

# Memorandum to the City of Markham Committee of Adjustment

April 30<sup>th</sup>, 2019

**File:** A/15/19  
**Address:** 5 Balsam Street, Markham  
**Applicant:** Mrs. Shahla Rasheed & Mr. Ghulam Mustafa  
**Agent:** HNS ENGINEERING INC  
**Hearing Date:** Wednesday May 08, 2019

The following comments are provided on behalf of the East Team:

The applicant is requesting relief from the following requirements of the Residential Two (R2\*190\*192) Zone in By-law 177-96, as amended, as they relate to a proposed basement apartment unit, to permit:

**a) Table A1 & Section 6.5:**

an accessory basement dwelling unit, whereas the By-law permits no more than one semi-detached dwelling/dwelling unit on a lot;

**b) Parking by-law 28-97, Section 3.0 :**

a minimum of 2 parking spaces, whereas the By-law requires a minimum of 3 parking spaces (two for the principle dwelling and one for the proposed accessory basement unit).

## BACKGROUND

### Property Description

The subject property is located on the east side of Balsam Street, south of White's Hill Avenue and east of Cornell Centre Boulevard. The property is located within a residential neighbourhood comprised of lane-based detached and semi-detached dwellings. There is an existing two-storey semi-detached 167.64 m<sup>2</sup> (1,804.46 ft<sup>2</sup>) dwelling on the property. Parking to accommodate the existing dwelling is located at the rear yard, including one space within a private garage and another on a driveway/parking pad. Vehicle access is also provided to a public lane abutting the rear property line. The site plan submitted in support of this application is attached as Appendix 'B'.

### Proposal

The applicant is proposing a secondary suite in the basement of the existing dwelling. The proposed secondary suite will have independent access provided by a new door on the south side of the building to access the rear yard. No other changes are proposed to the exterior of the dwelling or the property.

## Provincial Policies

### Strong Communities through Affordable Housing Act - Province of Ontario

In 2011, the Strong Communities through Affordable Housing Act amended various sections of the Ontario Planning Act to facilitate the creation of second units by:

- Requiring municipalities to establish Official Plan policies and Zoning By-law provisions allowing secondary units in detached, semi-detached and row houses, as well as in ancillary structures
- Providing authority for the Minister of Municipal Affairs and Housing to make regulations authorizing the use of, and prescribing standards for, second units.

Under the *Strong Communities through Affordable Housing Act*, 'Second Units' also known as secondary suites are defined as "self-contained residential units with kitchen and bathroom facilities within dwellings or within structures accessory to dwellings."

### **Official Plan and Zoning**

2014 Official Plan (partially approved on Nov 24/17, and further updated on April 9/18)

The 2014 Official Plan designates the subject property "Residential Low Rise", which provides for low rise housing forms including semi-detached dwellings. The definition of a "Secondary Suite" in the 2014 Official Plan is "a second residential unit in a detached house, semi-detached house or rowhouse that consists of one or more rooms designed, occupied or intended for use, including occupancy, by one or more persons as an independent and separate residence in which a facility for cooking, sleeping facilities and sanitary facilities are provided for the exclusive use of such person or persons."

Section 8.13.8 states that it is the policy of Council that in considering an application to amend the zoning by-law to permit the establishment of a secondary suite where provided for in the 2014 Official Plan, that Council shall be satisfied that an appropriate set of development standards are provided for in the zoning by-law including:

- a) The building type in which the secondary suite is contained;
- b) The percentage of the floor area of the building type devoted to the secondary suite;
- c) The number of dwelling units permitted on the same lot;
- d) The size of the secondary suite;
- e) The applicable parking standards; and
- f) The external appearance of the main dwelling.

As part of the City initiated zoning by-law consolidation project, Council recently considered the issue of second suites within the City. On May 29<sup>th</sup>, 2018, Council voted not to permit second suites as of right in any single detached, semi-detached, or townhouse dwelling zone category.

### Zoning By-Law 177-96

The subject property is zoned 'Residential Two\*190\*192 (R2\*190\*192)' under By-law 177-96, as amended, which permits various types of low rise housing forms, including semi-detached dwellings. Exception \*190 provides area specific zone standards which includes permission of accessory dwellings located above a private garage in either the main building or an accessory building on the same lot (i.e. above an attached or detached garage). Considering the proposed accessory unit is not located above a private garage, the applicant has submitted a variance application to permit it within the basement instead. Exception 192 relates to zone standards for corner lots and an additional permitted use of semi-detached dwellings with attached private garages and prescribes area specific development standards.

### Parking Standards By-law 28-97

The proposed secondary suite also does not comply with the requirements of Parking Standards By-law 28-97, as amended, which requires two parking spaces for the semi-detached unit and an additional parking space for the proposed accessory unit. Since no changes are proposed to the onsite parking configuration, the applicant is requesting a variance to reduce the onsite parking requirements to allow the accessory unit. Further details are provided in the comment section below.

**Applicant's Stated Reason(s) for Not Complying with Zoning**

According to the information provided by the applicant, the reason for not complying with Zoning is, *"the by-law does not allow second suites in the area"*.

**Zoning Preliminary Review (ZPR) Undertaken**

The owner has completed a Zoning Preliminary Review (ZPR) on January 30, 2019 to confirm the variances required for the proposed development.

**COMMENTS**

The Planning Act states that four tests must be met in order for a variance to be granted by the Committee of Adjustment:

- a) The variance must be minor in nature;
- b) The variance must be desirable, in the opinion of the Committee of Adjustment, for the appropriate development or use of land, building or structure;
- c) The general intent and purpose of the Zoning By-law must be maintained;
- d) The general intent and purpose of the Official Plan must be maintained.

**Secondary Suites**

Engineering staff confirmed that the existing sanitary sewer system has adequate capacity to accommodate the secondary suite. The Fire and Emergency Services Department have no objections provided the secondary suite is registered with the City and complies with the Ontario Building and Fire Codes. Should this application be approved, the applicant will be required to obtain a building permit to ensure the secondary suite complies with these regulations.

The City of Markham is committed to promoting affordable and shared housing opportunities. Secondary suites help the City increase the availability of affordable housing forms and provide support to achieve its affordable housing target required by the Province. Planning staff are of the opinion that the application meets the criteria under Section 8.13.8 of the 2014 Official Plan for the establishment of a secondary suite and therefore have no objections.

**Reduced Parking Spaces**

As noted, Parking Standards By-law 28-97 requires two parking spaces be provided for the semi-detached unit and an additional space for the accessory dwelling unit or secondary suite. The existing single-car garage and driveway currently provide a total two parking spaces.

As shown in Appendix B, the rear lane adjacent to the subject property intersects with another public lane along the north side yard of the site. This lane to lane intersection creates a curved rear lot line which limits the potential of adding a parking pad that would comply with the minimum width requirements of Parking Standards By-law 28-97, as amended. An extended driveway at this location could pose safety concerns with respect to site lines at the lane to lane intersection. Further, requiring an additional parking space will result in changes to the subject property that reduce soft landscaping in the rear yard. Soft landscaping plays an important part of good storm water management practice by reducing the amount of soft surface area that provides for the infiltration of rain water. Staff do not have concerns with the requested variance to reduce parking for the accessory dwelling unit.

The applicant should be aware that no overnight parking is permitted on City of Markham public streets unless an overnight parking pass or exemption is obtained through the By-law and Licensing Department.

## **PUBLIC INPUT SUMMARY**

No written submissions were received as of April 23, 2019. It is noted that additional information may be received after the writing of the report, and the Secretary-Treasurer will provide information on this at the meeting.

## **CONCLUSION**

Planning Staff have reviewed the application with respect to Section 45(1) of The Planning Act, R.S.O. 1990, c. P.13, as amended, and are of the opinion that the variance request meets the four tests of the Planning Act and have no objection. Staff recommend that the Committee consider public input in reaching a decision.

The onus is ultimately on the applicant to demonstrate why they should be granted relief from the requirements of the zoning by-law, and how they satisfy the tests of the Planning Act required for the granting of minor variances.

Please see Appendix "A" for conditions to be attached to any approval of this application.

PREPARED BY:



Aqsa Malik, Planner, Zoning and Special Projects

REVIEWED BY:



Stephen Corr, Senior Planner, East District

File Path: Amanda\19 112476 \Documents\District Team Comments Memo

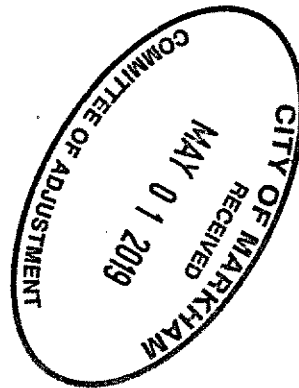
## **APPENDIX "A"**

### **CONDITIONS TO BE ATTACHED TO ANY APPROVAL OF FILE A/15/19**

1. The variances apply only to the proposed development as long as it remains;
2. That the variances apply only to the subject development, in substantial conformity with the plan(s) attached as 'Appendix B' to this Staff Report and received by the City of Markham on May 1<sup>st</sup>, 2019, and that the Secretary-Treasurer receive written confirmation from the Director of Planning and Urban Design or designate that this condition has been fulfilled to his or her satisfaction;
3. That the owner submit, if required by the Chief Building Official, a third-party report prepared by an architect or professional engineer licensed in the Province of Ontario, to assess compliance of existing construction with the provisions of the Ontario Building Code, and in particular relating to the change of use from a dwelling containing a single suite to a dwelling containing more than one suite;
4. That the Owner register the home as a two-unit house with the City of Markham Fire & Emergency Services Department, and satisfy any and all conditions for registration, to the satisfaction of the Fire Chief.


CONDITIONS PREPARED BY:

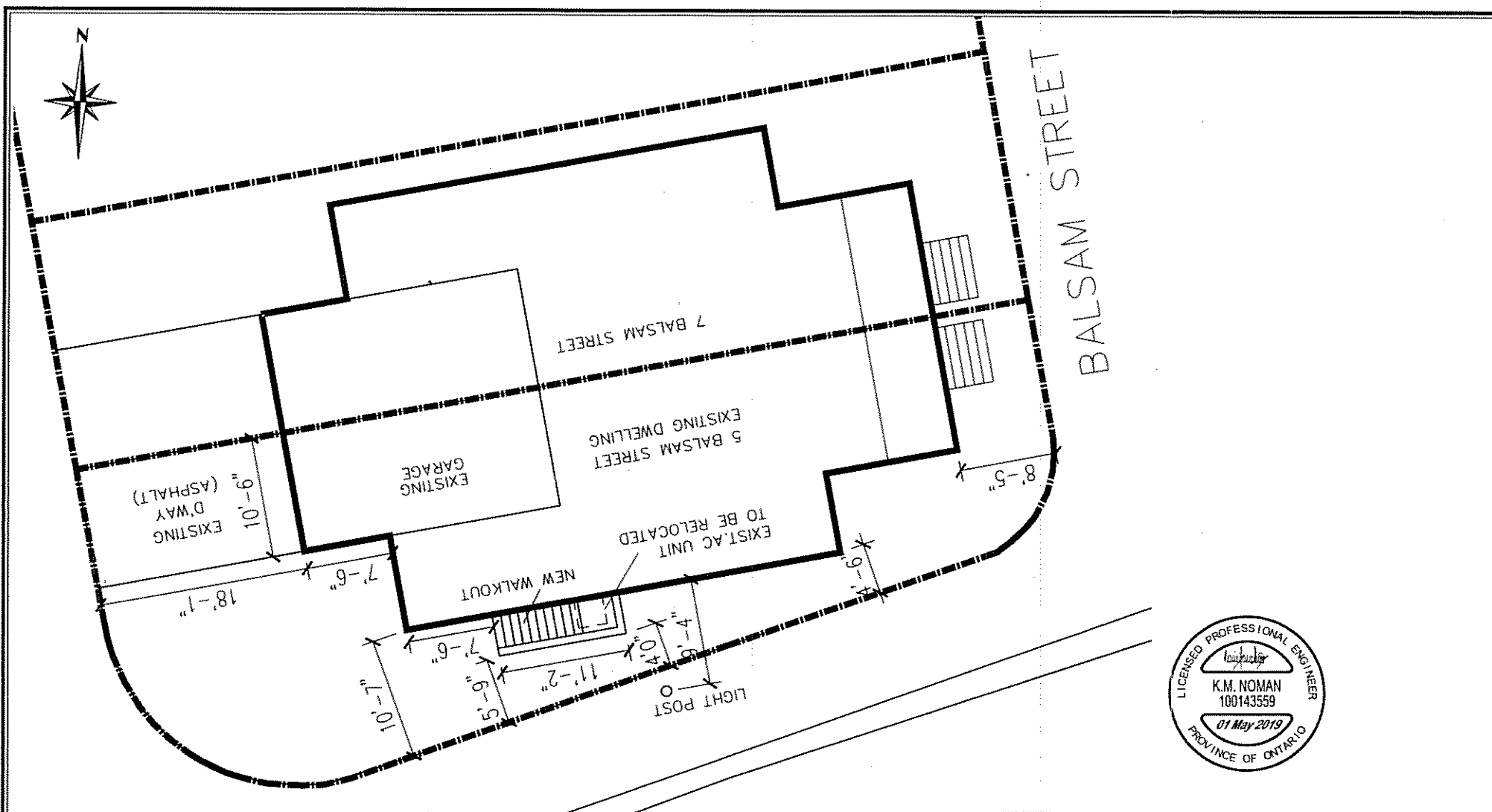
  
\_\_\_\_\_  
Aqsa Malik, Planner, Zoning and Special Projects



**PROJECT: SECOND SUITE CONVERSION w/BELOW GRADE ENTRANCE**  
5 Balsam St Markham, ON L6B 0J7



 <b>HNS</b> Engineering Inc.	PROJECT: SECOND SUITE w/BELOW GRADE ENTRANCE ADDRESS: 5 Balsam St Markham, ON L6B 0J7	
	ENGINEER: K.M.NOMAN	Designed: SI
	SCALE: AS NOTED	DATE: JAN 2019
501-55 STRATHAVEN DR MISSISSAUGA, ON, L5R 4G9 E: design_sajid@yahoo.ca t: 647.330.6281	COVER PAGE	<b>A1.1</b>



### PROPOSED LOT PLAN

**NOTE:**

NO CHANGES TO EXISTING GRADES, SET BACKS, GFA, FSI, LOT COVERAGE

LOT PLAN CREATED FROM:

<https://www.yorkmaps.ca/html5Viewer24/index.html?configBase=https://www.yorkmaps.ca/Geocortex/Essentials/Essentials43/REST/sites/CommunityServices/newspapers/YorkMaps/virtualdirectory/Resources/Config/Default>



INS

: Engineering inc.

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E: design\_sajid@yahoo.ca  
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PROJECT: SECOND SUITE w/BELOW GRADE ENTRANCE  
ADDRESS: 5 Balsam St Markham, ON L6B 0J7

ENGINEER: K.M.NOMAN

Designed: SI

SCALE:  $\frac{1}{8}" = 1'-0"$

DATE: JAN 2019

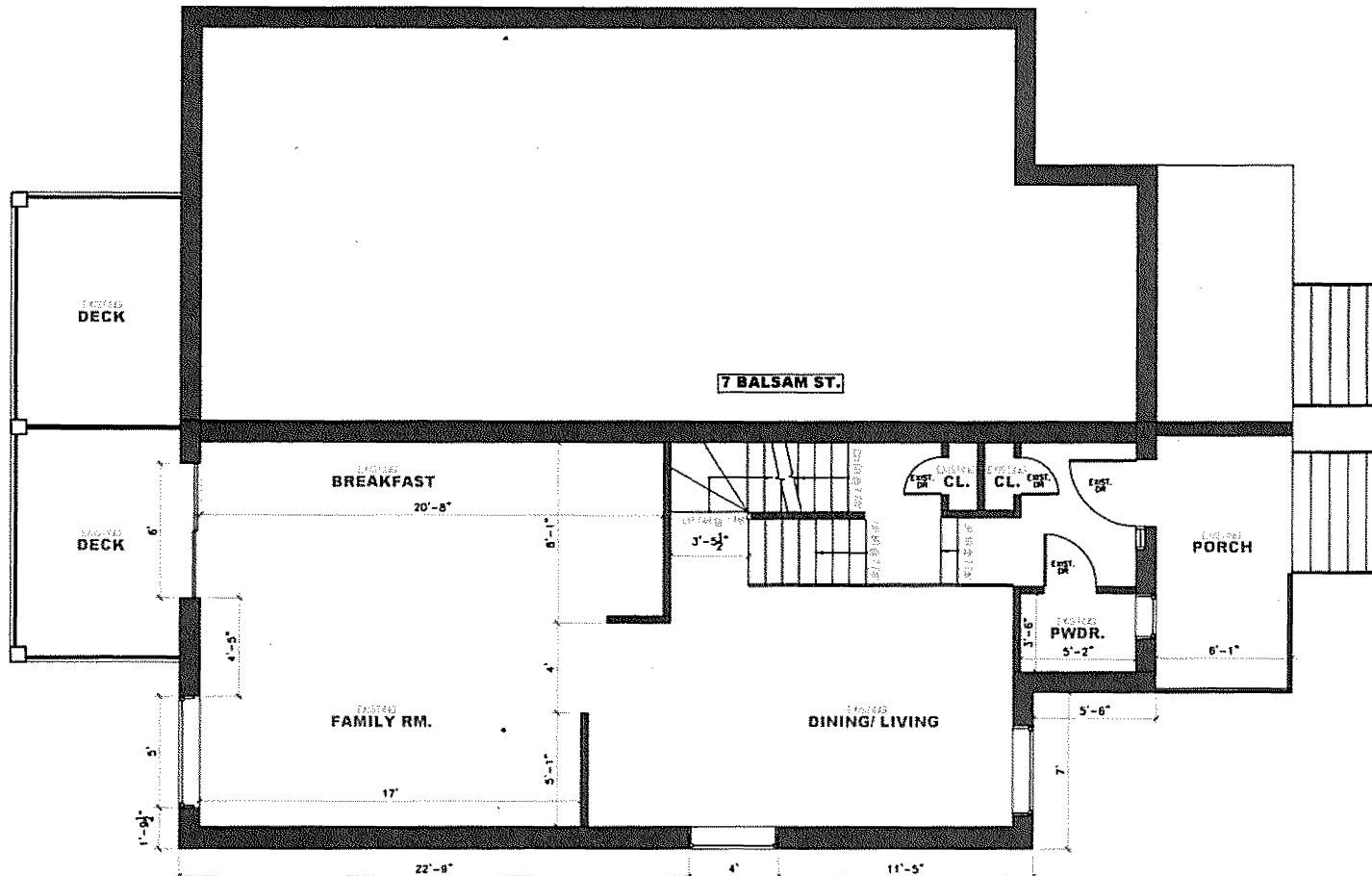
PROPOSED LOT PLAN

## A1.2






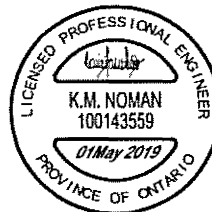




## EXISTING MAIN FLOOR PLAN

GROSS FLOOR AREA: 798.32 SFT (74.17 SQ.M)

 - WALL TO REMAIN



### GENERAL NOTES

1. ALL DIMENSIONS IN SI UNITS IN FEET & INCHES.
2. CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE INCLUDING ALL STANDARDS REFERENCED THEREIN AND ANY APPLICABLE ACTS OF PARLIAMT JURISDICTION IN ITS LATEST VERSION (OF STANDARDS AND CODES SHALL APPLY).
3. THE CONTRACTOR SHOULD VISIT THE SITE AND BECOME FAMILIARIZED WITH ALL CHARACTERISTICS AFFECTING NEW AND EXISTING CONSTRUCTION. CONTRACTOR SHALL CHECK ALL DIMENSIONS ON WORKING DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ANY CHANGES, ALTERATIONS, OR REVISIONS MUST BE REPORTED TO ENGINEER BEFORE PROCEEDING WITH WORK.
4. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS (O. REG. 231/04) LOADING.
5. THE DESIGN LOADS FOR THE BUILDING AND ITS COMPONENTS IS DETERMINED IN ACCORDANCE WITH THE 2012 OBC DIV B PART 4 AND 2010 NBC.



**HNS**  
Engineering Inc.

501-55 STRATHAVEN DR  
MISSISSAUGA, ON. L5R 4G9  
E: design\_sajid@yahoo.ca  
t: 647.330.6281

PROJECT: SECOND SUITE w/BELOW GRADE ENTRANCE  
ADDRESS: 9 Balsam St Markham, ON L6B 0J7

ENGINEER: K.M.NOMAN

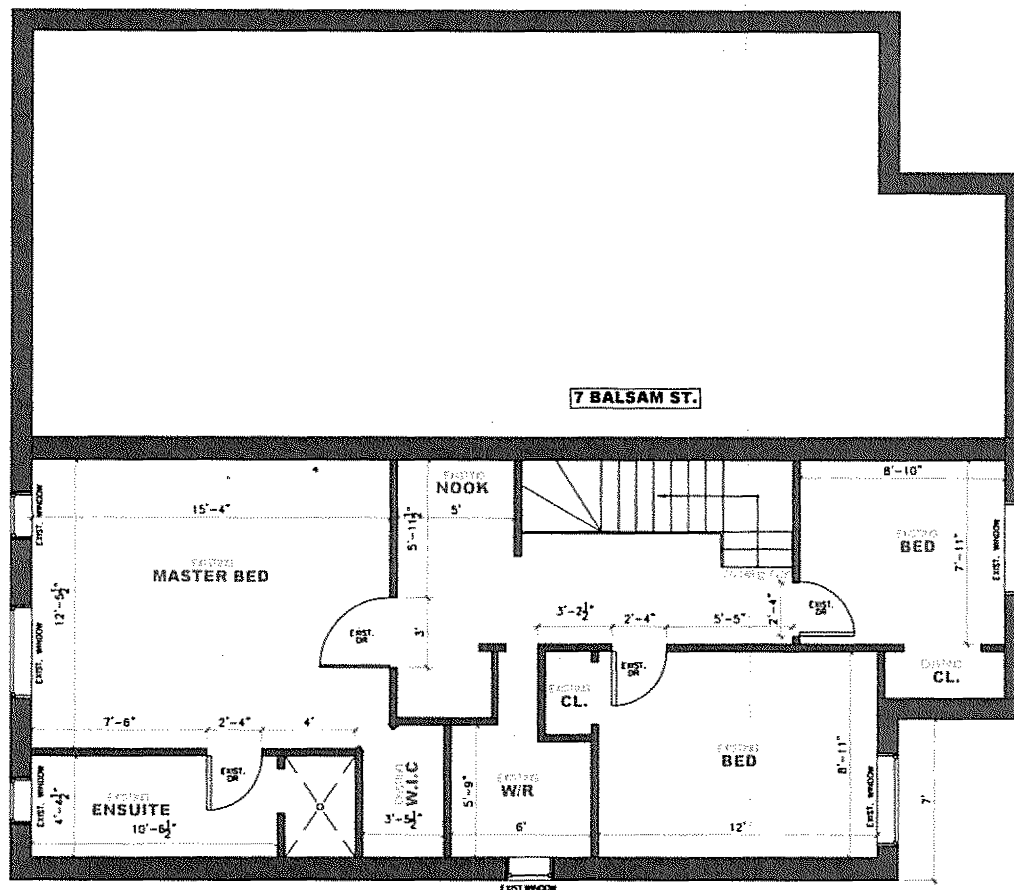
Designed: SI

SCALE: 1/8"=1'-0"

DATE: JAN 2019

EXISTING MAIN/2ND  
FLR PLAN

**A1.5**



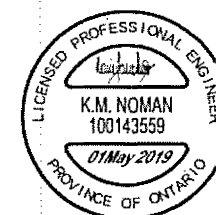
## EXISTING THIRD FLOOR PLAN


GROSS FLOOR AREA: 798.32 SFT (74.17 SQ.M)

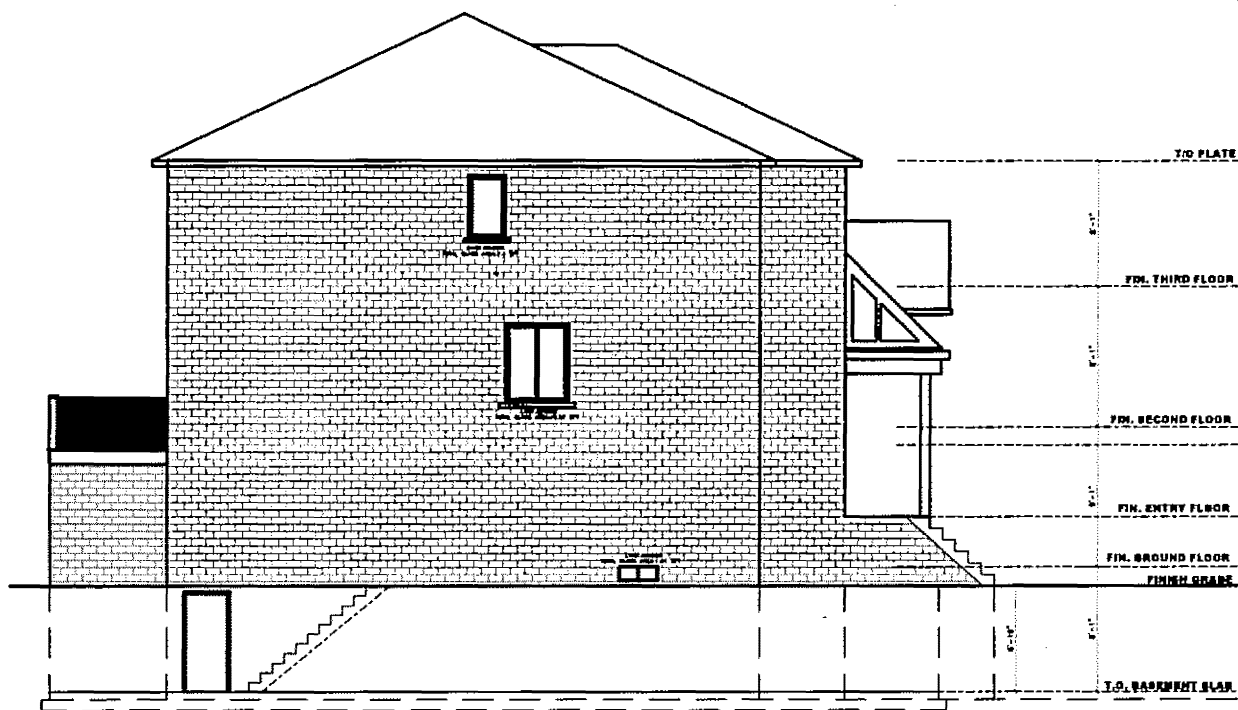
— WALL TO REMAIN

### GENERAL NOTES

1. ALL DIMENSIONS IN FEET & INCHES.
2. CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE INCLUDING ALL STANDARDS REFERENCED THEREIN AND ANY APPLICABLE ACTS OF PROVING JURISDICTION (THE LATEST VERSION OF STANDARDS AND CODES SHALL APPLY).
3. THE CONTRACTOR SHOULD VISIT THE SITE AND BECOME FAMILIARIZED WITH ALL CHARACTERISTICS AFFECTING NEW AND EXISTING CONSTRUCTION. CONTRACTOR SHALL CHECK ALL DIMENSIONS ON WORKING DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ANY CHANGES, ALTERATIONS, OR REVISIONS MUST BE REPORTED TO ENGINEER BEFORE PROCEEDING WITH WORK.
4. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION. PROJECTS: 0, REG. 23.191 (LOADING).
5. THE DESIGN LOADS FOR THE BUILDING AND ITS COMPONENTS IS DETERMINED IN ACCORDANCE WITH THE 2012 CBC DIV. B PART 4 AND 2010 NBC.

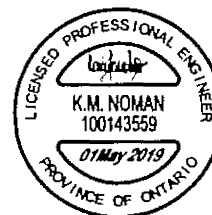


 <b>HNS</b> Engineering Inc.	PROJECT: SECOND SUITE w/BELOW GRADE ENTRANCE ADDRESS: 5 Balsam St. Markham, ON L6B 0J7	
	ENGINEER: K.M.NOMAN	Designed: SI
	SCALE: 1/4"=1'-0"	DATE: JAN 2019
	501-55 STRATHAVEN DR MISSISSAUGA, ON, L5R 4G9 E: design_sajid@yahoo.ca T: 647.330.6281	EXISTING 3RD FLR PLAN <b>A1.6</b>



**CALCULATION FOR GLAZED OPENING:**

WALL AREA (ABOVE GRADE) : 1305.0 SFT  
 EXISTING + PROPOSED WINDOW AREA (TOTAL) : 24.88 SFT  
 $\% \text{ OPENING OF TOTAL WALL AREA: } 24.88 / 1305.0 \times 100\% = 1.91\%$   
 SIDE SETBACK (LIMITING DISTANCE) : 4'-0"



**PROPOSED LEFT ELEVATION**



HNS  
Engineering Inc.

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 647.330.6281

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

Engineer: K.NOMAN  
 Designed: ST

PROJECT: SECOND SUITE  
 5 Balsam St Markham, ON L6B 0J7

PROPOSED LEFT ELEVATION

DATE: JAN 2019

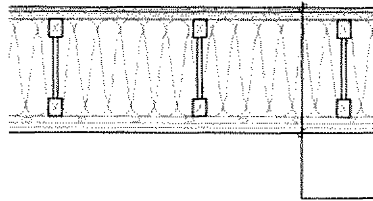
**A1.7**

as per SB-3

**INTERIOR PARTITIONS WITHIN UNITS  
AT STAIRCASE 1 HOUR FIRE RATED**

Construction complies with supplementary standards to the O.B.C 2012 SB-3 table 1 wall number W4b

- 38 X 89 mm (2 X 4) wood studs at 400 mm (16") o.c.
- single 38 X 89 mm (2 X 4) top and bottom plates
- 89mm (3 1/2") thick absorptive material processed from rock, slag, glass, or cellulose fibre on one side
- Resilient channel @ 400mm o.c. on one side of wall
- 2 layer 15.9mm (5/8") type "X" gypsum board on resilient metal channel side
- 15.9 mm (5/8") type "X" drywall on other side

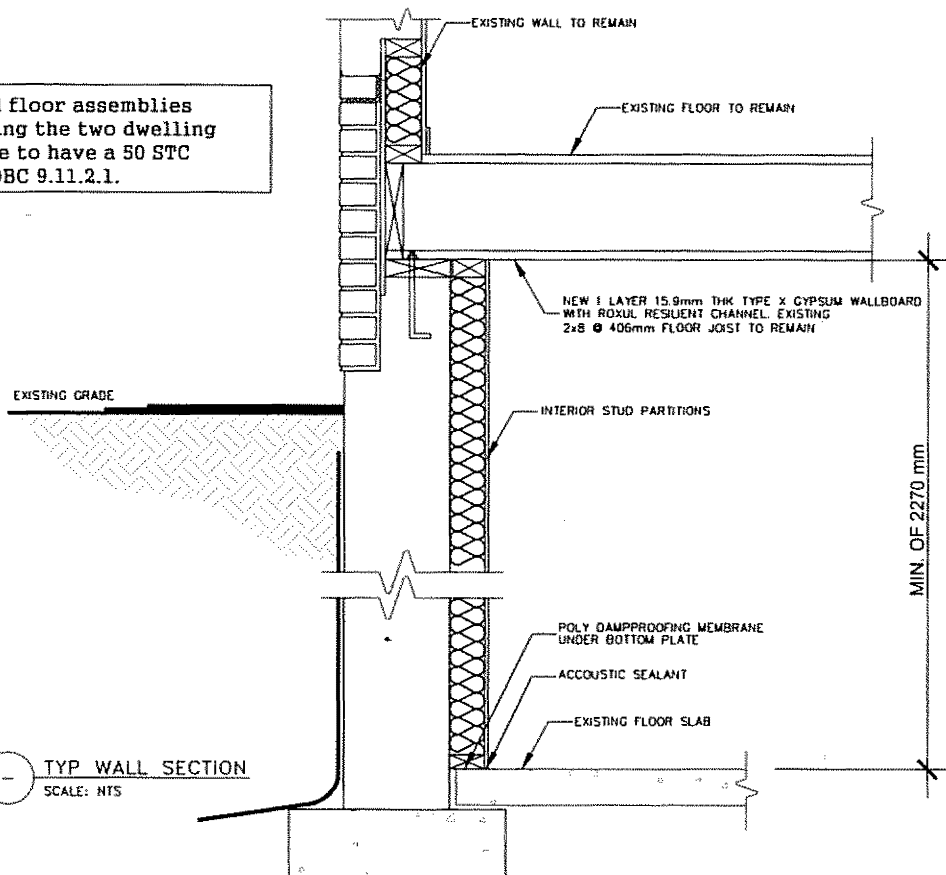


as per SB-2


Supplementary Standards O.B.C. 2012 SB2-2.3.4(A) AND (C)

- 15.9mm Plywood OR OSB
- Wood Floor Joists @ 16" o.c. Max.
- F8 Floor Space w/ "ROXUL" Ins.
- Resilient Metal Channels @ 600mm o.c.
- 1-Layer Of 15.9mm Type X G.W.B.

Wall and floor assemblies separating the two dwelling units are to have a 50 STC AS PER OBC 9.11.2.1.



**DETAILS**

 <b>HNS</b> Engineering Inc.	PROJECT: SECOND SUITE w/BELOW GRADE ENTRANCE ADDRESS: 5 Balsam St Markham, ON L6B 0J7	
	ENGINEER: K.M.NOMAN	Designed: SI
	SCALE: NTS	DATE: JAN 2019
	501-55 STRATHAVEN DR MISSISSAUGA, ON, L5R 4G9 E: design_sajid@yahoo.ca t: 647.330.6281	
DETAILS		A1.8

DETAILS

A1.8

## 2 FOUNDATION WALL:

250mm (10") POURED CONCRETE BLOCK TO A MIN. OF 6" ABOVE THE APPROVED FINISHED GRADES  
WITH 20M BARS @ 24" O.C. VERTICAL ON 22"X8" CON'T CONC.  
FOOTINGS WITH 2-15M BARS CONTINUOUS. DOWELS TO MATCH VERT. REIN.  
WITH 1/2" BITUMINOUS DUMPROOFING ON MIN. 1/2" PAVING (OPT. DRAINAGE LAYER)  
LATERAL SUPPORT 2X4" SILL PLATE ANCHORED WITH 1/2" DIA ANCHOR BOLTS 12" LONG MIN SET 5" INTO CONC. AT 6"-0" O.C. MAX.  
MAX. HEIGHT OF BACKFILL FROM TOP OF BASEMENT SLAB NOT TO EXCEED 7'-7".  
FOUNDATION WALLS TO BE ADEQUATELY BRACED PRIOR TO BACKFILLING.  
ALL FOOTINGS SHALL REST ON NATURALLY UNDISTURBED SOIL ASSUME MIN SOIL BEARING CAPACITY TO 75MPa. BACKFILL WITH SUSCEPTIBLE SOIL(NONSHRINK)

## 4. INTERIOR STUD PARTITIONS

-BEARING PARTITIONS 38x89 (2"x4") @ 400mm (16") O.C. FOR 2 STOREYS AND 300mm (12") O.C. FOR 3 STOREYS. NON-BEARING PARTITIONS 38x89 (2"x4") @ 600mm (24") O.C. PROVIDE 38x89 (2"x4") BOTTOM PLATE AND 2/38x89 (2"x4") TOP PLATE. 13mm (1/2") INTERIOR DRYWALL BOTH SIDES OF STUD. PROVIDE 38x140 (2"x6") @ 400mm (16") O.C. STUDS/PLATES WHERE NOTED. NON BEARING PARTITIONS 38x89 (2"x4") OR 38x140 (2"x6") @ 400mm (16") O.C.

## 10. ALL STAIRS/EXTERIOR STAIRS -OBC, 9.8.-

MAX. RISE = 200 (7-7/8")  
MIN. RUN = 210 (8-1/4")  
MIN. TREAD = 235 (9-1/4")  
MAX. NOSING = 25 (1")  
MIN. HEADROOM = 1950 (6'-5")  
RAIL @ LANDING = 900 (2'-11")  
RAIL @ STAIR = 800 (2'-8")  
MIN. STAIR WIDTH = 800 (2'-10")  
FOR CURVED STAIRS  
MIN. AVG. RUN = 150 (6")  
MIN. RUN = 200 (8")

## 11. FINISHED RAILING ON PICKETS SPACED

MAXIMUM 100mm (4") BETWEEN PICKETS.  
GUARDS -OBC, 9.8.8.  
INTERIOR GUARDS: 900mm (2'-11") MIN.  
EXTERIOR GUARDS: 1070mm (3'-6") MIN.

## 13. R20INSULATION BLANKET OR BATTS

WITH 2"x4" STUD WALL. AND APPROVED VAPOUR BARRIER FULL HEIGHT  
GRADE DAMPPROOF W/ BLDG. PAPER BETWEEN

## 26. MECHANICAL EXHAUST FAN, VENTED TO EXTERIOR,

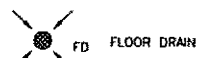
TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR. PROVIDE DUCT SCREEN AS PER O.B.C. 9.32.3.12

## 28. STUD WALL REINFORCEMENT 9.5.2.3.

PROVIDE WOOD BLOCKING REINFORCEMENT TO STUD WALLS FOR FUTURE GRAB BAR INSTALLATION  
IN MAIN BATHROOM, 840-920mm (33"-36") A.F.F. BEHIND TOILET. 850mm (33") A.F.F. ON THE WALL OPPOSITE THE THE ENTRANCE TO THE BATHTUB OR SHOWER

INSULATION VALUES UPDATED AS PER SB-12 O.B.C.

### LEGEND



FD FLOOR DRAIN

DJ DOUBLE JOIST

TJ TRIPLE JOIST

LVL LAMINATED VENEER LUMBER

X PL POINT LOAD FROM ABOVE

P.T. PRESSURE TREATED LUMBER

G.T. GIRDER TRUSS BY ROOF TRUSS MANUF.

R.R. ROOF RAFTERS

C.J. CEILING JOISTS

### SA SMOKE ALARM (REFER TO OBC 9.10.19)

PROVIDE 1 PER FLOOR, NEAR THE STAIRS CONNECTING THE FLOOR LEVEL. ALARMS TO BE CONNECTED TO AN ELECTRICAL CIRCUIT AND INTERCONNECTED TO ACTIVATE ALL ALARMS IF 1 SOUNDS.

### CMD CARBON MONOXIDE DETECTOR (OBC 9.11.4)

\* CHECK LOCAL BYLAWS FOR REQUIREMENTS \*

### WINDOWS:

#### 1) MINIMUM BEDROOM WINDOW -OBC, 9.7.1.3.-

AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.35m<sup>2</sup> UNOBSTRUCTED GLAZED OR OPENABLE AREA WITH MIN. CLEAR WIDTH OF 380mm (1'-3").

#### 2) WINDOW GUARDS -OBC, 9.7.1.6.-

A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 480mm (1'-7") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FIN. FLOOR TO THE ADJACENT GRADE IS GREATER THAN 1800mm (5'-11").

#### 3) WINDOW OVER STAIRS & LANDINGS -OBC, 9.7.5.3.-

A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 900mm (2'-11") ABOVE THE SURFACE OF THE TREAD, RAMP OR LANDING

### NOTE:

MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.3 AIR CHANGES PER HOUR AVERAGED OVER 24 HOURS. SEE MECHANICAL DRAWINGS.

### LUMBER:

1) ALL LUMBER SHALL BE SPRUCE NO.2 GRADE, UNLESS NOTED OTHERWISE.  
2) STUDS SHALL BE STUD GRADE SPRUCE, UNLESS NOTED OTHERWISE.  
3) LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE No. 2 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED OTHERWISE.

4) ALL LAMINATED VENEER LUMBER (L.V.L.) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY TRUSS MANUFACTURER.

5) LVL BEAMS SHALL BE 2.0E WS MICRO-LAM LVL (Fb=2800psi MIN.) OR EQUIVALENT. NAIL EACH PLY OF LVL WITH 89mm (3 1/2") LONG COMMON WIRE NAILS @ 300mm (12") O.C. STAGGERED IN 2 ROWS FOR 184,240 & 300mm (7 1/4", 9 1/2", 11 7/8") DEPTHS AND STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 13mm (1/2") DIA. GALV. BOLTS BOLTED AT MID-DEPTH OF BEAM @ 915mm (3'-0") O.C.

6) PROVIDE TOP MOUNT BEAM HANGERS TYPE "SCL" MANUFACTURED BY MGA CONNECTOR LTD. Tel. (905) 642-3175 OR EQUAL FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS NOTED OTHERWISE.

7) JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS INTERSECTING FLUSH BUILT-UP WOOD MEMBERS.

8) WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONC. BY AT LEAST 2 mm. POLYETHYLENE FILM, No.50 (45lbs.) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS AT LEAST 150mm (6") ABOVE THE GROUND.

### 9) TERMITE & DECAY PROTECTION

IN LOCATIONS WHERE TERMITES ARE KNOWN TO OCCUR, CLEARANCE BETWEEN STRUCTURAL WOOD ELEMENTS AND THE FINISHED GROUND LEVEL DIRECTLY BELOW THEM SHALL BE NOT LESS THAN 450mm (17 3/4") AND ALL SIDES OF SUPPORTING ELEMENTS SHALL BE VISIBLE TO INSPECTION.  
STRUCTURAL WOOD ELEMENTS, SUPPORTED BY WOOD ELEMENTS IN CONTACT WITH THE GROUND OR OVER EXPOSED BARE SOIL SHALL BE PRESSURE TREATED WITH CHEMICAL THAT IS TOXIC TO TERMITES

### STEEL:

1) STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS "H".

2) REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400R.



Engineering Inc.

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647.330.6281

SCALE: NTS

Engineer: K.NOMAN  
Designed: SI

PROJECT: SECOND SUITE  
5 Balsam St Markham, ON L6B 0J7

CONSTRUCTION NOTES

DATE: JAN 2019

A1.9

# GENERAL NOTES

## 1. FOOTINGS

610x205mm POURED CONC. FOOTING  
ALL FOOTINGS SHALL REST ON  
NATURAL UNDISTURBED SOIL OR  
COMPACTED GRANULAR FILL

## 3. EXTERIOR STAIRS

200 RISE MAXIMUM 125 MINIMUM  
210 RUN MAXIMUM 355 MAXIMUM  
235 TREAD MINIMUM 355 MAXIMUM

## 2. CONCRETE

MINIMUM COMPRESSIVE STRENGTH  
OF 4500 PSI @ 28 DAYS W/  
5% TO 8% AIR ENTRAINMENT

MINIMUM R6 INSULATION & VAPOUR  
BARRIER ON THE INSIDE FACE OF  
THE EXPOSED FOUNDATION WALL

## 5. RETAINING WALL

8" CONC BLOCK WALL  
15M REBARS EVERY 24"

## 7. UNITS

1. SOLID MASONRY: 2-3 1/2"x3 1/2"x1/4" ANGELS
2. BRICK VENEER: 1- 3 1/2"x3 1/2"x1/4" + 2-x8
3. WOOD FRAME/SIDING: 2-2"x8"

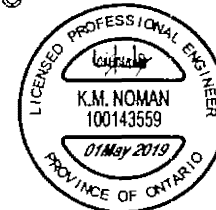
## 6. GUARDS

1070 HIGH WHERE DISTANCE FROM GRADE  
TO BOTTOM OF WALKOUT EXCEEDS 1800;  
890 FOR LESSER HEIGHTS. MAXIMUM 100  
BETWEEN VERTICAL PICKETS

(NOTE: GUARD RAIL DESIGN MUST:  
1. CONFORM TO THE REQUIREMENTS OF SUPPLEMENTARY STANDARDS SB-7 OF THE ONTARIO BLDG. CODE  
2. VERTICAL RAILS & PICKETS HAVE BEEN DESIGNED IN ACCORDANCE WITH 2010 OBC SECTION 9.8.6.2 & MISC SECTION 9.8.6.3 FOR THE FOLLOWING LOADS:  
1) 113 LB (5.1 kN) HORIZONTAL CONCENTRATED LOAD AT ANY POINT APPLIED OVER AN AREA 300mmx300mm.  
2) A UNIFORM VERTICAL LOAD OF 100 PLF (1.5 kN/m) APPLIED TO THE TOP OF THE GUARD.  
3. FLOOR TOP RAIL DESIGNED TO RESIST THE FOLLOWING HORIZONTAL LOADS:  
1) 0.5 kN/m (34 lb/ft) OR  
2) 1.0 kN (225 lb) CONCENTRATED LOAD AT ANY POINT

SECTION A-A

SECTION B-B



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SECTIONS

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S1.1