED WHERE STAIR WIDTH EXCEEDS 3'-7" (1100mm)
-ONE HANDRAIL IS REQUIRED ON CURVED STAIRS OF ANY WIDTH WITHIN DWELLING UNITS
-HANDRAILS ARE TO BE CONTINUOUS EXCEPT WHERE INTERRUPTED BY DOOR WAYS, LANDINGS OR POSTS AT CHANGES IN DIRECTION

HEIGHT:
O.B.C. 9.8.7.4
- 2'-10" (865mm) MIN. TO 3'-2" (965mm) MAX.
- 3'-6" (1070mm) WHERE GUARDS ARE REQUIRED ON LANDINGS
-MEASURED VERTICALLY FROM THE TOP OF THE HANDRAIL TO A STRAIGHT LINE DRAWN FROM THE TANGENT TO THE TREAD NOSING

PROJECTIONS:
O.B.C. 9.8.7.6
-HANDRAILS AND PROJECTIONS BELOW HANDRAILS INCLUDING STEP STRINGERS TO PROJECT A MAXIMUM OF 4" (100mm) INTO THE REQUIRED WIDTH OF THE STAIR

35a **PUBLIC STAIRS:**
O.B.C. 9.8.4.

-MAX. RISE	= 7-3/32"	(180mm)
-MIN. RUN	= 11"	(280mm)
-MIN. TREAD	= 11"	(280mm)
-MAX. NOSING	= 1"	(25mm)
-MIN. HEADROOM	= 6'-9"	(2050mm)
-MIN. WIDTH (EXIT STAIRS, BETWEEN GUARDS)	= 2'-11"	(900mm)

-FINISHED RAILING ON WOOD PICKETS MAX. 4" BETWEEN PICKETS
-FOUND. WALL REQUIRED WHEN NUMBER OF RISERS EXCEEDS 2
-FTG. FOR FOUND. WALL TO BE MIN. 4'-0" (1220mm) BELOW GRADE

HANDRAILS:
O.B.C. 9.8.7
-ONE HANDRAIL REQUIRED WHERE STAIR WIDTH IS LESS THAN 3'-7" (1100mm)
-TWO HANDRAILS REQUIRED WHERE STAIR WIDTH EXCEEDS 3'-7" (1100mm)
-TWO HANDRAILS ARE REQUIRED ON CURVED STAIRS OF ANY WIDTH
-HANDRAILS ARE TO BE CONTINUOUS INCLUDING AT LANDINGS EXCEPT WHERE INTERRUPTED BY DOOR WAYS OR NEWEL POSTS AT CHANGES IN DIRECTION

HEIGHT:
O.B.C. 9.8.7.4
- 2'-10" (865mm) MIN. TO 3'-2" (965mm) MAX.
- 3'-6" (1070mm) WHERE GUARDS ARE REQUIRED ON LANDINGS)
- MEASURED VERTICALLY FROM THE TOP OF THE HANDRAIL TO A STRAIGHT LINE DRAWN FROM THE TANGENT TO THE TREAD NOSING

PROJECTIONS:
O.B.C. 9.8.7.6
- HANDRAILS AND PROJECTIONS BELOW HANDRAILS INCLUDING STEP STRINGERS TO PROJECT A MAXIMUM OF 4" (100mm) INTO THE REQUIRED WIDTH OF THE STAIR

TERMINATION:
O.B.C. 9.8.7.3
- ONE HAND RAIL SHALL EXTEND HORIZONTALLY NOT LESS THAN 11 3/4" (300mm) BEYOND THE TOP & BOTTOM OF EACH STAIR

FINISH:
O.B.C. 9.8.9.6
-TREADS ARE TO BE WEAR AND SLIP RESISTANT, SMOOTH, EVEN AND FREE FROM DEFECTS PER OBC 9.8.9.6.(4)
- STAIRS AND RAMPS SHALL HAVE A COLOUR CONTRAST OR DISTINCTIVE VISUAL PATTERN TO DEMARCATE THE LEADING EDGE OF THE TREADS, LANDING AND THE BEGINNING AND END OF A RAMP.

36 **INTERIOR GUARDS:**
O.B.C. SB-7 & 9.8.8.3.
-GUARDS TO BE 3'-6" (1070mm) HIGH
-FOR DWELLING UNITS GUARDS TO BE A MIN. OF 2'-11" (900mm) HIGH
-INCLUDES WINDOWS OVER STAIRS, RAMPS AND LANDINGS
-PICKETS TO HAVE 4" (100mm) MAX. SPACING
-GUARDS FOR FLIGHTS OF STEPS (EXCEPT EXIT STAIRS) TO BE 2'-11" (900mm) HIGH

36a **EXTERIOR GUARDS:**
O.B.C. SB-7 & 9.8.8.3.
-GUARDS ARE REQUIRED WHEN WALKING SURFACE TO GRADE IS GREATER THAN 23 5/8" (600mm).
-GUARDS TO BE 3'-6" (1070mm)
-FOR DWELLING UNITS GUARDS TO BE A MIN. OF 2'-11" (900mm) HIGH
-FOR DWELLING UNITS GUARDS TO BE 3'-6" (1070mm) HIGH WHERE WALKING SURFACE IS MORE THAN 5'-11" (1800mm) ABOVE ADJACENT GRADE.
-PICKETS TO HAVE 4" (100mm) MAX. SPACING
-PROVIDE MID-SPAN POSTS AS PER SB-7.
-GUARDS FOR FLIGHTS OF STEPS (EXCEPT EXIT STAIRS) TO BE 2'-11" (900mm) HIGH

THESE DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES MUST BE REPORTED DIRECTLY TO RN DESIGN LTD

I, DECLARE THAT I HAVE REVIEWED AND TAKEN RESPONSIBILITY FOR THE DESIGN ... ON BEHALF OF **RN DESIGN LTD.** UNDER ... TION-3.2.4 OF THE BUILDING ... E FIRM IS REGIST... ES.

PRELIMINARY-NOT FOR CONSTRUCTION

SIGNATURE:

client: Steve & Tina Vocella

location: VAUGHAN

project: Detached Garage

marketing name

#	revisions	date	dwn	chk
1	ISSUED FOR CLIENT REVIEW	16-FEB-18	KK	MSA
2	ISSUED FOR CLIENT REVIEW	28-FEB-18	MSA	MSA
3	REVISED AS PER HCD COMMENTS	5-MAR-18	MSA	MSA

RN design
Imagine - Inspire - Create

model: DETACHED GARAGE

scale: 3/16" = 1'0"

project #: 18016

page: D2

(36b) EXTERIOR GUARDS @ JULIET BALCONY:
-FOR RAILING SPANNING MAXIMUM OF 6'-0".
-PROVIDE PREFIN. METAL RAILING W/ 76mm VERTICAL OPENING TO CONFORM WITH O.B.C. APPENDIX A-9.8.8.5.
-GUARDS TO BE 3'-6" (1070mm)
-FOR DWELLING UNITS GUARDS TO BE 2'-11" (900mm) WHERE FLOOR TO GRADE DIFFERENCE IS LESS THAN 5'-11" (1800mm) AS PER O.B.C. 9.8.8.2. OR
-FOR DWELLING UNITS GUARDS TO BE 3'-6" WHERE FLOOR TO GRADE DIFFERENCE IS 5'-11" (1800mm) OR GREATER AS PER O.B.C. 9.8.8.2.
-VERTICAL END RAILING ANCHORED TO CORNER DOUBLE STUDS USING 3 ROWS OF 3/8"Ø MIN. ANCHOR BOLTS EQUALLY SPACED WITH 3" MIN. EMBEDMENT TO STUDS.
-PROVIDE SAME ANCHOR BOLTS @ 36" O.C. FOR BASE PLATE CONNECTION.

(37) -LINEN CLOSET 4 SHELVES MIN. 1'-2" (350mm) DEEP

(38) -WASHROOMS TO BE MECHANICALLY VENTED TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR, O.B.C.- 9.32.1.3.(3)

(39) -CAPPED DRYER VENT

(40) -1"X2" (19mmX38mm) BOTH SIDES OF STEEL.

(41) -WOOD FRAMING MEMBERS SUPPORTED ON CONCRETE IN CONTACT WITH GROUND OR FILL SHALL BE PRESSURE TREATED OR SEPARATED FROM CONCRETE W/ 6 mil POLYETHYLENE.

(42) -PRECAST CONC. STEP
-2 RISERS MAXIMUM PERMITTED TO BE LAID ON GROUND

(44) SMOKE ALARM, O.B.C.- 9.10.19.
-PROVIDE 1 ON EACH FLOOR INCLUDING BASEMENTS
-PROVIDE 1 IN EACH BEDROOM
-PROVIDE 1 IN EACH HALLWAY SERVICING BEDROOMS
- INSTALLED AT OR NEAR CEILING
-ALARMS TO BE CONNECTED IN CIRCUIT AND INTERCONNECTED SO ALL ALARMS WILL BE ACTIVATED IF ANY ONE OF THEM SOUNDS AND HAVE A VISUAL SIGNALLING COMPONENT
-ALARMS MUST BE HARDWIRED AND HAVE AN ALTERNATE POWER SOURCE THAT CAN POWER ALARM FOR 7 DAYS, FOLLOWED BY 4 MINUTES OF ALARM

(45) CARBON MONOXIDE ALARM (CMA), O.B.C.- 9.33.4.
-WHERE THERE IS A FUEL BURNING APPLIANCE A CMA SHALL BE PROVIDED ADJACENT TO EACH SLEEPING AREA.
-CMA TO BE WIRED IN CIRCUIT TO SOUND SMOKE ALARMS WHEN ACTIVATED.

(46) -MAIN DOOR TO BE OPERABLE FROM INSIDE W/OUT KEY
-PROVIDE A VIEWER WITH A VIEWING ANGLE OF NOT LESS THAN 180 DEG. UNLESS GLAZING IS PROVIDED IN DOOR OR A SIDELIGHT IS PRESENT.
-R4 (RSI 0.70) WHERE A STORM DOOR IS NOT PROVIDED

(47) -GARAGE MAN DOORS TO BE GAS PROOFED WITH SELF CLOSER, WEATHERSTRIPPING, THRESHOLD & DEAD BOLT PER O.B.C. 9.10.13.15.
-R4 (RSI 0.70)

(48) -TRAVEL FROM A FLOOR LEVEL TO AN EXIT OR EGRESS DOOR SHALL BE LIMITED TO ONE FLOOR EXCEPT;
1) WHERE THAT FLOOR LEVEL HAS ACCESS TO A BALCONY
OR
2) WHERE THAT FLOOR LEVEL HAS A WINDOW PROVIDING AN UNOBSTRUCTED OPENING OF NOT LESS THAN 3'-3" (1000mm) IN HEIGHT AND 21 5/8" (550mm) IN WIDTH; SUCH WINDOW SHALL BE LOCATED SO THAT THE SILL IS NOT MORE THAN 3'-3" (1000mm) ABOVE FLOOR AND 23'-0" (7.0m) ABOVE ADJACENT GROUND LEVEL.

(49) EXTERIOR COLUMN W/ MASONRY PIER:
-MIN. 6"X6" (140mm X 140mm) WOOD POST ANCHORED TO PORCH SLAB W/ METAL SADDLE.
-TOP PORTION OF POST CLAD W/ DECOR. SURROUND PER ELEVATION DRAWINGS.
-1'-4" X 1'-4" MASONRY VENEER SURROUND W/ PRECAST CONCRETE CAP.
-REFER TO ELEVATION DRAWINGS FOR HEIGHT OF CAP.
-SURROUND TO BE TIED W/ METAL TIES @ 16" (400mm) O.C. VERT. INSTALLED PER O.B.C. 9.20.9.4.
-3/4" AIR SPACE AROUND POST.
OR
-MIN. 6"X6" (140mm X 140mm) WOOD POST CLAD W/ DECOR. SURROUND (PER ELEVATION DRAWINGS) ANCHORED TO CONC. CAP W/ METAL SADDLE.
-1'-4" X 1'-4" MASONRY PIER TO BE CONSTRUCTED SOLID W/ PRECAST CONCRETE CAP.
-REFER TO ELEVATION DRAWINGS FOR HEIGHT OF CAP.
NOTE: DECORATIVE STRUCTURAL COLUMNS MAY REPLACE 6" X 6" POST PROVIDED THAT THEY ARE IN CONFORMANCE WITH O.B.C. 9.17.4.

(49a) EXTERIOR COLUMN:
-MIN. 6"X6" (140mm X 140mm) WOOD POST CLAD W/ DECOR. SURROUND (PER ELEVATION DRAWINGS) ANCHORED TO PORCH SLAB W/ METAL SADDLE
NOTE: DECORATIVE STRUCTURAL COLUMNS MAY REPLACE 6" X 6" ABOVE PROVIDED THAT THEY ARE IN ACCORDANCE WITH O.B.C. 9.17.4.

(50) COLD CELLARS:
FOR COLD CELLARS PROVIDE THE FOLLOWING:
-VENTING AREA TO BE EQUIVALENT TO 0.2% OF COLD CELLAR AREA.
-COVER VENT W/ BUG SCREEN
-WALL MOUNTED LIGHT FIXTURE
-L1+L7 FOR DOOR OPENING
-2'-8" X 6'-8" EXTERIOR TYPE DOOR (MIN.R-4 RSI 0.7)
-INSULATE FULL HEIGHT OF INTERIOR BASEMENT WALL W/ MIN. R12 (RSI 2.11)

(51) STUD WALL REINFORCEMENT:
O.B.C. 9.5.2.3.
-WALL STUDS ADJACENT TO WATER CLOSETS & SHOWER BATH TUBS IN MAIN BATHROOM ARE TO BE REINFORCED TO PERMIT THE FUTURE INSTALLATION OF GRAB BARS AS PER O.B.C. 3.8.3.8.(3)(a)&(c) & 3.8.3.13.(2)(f) & 3.8.3.13.(4)(c)
-GRAB BARS TO BE INSTALLED AS PER O.B.C. 9.8.7.7.(2)

(52) ELECTRICAL VEHICLE CHARGING REQUIREMENTS:
- REFER TO OBC 9.34.4.1. FOR REQUIRMENTS (EFFECTIVE JANUARY 2018)

(53) WINDOW GUARDS:
@ STAIRS, LANDINGS & RAMPS - OBC 9.8.8.1.(8)
WINDOW SILL AT 3'-0" (900mm) OR GREATER DOES NOT REQUIRE GUARDS
@ FLOORS - OBC 9.8.8.1.(6)
WINDOWS LESS THAN 1'-7" (480mm) ABOVE FLOORS WHERE ADJACENT GRADE IS GREATER THAN 5'-11" (1800mm) REQUIRE A GUARD PER OBC 9.8.8.2.
- OR -
WINDOW TO BE NON-OPERABLE AND DESIGNED TO WITHSTAND LATERAL LOADS PER OBC 9.8.8.1.(8)(b)

FRAME CONSTRUCTION:
-ALL FRAMING LUMBER TO BE No.1 AND No. 2 SPF UNLESS NOTED OTHERWISE.
-ROOF LOADING IS BASED ON 1.5kPa SPECIFIED COMPOSITE SNOW AND RAIN LOADS.
-JOISTS TO HAVE MIN. 1-1/2" (38mm) END BEARING
-BEAMS TO HAVE MIN. 3-1/2" (89mm) END BEARING
-DOUBLE STUDS @ OPENINGS
-DOUBLE HEADER JOISTS AROUND FLOOR OPENINGS WHEN THEY ARE BETWEEN 3'-11" (1200mm) AND 10'-6" (3200mm)
-DOUBLE TRIMMER JOISTS WHEN HEADER JOIST LENGTH IS BETWEEN 2'-7" (800mm) AND 6'-7" (2000mm)
-DOUBLE JOISTS OR SOLID BLOCKING UNDER NON-LOAD BEARING PARALLEL PARTITIONS
-BEAMS TO BE PLACED UNDER LOADBEARING WALLS WHEN WALLS ARE PARALLEL TO FLOOR JOISTS
-BEAMS MAY BE A MAX. 24" (600mm) FROM LOADBEARING WALLS WHEN WALLS ARE PERPENDICULAR TO FLOOR JOISTS
-APPROVED METAL HANGERS TO BE USED FOR JOISTS AND BEAMS WHEN THEY FRAME INTO SIDES OF BEAMS, TRIMMERS AND HEADERS
-FLOOR JOISTS SUPPORTING ROOF LOADS SHALL NOT BE CANTILEVERED MORE THAN 15 3/4" (400mm) BEYOND SUPPORTS FOR 2" X 8" (38mm X 184mm)
-FLOOR JOISTS SUPPORTING ROOF LOADS SHALL NOT BE CANTILEVERED MORE THAN 23 5/8" (600mm) BEYOND SUPPORTS FOR 2" X 10" (38mm X 235mm) OR LARGER.

WINDOWS:
-WINDOWS TO BE SEALED TO THE AIR & VAPOR BARRIER
-WINDOWS THAT SEPARATE HEATED SPACE FROM UNHEATED SPACE SHALL HAVE AN OVERALL COEFFICIENT OF HEAT TRANSFER OF 1.6 W/(m2.K) OR
-AN ENERGY RATING OF NOT LESS THAN 25 FOR WINDOWS
-BASEMENT WINDOWS WITH LOAD BEARING STRUCTURAL FRAME SHALL BE DOUBLE GLAZED WITH LOW-E COATING
-SKYLIGHTS SHALL HAVE AN OVERALL COEFFICIENT OF HEAT TRANSFER OF 2.8 W/(m2.K)
-FOR GROSS GLAZED AREAS LESS THAN AND EQUAL TO 17%

♦ *CLIENT SPECIFIC REVISIONS*

THESE DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES MUST BE REPORTED DIRECTLY TO RN DESIGN LTD

SCHEDULES

DOORS (46) (47)

A	865x2030x45 (2'10"x6'8"x1-3/4")
B	815x2030x35 (2'8"x6'8"x1-3/8")
C	760x2030x35 (2'6"x6'8"x1-3/8")
D	710x2030x35 (2'4"x6'8"x1-3/8")
E	460x2030x35 (1'6"x6'8"x1-3/8")
F	610x2030x35 (2'0"x6'8"x1-3/8")
G	OVER SIZED EXTERIOR DOOR

STEEL BEAMS

ST1	W 6 X 15
ST2	W 6 X 20
ST3	W 8 X 18
ST4	W 8 X 21
ST5	W 8 X 24

WD1	3/ 2" X 8" SPR
WD2	4/ 2" X 8" SPR
WD3	5/ 2" X 8" SPR
WD4	3/ 2" X 10" SPR
WD5	4/ 2" X 10" SPR
WD6	5/ 2" X 10" SPR
WD7	3/ 2" X 12" SPR
WD8	4/ 2" X 12" SPR
WD9	5/ 2" X 12" SPR

WOOD BEAMS

WD10	2/ 1 3/4" X7 1/4" (2.0E) LVL
WD11	3/ 1 3/4" X7 1/4" (2.0E) LVL
WD12A	1/ 1 3/4" X9 1/2" (2.0E) LVL
WD12	2/ 1 3/4" X9 1/2" (2.0E) LVL
WD13	3/ 1 3/4" X9 1/2" (2.0E) LVL
WD14A	1/ 1 3/4" X11 7/8" (2.0E) LVL
WD14	2/ 1 3/4" X11 7/8" (2.0E) LVL
WD15	3/ 1 3/4" X11 7/8" (2.0E) LVL
WD16A	1/ 1 3/4" X14" (2.0E) LVL
WD16	2/ 1 3/4" X14" (2.0E) LVL
WD17	3/ 1 3/4" X14" (2.0E) LVL

LINTELS

L1	2/ 2" X 8" SPR	L9	4" X 3-1/2" X 1/4" L	L14	5-7/8" X 3-1/2" X 1/2" L
L3	2/ 2" X 10" SPR	L10	4-7/8" X 3-1/2" X 5/16" L	L15	5-7/8" X 4" X 1/2" L
L5	2/ 2" X 12" SPR	L11	4-7/8" X 3-1/2" X 3/8" L	L16	7-1/8" X 4" X 3/8" L
L7	3-1/2" X 3-1/2" X 1/4" L	L12	5 7/8" X 3-1/2" X 5/16" L	L17	7-1/8" X 4" X 1/2" L
L8	4-7/8" X 3-1/2" X 1/4" L	L13	5-7/8" X 3-1/2" X 3/8" L		

PLAN/ELEVATION LEGEND

- SMOKE ALARM (44)
- WATERPROOF DUPLEX OUTLET
- VENTS AND INTAKES
- HOSE BIB
- (38) EXHAUST FAN
- COLD CELLAR VENT (50)
- STOVE VENT
- FIRE PLACE VENT
- DRYER VENT
- CMA CARBON MONOXIDE ALARM (CMA) (45)
- DJ DOUBLE JOIST
- PT PRESSURE TREATED LUMBER
- GT GIRDER TRUSS
- AFF ABOVE FINISHED FLOOR
- BBFM BEAM BY FLOOR MANUF
- (FL) FLUSH
- (DR) DROPPED
- 'DO' REPEAT SAME JOIST SIZE UNDER SIDE
- U/S
- FG FIXED GLAZING
- GB GLASS BLOCK
- BG BLACK GLASS
- FD FLOOR DRAIN
- SOLID BEARING (TO BE SAME WIDTH AS SUPPORTED MEMBER)
- POINT LOAD
- FLAT ARCH
- 2 STORY WALL
- EXT. LIGHT FIXTURE (WALL MOUNTED)
- (H) HYDRO METER
- (G) GAS METER

I DECLARE THAT I HAVE REVIEWED AND TAKEN RESPONSIBILITY FOR THE DESIGN ON BEHALF OF **RN DESIGN LTD.** UNDER THE ...TION-3.2.4 OF THE BUILDING ... THE FIRM IS REGIST... ...ES.

PRELIMINARY-NOT FOR CONSTRUCTION

SIGNATURE:

client: Steve & Tina Vocella
location: VAUGHAN
project: Detached Garage
marketing name:

#	revisions	date	dwn	chk
1	ISSUED FOR CLIENT REVIEW	16-FEB-18	KK	MSA
2	ISSUED FOR CLIENT REVIEW	28-FEB-18	MSA	MSA
3	REVISED AS PER HCD COMMENTS	5-MAR-18	MSA	MSA

#	revisions	date	dwn	chk

RN design
Imagine - Inspire - Create

model: DETACHED GARAGE
scale: 3/16" = 1'0"
project #: 18016

page: D3