

# **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)

#### **REF** PERMIT NO. **2021-50731**

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 **must** 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 must 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
- 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 must 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.
- 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 must 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 in dwelling units 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"); min. run of 210 mm (8 1/4") and min. tread depth of 235 mm (9 1/4"). Curved stairs shall have a min. average run of 200 mm (7 7/8") and a min. run of 150 mm (5 7/8"). The tolerance of stair dimensions to conform to OBC 9.8.4. Secure stair stringers at top and bottom.
- 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.
- 21. 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 must 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)



ELEVATION 'B' END

These drawings have been reviewed under Compliance Option: Performance of the OBC 2012, SB-12.

# **UNIT - 2009 END**

These drawings shall be read in conjunction with Block Foundation Plans, Roof trusses, Engineered Floor Joists plans and Details

## SB-12 ENERGY EFFICIENCY DESIGN MATRIX

| PERFORMANCE COMPLIANCE | SB-12 ( | SECTION 3.1.1) | TABLE 3.1.1.2.A |
|------------------------|---------|----------------|-----------------|
| PERFORMANCE            |         | SPACE HEA      | ATING FUEL      |
| F LINI ON MANGE        |         | ■ GAS          | □ OIL           |
| COMPLIANCE             |         | □ ELECTRIC     | ☐ PROPANE       |
| COMI LIANCE            |         | □ EARTH        | □ SOLID FUEL    |

| BUILDING COMPONENT  | REQUIRED      | PROPOSED         |
|---|---------------|------------------|
| INSULATION RSI (R) VALUE  |               |                  |
| CEILING W/ ATTIC SPACE  | 10.56 (R60)   | 10.56 (R60)      |
| CEILING W/O ATTIC SPACE   | 5.46 (R31)    | 5.46 (R31)       |
| EXPOSED FLOOR   | 5.46 (R31)    | 5.46 (R31)       |
| WALLS ABOVE GRADE   | 3.87 (R22)    | 3.87 (R22)+1.5ci |
| BASEMENT WALLS  | 3.52 ci \star | 3.52 ci *        |
| * PROPOSED VALUES MAY BE SUBSTITUTED W/ 2.11+1.76ci (R12+R10ci) | (R20 ci) ×    | (R20 ci) *       |
| BELOW GRADE SLAB ENTIRE SURFACE > 600mm BELOW GRADE             | -             | -                |
| EDGE OF BELOW GRADE SLAB ≤ 600mm BELOW GRADE                    | 1.76 (R10)    | 1.76 (R10)       |
| HEATED SLAB OR SLAB ≤ 600mm BELOW GRADE                         | 1.76 (R10)    | 1.76 (R10)       |
| WINDOWS & DOORS   |               |                  |
| WINDOWS/SLIDING GLASS DOORS (MAX U-VALUE)                       | 1.6           | 1.6              |
| SKYLIGHTS (MAX. U-VALUE)  | 2.8           | 2.8              |
| APPLIANCE EFFICIENCY  |               |                  |
| SPACE HEATING EQUIP. (AFUE%)                                    | 96%           | 96%              |
| HRV EFFICIENCY (%)  | 75%           | 75%              |
| DOMESTIC HOT WATER HEATER (EF)                                  | 0.8           | EF of 0.9.       |
| DWHR UNIT (%) (SEE O.B.C. 3.1.1.12 FOR RULES & EXCEPTIONS)      | 42% ON 2 SH   | OWERS MIN.       |

| ADEA CALCUL ATIONS              |                 |                 |
|---------------------------------|-----------------|-----------------|
| AREA CALCULATIONS               | STD. PLAN       | STD. PLAN       |
| GROUND FLOOR AREA               | 754 sq. ft.     | 754 sq. ft.     |
| SECOND FLOOR AREA               | 954 sq. ft.     | 954 sq. ft.     |
| SUBTOTAL                        | 1708 sq. ft.    | 1708 sq. ft.    |
| DEDUCT ALL OPEN AREAS           | 8 sq. ft.       | 8 sq. ft.       |
| TOTAL NET AREA                  | 1700 sq. ft.    | 1700 sq. ft.    |
|                                 | (157.94 sq. m.) | (157.94 sq. m.) |
| FINISHED BASEMENT AREA          | 505 sq. ft.     | 505 sq. ft.     |
| COVERAGE                        | 984 sq. ft.     | 984 sq. ft.     |
| W/OUT PORCH                     | (91.42 sq. m.)  | (91.42 sq. m.)  |
| COVERAGE                        | 1041 sq. ft.    | 1041 sq. ft.    |
| W/ PORCH                        | (96.71 sq. m.)  | (96.71 sq. m.)  |
| WINDOW / WALL AREA              | EL. 'A1'/'A2'   | EL. 'B'         |
| <u>CALCULATIONS</u>             | STD. PLAN       | STD. PLAN       |
| GROSS WALL AREA                 | 3165.19 sq. ft. | 3160.69 sq. ft. |
| GITOGO WALLATIE                 | (294.06 sq. m.) | (293.64 sq. m.) |
| GROSS WINDOW AREA               | 268.96 sq. ft.  | 293.64 sq. ft.  |
| (INCL. GLASS DOORS & SKYLIGHTS) | (24.99 sq. m.)  | (27.28 sq. m.)  |
| TOTAL WINDOW %                  | 8.50 %          | 9.29 %          |

EL. 'A'/'A2' EL. 'B'

- 1 TITLE PAGE
- 2 BASEMENT PLAN, ELEV. 'A' & 'B'
- 3 OPT. FINISHED BASEMENT PLAN, ELEV. 'A' & 'B'
- 4 GROUND FLOOR PLAN, ELEV. 'A'
- 5 PART. GROUND FLOOR PLAN OPT. KITCHEN LAYOUT
- 6 SECOND FLOOR PLAN, ELEV. 'A1/A2'
- 7 GROUND FLOOR PLAN, ELEV. 'B'
- 8 SECOND FLOOR PLAN, ELEV. 'B'
- 9 FRONT & REAR ELEVATION 'A1'
- 10 PART. FRONT ELEVATION 'A2' & SECTION 'B'
- 11 LEFT SIDE ELEVATION 'A1/A2'
- 12 FRONT & REAR ELEVATION 'B'
- 13 PART. SECTION 'C'
- 14 LEFT SIDE ELEVATION 'B'
- 15 CROSS SECTION 'A-A'
- 16 FLAT ROOF DETAILS FOR ELEVATION 'B'
- 17 CONSTRUCTION NOTES
- 18 CONSTRUCTION NOTES 2

Refer to attached general notes and drawings.



City of Richmond Hill Building Division

#### **REVIEWED**

By: **KER** 

\_Date: 09/16/2021

REF Permit #: \_\_

2021-50731

All construction shall comply with the Ontario Building Code and all other applicable statutory regulations. The reviewed documents must be kept on site at all times.

Building inspection line: 905-771-5465 (24 hr) building inspections @richmondhill ea Building inquiry line 905-771-8810 ESS ION

W Architect Inc.

DESIGN CONTROL REVIEW

JUNE 01, 2021

FINAL BY: All.



FOR STRUCTURAL ONLY NOT INCLUDING ENGINEERED FLOOR OR ROOF SYSTEM



37308

QUALIFICATION INFORMATION Derek R. Santos CITY OF RICHMOND HILL BUILDING DIVISION

07/20/2021

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Per:\_\_\_\_jocelyn.aguilar\_\_

| 7. ISSUED FOR PERMIT                             | -                 | -         |
|--|-------------------|-----------|
| 6. ISSUED FOR FINAL APPROVAL                     | 2021/05/31        | MM        |
| 5. REVISED AS PER ARCHITECTURAL CONTROL COMMENTS | 2021/05/31        | MM        |
| 4. REVISED AS PER ENGINEER COMMENTS              | 2021/05/11        | JLT       |
| 3. REVISED AS PER CLIENT'S COMMENTS (2)          | 2021/03/24        | JLT       |
| 2. REVISED AS PER FLOOR MANUFACTURE PLANS        | 2021/05/11        | JLT       |
| 1. REVISED AS PER CLIENT'S COMMENTS              | 2020/07/29        | MM        |
| REVISIONS  | DATE (YYYY/MM/DD) | BY        |
|  | TITLE PA          | <b>GE</b> |

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DESIGN ASSOCIATES INC.

ROYAL PINE HOMES - 216102 "MACKENZIE"UNIT 2009-END 'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON. REV.2021.05.31

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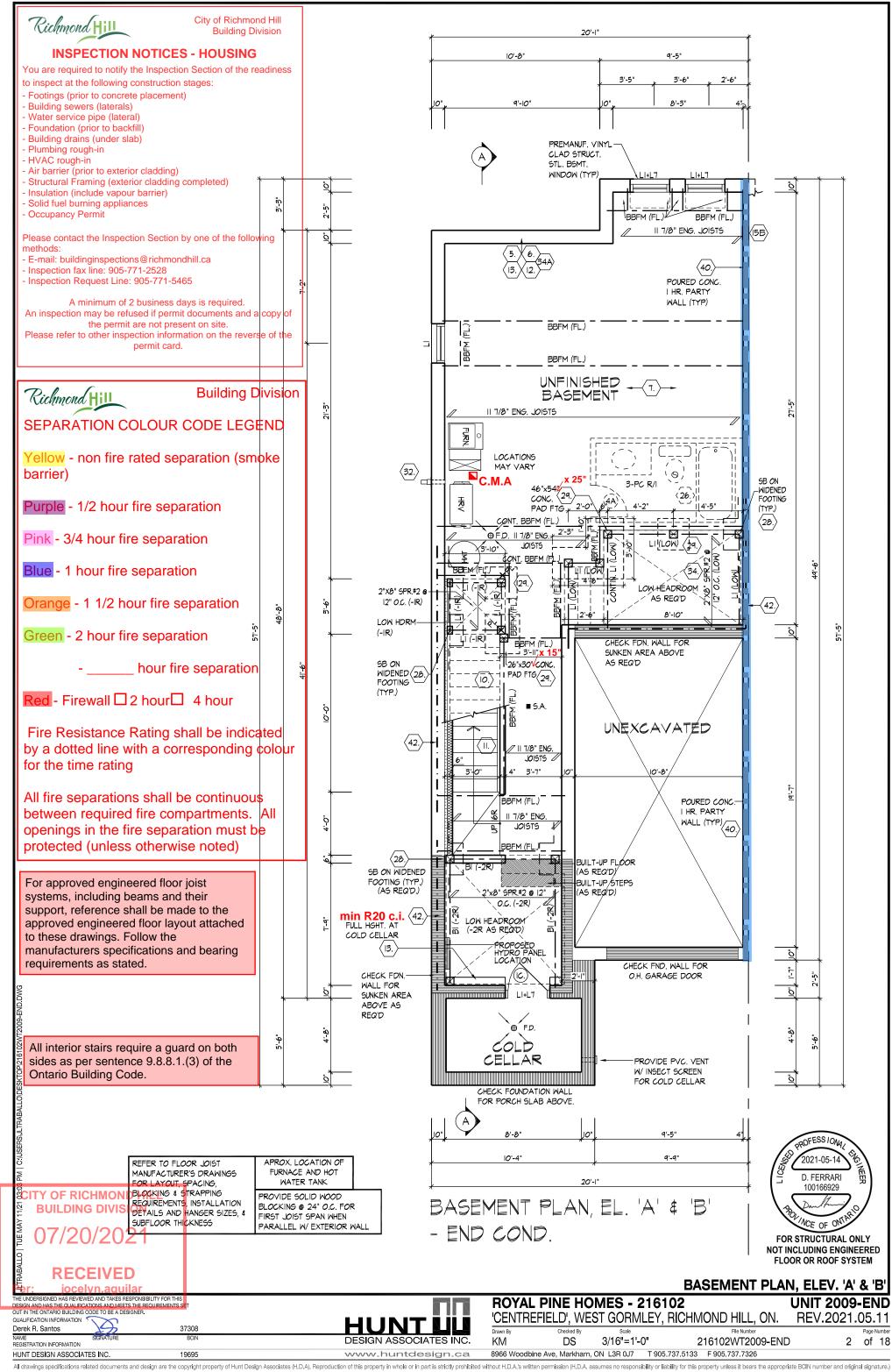
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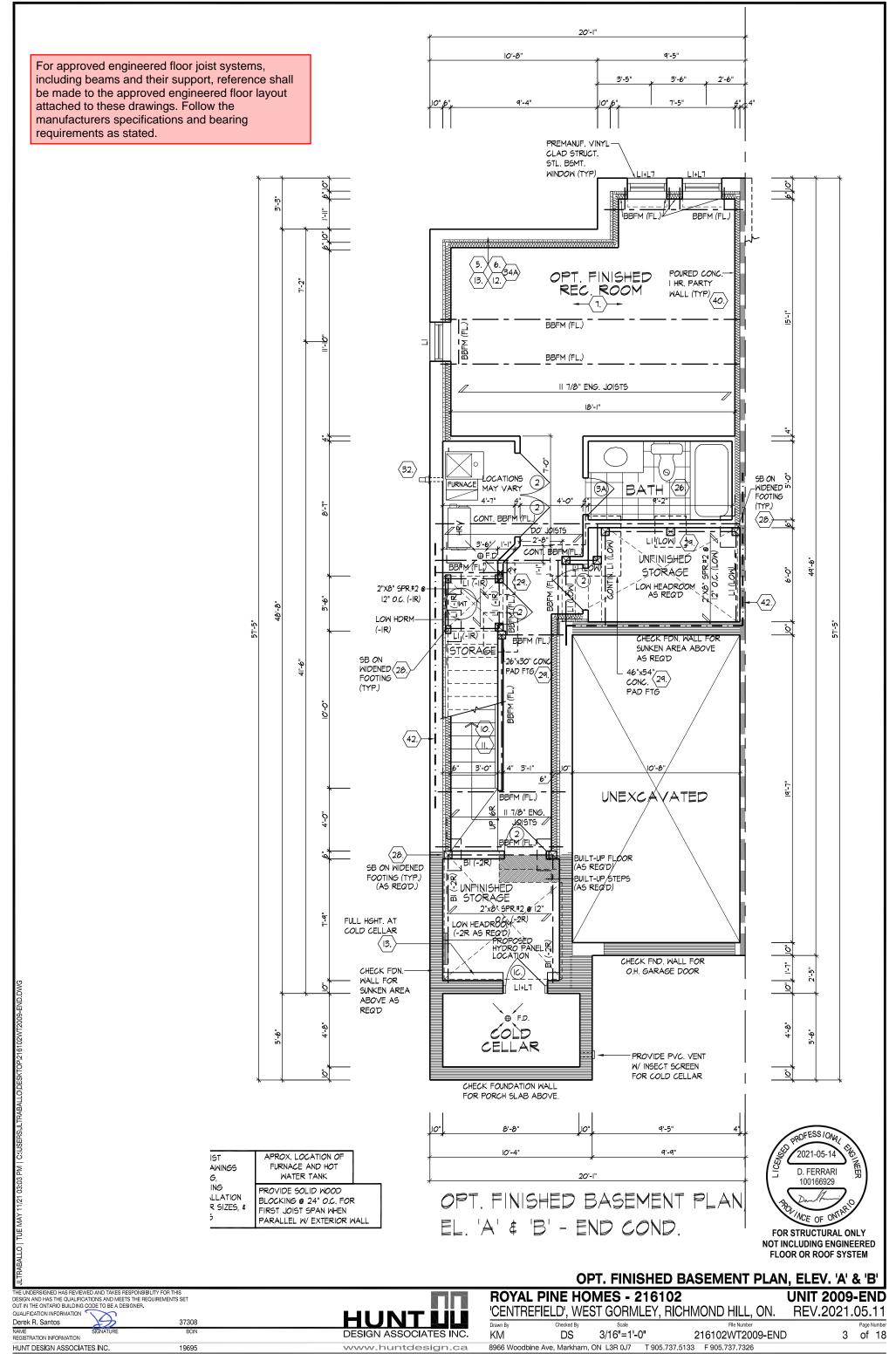
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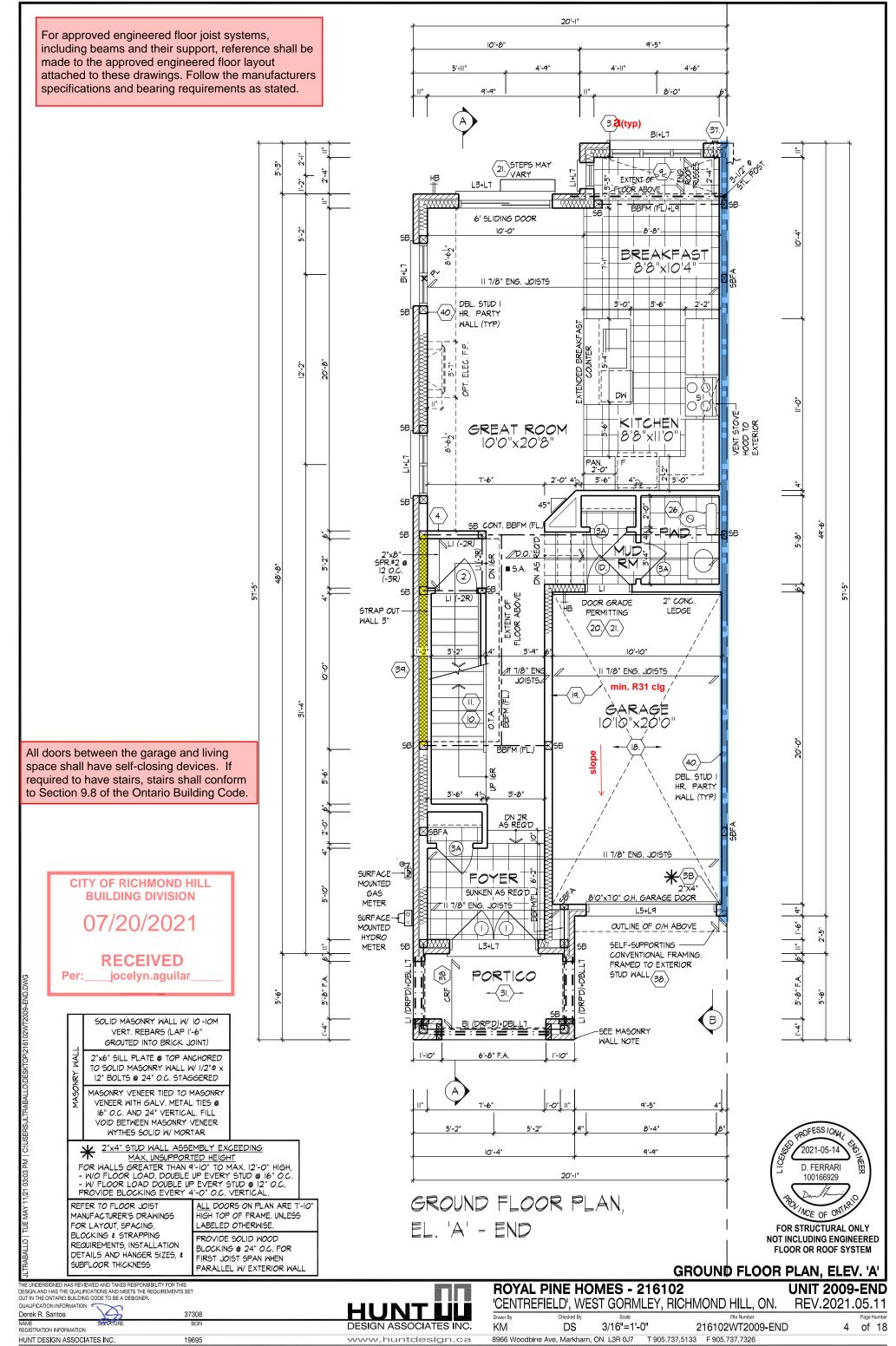
WWW.huntdesign.ca 8966 Woodbine Ave, Markham, ON L3R 0J7 T 905.737.5133 F 905.737.7326

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REFER TO FLOOR JOIST
MANUFACTURER'S DRAWINGS
FOR LAYOUT, SPACING,
BLOCKING & STRAPPING
REQUIREMENTS, INSTALLATION
DETAILS AND HANGER SIZES, &
SUBFLOOR THICKNESS

QUALIFICATION INFORMATION 
Derek R. Santos

REFER TO FLOOR JOIST
MANUFACTURER'S DRAWINGS
FOR LAYOUT, SPACING,
BLOCKING & STRAPPING
PROVIDE SOLID WOOD

37308

PROVIDE SOLID WOOD BLOCKING @ 24" O.C. FOR FIRST JOIST SPAN WHEN PARALLEL W EXTERIOR WALL

REFER TO STANDARD PLAN FOR COMPLETE CONSTRUCTION NOTES & DIMENSIONS

ROOF VENT—— 4:12 12 FIN. MAIN FLOOR

TOP OF WINDOWDOOR

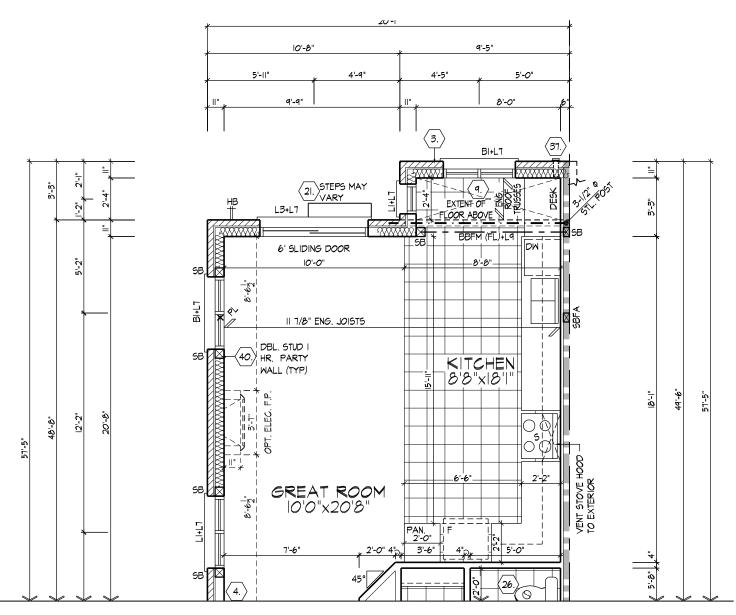
FIN. GROUND FLOOR

FIN. GRADE @ REAR

30"xi6" RWL

REAR ELEVATION 'A' & 'B'
- OPT. KITCHEN LAYOUT





PART. GROUND FLOOR PLAN
- OPT. KITCHEN LAYOUT EL. 'A' & 'B'

CITY OF RICHMOND HILL BUILDING DIVISION

07/20/2021

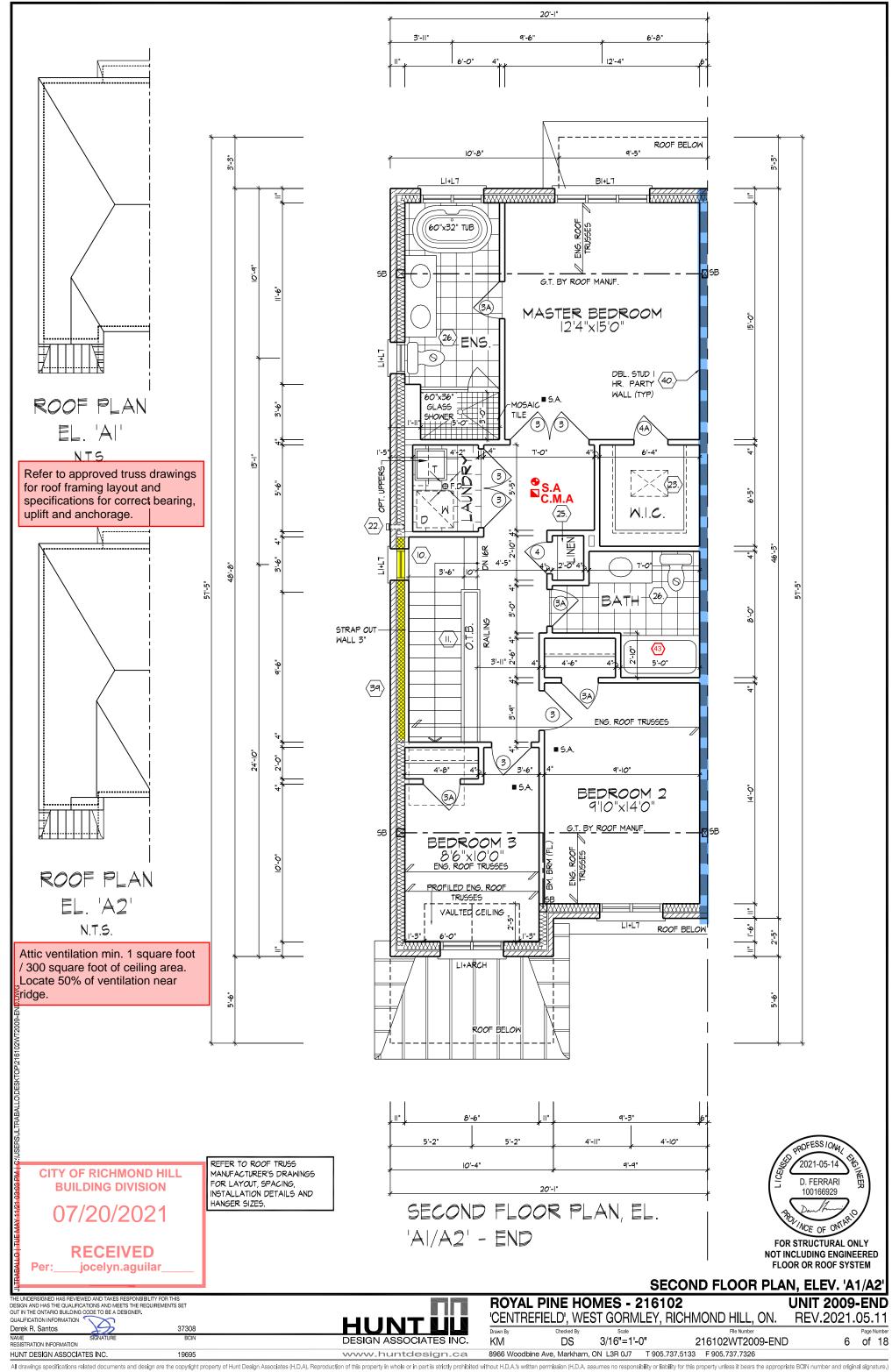
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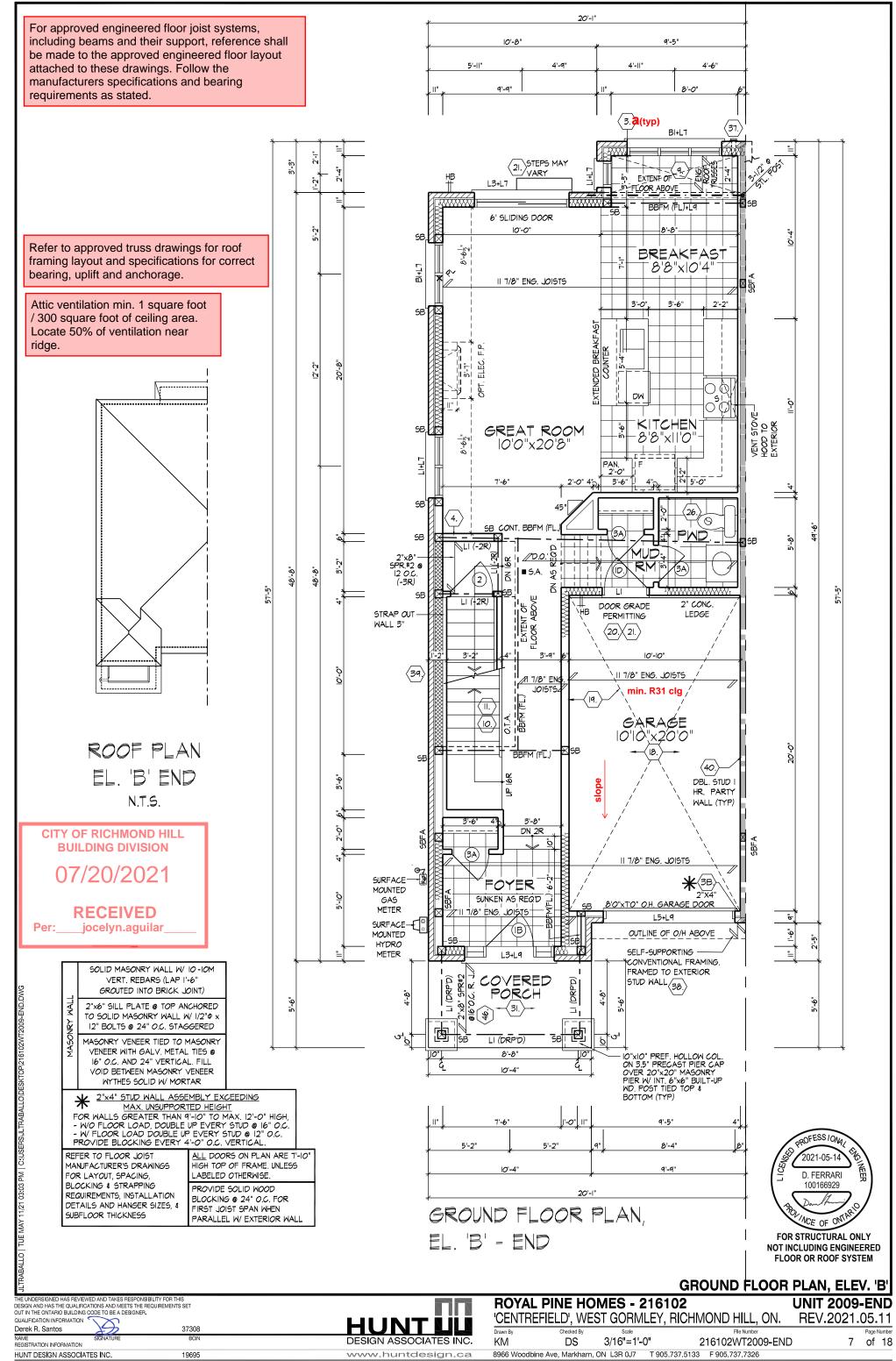


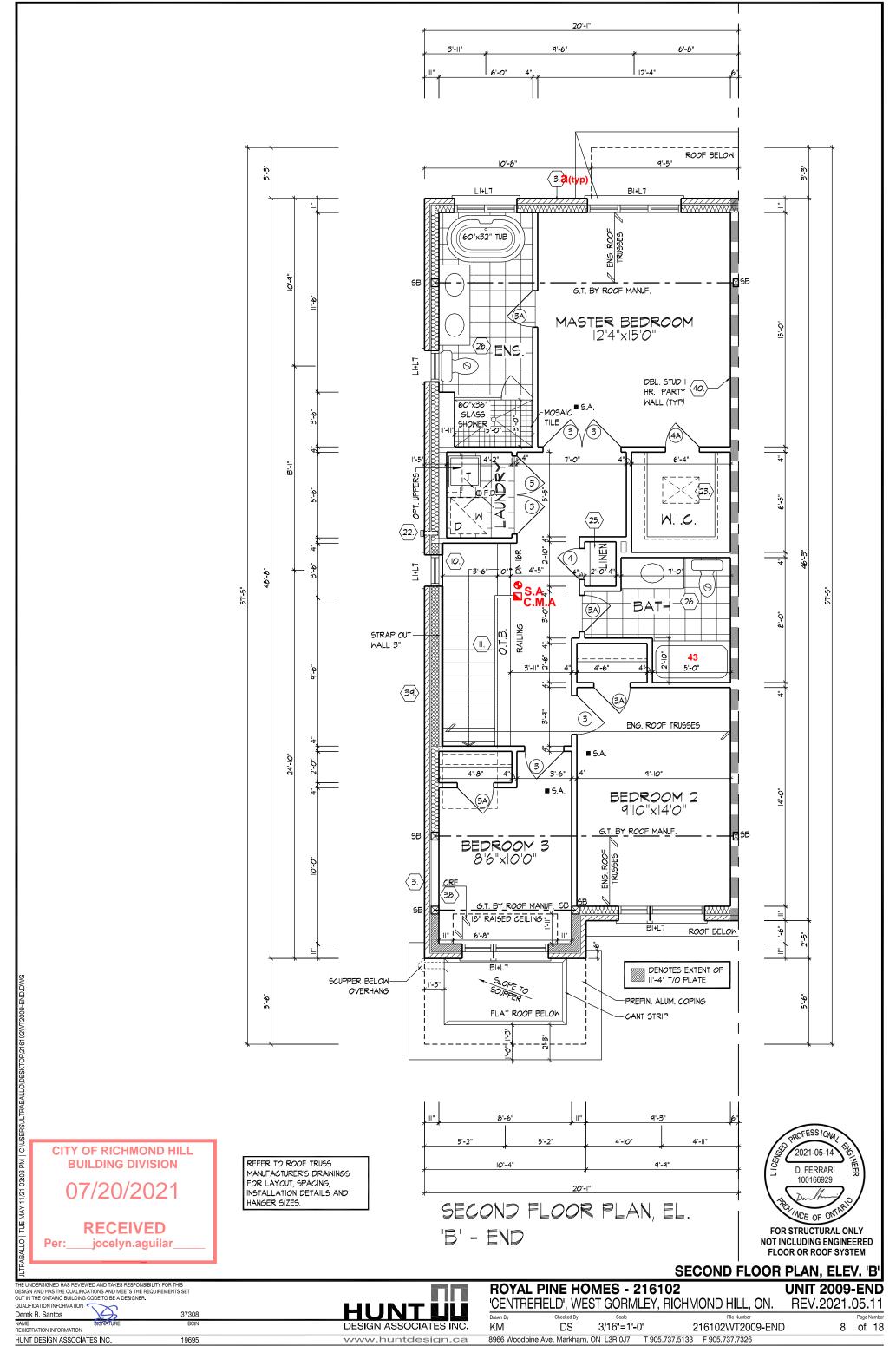
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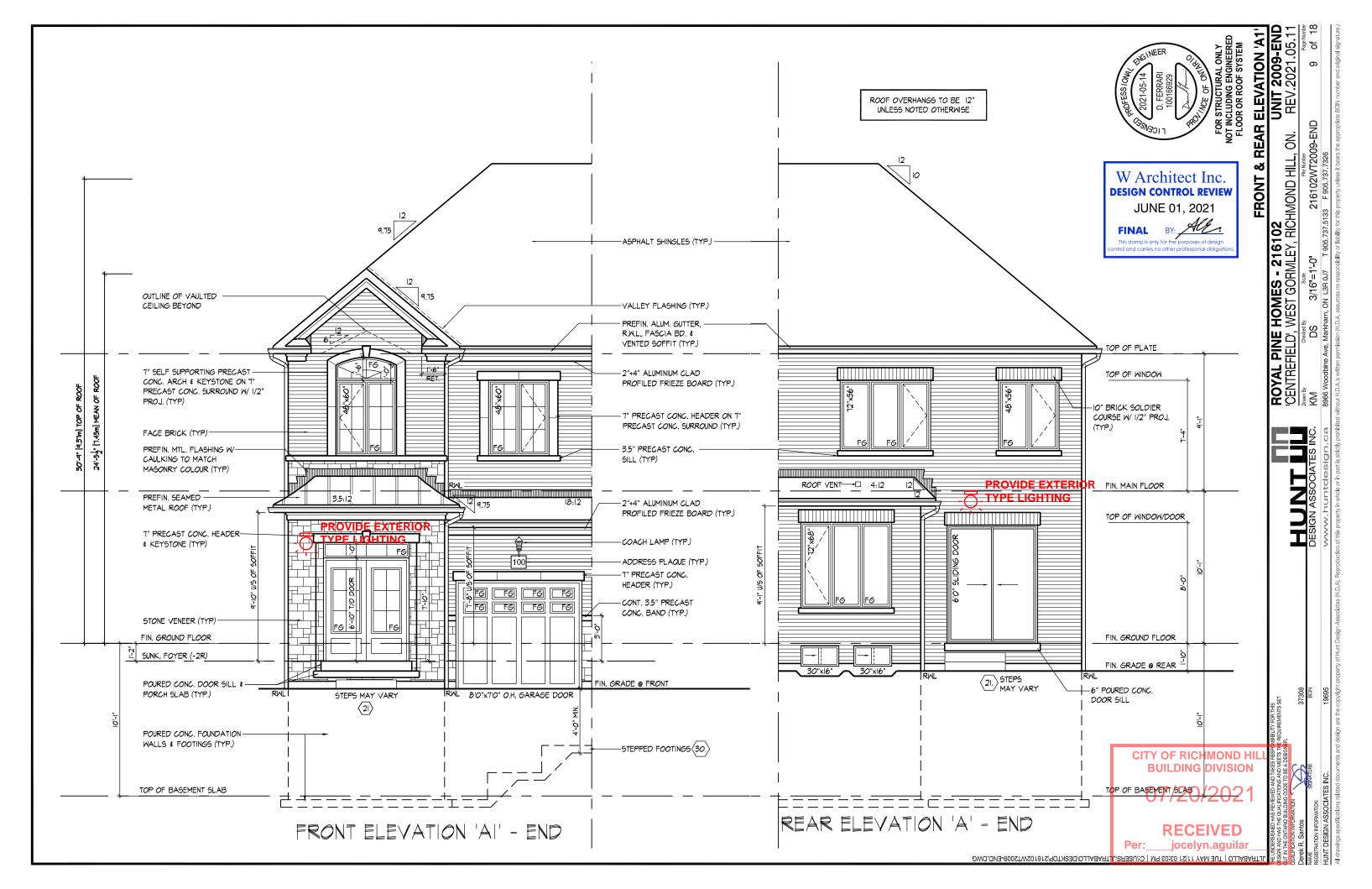
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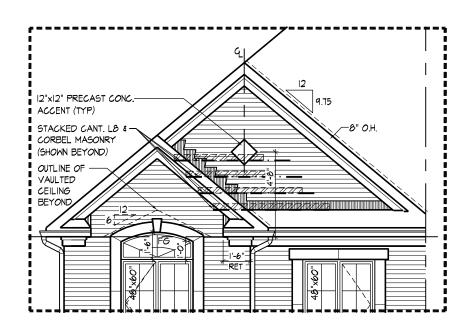












PART. FRONT ELEVATION 'A2'



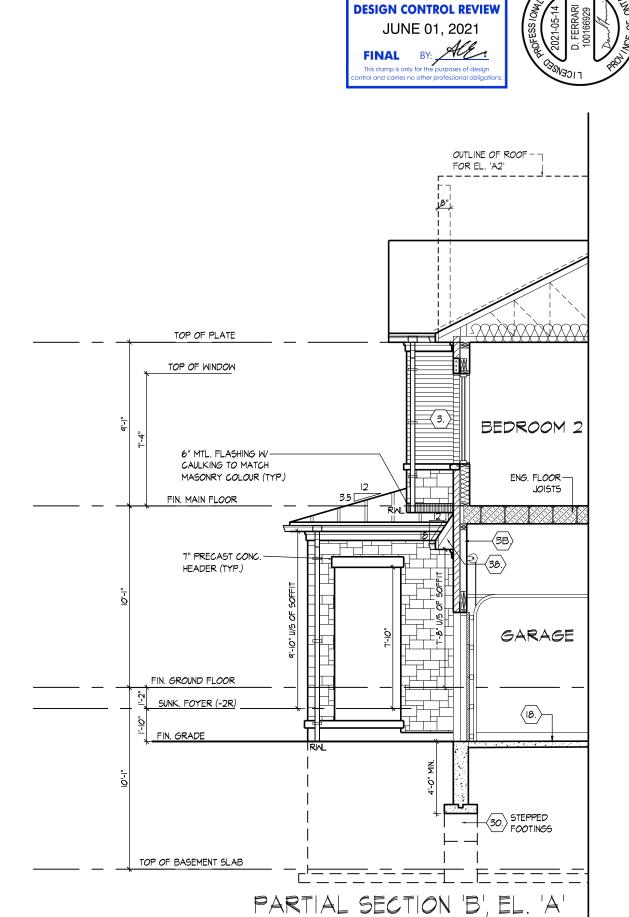
INTERIOR PORTICO ELEVATION 'A'

**CITY OF RICHMOND HILL BUILDING DIVISION** 

07/20/2021

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\_\_jocelyn.aguilar



W Architect Inc.

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PART. FRONT ELEVATION 'A2' & SECTION 'B'

ROYAL PINE HOMES - 216102

UNIT 2009-END

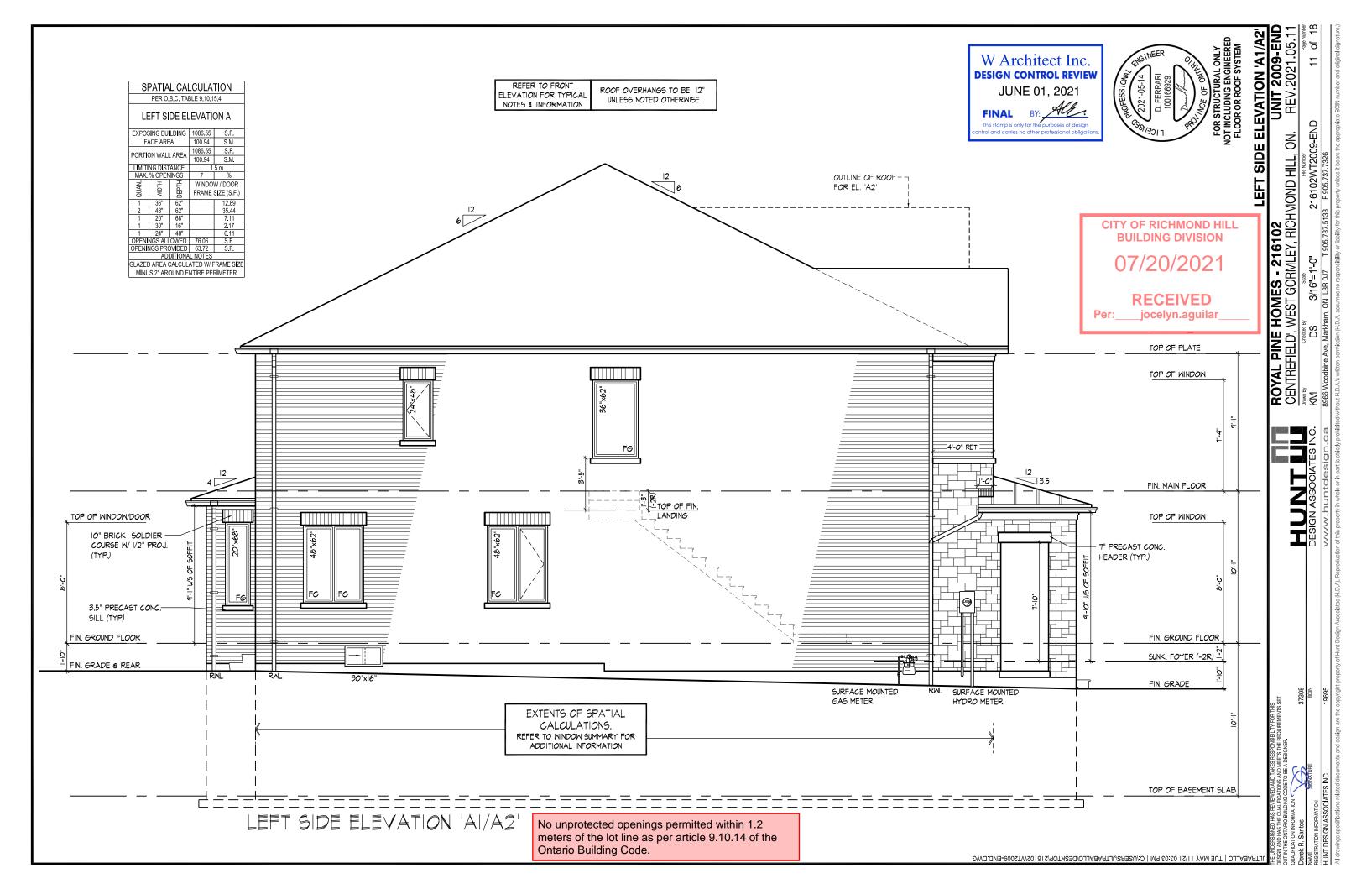
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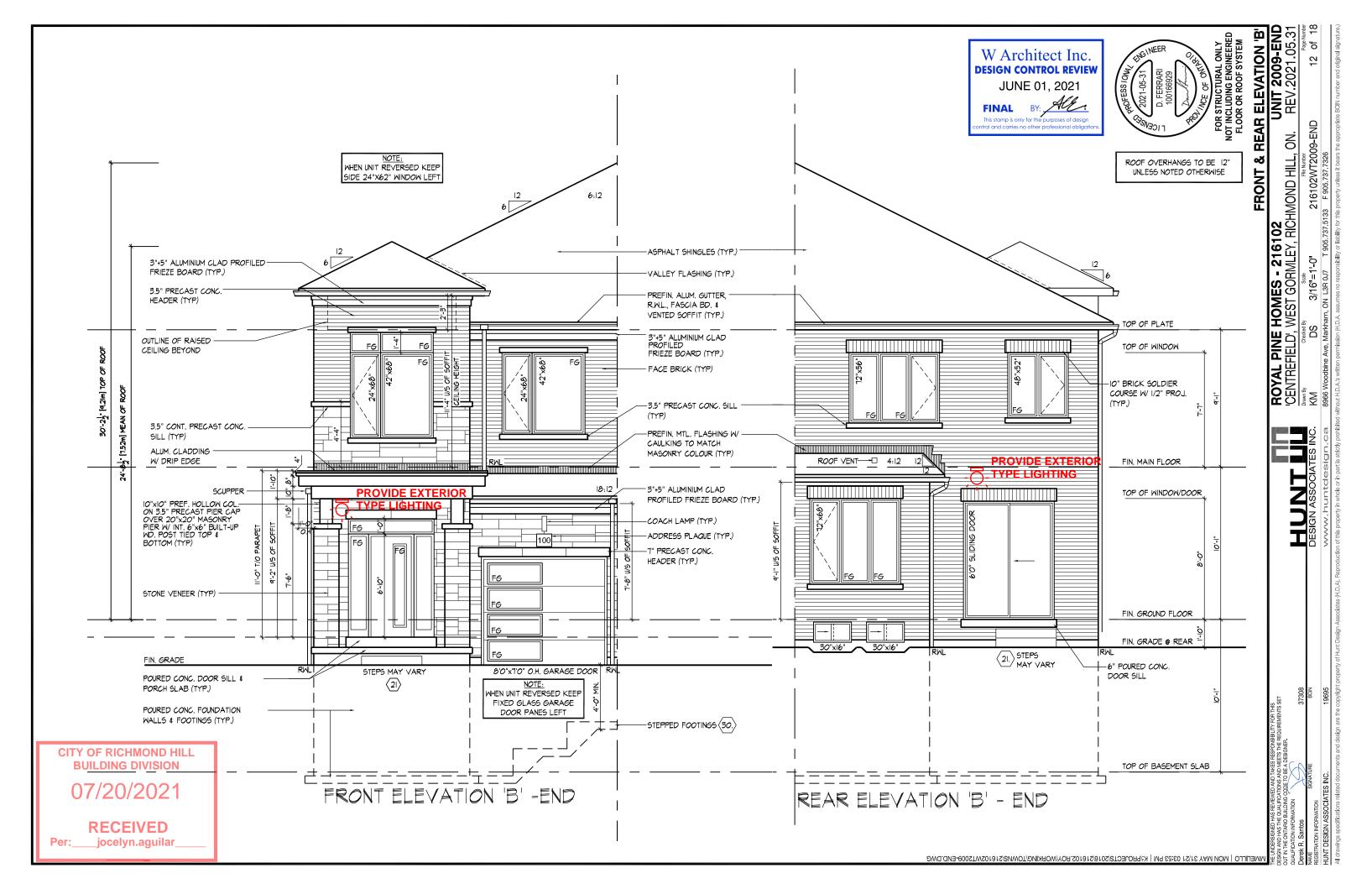
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Bell DONNATIONAL ON BEV. 2021.05.11

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W Architect Inc. **DESIGN CONTROL REVIEW** JUNE 01, 2021 FINAL BY: All.
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RT. SECTION 'C' UNIT 2009-END REV. 2021.05.31

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ROYAL PINE HOMES - 216102

"CENTREFIELD", WEST GORMLEY, RICHMOND HILL, ON.

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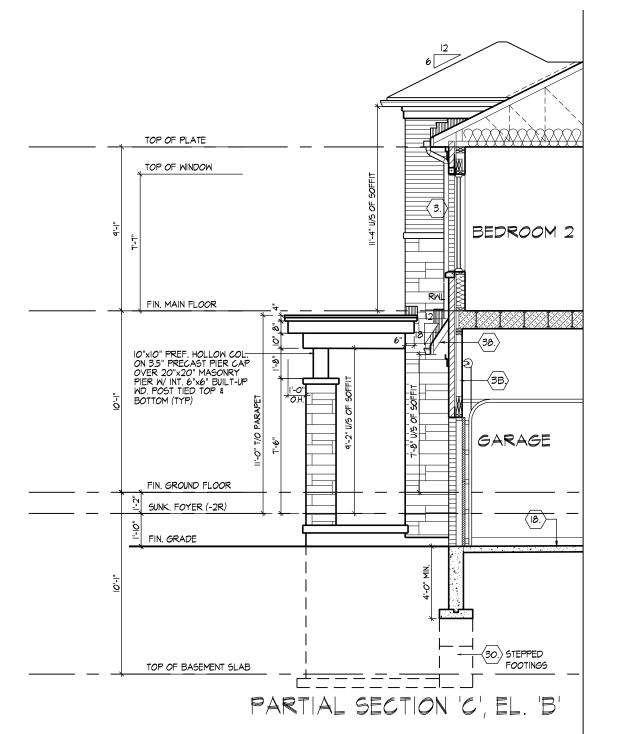
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**PART**.

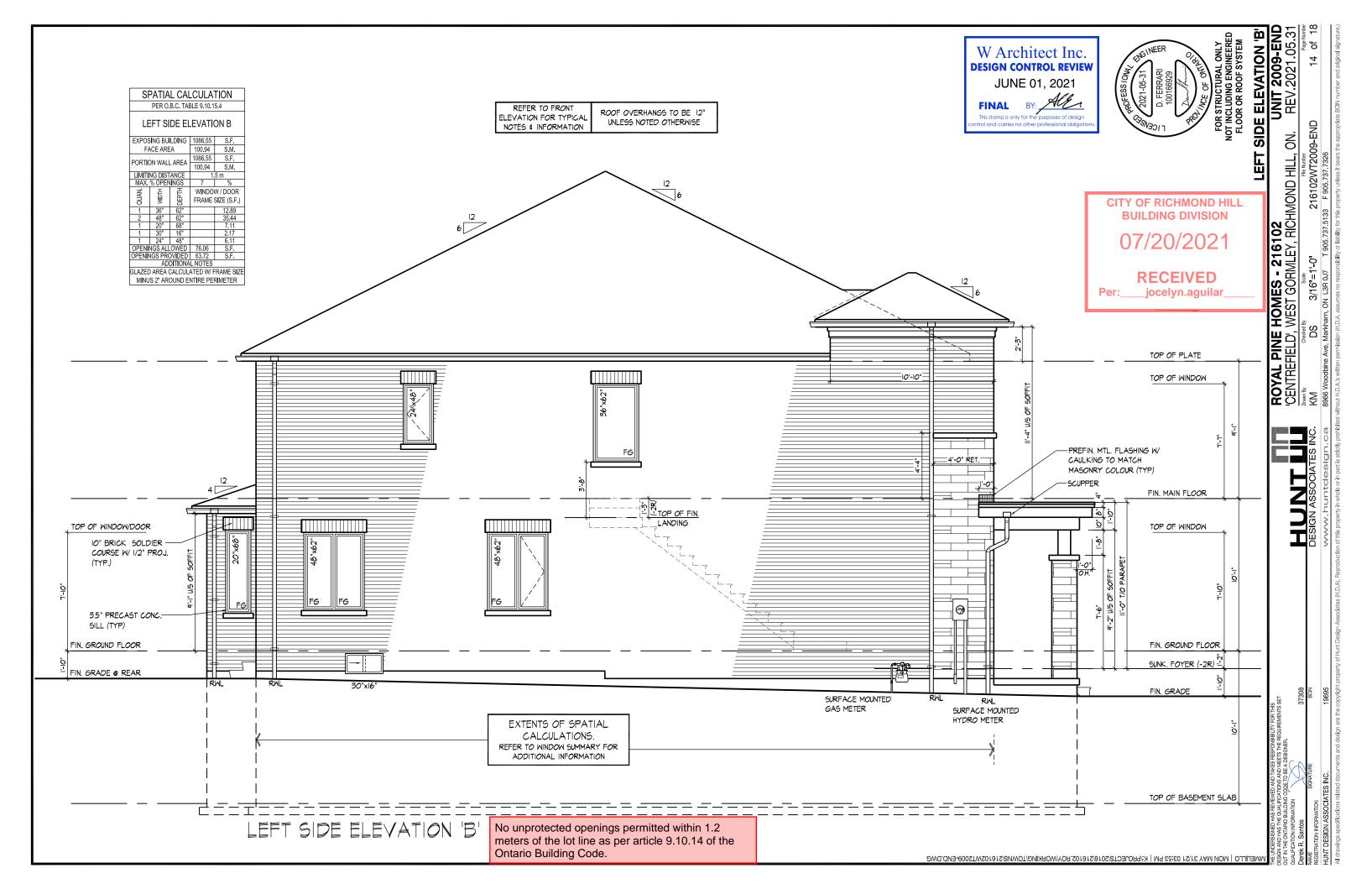
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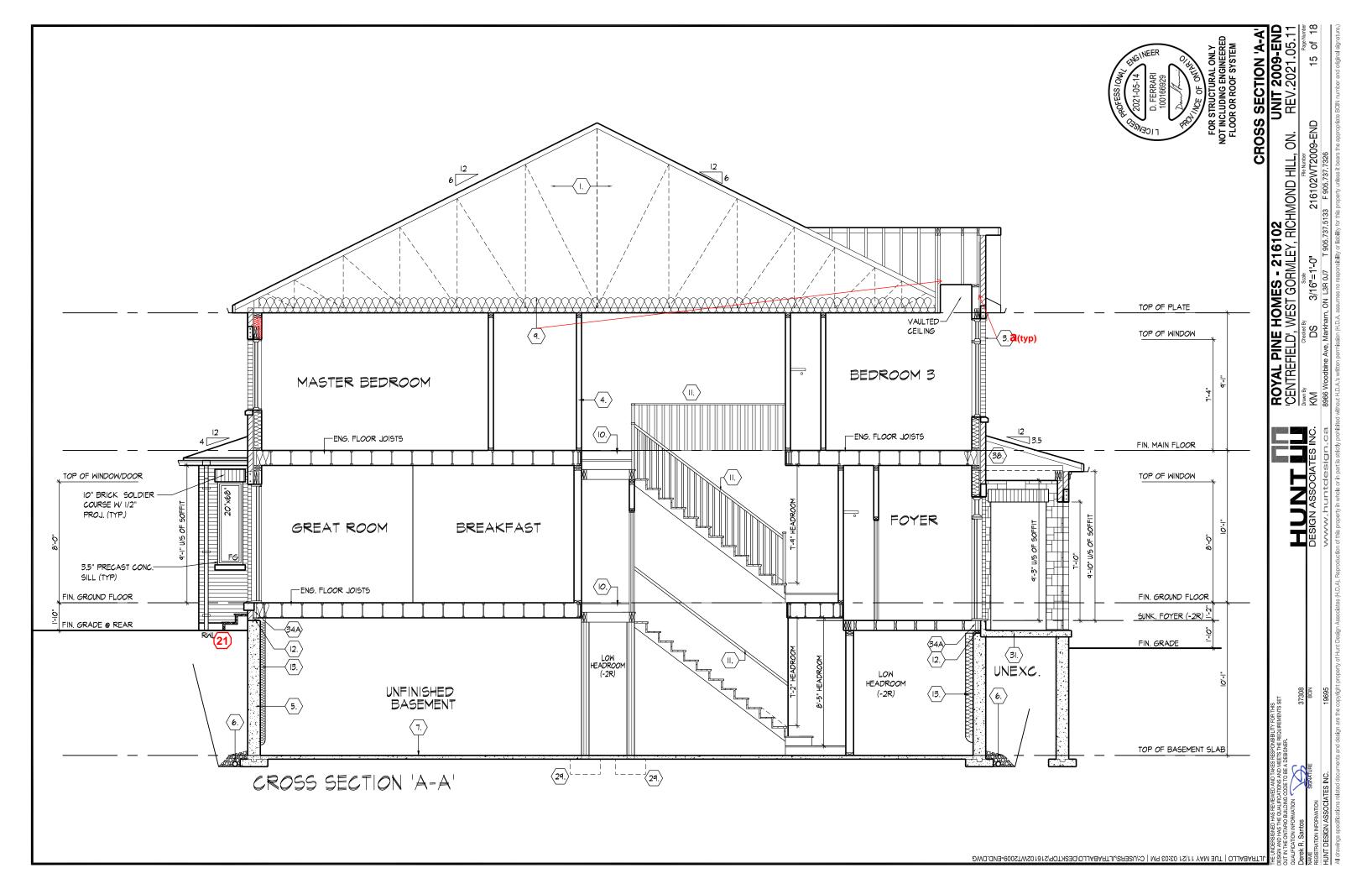


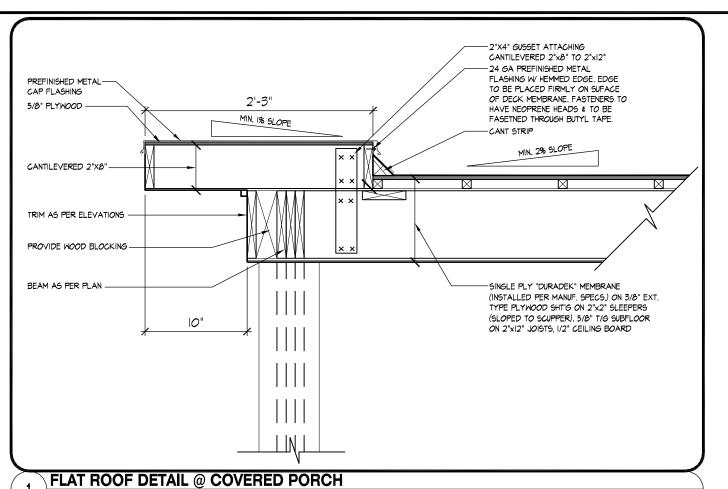
**CITY OF RICHMOND HILL BUILDING DIVISION** 

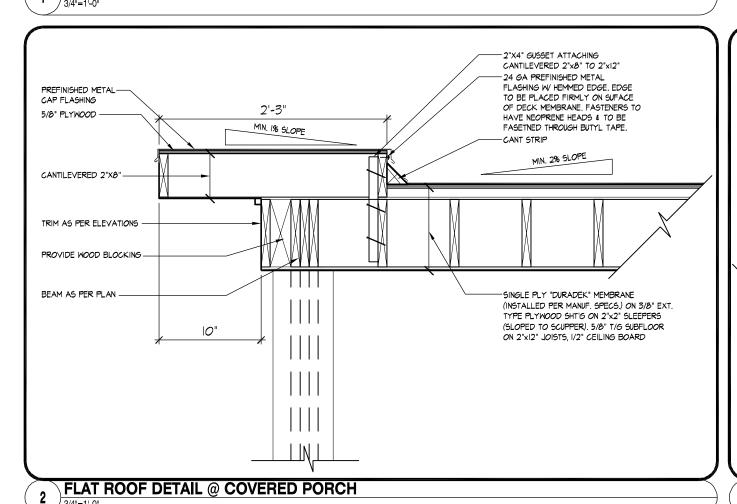
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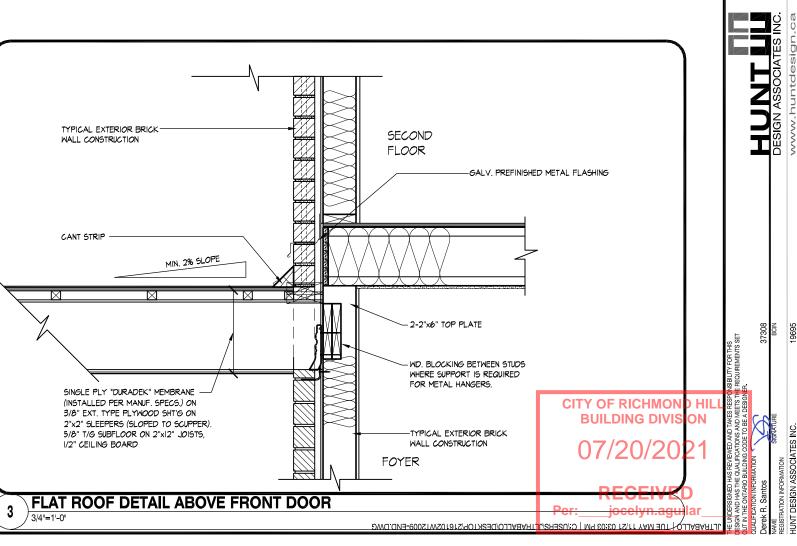
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**UNIT 2009-END** REV.2021.05.11 EVATION I

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ROYAL PINE HOMES - 216102

'CENTREFIELD', WEST GORMLEY, RICHMOND HILL,

Dam By Sale Sale Sale File Number

KM DS 3/16"=1-0" 216102WT200

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FLAT ROOF DETAILS FOR

EAVESTROUGH AND DOWN RWL. ICE AND WATER SHIELD

PROVIDE ICE AND WATER SHIELD IN THE AREAS INDICATED. THE ICE AND WATER SHIELD SHALL BE A SELF ADHERING AND SELF SEALING MEMBRANE. SIDE LAPS MUST BE A MINIMUM 3 1/2" (90) AND END LAPS A MINIMUM 6" (152). AND TO EXTEND UP DORMER WALLS A MINIMUM 12" (305).

**PROFILED ROOF TRUSSES** 

ROOF TRUSSES SHALL BE PROFILED AND/OR STEPPED AT RAISED COFFER/TRAY CEILINGS. ANGLED TRAY CEILINGS WILL BE SHEATHED W/ 3/8" (9.5) PLYWOOD.

SIDING WALL CONSTRUCTION (2"x6")

SIDING MATERIAL AS PER ELEVATION ATTACHED TO FRAMING MEMBERS SIDING MATERIAL AS PER ELEVATION AT ITALHED TO PRAMINING MEMBERS, FURRING MEMBERS OR BLOCKING BETWEEN THE FRAMING MEMBERS ON APPROVED SHEATHING PAPER ON 3/8" (9.5) EXT. GRADE SHEATHING ON STUDS CONFORMING TO 0.B.C (9.23.10.1.) & SECTION 1.1., INSULATION, APPROVED 6 MIL POLYETHYLENE AIR/VAPOUR BARRIER, ON 1/2" (12.7) GYPSUM WALLBOARD INT. FIN. (GYPSUM SHEATHING, RIGID INSULATION, AND FIBERBOARD SHALL NOT BE USED FOR THE ATTACHMENT OF SIDING (9.23.16.3.(1.)) (REFER TO 35 NOTE AS REQ.)

SIDING WALL CONSTRUCTION (2'x6") W/ CONTIN. INSULATION SIDING MATERIAL AS PER ELEVATION ATTACHED TO FURRING MEMBERS ON I.APPROVED AIR,WATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS ON 3/8" (9.5) EXT. GRADE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION, APPROVED 6 MIL POLYETHYLENE AIR/VAPOUR BARRIER, ON 1/2" (12.7) GYPSUM WALLBOARD INT. FIN. (GYPSUM SHEATHING, RIGID INSULATION, AND FIBERBOARD SHALL NOT BE

USED FOR THE ATTACHMENT OF SIDING (9.23.16.3.(1.)) (REFER TO 35 NOTE AS REQ.)

SIDING WALL @ GARAGE CONSTRUCTION

SIDING MATERIAL AS PER ELEVATION ATTACHED TO FRAMING MEMBERS, FURRING MEMBERS OR BLOCKING BETWEEN THE FRAMING MEMBERS ON APPROVED SHEATHING PAPER ON 3/8" (9.5) EXTERIOR TYPE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1.,1/2" (12.7) GYPSUM WALLBOARD INTERIOR FINISH. (GYPSUM SHEATHING, RIGID INSULATION AND FIRERROARD SHALL NOT BE USED FOR THE ATTACHMENT OF SIDING (9.23.16.3.(1.)) (REFER TO 35 NOTE AS REQ.)

BRICK VENEER WALL CONSTRUCTION (2'x6")

BRICK VENEER WALL CONSTRUCTION (2"X6")

3 1/2" (90) BRICK VENEER 1" (25) AIR SPACE, 7/6"X7"X0.03" (22X180x0.76) GALV. METAL TIES

(0 16" (400) O.C. HORIZ. 24" (600) O.C. VERT. BONDING AND FASTENING FOR TIES TO
CONFORM WITH 9.20.9. ON APPROVED SHEATHING PAPER, 3/8" (9.5) EXTERIOR TYPE
SHEATHING, STUDS CONFORMING TO O.B.C. (9.23.10.1.) & SECTION 1.1., INSULATION
AND 6 mil POLYETHYLEN VAPOUR BARRIER WITH APPROVED CONTIN. AIR BARRIER, 1/2"

(12.7) GYPSUM WALLBOARD INTERIOR FINISH. PROVIDE WEEP HOLES @ 32" (800) O.C.
BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 6" (150) BEHIND BUILDING PAPER (9.20.13.6.) (REFER TO 35 NOTE AS REQUIRED)

BRICK VENEER WALL CONSTRUCTION (2"x6") W/ CONTIN. INSULATION 3 1/2" (90) BRICK VENEER 1" (25) AIR SPACE, 7/8"x7"x0.03" (22x180x0.76) GALV. METAL I TIES © 16" (400) O.C. HORIZ. 24" (600) O.C. VERT. BONDING AND FASTENING FOR TIES TO CONFORM WITH 9.20.9. ON APPROVED AIR/WATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS, ON 3/8" (9.5) EXTERIOR TYPE SHEATHING, STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION AND 6 mil POLYETHYLENE VAPOUR BARRIER WITH APPROVED CONTIN. AIR BARRIER. 1/2" (12.7) GYPSUM WALLBOARD INTERIOR FINISH. PROVIDE WEEP HOLES @ 32" (800) O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 6" (150) OVER RIGID INSULATION (9.20.13.6.) (REFER TO 35 NOTE AS REQUIRED)

**BRICK VENEER WALL @ GARAGE CONSTRUCTION** 3 1/2" (90) BRICK VENEER, MIN. 1" (25) AIR SPACE, 7/8"x7"x0.03" (22x180x0.76) GALV. METAL TIES @ 16" (400) O.C. HORIZ, 24" (600) O.C. VERT. BONDING AND FASTENING FOR TIES TO CONFORM WITH 9.20.9. ON APPROVED SHEATHING PAPER, 3/8" (9.5) EXTERIOR TYPE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., 1/2" (12.7) GYPSUM WALLBOARD INTERIOR FINISH, PROVIDE WEEP HOLES @ 32" (800) O.C. AT BOTTOM COURSE AND OVER OPENINGS, PROVIDE BASE FLASHING UP 6" (150) MIN. BEHIND BUILDING PAPER (9.20.13.6.) (REFER TO

**INTERIOR STUD PARTITIONS** (9.23.9.8., 9.23.10)

35 NOTE AS REQ.)

BEARING PARTITIONS SHALL BE A MINIMUM 2"x4" (38x89) @ 16" (406) O.C. FOR 2 STOREY AND 12" (305) O.C. FOR 3 STOREY, NON-BEARING PARTITIONS 2"x4" (38x89) @ 24" (610) O.C. PROVIDE 2"x4" (38x89) BOTTOM PLATE AND 2-2"x4" (2-38x89) TOP PLATE. 1/2" (12.7) INT. DRYWALL BOTH SIDES OF STUDS, PROVIDE 2"x6" (38x140) STUDS WHERE NOTED. PROVIDE 2"x4" (38x89) @ 24" (610) O.C. LADDER FRAMING WHERE WALLS INTERSECT PERPENDICULAR TO ONE ANOTHER. PROVIDE 2"x4" (38x89) WOOD BLOCKING ON FLAT @ 3"-11" (1194) O.C. MAX. BETWEEN FLOOR JOISTS WHEN NON-LOADBEARING WALLS ARE PARALLEL TO FLOOR JOISTS.

EXT. LOFT WALL CONSTRUCTION (2"x6") - NO CLADDING

3/8" (9.5) EXTERIOR TYPE SHEATHING, STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION AND 6 mil POLYETHYLENE VAPOUR BARRIER WITH APPROVED CONT. AIR BARRIER. 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (9.23.)

EXT. LOFT WALL CONSTRUCTION (2"x6") NO CLADDING W/ CONTINUOUS INSULATION

APPROVED AIRWATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS, ON 3/8" (9.5) EXTERIOR TYPE SHEATHING, STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION AND 6 mil POLYETHYLENE VAPOUR BARRIER WITH APPROVED CONT. AIR BARRIER. 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (9.23.)

FOUNDATION WALL/FOOTINGS

POURED CONC. FOUNDATION WALL AS PER CHART BELOW ON CONTINUOUS KEYED CONCRETE FOOTING, FOUNDATION WALLS SHALL EXTEND NOT LESS THAN 6" (150) ABOVE FINISHED GRADE, THE OUTSIDE OF THE FOUNDATION SHALL BE DAMPROOFED FROM THE TOP OF THE FOOTING TO FINISHED GRADE AND BRUSH COAT FROM THE TOP TO 2" BELOW GRADE. PROVIDE A DRAINAGE LAYER ON THE OUTSIDE OF THE FOUNDATION WALL. SEAL THE DRAINAGE LAYER AT THE TOP. THE TOP OF THE CONC. FOOTING SHALL BE DAMPROOFED. CONCRETE FOOTINGS SUPPORTING JOIST SPANS GREATER THAN 16'-1" (4900)

SHALL BE SIZED IN ACCORDANCE WITH 9.15.3.4 (1), (2) OF THE O.B.C. (REFER TO CHART BELOW FOR RESPECTIVE SIZE). BRACE FOUNDATION WALL PRIOR TO BACKFILLING, ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OF 75kPa OR COMPACTED ENGINEERED FILL WITH MIN. BEARING CAPACITY OF 150kPa. IF SOIL BEARING DOES NOT MEET MINIMUM CAPACITY, ENGINEERED FOOTINGS ARE REQUIRED. ACTUAL SOIL BEARING CAPACITY TO BE VERIFIED

WITH SOIL ENGINEERING REPORT. REFER TO CONSTRUCTION DRAWINGS AND DETAILS FOR FOUNDATION WALL STRENGTH AND THICKNESS AND 9.15.4.

FOUNDATION WALLS SHALL NOT EXCEED 9'-10" (3.0m) IN UNSUPPORTED HEIGHT UNLESS OTHERWISE NOTED. [9.15.4.2.(1.)]

| ı | UNREINFORCED SOLID CONCRETE FOUNDATION WALLS (9.15.4.2.)      |             |                                     |               |                  |                |  |  |
|---|---|-------------|-------------------------------------|---------------|------------------|----------------|--|--|
| ſ | TH  | SS          | MAX. HEIGHT FROM FIN. SLAB TO GRADE |               |                  |                |  |  |
|   | HE SE MAX. HEIGHT I  WINSUPPORTED  WINSUPPORTED  AT TOP  ≤2.5 |             |                                     |               | SUPPORTED AT TOP |                |  |  |
|   | 馬   差   AT TOP  |             | AT TOP                              | ≤2.5m         | >2.5m & ≤2.75m   | >2.75m & ≤3.0m |  |  |
| ſ | ₹   | <b>*</b> 8" | 3'-11" (1.20m)                      | 7'-0" (2.15m) | 7'-0" (2.15m)    | 6'-10" (2.10m) |  |  |
|   |   | 10"         | 4'-7" (1.40m)                       | 7'-6" (2.30m) | 8'-6" (2.60m)    | 8'-2" (2.50m)  |  |  |
|   | 15  | 12"         | 4'-11" (1.50m)                      | 7'-6" (2.30m) | 8'-6" (2.60m)    | 9'-3" (2.85m)  |  |  |
| ſ | МРа   | <b>*</b> 8" | 3'-11" (1.20m)                      | 7'-6" (2.30m) | 7'-6" (2.30m)    | 7'-2" (2.20m)  |  |  |
|   |   | 10"         | 4'-7" (1.40m)                       | 7'-6" (2.30m) | 8'-6" (2.60m)    | 9'-3" (2.85m)  |  |  |
|   | 20  | 12"         | 4'-11" (1.50m)                      | 7'-6" (2.30m) | 8'-6" (2 60m)    | 9'-3" (2.85m)  |  |  |

\* 9" MIN. THICK FOUNDATION WALL IS REQUIRED FOR MASONRY VENEER FINISHED EXTERIOR WALLS WITH CONTINUOUS INSULATION CONDITION, TO PROVIDE MIN. BEARING FOR SILL PLATES, BEAMS AND FLOOR JOIST AS PER 9.23.7.2., 9.23.8.1., & 9.23.9.1. OF THE O.B.C

| MINIMUM STRIP FOOTING SIZES (9.15.3.) |  |                        |                         |  |  |  |  |  |
|---------------------------------------|--|------------------------|-------------------------|--|--|--|--|--|
| NUMBER FLOORS<br>SUPPORTED            | SUPPORTING INT.<br>LOAD BEARING<br>MASONRY WALLS | SUPPORTING<br>EXTERIOR | SUPPORTING<br>PARTYWALL |  |  |  |  |  |
| 1                                     | 16" WIDE x 6" THICK                              | 16' WIDE x 6" THICK    | 16" WIDE x 6" THICK     |  |  |  |  |  |
| 2                                     | 24" WIDE x 8" THICK                              | 20' WIDE x 6" THICK    | 24" WIDE x 8" THICK     |  |  |  |  |  |
| 3                                     | 36" WIDE x 14" THICK                             | 26' WIDE x 9" THICK    | 36" WIDE x 14" THICK    |  |  |  |  |  |

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REFER TO SB-12 ENERGY EFFICIENCY DESIGN MATRIX ON THE TITLE PAGE FOR ALL VALUES AS REQUIRED PER 3.1.1., 3.1.2., 3.1.3. OF THE OBC.

FOUNDATION REDUCTION IN THICKNESS FOR MASONRY WHERE THE TOP OF THE FOUNDATION WALL IS REDUCED IN THICKNESS TO PERMIT THE INSTALLATION OF MASONRY EXTERIOR FACING, THE REDUCED SECTION SHALL BE NOT LESS THAN 3 1/2" (90) THICK. THE BRICK VENEER SHALL BE TIED TO THE FOUNDATION WALL WITH CORROSION RESISTANT METAL TIES @ 7 7/8" (200) VERTICAL AND 2'-11" (889) HORIZONTAL. FILL VOID WITH MORTAR BETWEEN WALL AND BRICK VENEER (9.15.4.7(2)(3) & 9.20.9.4(3))

**FOUNDATION REDUCTION IN THICKNESS FOR JOISTS** WHERE THE TOP OF THE FOUNDATION WALL IS REDUCED IN THICKNESS TO PERMIT THE INSTALLATION OF FLOOR JOISTS, THE REDUCED SECTION SHALL BE NOT MORE THAN 13 3/4" (350) HIGH & NOT LESS THAN 3 1/2" (90) THICK (9.15.4.7(1))

4" (100) Ø WEEPING TILE W/ FILTER CLOTH WRAP & 6" (152) CRUSHED STONE COVER

**BASEMENT SLAB OR SLAB ON GRADE** (9.16.4.3.) 3" (80) MIN, 25MPa (3600psi) CONC, SLAB ON 4" (100) COARSE GRANULAR FILL OR 20MPa (2900psi) CONC. WITH DAMPPROOFING BELOW SLAB. PROVIDE 1/2" (12.7) IMPERVIOUS BOARD FOR BOND BREAK AT EDGE. (9.13.) WHERE A BASEMENT SLAB IS WITHIN 24" (610) OF THE EXTERIOR GRADE PROVIDE RIGID INSUL. AROUND THE PERIMETER EXTENDING MIN. 24" (610) BELOW GRADE. FOR SLAB ON GRADE CONDITIONS RIGID INSULATION SHALL BE APPLIED TO THE UNDERSIDE OF THE ENTIRE SLAB. ([SB-12] 3.1.1.7.(5) & (6))

EXPOSED FLOOR TO EXTERIOR (9.10.17.10, & CAN/ULC-S705.2) PROVIDE SPRAY FOAM INSULATION BETWEEN CANT. JOIST AND INSTALL FIN. SOFFIT OR CLADDING AS PER ELEVATION TO U/S OF EXPOSED CANT. JOIST.

EXPOSED CEILING TO EXTERIOR w/ ATTIC (9.25.2.4) min. R60 INSULATION, 6 mil POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM BOARD INTERIOR FINISH OR APPROVED FO

EXPOSED CEILING TO EXTERIOR W/O ATTIC

JOISTS/TRUSSES AS PER PLANS W/ 2"x2" (38x38) PURLINS @ 6" (406) O.C.
PERPENDICULAR TO JOISTS (PURLINS NOT REQ. W/ SPRAY FOAM OR ROOF TRUSSES),
W/ INSULATION BETWEEN JOIST, 6 mil POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7)
GYPSUM BOARD INT. FINISH OR APPROVED EQ. (CAN/ULC-S705.2, 9.19.1, 9.10.17.1)

**ALL STAIRS/EXTERIOR STAIRS** (9.8.1.2., 9.8.2., 9.8.4.)

|         | MAX. RISE    | MIN. F   | RISE | MAX. RUN  | MIN. RUN     | MAX. TREAD | M    | N. TREAD   |
|---------|--------------|----------|------|-----------|--------------|------------|------|------------|
| PRIVATE | 7 7/8" (200) | 5" (125) |      | 14' (355) | 8 1/4" (210) | 14" (355)  | 9    | 1/4' (235) |
| PUBLIC  | 7" (180)     | 5" (12   | 25)  | NO LIMIT  | 11' (280)    | NO LIMIT   | 1    | 11" (280)  |
|         | MIN. STAIR   | WIDTH    | (    | CURVED ST | AIRS         | ALL S      | TAIF | RS         |
| PRIVATE | 2'-10" (8    | 60)      | М    | IN. RUN   | 5 7/8' (150) | MAX. NOSIN | G    | 1' (25)    |
| PUBLIC  | 2'-11" (9    | (00)     | MIN. | AVG. RUN  | 7 7/8" (200) |            |      |            |
|         |              |          |      |           |              |            |      |            |

\*\* HEIGHT OVER STAIRS (HEADROOM) IS MEASURED VERTICALLY ACROSS WIDTH OF STAIRS FROM A STRAIGHT LINE TO THE TREAD & LANDING NOSING TO LOWEST POINT ABOVE AND NOT LESS THAN 6-5" (1950) FOR SINGLE DWELLING UNIT & 6-8 3/4" (2050) FOR EVERYTHING ELSE. (9.8.2.2.) REQUIRED LANDING IN GARAGÉ - O.B.C. 9.8.6.2.(3.)

FOR AN EXTERIOR STAIR SERVING A GARAGE, W/ MORE THAN 3 RISERS GUARDS, HANDRAILS & STEPS AS PER CONSTRUCTION HEX NOTE 10 & 11.

**GUARDS/RAILINGS** (9.8.7., 9.8.8.)

GUARDS TO BE DESIGNED NOT TO FACILITATE CLIMBING AND PROVIDING MAX. OPENING CONFORMING TO O.B.C. 9.8.8.5. & 9.8.8.6. AND BE ABLE TO RESIST LOADS AS PER TABLE 9 8 8 2

GUARD HEIGHTS - O.B.C. 9.8.8.

INTERIOR GUARDS: 2'-11" (900) MIN. EXTERIOR GUARDS: 2'-11" (900) MIN. (LESS THAN 5'-11" (1800) TO GRADE) 3'-6" (1070) MIN. (MORE THAN 5'-11" (1800) TO GRADE) GUARDS FOR EXIT STAIRS: 3'-0" (920) MIN. GUARDS FOR LANDINGS @ EXIT STAIRS: 3'-6" (1070) MIN.

GUARDS FOR FLOORS & RAMPS IN GARAGES (SERVICE STAIRS)
FLOOR OR RAMP W/O EXTERIOR WALLS THAT IS 23 5/8" (600) OR MORE ABOVE

ADJACENT SURFACE REQUIRES CONT. CURB MIN. 6" (150) HIGH, AND GUARD REQUIRED GUARDS

BETWEEN WALKING SURFACE & ADJACENT SURFACE WITH A DIFFERENCE IN ELEVATION MORE THAN 23 5/8" (600) OR ADJACENT SURFACE WITHIN 3-11" (1200) & WALKING SURFACE W/ A SLOPE MORE THAN 1 IN 12 SHALL BE PROTECTED WITH GUARDS PER CONSTRUCTION HEX NOTE 11.

WITH GUARDS PER CONSTRUCTION HEX NOTE 11.

HANDRAIL HEIGHTS - O.B.C. 9.8.7. - REQUIRED AS PER 9.8.7.1.(3)

MIN. HEIGHT AT STAIRS OR RAMP: 2'-10" (865)

MAX. HEIGHT AT STAIRS OR RAMP: 3'-2" (965)

MAX. HEIGHT AT LANDING: 3'-6" (1070) STAIRS OR RAMP MIN. 7'-3" (2200) WIDE: 2'-9" (865) MIN. HEIGHT

2"x4" (38x89) SILL PLATE WITH 1/2" (12.7)Ø ANCHOR BOLTS 8" (200) LONG, EMBEDDED MIN. 4" (100) INTO CONC. @ 7"-10" (2388) O.C., CAULKING OR GASKET BETWEEN PLATE AND TOP OF FOUNDATION WALL. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED (9.23.7.)

**BASEMENT INSULATION** ([SB-12] 3.1.1.7.) PROVIDE CONTINUOUS BLANKET INSULATION W/ BUILT IN 6 mil POLYETHYLENE VAPOUR BARRIER. INSULATION TO EXTEND NO MORE THAN 8" (200) ABOVE FINISHED BASEMENT FLOOR. DAMPROOFED WITH BUILDING PAPER BETWEEN THE FOLK BASEMENT AND INCLUDING PAPER BETWEEN THE FOLK BASEMENT FLOOR. THE FOUNDATION WALL AND INSULATION UP TO GRADE LEVEL.

**BEARING STUD PARTITION IN BASEMENT** (9.15.3.6., 9.23.10.1.) 2"x4" (38x89) STUDS @ 16" (406) O.C., 2"x4" (38x89) SILL PLATE (2"x6" (38x140) AS REQUIRED) ON DAMPPROOFING MATERIAL OR 2 mil POLYETHYLENE FILM, 1/2" (12.7) Ø ANCHOR BOLTS 8" (200) LONG, EMBEDDED 4" (100) MIN. INTO CONC. @ 7-10" (2390) O.C. 4" (100) HIGH CONC. CURB ON CONC. FOOTING, FOR SIZE REFER TO HEX NOTE 5. ADD HORIZ. BLOCKING AT MID-HEIGHT IF WALL IS UNFINISHED.

ADJUSTABLE STEEL BASEMENT COLUMN (9.15.3.4.) 9-10" (3000) MAX. SPAN BETWEEN COLUMNS. 3 1/2" (90)Ø SINGLE TUBE ADJUSTABLE STEEL COLUMN CONFORMING TO CAN/CGSB-7.2M, AND WITH 6"x6"x3/8" (152x152x9.5) STEEL PLATE TOP & BOTTOM, FIELD WELD BASEMENT COLUMN CONNECTION. POURED CONCRETE FOOTING ON NATURAL UNDISTURBED SOIL OF 75KPa OR COMPACTED ENGINEERED FILL WITH MIN. BEARING CAPACITY OF 150KPa AS PER SOILS REPORT.

SUPPORTING 2 STOREY FLR. LOAD PROVIDE 34"x34"x16" (870x870x410) CONC. FOOTING SUPPORTING 3 STOREY FLR. LOAD PROVIDE 40"x40"x19" (1060x1060x480) CONC. FOOTING

NON-ADJUSTABLE STEEL BASEMENT COLUMN

3 1/2" (90)Ø x 0.188" (4.78) NON-ADJUSTABLE STEEL COLUMN WITH 6"x6"x3/8" (152x152x9.5) STEEL PLATE TOP & BOTTOM. FIELD WELD BASEMENT COLUMN CONNECTION. POURED CONCRETE FOOTING ON NATURAL UNDISTURBED SOIL OF 75kPa OR COMPACTED ENGINEERED FILL WITH MIN. BEARING CAPACITY OF 150kPa AS PER SOILS REPORT.

SUPPORTING 2 STOREY FLR. LOAD PROVIDE 42"x42"x281 (1070x1070x460) CONC. FOOTING SUPPORTING 3 STOREY FLR. LOAD PROVIDE 48"x48"x24" (1220x1220x610) CONC. FOOTING

NON-ADJUSTABLE STL. COLUMN AT FOUNDATION WALL

3 1/2" (90)Ø x 0.188" (4.78) NON-ADJUSTABLE STEEL COLUMN WITH 6"x6"x3/8" (152x152x9.5) STEEL TOP PLATE & 6"x4"x3/8" (152x100x9.5) BOTTOM PLATE. BASE PLATE 4-1/2"x10"x11/2" (120x250x12.7) WITH 2-1/2"0 x 12" LONG x 2" HOOK ANCHORS (2-12.70x305x50). FIELD WELD COLUMN TO BASE PLATE & STEEL BM.

**STEEL BEAM BEARING AT FOUNDATION WALL (9.23.8.1.)** BEAM POCKET OR 8"x8" (200x200) POURED CONC. NIB WALLS, MIN. BEARING 3 1/2" (90). CONC. NIB WALLS TO HAVE EXTENDED FOOTINGS

**WOOD STRAPPING AT STEEL BEAMS** (9.23.4.3.(3.), 9.23.9.3.) 1"x3" (19x64) CONTIN. WOOD STRAPPING BOTH SIDES OF STEEL BEAM.

**GARAGE SLAB** (9.16., 9.35.)

4" (100) 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 4" (100) COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT @ 1% MIN.

**GARAGE TO HOUSE WALLS/CEILING** (9.10.9.16.) 1/2" (12.7) GYPSUM BOARD ON WALL AND CEILING BETWEEN HOUSE AND GARAGE, PLUS REQUIRED INSULATION IN WALLS AND SPRAY FOAM FOR CEILINGS. TAPE AND SEAL ALL JOINTS GAS TIGHT. (9.10.17.10, CAN/ULC-S705.2)

GARAGE TO HOUSE WALLS/CEILING W/ CONTIN. INSULATION 1/2" (12.7) GYPSUM BOARD ON CEILING AND ON WALLS INSTALLED OVER EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS ON 3/8" EXTERIOR GRADE SHEATHING ON STUDS BETWEEN HOUSE AND GARAGE, PLUS REQUIRED INSULATION IN WALLS & SPRAY FOAMFOR CEILINGS. TAPE AND SEAL ALL JOINTS GAS TIGHT. (9.10.9.16., 9.10.17.10, CAN/ULC-S705.2) min. 21h

GARAGE DOOR TO HOUSE (9.10.9.16., 9.10.13.10., 9.10.13.15.)densit GAS-PROOF DOOR AND FRAME. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHER STRIPPING.

EXTERIOR AND GARAGE STEPS

PRECAST CONC. STEP OR WOOD STEP WHERE NOT EXPOSED TO WEATHER. MAX RISE 7 7/8" (200), MIN. TREAD 9 1/4" (235). FOR THE REQUIRED NUMBER OF STEPS REFER TO SITING AND GRADING DRAWINGS. EXTERIOR CONCRETE STARS WITH MORE THAN 2 RISERS AND 2 TREADS SHALL BE PROVIDED WITH FOUNDATION AS REQUIRED BY ARTICLE 9.8.9.2. OR SHALL BE CANTILEVERED AS PER SUBSECTION 9.8.10.

DRYER EXHAUST

CAPPED DRYER EXHAUST VENTED TO EXT. CONFORMING TO PART 6. OBC 9.32.

ATTIC ACCESS (9.19.2.1.)  $\langle$  23 $\rangle$ 

ATTIC ACCESS HATCH WITH MIN. AREA OF 0.32m2 AND NO DIM. LESS THAN 21 1/2" (545) WITH WEATHER STRIPPING. HATCHWAYS TO THE ATTIC OR ROOF SPACE WILL BE FITTED WITH DOORS OR COVERS AND WILL BE INSULATED WITH MIN. R20 (RSI 3.52) ([SB-12] 3.1.1.8.(1))

FIREPLACE CHIMNEYS (9.21.)

TOP OF FIREPLACE CHIMNEY SHALL BE 2'-11" (889) ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF AND 2-0" (610) ABOVE THE ROOF SURFACE WITHIN A HORIZ. DISTANCE OF 10-0" (3048) FROM THE CHIMNEY

**LINEN CLOSET** (25)

PROVIDE 4 SHELVES MIN. 14" (356) DEEP.

MECHANICAL VENTILATION (9.32.1.3.) MECHANICAL EXHAUST FAN. VENTED TO EXTERIOR. TO PROVIDE AT LEAST

ONE AIR CHANGE PER HOUR. SEE GENERAL NOTE 2.3 PARTY WALL BEARING (9.23.8)

> 12"x12"x5/8" (305x305x15.9) STEEL PLATE FOR STEEL BEAMS AND 12"x12"x1/2" (305x305x12.7) STEEL PLATE FOR WOOD BEAMS BEARING (MIN. 3-1/2" (89)) ON CONC. BLOCK PARTY WALL, ANCHORED WITH 2-3/4" (2-19) x 8" (200) LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL W, NON-SHRINK GROUT.
> REFER TO NOTE SOLID BEARING (SECTION 3.0) FOR WD. STUD PARTY WALL.

WOOD FRAMING IN CONTACT TO CONCRETE

WOOD BEARING WALLS, THE UNDERSIDE OF BUILT-UP WOOD POSTS AND SILLS SHALL BE WRAPPED WITH 2 mil POLY. STRIP FOOTINGS SUPPORTING THE FOUNDATION WALL SHALL BE WIDENED 6" (152) BELOW THE BEARING WALL AND/OR WOOD POST. (9.17.4.3.)

**BUILT-UP WOOD POST AND FOOTING** (9.17.4.1., 9.15.3.7.) 3-2"x6" (3-38x140) BUILT-UP WOOD POST (UNLESS OTHERWISE NOTED) ON METAL BASE SHOE ANCHORED TO CONC. WITH 1/2" (12.7) Ø BOLT, 24"x24"x12" (610x610x305) CONC. FOOTING OR AS PROVIDED ON PLAN. REFER TO NOTE 28

**STEP FOOTINGS** (9.15.3.9.)

MIN. HORIZ. STEP = 23 5/8" (600). MAX. VERT. STEP = 23 5/8" (600).

CONC. PORCH SLAB (9.16.4.)

MIN. 4" (100) CONCRETE SLAB ON GRADE ON 4" (100) COARSE GRANULAR FILL, REINFORCED WITH 6x6xW2.9xW2.9 MESH PLACED NEAR MID-DEPTH OF SLAB. CONC. STRENGTH 32MPa (4640psi) WITH 5-8% AIR ENTRAINMENT ON COMPACTED SUB-GRADE.

FURNACE VENTING (9.32.)

DIRECT VENT FURNACE TERMINAL MIN. 3'-0" (915) FROM A GAS REGULATOR. MIN. 12" (305) ABOVE FIN. GRADE, FROM ALL OPENINGS, EXHAUST AND INTAKE VENTS. HRV INTAKE TO BE A MIN. OF 6'-0" (1830) FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE.

FIREPLACE VENTING (9.32.3.) DIRECT VENT GAS FIREPLACE VENT TO BE A MIN. 12" (305) FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE.

**FLOOR FRAMING** (9.23.3.5., 9.23.9.4., 9.23.14.) T&G SUBFLOOR ON WOOD FLOOR JOISTS. FOR CERAMIC TILE APPLICATION SEE O.B.C. 9,30.6. ALL JOISTS WHERE REQUIRED TO BE BRIDGED WITH 2"x2" (38x38) CROSS BRACING OR SOLID BLOCKING @ 6-11" (2108) O.C. MAX. ALL JOISTS TO BE STRAPPED WITH 1"x3" (19x64) @ 6-11" (2108) O.C. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED.

**HEADER CONSTRUCTION** 

PROVIDE CONTINUOUS APPROVED AIR/VAPOUR BARRIER (HEADER WRAP) UNDER THE SILL PLATE, AROUND THE RIM BOARD AND UNDER THE BOTTOM PLATE. THE HEADER WRAP SHALL EXTEND 6" (152) BELOW THE TOP OF FOUNDATION WALL AND WILL BE SEALED TO THE CONCRETE FOUNDATION WALL EXTEND HEADER WRAP 6" (152) UP THE INTERIOR SIDE OF THE STUD WALL AND OVERLAP WITH THE VAPOUR BARRIER AND SEAL THE JOINT, ALL EDGES/JOINTS MUST BE MECHANICALLY CLAMPED.

EXPOSED BUILDING FACE w/ LIMITING DISTANCE <= 3'-11" (1.20m) WALL ASSEMBLY CONTAINS INSULATION CONFORMING TO CAN/ULC-S702 & HAVINIA MASS OF NOT LESS THAN 1.22 KG/M2 OF WALL SURFACE AND 1/2" (12.7) TYPE X GYPSUM WALLBOARD INTERIOR FINISH. EXTERIOR CLADDING MUST BE NON-COMBUSTIBLE WHEN LIMITING DISTANCE IS 23 5/8" (0.60m) OR LESS. WALL ASSEMBLY REQUIRES TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 MINUTES & CONFORMING TO O.B.C. (9.10.14. OR 9.10.15). REFER TO DETAILS FOR TYPE & SPECS. \*\* AN OPENING IN AN EXPOSING BUILDING FACE NOT MORE THAN 20 in (130cm²) SHALL NOT BE CONSIDERED AN UNPROTECTED OPENING AS PER 910.146.

**COLD CELLAR PORCH SLAB** (9.39.)

FOR MAX. 8'-2" (2500) PORCH DEPTH, 5" (127) 32 MPa (4640psi) CONC. SLAB W/5-8% AIR ENTRAINMENT. REINF. WITH 10M BARS @ 7 7/8" (200) O.C. EACH DIRECTION, W/ 1 1/4" (32) CLEAR COVER FROM BOTTOM OF SLAB TO FIRST LAYER OF BARS & SECOND LAYER OF BARS LAID DIRECTLY ON TOP OF LOWER LAYER IN OPPOSITE DIR. 24"x24" (610x610) 10M DOWELS @ 23 5/8" (600) O.C., ANCHORED IN PERIMETER FND. WALLS. SLOPE SLAB 1.0% FROM DOOR.

**RANGE HOODS AND RANGE-TOP FANS** 

COOKING APPLIANCE EXHAUST FANS VENTED TO EXTERIOR MUST CONFORM TO OBC 9.10.22, 9.32.3.9. & 9.32.3.10.

CONVENTIONAL ROOF FRAMING (9.23.13., 9.23.15.) 2"x6" (38x140) RAFTERS @ 16" (406) O.C., 2"x8" (38x184) RIDGE BOARD. 2"x4" (38x89) COLLAR TIES AT MID-SPAN, CEILING JOISTS TO BE 2"x4" (38x89) @ 16" (406) O.C. FOR MAX. 9'-3" (2819) SPAN & 2"x6" (38x140) @ 16" (406) O.C. FOR MAX. SPAN 14'-7" (4450). RAFTERS FOR BUILT UP ROOF OVER PRE-ENGINEERED ROOF TRUSSÉS AND OR CONVENTIONAL FRAMING TO BE 2"x4" (38x89) @ 24" (610) O.C. UNLESS OTHERWISE SPECIFIED.

**TWO STOREY VOLUME SPACES** (9.23.10.1., 9.23.11., 9.23.16.)

WIND LOADS WALL ASSEMBLY <= 0.5 kPA (q50) > 0.5 kPa (q50) **EXTERIOR** STUDS SPACING MAX HEIGHT SPACING MAX HEIGHT 2" (305) O.C. 18'-4" (5588) 8' (200) O.C. 18'-4" (5588) **BRICK** (2-38x140) SIDING |6" (406) O.C.| 18'-4" (5588) | 12" (305) O.C.| 18'-4" (5588) 12" (305) O.C. 21'-0" (6400) | 12" (305) O.C. 21'-0" (6400) (2-38x184) 16" (406) O.C. 21'-0" (6400) 16" (406) O.C. 21'-0" (6400) SIDING

STUDS ARE TO BE CONTINUOUS, C/W 3/8" (9.5) THICK EXTERIOR PLYWOOD SHEATHING. PROVIDE SOLID WOOD BLOCKING BETWEEN WOOD STUDS @ 4'-0" (1220) O.C. VERTICALLY.

\*\* STUD SIZE & SPACING TO BE VERIFIED BY STRUCTURAL ENGINEER \*\*

- FOR HORIZ. DISTANCES LESS THAN 9'-6" (2896) PROVIDE 2"x6" (38x140) STUDS @ 16' (406) O.C. WITH CONTIN. 2-2"x6" (2-38x140) TOP PLATE + 1-2"x6" (1-38x140) EDOTTOM PLATE & MIN. OF 3-2"x8' (3-38x184) CONT. HEADER AT GROUND FLOOR CEILING LEVEL TOE-NAILED & GLUED AT TOP, BOTTOM PLATES & HEADERS.

**BUILDING DIVISION** 07/20/2021

CITY OF RICHMOND HILL

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FOR STRUCTURAL ONLY NOT INCLUDING ENGINEERED FLOOR OR ROOF SYSTEM

REV 2021 05.11

**CONSTRUCTION NOTES** 

**UNIT 2009-END** 

216102WT2009-END 17 of 18

ΚM 3/16"=1'-0" DS 8966 Woodbine Ave, Markham, ON L3R 0J7 T 905.737.5133 F 905.737.7326

'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON,

**ROYAL PINE HOMES - 216102** 

STAME

Derek R. Santos

HUNT DESIGN ASSOCIATES INC. 19695

1 HR. PARTY WALL (CONC. BLOCK) ([SB-3] WALL TYPE 'B6e' & 'B1b') 1/2" (12.7) GYPSUM SHEATHING ON EACH SIDE ON 2"x2" (38x38) VERTICAL WD. STRAPPING @ 24" (610) O.C. ON 8" (200) CONC. BLOCK FILL STRAPPING CAVITY EACH SIDE WITH AT LEAST 90% OF ABSORPTIVE MATERIAL PROCESSED FROM ROCK, SLAG OR GLASS, TAPE, FILL & SAND ALL GYPSUM JOINTS. EXPOSED BLOCK MUST BE SEALED W/ 2 COATS OF PAINT OR FURRED WITH 2"x2" (38x38) WD. STRAPPING & 1/2" (12.7) GYPSUM SHEATHING.



1 HR. PARTY WALL (DOUBLE STUD) ([SB-3] WALL TYPE 'W13c') 5/8" (15.9) TYPE 'X' GYPSUM SHEATHING ON EXTERIOR SIDE OF 2 ROWS OF 2"x4" (38x89) STUDS @ 16" (406) O.C., MIN. 1" (25) APART ON SEPARATE 2"x4" (38x89) SILL PLATES. (2"x6" (38x140) AS REQUIRED) FILL ONE SIDE OF STUD CAVITY WITH AT LEAST 90% OF ABSORPTIVE MATERIAL PROCESSED FROM ROCK, SLAG OR GLASS. TAPE FILL AND SAND ALL GYPSUM JOINTS.



2 HR. FIREWALL ([SB-3] WALL TYPE 'B6e' & 'B1b')

1/2" (12.7) GYPSUM SHEATHING ON EACH SIDE ON 2"x2" (38x38) VERTICAL 1/2" (12.7) GYPSUM SHEATHING ON EACH SIDE ON 2X2" (38X38) VEHTICAL WOOD STRAPPING @ 24" (610) O.C ON 8" (200) CONC. BLOCK 75% SOLID. FILL STRAPPING CAVITY EACH SIDE WITH AT LEAST 90% OF ABSORPTIVE MATERIAL PROCESSED FROM ROCK, SLAG OR GLASS. TAPE, FILL & SAND ALL GYPSUM JOINTS. AT UNFINISHED AREAS, EXTERIOR FACE OF CONC. BLOCK TO BE SEALED WITH 2 COATS OF PAINT. GYPSUM SHEATHING TO BE ATTACHED TO CONC. BLOCK. (REFER TO DETAILS)



STUCCO WALL CONSTRUCTION (2"x6")

STUCCO FINISH CONFORMING TO O.B.C. SECTION 9.28. AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 1 1/2" (38) E.I.F.S. (MINIMUM) ON APPROVED DRAINAGE MAT ON 1/2" (12.7) DENSGLASS GOLD GYPSUM BOARD ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION, APPROVED 6 MIL. POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (REFER TO 35 NOTE AS REQUIRED)



STUCCO WALL CONSTRUCTION (2"x6") W/ CONTIN. INSUL. STUCCO FINISH CONFORMING TO O.B.C. SECTION 9.28. AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 1 1/2" (38) E.I.F.S. (MINIMUM) ON

APPROVED DRAINAGE MAT ON APPROVED AIRWATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS, ON 7/16" EXTERIOR TYPE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1. INSULATION, APPROVED 6 MIL. POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (REFER TO 35 NOTE AS REQUIRED)



STUCCO WALL @ GARAGE CONST.

STUCCO FINISH CONFORMING TO 0.B.C. SECTION 9.28. AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 1 1/2" (38) E.F.I.S (MINIMUM) ON APPROVED DRAINAGE MAT ON 1/2" (12.7) DENSGLASS GOLD GYPSUM BRD. ON STUDS CONFORMING TO 0.B.C (9.23.10.1.) & SECTION 1.1., 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (REFER TO 35 NOTE AS REQ.) \*\*\* FOR DWELLINGS USING CONTIN. INSULATION CONSTRUCTION, PROVIDE APPROVED DRAINAGE MAT ON 7/16" (11) EXTERIOR TYPE SHEATHING OVER FURRING (AS REQ.) AND STUDS IN LIEU OF 1 1/2" (38) E.F.I.S (MINIMUM) ON APPROVED DRAINAGE MAT ON 1/2" (12.7) DENSGLASS GOLD GYPSUM BRD.



**UNSUPPORTED FOUNDATION WALLS** (9.15.4.2.)

REINFORCING AT STAIRS AND SUNKEN FLOOR AREAS
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) - BARS STACKED VERTICALLY AT INTERIOR FACE OF WALL

- BARS STACKED VERTICALLY AT INTERIOR FACE OF WALL REINFORCING AT BASEMENT WINDOWS

2-15M HORIZ. REINFORCING ON THE INSIDE AND OUTSIDE FACE OF THE FOUNDATION WALL BELOW THE WIN. SILL. EXTEND BARS 24" (610) BEYOND THE OPENING. 2-15M VERTICAL REINFORCING ON THE INSIDE AND OUTSIDE FACE OF THE FOUNDATION WALL ON EACH SIDE OF THE WINDOW OPENING.

- BARS TO HAVE MIN. 1" (25) CONC. COVER - BARS TO EXTEND 3-0" (610) BEYOND BOTH SIDES OF OPENING

#### STUD WALL REINFORCEMENT

PROVIDE STUD WALL REINFORCEMENT IN MAIN BATHROOM CONFORMING TO O.B.C. (9.5.2.3.(1) AND 3.8.3.8.(3)) (REFER TO DETAILS)



WHERE A WINDOW OPENS INTO A WINDOW WELL, A CLEARANCE OF NOT WHERE A WINDOW WELL SINTO A WINDOW WELL, A CLEARANCE OF NOVELESS THAN 21 5/8" (550) SHALL BE PROVIDED IN FRONT OF THE WINDOW. EVERY WINDOW WELL SHALL BE DRAINED TO THE FOOTING LEVEL OR OTHER SUITABLE LOCATION WITH A 4" (100) WEEPING TILE C,W A FILTER CLOTH WRAP AND FILLED WITH CRUSHED STONE. (9.9.10.1.(5), 9.14.6.3.)





FLAT ROOF/BALCONY CONSTRUCTION

WATERPROOFING MEMBRANE (9.26.11, 9.26.15, 9.26.16) FULLY ADHERED TO 5/8" (15.9) T&G EXTERIOR GRADE PLYWOOD SHEATHING ON 2"x2" (33x38) PURLINS ANGLED TOWARDS SCUPPER @ 2% MINIMUM LAID PERPENDICULAR TO 2"x8" (38x184) FLOOR JOISTS @ 16" (406) O.C. (UNLESS OTHERWISE NOTED). BUILT UP CURB TO BE 4" (100) MIN. ABOVE FINISHED BALCONY FLOOR. CONTINUOUS 'L' TRIM DRIP EDGE TO BE PROVIDED ON OUTSIDE FACE OF CURB. SCUPPER DRAIN TO BE LOCATED 24" (610) MIN. AWAY FROM HOUSE. PREFINISHED ALUMINUM OR PANEL FOR UNDERSIDE OF SOFFIT (9.23.2.3). REMOVE CURB WHERE REQ.

**BALCONY CONDITION** 

SEE FLAT ROOF/BALCONY CONSTRUCTION NOTE. INCLUDE 2"x4" (38x89) PT. DECKING W/ 1/4" (6.4) GAPS LAID FLAT PARALLEL TO JOISTS ON 2"x4" (38x89) PT. SLEEPERS @ 12" (305) O.C. LAID FLAT PERPENDICULAR TO JOISTS

BALCONY OVER HEATED SPACE CONDITION SEE FLAT ROOF/BALCONY CONSTRUCTION NOTE FOR ASSEMBLY. REFER TO PLANS FOR FLOOR JOIST SIZE & REFER TO HEX NOTE 9 FOR INSULATION AND INTERIOR FINISH

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BARREL VAULT CONSTRUCTION

CANTILEVERED 2"x4" (38x89) SPACERS LAID FLAT ON 2"x10" (38x235) SPR. #2 ROOF JOIST NAILED TO BUILT-UP 3-3/4" (19) PLYWOOD HEADER PROFILED FOR BARREL. SPRAY FOAM INSULATION BETWEEN JOISTS W/ GYPSUM BOARD. INTERIOR FIN. (REFER TO DETAILS)

#### REFER TO SB-12 ENERGY EFFICIENCY DESIGN MATRIX ON THE TITLE PAGE FOR ALL VALUES AS REQUIRED PER 3.1.1., 3.1.2., 3.1.3. OF THE OBC. SECTION 1.1. WALL STUDS

REFER TO THIS CHART FOR STUD SIZE & SPACING AS REQUIRED FOR EXTERIOR WALLS ONLY. REFER TO SITING & GRADING PLAN OF THIS UNIT FOR CONFIRMATION OF TOP OF FOUNDATION WALL AND ADDITIONAL INFORMATION.

- IF STUD WALL HEIGHT EXCEEDS MAX. UNSUPPORTED HEIGHT, WALL NEEDS TO BE

| THE VIEW PROPERTY OF THE VIEW |                                 |                                   |                                   |                                   |  |  |  |
|---|---------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--|--|--|
| SIZE & SPACING OF STUDS: (OBC REFERENCE - TABLE 9.23.10.1.)   |                                 |                                   |                                   |                                   |  |  |  |
| MIN.  | SUPPORTED LOADS (EXTERIOR)      |                                   |                                   |                                   |  |  |  |
| STUD<br>SIZE.   | ROOF w/ OR<br>w/o ATTIC         | ROOF w/ OR w/o<br>ATTIC & 1 FLOOR | ROOF w/ OR w/o<br>ATTIC & 2 FLOOR | ROOF w/ OR w/o<br>ATTIC & 3 FLOOR |  |  |  |
| in (mm)   | MAX. STUD SPACING, in (mm) O.C. |                                   |                                   |                                   |  |  |  |
| ()  | N                               | MAX. UNSUPPOR                     | TED HGT., ft-in (m                | 1)                                |  |  |  |
| 2"x4"   | 24" (610)                       | 16" (405)                         | 12" (305)                         | N/A                               |  |  |  |
| (38x89)   | 9'-10" (3.0)                    | 9'-10" (3.0)                      | 9'-10" (3.0)                      | N/A                               |  |  |  |
| 2"x6"   | -                               | 24" (610)                         | 16" (406)                         | 12" (305)                         |  |  |  |
| (38x140)  | -                               | 9'-10" (3.0)                      | 11'-10" (3.6)                     | 5'-11" (1.8)                      |  |  |  |

#### **SECTION 2.0. GENERAL NOTES**

#### 2.1. WINDOWS

XCEPT WHERE A DOOR ON THE SAME FLOOR LEVEL AS THE BEDROOM PROVIDES DIRECT ACCESS TO THE EXTERIOR, EVERY FLOOR LEVEL CONTAINING A BEDROOM IS TO HAVE AT LEAST ONE OUTSIDE WINDOW W/ MIN. 0.35m2 UNOBSTRUCTED OPEN PORTION W/ NO DIMENSION LESS THAN 1'-3" (380), CAPABLE OF MAINTAINING THE OPENING WITHOUT THE NEED FOR ADDITIONAL SUPPORT, CONFORMING TO 9.9.10. 2) WINDOW GUARDS: A GUARD OR A WINDOW WITH A MAXIMUM RESTRICTED. OPENING WIDTH OF 4" (100) IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 1'-7" (480) ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FINISHED FLOOR TO THE ADJACENT GRADE IS GREATER THAN 5'-11" (1800). (9.8.8.1.) 3) WINDOWS IN EXIT STAIRWAYS THAT EXTEND TO LESS THAN 2'-11" (900) [3'-6" (1070) FOR ALL OTHER BUILDINGS] SHALL BE PROTECTED BY GUARDS IN ACCORDANCE WITH NOTE #2 (ABOVE). OR THE WINDOW SHALL BE NON-OPERABLE AND DESIGNED TO WITHSTAND THE SPECIFIED LOADS FOR BALCONY GUARDS AS PROVIDED IN 4.1.5.15 OR 9.8.8.2

4) REFER TO TITLE PAGE FOR MAX. U-VALUE REQUIREMENTS

#### 2.2. CEILING HEIGHTS

THE CEILING HEIGHTS OF ROOMS AND SPACES SHALL CONFORM TO TABLE 9.5.3.1.

| ROOM OR SPACE                           | MINIMUM HEIGHTS  |
|---|--|
| LIVING ROOM, DINING<br>ROOM AND KITCHEN | 7'-7" OVER 75% OF REQUIRED FLOOR AREA WITH A<br>CLEAR HEIGHT OF 6'-11" AT ANY POINT  |
| BEDROOM                                 | 7'-7" OVER 50% OF REQUIRED FLOOR AREA OR 6'-11"<br>OVER ALL OF THE REQUIRED FLOOR AREA.  |
| BASEMENT                                | 6'-11" OVER AT LEAST 75% OF THE BASEMENT AREA<br>EXCEPT THAT UNDER BEAMS AND DUCTS THE<br>CLEARANCE IS PERMITTED TO BE REDUCED TO 6'-5". |
| BATHROOM, LAUNDRY<br>AREA ABOVE GRADE   | 6'-11" IN ANY AREA WHERE A PERSON WOULD<br>NORMALLY BE STANDING  |
| FINISHED ROOM NOT<br>MENTIONED ABOVE    | 6-11"  |
| MEZZANINES                              | 6'-11" ABOVE & BELOW FLOOR ASSEMBLY (9.5.3.2.)   |
| STORAGE GARAGE                          | 6'-7" (9.5.3.3.)   |

2.3. MECHANICAL / PLUMBING

1) MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.7 AIR CHANGE PER HOUR IF NOT AIR CONDITIONED 1 PER HOUR IF AIR CONDITIONED AVERAGED OVER 24 HOURS. WHEN A VENTILATION FAN (PRINCIPAL EXHAUST) IS REQUIRED, CONFORM TO OBC 9.32.3.4. WHEN A HRV IS REQUIRED, CONFORM TO 9.32.3.11. REFER TO MECHANICAL DRAWINGS.

2) REFER TO HOT WATER TANK MANUFACTURER SPECS. CONFORM TO OBC 9.31.6. 3) REFER TO TITLE PAGE FOR SPACE HEATING EQUIPMENT, HRV AND DOMESTIC HOT WATER HEATER MINIMUM EFFICIENCIES.

4) DRAIN WATER HEAT RECOVERY UNIT(S) WILL BE INSTALLED CONFORMING TO THE RÉQUIREMENTS OF 3.1.1.12. OF THE O.B.C.

**2.4. LUMBER**1) ALL LUMBER SHALL BE SPRUCE No.2 GRADE OR BETTER, 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 (LVL) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY FLOOR AND ROOF TRUSS MANUFACTURER. JOIST HANGERS: PROVIDE APPROVED METAL HANGERS FOR ALL JOISTS AND

BUILT-UP WOOD MEMBERS INTERSECTING WITH FLUSH BUILT-UP WOOD MEMBERS. 6) WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONC. BY AT LEAST 2 mil POLYETHYL. FILM, No. 50, (45lbs) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS AT LEAST 6" (152) ABOVE THE GROUND.

**2.5. STEEL** (9.23.4.3.)

TI STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCT. SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS "H". 2) REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400R.

2.6. FLAT ARCHES

1) FOR 8'-0" (2440) CEILINGS, FLAT ARCHES SHALL BE 6'-10" (2080) A.F.F. 2) FOR 9'-0" (2740) CEILINGS, FLAT ARCHES SHALL BE 7'-10" (2400) A.F.F. 3) FOR 10'-0" (3040) CEILINGS, FLAT ARCHES SHALL BE 8'-6" (2600) A.F.F.

2.7. ROOF OVERHANGS

ALL ROOF OVERHANGS SHALL BE 1'-0" (305). UNLESS NOTED OTHERWISE.

2.8. FLASHING (9.20.13., 9.26.4, & 9.27.3.) 1) FLASHING MATERIALS & INSTALLATION SHALL CONFORM TO O.B.C.

IT THE BUILDING SHALL BE LOCATED OR THE BUILDING SITE GRADED SO THE WATER WILL NOT ACCUMULATE AT OR NEAR THE BUILDING AND WILL NOT ADVERSELY AFFECT ADJACENT PROPERTIES. CONFORM TO 9.14.6.

2.10. ULC SPECIFIED ASSEMBLIES

ALL REQUIRED INDIMIDUAL COMPONENTS THAT FORM PART OF ANY 'ULC USTED ASSEMBLY', SPECIFIED WITHIN THESE DRAWINGS, CANNOT BE ALTERED OR SUBSTITUTED FOR ANY OTHER MATERIAL/PRODUCT OR SPECIFIED MANUFACTURER THAT IS IDENTIFIED IN THAT SPECIFIED U.C. LISTING. THERE SHALL BE NO DEVIATIONS UNDER ANY CIRCUMSTANCES IN ANY 'ULC LISTED ASSEMBLY' IDENTIFIED IN THESE DRAWINGS.

#### **SECTION 3.0. LEGEND**

3.1. WOOD LINTELS AND BUILT-UP WOOD (DIVISION B PART 9. TABLES A8 TO A10 AND A12, A15 & A16) 23.4.2.(3), 9.23.4.2.(4), 9.23.12.3.(1),(3), 9.23.13.8.(2)

|      | 2"x8" SPRUCE #2     |  | 2"x10" SPRUCE #2     |                        | 2"x12" SPRUCE #2    |
|------|---------------------|--|----------------------|------------------------|---------------------|
| L1   | 2/2"x8" (2/38x184)  | L3   | 2/2"x10" (2/38x235)  | L5                     | 2/2"x12" (2/38x286) |
| B1   | 3/2"x8" (3/38x184)  | ВЗ   | 3/2"x10" (3/38x235)  | B5 3/2"x12" (3/38x286) |                     |
| B2   | 4/2"x8" (4/38x184)  | B4   | 4/2"x10" (4/38x235)  | B6 4/2"x12" (4/38x286) |                     |
| B7   | 5/2"x8" (5/38x184)  | 5/2"x8" (5/38x184) B8 5/2"x10" (5/38x235) B9 5/2"x12" (5/38x235) |                      | 5/2"x12" (5/38x286)    |                     |
|      | Е                   | NGIN   | EERED LUMBER SCHEDU  | LE                     |                     |
|      | 1 3/4" x 9 1/2" LVL |  | 1 3/4" x 11 7/8" LVL |                        | 1 3/4" x 14" LVL    |
| LVL2 | 1-1 3/4"x9 1/2"     | LVL3   | 1-1 3/4"x11 7/8"     | LVL10                  | 1-1 3/4"x14"        |
| LVL4 | 2-1 3/4"x9 1/2"     | LVL6   | 2-1 3/4"x11 7/8"     | LVL11                  | 2-1 3/4"x14"        |
| LVL5 | 3-1 3/4"x9 1/2"     | LVL7   | 3-1 3/4"x11 7/8"     | LVL12                  | 3-1 3/4"x14"        |
| LVL8 | 4-1 3/4"x9 1/2"     | LVL9   | 4-1 3/4"x11 7/8"     | LVL13                  | 4-1 3/4"x14"        |
|      |                     |  |                      |                        |                     |

### 3.2. STEEL LINTELS SUPPORTING MASONRY VENEER

(DIVISION B PART 9. TABLE 9.20.5.2.B.) FORMING PART OF SENTENCE 9.20.5.2.(2) & 9.20.5.2.(3)

| CODE | SIZE                                     | BRICK           | STONE          |
|------|--|-----------------|----------------|
| L7   | 3 1/2" x 3 1/2" x 1/4" (89 x 89 x 6.4)   | 8'-1" (2.47m)   | 7'-6" (2.30m)  |
| L8   | 4" x 3 1/2" x 1/4" (102 x 89 x 6.4)      | 8'-9" (2.66m)   | 8'-1" (2.48m)  |
| L9   | 4 7/8" x 3 1/2" x 5/16" (127 x 89 x 7.9) | 10'-10" (3.31m) | 10'-1" (3.03m) |
| L10  | 4 7/8" x 3 1/2" x 3/8" (127 x 89 x 11)   | 11'-5" (3.48m)  | 10'-7" (3.24m) |
| L11  | 5 7/8" x 3 1/2" x 3/8" (152 x 89 x 11)   | 12'-6" (3.82m)  | 11'-7" (3.54m) |
| L12  | 7 1/8" x 4" x 3/8" (178 x 102 x 11)      | 14'-1" (4.30m)  | 13'-1" (3.99m) |

3.3. DOOR SCHEDULE CONFORMING TO SECTIONS 9.5.11, 9.6., 9.7.2.1, 9.7.5.2, & 9.10.13.10 EXTERIOR | 2'-8" x 6'-8" x 1-3/4" (815 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7) 1A EXTERIOR 2'-10" x 6'-8" x 1-3/4" (865 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7) 1B EXTERIOR 3'-0" x 6'-8" x 1-3/4" (915 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7)

1C | EXTERIOR | 2'-6" x 6'-8" x 1-3/4" (760 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7) 1D EXTERIOR 2'-8" x 6'-8" x 1-3/4" (815 x 2030 x 45) INS, MIN, R4 (RSI 0.7) (SEE HEX NOTE 20) 1E EXTERIOR 3'-0" x 8'-0" x 1-3/4" (915 x 2440 x 45) INSULATED MIN. R4 (RSI 0.7) 1F EXTERIOR 2'-8" x 8'-0" x 1-3/4" (815 x 2440 x 45) INSULATED MIN. R4 (RSI 0.7)

2A EXTERIOR 2-8" x 6-8" x 1-3/4" (815 x 2030 x 45) 20 MIN. F.R.R. DOOR/FRAME WITH APP. SELF CLOSING DEVICE 2 INTERIOR | 2'-8" x 6'-8" x 1-3/8" (815 x 2030 x 35' 3 INTERIOR 2'-6" x 6'-8" x 1-3/8" (760 x 2030 x 35) 3A INTERIOR | 2'-4" x 6'-8" x 1-3/8" (710 x 2030 x 35) 4 INTERIOR 2'-0" x 6'-8" x 1-3/8" (610 x 2030 x 35) 4A INTERIOR | 2'-2" x 6'-8" x 1-3/8" (660 x 2030 x 35)

5 INTERIOR 1'-6" x 6'-8" x 1-3/8" (460 x 2030 x 35)

PROVIDE 8'-0" HIGH INTERIOR DOORS FOR ALL 10' CEILING CONDITIONS

3.4. ACRONYMS

|               | o.t. Achterime               |              |                         |  |  |  |  |  |  |
|---------------|------------------------------|--------------|-------------------------|--|--|--|--|--|--|
| AFF           | ABOVE FINISHED FLOOR         | JST          | JOIST                   |  |  |  |  |  |  |
| BBFM          | BEAM BY FLOOR MANUFACTURER   | L <b>i</b> N | LINEN CLOSET            |  |  |  |  |  |  |
| BG            | FIXED GLASS W/ BLACK BACKING | LVL          | LAMINATED VENEER LUMBER |  |  |  |  |  |  |
| BM            | BEAM                         | OTB/A        | OPEN TO BELOW/ABOVE     |  |  |  |  |  |  |
| BBRM          | BEAM BY ROOF MANUFACTURER    | PL           | POINT LOAD              |  |  |  |  |  |  |
| CRF           | CONVENTIONAL ROOF FRAMING    | PLT          | PLATE                   |  |  |  |  |  |  |
| C/W           | COMPLETE WITH                | PT           | PRESSURE TREATED        |  |  |  |  |  |  |
| DJ/TJ         | DOUBLE JOIST/ TRIPLE JOIST   | PTD          | PAINTED                 |  |  |  |  |  |  |
| DO            | DO OVER                      | PWD          | POWDER ROOM             |  |  |  |  |  |  |
| DRP           | DROPPED                      | RWL          | RAIN WATER LEADER       |  |  |  |  |  |  |
| ENG           | ENGINEERED                   | SB           | SOLID BEARING WOOD POST |  |  |  |  |  |  |
| EST           | ESTIMATED                    | SBFA         | SB FROM ABOVE           |  |  |  |  |  |  |
| FA            | FLAT ARCH                    | SJ           | SINGLE JOIST            |  |  |  |  |  |  |
| FD            | FLOOR DRAIN                  | SPR          | SPRUCE                  |  |  |  |  |  |  |
| FG            | FIXED GLASS                  | STL          | STEEL                   |  |  |  |  |  |  |
| FL            | FLUSH                        | T/O          | TOP OF                  |  |  |  |  |  |  |
| FLR           | FLOOR                        | TYP          | TYPICAL                 |  |  |  |  |  |  |
| GT            | GIRDER TRUSS                 | U/S          | UNDERSIDE               |  |  |  |  |  |  |
| НВ            | HOSE BIB                     | WD           | WOOD                    |  |  |  |  |  |  |
| HRV           | HEAT RETURN VENTILATION UNIT | WIC          | WALK IN CLOSET          |  |  |  |  |  |  |
| HWT           | HOT WATER TANK               | WP           | WEATHER PROOF           |  |  |  |  |  |  |
| 0.5.00/4001.0 |                              |              |                         |  |  |  |  |  |  |

3.5. SYMBOLS ALL ELECTRICAL FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 9.34. • CLASS 'B' VENT EXHAUST VENT (2) DUPLEX OUTLET (12" HIGH) 0 <del>O</del> Ŝ DUPLEX OUTLET (HEIGHT AS NOTED A.F.F. <del>∨</del>§ ◑ HEAVY DUTY OUTLET SWITCH (2/3/4 WAY)  $\oplus$ LIGHT FIXTURE (CEILING MOUNTED) -0-POT LIGHT Ó Ø60 LIGHT FIXTURE (PULL CHAIN) LIGHT FIXTURE (WALL MOUNTED) CABLE T.V. JACK TELEPHONE JACK CENTRAL VACUUM OUTLET CHANDELIER (CEILING MOUNTED)

**SMOKE ALARM** (9.10.19.) ■ SA

PROVIDE ONE PER FLOOR, NEAR THE STAIRS CONNECTING THE FLOOR LEVEL. A ARE TO BE INSTALLED IN EACH SLEEPING ROOM AND IN A LOCATION BETWEEN SLEEPING ROOMS AND CONNECTING HALLWAYS AND WIRED TO BE INTERCONNECTED TO ACTIVATE ALL ALARMS IF ONE SOUNDS. ALARMS ARE TO BE CONNECTED TO AN TO ACTIVATE ALL ALCATIVIO IT ONE SOURCE STATE OF THE ACTIVITY COMPONENT AS PER THE "NATIONAL FIRE ALARM AND SIGNALING CODE 72".

CMD CARBON MONOXIDE ALARM (9.33.4.)

\*\*CHECK LOCAL BY-LAWS FOR REQUIREMENTS \*\* A CARBON MONOXIDE ALARM(S) CONFORMING TO CAN/CGA-6.19 SHALL BE INSTALLED ON OR NEAR THE CEILING IN EACH DWELLING UNIT ADJACENT TO EACH SLEEPING AREA. CARBON MONOXIDE ALARM(S) SHALL BE PERMANENTLY WIRED WITH NO DISCONNECT SWITCH, WITH AN ALARM THAT IS AUDIBLE WITHIN SLEEPING ROOMS WHEN THE INTERVENING DOORS ARE CLOSED.

SOLID BEARING (BUILT-UP WOOD COLUMNS AND STUD POSTS)

THE WIDTH OF A WOOD COLUMN SHALL NOT BE LESS THAN THAN THE WIDTH OF SUPPORTED MEMBER. BUILT-UP WOOD COLUMNS SHALL BE NAILED TOGETHER WITH NOT LESS THAN 3" (76) NAILS SPACED NOT MORE THAN 11 3/4" (300) O.C. THE NUMBER OF STUDS IN A WALL DIRECTLY BELOW A GIRDER TRUSS OR ROOF BEAM SHALL CONFORM TO TABLES A-34 TO A-37. (9.17.4., 9.23.10.7.)

TWO STOREY VOLUME SPACE. SEE CONSTRUCTION NOTE 39.

VARYING PLATES, BUILT-OUT FLOORS, BEARING WALLS, ICE & WATER SHIELD EXPOSED BUILDING FACE -O.B.C. 9.10.14. OR 9.10.15.
REFER TO HEX NOTE 35. & DETAILS FOR TYPE AND SI

REFER TO HEX NOTE 35. & DETAILS FOR TYPE AND SPECIFICATIONS.

1 HR. PARTY WALL REFER TO HEX NOTE 40.

2 HR. FIREWALL REFER TO HEX NOTE 40A.

### **SECTION 4.0. CLIMATIC DATA**

DESIGN SNOW LOAD (9.4.2.2.): 1.23 **kPa** WIND LOAD (q50) (SB-1.2.): 0.44 **kPa** 

STAME

CITY OF RICHMOND HILL **BUILDING DIVISION** 07/20/2021

**RECEIVED** 

\_jocelyn.aguilar

CONSTRUCTION NOTE REVISION DATE: MAY 9, 2019



FLOOR OR ROOF SYSTEM

CONTRACTOR MUST VERIFY ALL DIMENSIONS ON THE JOB, REPORT ANY DISCREPANCIES TO HUNT DESIGN ASSOCIATES INC. (H.D.A.I.) BEFORE PROCEEDING WITH THE WORK, ALL THE DRAWINGS & SPECIFICATIONS ARE THE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF H.D.A.I. ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND SPECIFICATIONS AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.

**CONSTRUCTION NOTES 2** 

**UNIT 2009-END** 

'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON, Flle Numbe

REV.2021.05.11 18 of 18

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QUALIFICATION INFORMATION Derek R. Santos

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**ROYAL PINE HOMES - 216102**