

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

City of Richmond Hill 225 East Beaver Creek Road

Richmond Hill, Ontario Canada, L4B 3P4

# **GENERAL NOTES** (PART 9 - RESIDENTIAL)

# PERMIT NO. **RM#-2022-00085**

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

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

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

CONSTRUCTION NOTES (UNLESS OTHERWISE NOTED) ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND SPEC'S AND TO CONFORM TO THE ONTARIO BUILDING NOTICODE AND ALL OTHER APPLICABE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12 - 2012 OBC.

ROOF CONSTRUCTION (\*SEE OBC 9.19.)

NO. 210 (10.25kg/m2) ASHPHALT SHINGLES. 10mm (3/8")
PLYWOOD SHEATHING WITH "H" CLIPS. APPROVED WOOD
TRUSSES @600mm 24" o.c. MAX. APPROVED EAVE
PROTECTION TO EXTEND 900mm (3'-0") FROM EDGE OF ROOF AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL, 38x89 (2"x4") TRUSS BRACING @ 1830mm (6'-0") o.c. AT BOTTOM CHORD. PREFIN. ALUM.
EAVESTROUGH, FASCIA, RWL & VENTED SOFFIT. PROVIDE
ICE & WATER SHIELD TO ALL ROOF / WALL SURFACES
SUSCEPTIBLE TO DAMMING. ROOF SHEATHING TO BE FASTENED 150 (6") c.c. ALONG EDGES & INTERMEDIATE SUPPORTS WHEN TRUSSES SPACED GREATER THAN 406 (16"). ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH 50% AT EAVES.

FRAME WALL CONSTRUCTION (2"X6")

2 SIDING, HARDIE BOARD, STUCCATO BOARD OR EQUAL AS PER ELEVATION, 19X64 (1"X3") VERTICAL MOOD FURRING, APPROVED SHEATHING PAPER, 7/16" O.S.B. EXTERIOR SHEATHING. 38X140 (2"X6") STUDS @ 400MM (16") O.C. W/APPROVED DIAGONAL WALL BRACING, RSI 3.67 (R22) INSULATION AND APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL

BRICK VENEER CONSTRUCTION (2"x6")

90mm (4") FACE BRICK 25mm (1") AIR SPACE 22x180x0.76mm (7/8"x7"x0.03") GALV. METAL TIES @ 400mm (16") o.c. HORIZONTAL 600mm (24") o.c. VERTICAL. APPROVED SHEATHING PAPER, 7/16" O.S.B. EXTERIOR SHEATHING. 38×140 (2"×6") STUDS @ 400mm (16") o.c. WAPPROVED DIAGONAL WALL BRACING, RSI 3.87 (R22)
INSUL. APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, I3mm (1/2") INT. DRYWALL FINISH. PROVIDE WEEP HOLES @ 800mm (32") o.c. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER.

STUCCO WALL CONSTRUCTION (2"x6")

STUCCO CLADDING SYSTEM CONFIRMING TO OBC9.27.I.I.(2) \$ 9.28 THAT EMPLOY A MINIMUM 6mm (1/4") DRAINAGE CAVITY BEHIND THE CLADDING WITH POSITIVE DRAINAGE TO THE EXTERIOR AND APPLIED AS PER MANUFACTURERS SPECIFICATION ON 25mm (1") MINIMUM EXTRUDED OR EXPANDED RIGID INSULATION APPROVED SHEATHING PAPER, 7/16" O.S.B. EXTERIOR SHEATHING. 38x140 (2"x6") STUDS @ 400mm (16") o.c. W/APPROVED DIAGONAL WALL BRACING, RSI 3.87 (R22) INSUL, APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, I3mm (1/2") INT. DRYWALL FINISH. STUCCO TO BE MIN.200mm (8") ABOVE FINISH GRADE.

# INTERIOR STUD PARTITIONS

(\*SEE OBC 9.23.10.&9.23.11.)

BEARING PARTITION 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  $2/38\times84$  (2-2"x4") TOP PLATE. I3mm (I/2") INTERIOR DRYWALL BOTH SIDES OF STUD, PROVIDE  $38\times140$  (2"x6") STUDS/PLATES WHERE NOTED.

FOUNDATION WALL/FOOTINGS: (5)

(\*SEE OBC 9.15.3 & 9.15.4.)

MIN. 200mm (8") POURED CONC. FDTN. WALL 15MPa (2200psi) WITH BITUMENOUS DAMPROOFING AND DRAINAGE LAYER. MIN. 480X155 (19"x6") CONTIN. KEYED CONC. FTG. BRACE FOUNDATION WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL WITH MINIMUM BEARING CAPACITY OF 120kPa (17.4 psi) OR GREATER.



(\* SEE OBC 9.14.3.) OOMM (4") DIA. WEEPING TILE ISOMM (6") CRUSHED STONE OVER AND AROUND WEEPING TILES.

BASEMENT SLAB (\*SEE OBC 9.16.-) 80mm (3") MIN. 25MPa (3600psi) CONC. SLAB ON 100mm (4") COARSE GRANULAR FILL, OR 15MPa (2200psi) CONC. WITH DAMPROOFING BELOW SLAB.

WOOD SUBFLOORS (\*SEE OBC 9.23.14. & 9.30.2.) 19mm (3/4") T&G SUBFLOOR UNDER GROUND FLOOR FINISH FLOOR. 16mm (5/8") T&G SUBFLOOR UNDER SECOND FLOOR FINISH FLOOR. 16mm (5/8") PANEL-TYPE UNDERLAY FOR CERAMIC TILE APPLICATION. 6mm (1/4") PANEL-TYPE UNDERLAY UNDER RESILIENT & PARQUET

ROOF INSULATION (\*SEE SB12 - 2.1.1.2.A & 2.1.1.7) RSI 10.57 (R60) ROOF INSULATION AND APPROVED VAPOUR BARRIER, 16mm (5/8") INT. DRYWALL FINISH OR APPROVED EQUAL.

ALL STAIRS/EXTERIOR STAIRS

MAX. RISE

MIN. RUN

= 255 00 (\*SEE OBC 9.8.-) =200 =255 =355 =25 =1950 (7-7/8") (10") MAX, RUN/TREAD (14") MAX. NOSING MIN. HEADROOM (6'-5") RAIL @ LANDING RAIL @ STAIR MIN. STAIR MIDTH =900 (2'-II") =865 (2'-I0") =860 (2'-I0") TO 965 (3'-2") FOR CURVED STAIRS

RAILING (\*SEE OBC 9.8.8.) NISHED RAILING ON PICKETS SPACED MAXIMUM IOOMM (4") BETWEEN PICKETS.

= 200 (8") = 150 (6")

= 900mm (2'-II") MIN. = 1070mm (3'-6") MIN. INTERIOR GIARDS EXTERIOR GUARDS:

(\*SEE OBC 9.23.6 & 9.23.7.) (12)38x89 (2"x4") SILL PLATE WITH 13mm (1/2") DIA, ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN, 100mm (4") INTO CONC. @ 2400mm (T'-10") O.C. CAULKING OR 25 (1") MIN.
MINERAL MOOL BETWEEN PLATE AND TOP OF FDTN. WALL.
USE MORTAR TO LEVEL SILL PLATE WHEN REQUIRED.

13 BASEMENT INSULATION (\*SEE OBC 12.3.) FOUNDATION WALLS ENCLOSING HEATED SPACE SHALL BE INSULATED FROM THE UNDERSIDE OF THE SUBFLOOR TO NOT MORE THAN 152mm (6") ABOVE THE FINISHED FLOOR OF THE BASEMENT AND NOT LESS THAN 50mm (2") TO THE

FOUNDATION WALL INSULATION SHALL BE MINIMUM RSI. 3.52 (R20) BLANKET INSULATION, APPROVED VAPOUR BARRIER, DAMPROOFING WBLDG. PAPER BETWEEN THE FDTN. AND INSUL.

# 14 BASEMENT BEARING STUD PARTITION

(\*SEE OBC 9.23.10.)

MIN. AVG. RUN MIN. RUN

38×89 (2"x4") STUDS @400mm (16") o.c. 38×89 (2"x4") SILL PLATE ON DAMPROOFING MATERIAL, I3mm (1/2") DIA.
ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm
(4") INTO CONC. @ 2400mm (7'-10") o.c. (4") HIGH CONC. CURB ON 305x155 (12"x6") CONC. FOOTING. ADD HORIZ. BLOCKING AT MID-HEIGHT IF WALL IS UNFINISHED.

15 STEEL BASEMENT COLUMN (\* SEE OBC 9.17.3.) 

STEEL COLUMN (\* SEE OBC 9.17.3.) (15A) GILLL BULLININ (188) STL. COLUMN WITH 100x100x6.4mm (4"x4"x1/4") STEEL TOP & BOTTOM PLATE. FIELD WELD BOTTOM PLATE TO 250x100x12.5mm (IO"x4"xI/2") BASE PLATE C/W 2-I3mm (I/2") DIA. x 300mm (12") LONG x 50mm (2") HOOK ANCHORS.

NIB WALLS (\* SEE DBC 9.23.8. BEAM POCKET OR 200x200 (8"x8") POURED CONCRETE (\* SEE OBC 9.23.8.) NIB WALLS, MINIMUM BEARING 90mm (3-1/2")

STEEL BEAM STRAPPING (\* SEE DBC 9.23.4.3.(3)(c))
17 19x38 (1"x2") CONTINUOUS WOOD STRAPPING BOTH SIDES

(18) GARAGE SLAB (\*SEE OBC 9.16.-) OOMM (4") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 100 (4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT 1% MIN.

19 INTERIOR GARAGE WALLS & CEILING (\*SEE OBC 9.10.9.16.)

> 13mm (1/2") GYPSUM BOARD ON WALL AND CEILING BETWEEN HOUSE AND GARAGE, RSI 3,87 (R22) IN WALLS, RSI 5.46 (R3I) IN CEILING. TAPE AND SEAL ALL JOINTS

(\*SEE OBC 9.10.13.15.)

DOOR AND FRAME GASPROOFING, DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHER STRIPPING

EXTERIOR STEP

(\*SEE DBC 9.8.9.2, 9.8.9.3 & 9.8.10.) (max. 2 risers for precast) PRECAST CONCRETE STEP OR WD. STEP WHERE NOT EXPOSED TO WEATHER MAX. RISE 200mm (7-7/8"): MINIMUM TREAD 250mm (9-1/2")

22 DRYER VENT (\*SEE OBC 6.2.3.8. CAPPED DRYER EXHAUST VENTED TO EXTERIOR. USE (\*SEE OBC 6.2.3.8.(7)) 1000mm (4") DIA. SMOOTH WALL VENT PIPE.

ATTIC ACCESS (\*SEE OBC 9.19.2.) ATTIC ACCESS HATCH 545×700 (22"×28") WITH WEATHERSTRIPPING. RSI 5.46 (R3I) RIGID INSULATION

FIREPLACE CHIMNEYS (\*DBC 9.21.-) TOP OF FIREPLACE CHIMNEY SHALL BE 915mm (3-0") ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF AND 610mm (2'-0") ABOVE THE ROOF SURFACE WITHIN A HORIZ. DISTANCE OF 3050mm (10'-0") FROM THE CHIMNEY.

LINEN CLOSET
4 SHELVES MIN. 350mm (14") DEEP.

26 MECHANICAL EXHAUST (\*SEE OBC 9.32.3.5, 9.32.3.10.)

MECHANICAL EXHAUST FAN VENTED TO EXTERIOR.

27 STEEL BEARING PLATE FOR MASONRY WALLS 280×280×16 (II"XII"×5/8") STL. PLATE FOR STL BEAMS AND 280×280×12 (II"XII"XI/2") STL. PLATE FOR WOOD BEAMS BEARING ON CONC. BLOCK PARTYWALL, ANCHORED W 2-19mm (3/4") x200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHRINK GROUT.

MID-DEPTH OF SLAB.

CLASS "B" VENT
U.L.C. RATED CLASS "B" VENT 610mm (2'-0") ABOVE THE POINT IN CONTACT WITH THE ROOF FOR SLOPES UP TO 9/12, REFER TO THE ONTARIO GAS UTILIZATION CODE.

WOOD BASEMENT POST (\*OBC 9.17.4.) 3-38x140 (3-2"x6") BUILT-UP POST ON METAL BASE SHOE ANCHORED TO CONC. WITH 127 (1/2") DIA BOLT ON 406×406×203 (16"×16"×8") CONC. FOOTING.

STEP FOOTINGS (\*0BC 9.15
MIN. HORIZ. STEP = 610mm (24"). MAX. VERT. STEP = (\*OBC 9.15.3.9.) 610mm (24")

SLAB ON GRADE (\*SEE OBC 9.16.-) 100mm (4") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 100 (4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. REINFORCED W 6x6-W2.9xW2.9 MESH PLACED NEAR

DIRECT VENT FURNACE (32) DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A GAS REGULATOR. MIN 300mm (12") ABOVE FIN. GRADE, FROM ALL OPENINGS, EXHAUST & INTAKE VENTS. HRV INTAKE TO BE A MIN. OF 1830mm (6'-0") FROM ALL

EXHAUST TERMINALS, REFER TO GAS UTILIZATION CODE.

DIRECT VENT GAS FIREPLACE (33) DIRECT VENT GAS FIREPLACE. VENT TO BE A MINIMUM 300mm (12") FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE

JOIST STRAPPING & BRIDGING (\*SEE OBC 23.9.4.) ALL FLOOR JOISTS TO BE BRIDGED WITH 38x38 (2"x2") CROSS BRACING OR SOLID BLOCKING @2100mm (6'-11") o.c. MAX. 19x64 (1"x3") @2100mm (6'-11") o.c. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED.

EXPOSED BUILDING FACE (\* SEE DBC 9.10.15

EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45min. WHERE LIMITING DISTANCE IS LESS THAN 1.2M (3'-11") WHERE THE LIMITING DISTANCE IS (\* SEE OBC 9.10.15.) LESS THAN 600mm (I'-II") THE EXPOSING FACE SHALL BE CLAD IN NON-COMBUSTABLE MATERIAL

COLD CELLAR PORCH SLAB (\* SFF OBC 9.40.) (36) FOR MAX. 2500mm (8'-2") PORCH DEPTH, 125mm (5") 32Mpa (4640 psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT. REINF. WITH IOM BARS @200mm (8") O.C. EACH WAY IN BOTTOM THIRD OF SLAB, ANCHORED IN PERIMETER FDTN. WALLS W 610x610 (24"x24") 10M @600mm (24") o.c. DOWELS. SLOPE SLAB MIN. 1.0% FROM DOOR. SLAB TO HAVE A MIN. 75mm (3") BEARING ON FDTN. WALLS. PROVIDE (WI I) I INTELS OVER CELLAR DOOR

# 38 CONVENTIONAL ROOF FRAMING

(\*SEE DBC 9.23.4.2.(1))

FOR MAX. 2240mm (7'-4") SPAN, 38x89 (2"x4") RAFTERS @400mm (16") o.c.. FOR MAX. 3530mm (11'-7") SPAN, 38x140 (2"x6") RAFTERS @400mm (16") o.c., RIDGE BOARD TO BE 51mm (2") DEEPER. 38x39 (2"x4") COLLAR TIES AT MIDSPANS. CEILING JOISTS TO BE 38x89 (2"x4") @400mm (16") o.c. FOR MAX. 2830mm (9"-3") SPAN & 38x140 (2"x6") @ 400 (16") o.c. FOR MAX. 4450mm (14'-7") SPAN. RAFTERS FOR BUILT-UP ROOF TO BE 38x89 (2"x4") @600mm (24") o.c. WITH A 38x89 (2"x4") CENTER POST TO THE TRUSS BELOW, LATERALLY BRACED @1800mm (6'-0") o.c. VERTICALLY.

FDTN, WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3-1/2") THICK TO A MAX. DEPTH OF 660mm (26") FOR 8" FDTN. WALL. 10" FDTN. WALL WHEN REDUCTION IN THICNESS IS GREATER THAN 26". FDTN. WALL SHALL BE TIED TO THE FACING MATERIAL WITH METAL TIES SPACED

200mm (8")o.c. VERTICALLY AND 900mm (36")o.c. HORIZONTALLY. FILL SPACE BETWEEN WALL AND FACING SOLID WITH MORTAR.

# TWO STOREY VOLUME SPACES

FOR A MAXIMUM 5490mm (18'-0") HEIGHT, PROVIDE 2-38x140 (2-2"x6") CONTINUOUS STUDS @300mm (12") o.c. FOR BRICK AND 400mm (16") O.C. FOR SIDING. PROVIDE SOLID WOOD BLOCKING BETWEEN STUDS @1220mm (4"-0") o.c. VERT. 7/16" EXT. PLYWOOD.

EXPOSED FLOOR TO EXTERIOR (\*SB12 - 2.1.1.2.A) 

PARTYWALLS

TYPICAL I HOUR RATED PARTYWALL. REFER TO DETAILS FOR TYPE AND SPECIFICATIONS.

EXTERIOR WALLS FOR WALK-OUT CONDITION THE EXTERIOR BASEMENT STUD WALL TO BE 38x140mm (2"x6") STIDS @400mm (16") o.c. MATCH FLOOR JOIST SPACING WHEN PARALEL WITH FLOOR JOISTS.

SMOKE ALARM (\*0BC 9.10.19)
WITHIN DWELLING UNITS, SUFFICIENT SMOKE ALARMS SHALL

MITHIN DWELLING UNITS, SUFFICIENT SMOKE ALARMS SHALL
BE INSTALLED SO THAT,
a. THERE IS AT LEAST ONE SMOKE ALARM INSTALLED ON
EACH STOREY, INCLUDING BASEMENTS AND
b. ON ANY STOREY OF A DWELLING UNIT CONTAINING
SLEEPING ROOMS, A SMOKE ALARM IS INSTALLED,
I. IN EACH SLEEPING ROOM, AND
2. IN A LOCATION BETWEEN THE SLEEPING ROOMS
AND THE REMAINDER OF THE STOREY, AND IF THE
SLEEPING ROOMS ARE SERVED BY A HALLWAY,
THE SMOKE ALARM SHALL BE LOCATED IN THE
HALLWAY.

A SMOKE ALARM SHALL HAVE A VISUAL SIGNALING COMPONENT CONFORMING TO THE REQUIREMENTS IN 18.5.3. (LIGHT, COLOR AND PULSE CHARACTERISTIC) OF NFPA 72, "NATIONAL FIRE ALARM AND SIGNALING CODE".

A SMOKE ALARM SHALL BE INSTALLED IN CONFORMANCE WITH CANVLC-9553, "INSTALLATION OF SMOKE ALARMS".

SMOKE ALARMS SHALL BE INSTALLED ON OR NEAR THE

CARRON MONOXIDE ALARM (\*OBC 9.33.4.) WHERE A FUEL-BURNING APPLIANCE IS INSTALLED IN A SUITE OF RESIDENTIAL OCCUPANCY, A CARBON MONOXIDE ALARM SHALL BE INSTALLED TO EACH SLEEPING AREA IN THE SUITE.

THE CARBON MONOXIDE ALARM SHALL

a. BE PERMANENTLY CONNECTED TO AN ELECTRICAL CIRCUIT AND SHALL HAVE NO DISCONNECT SWITCH BETWEEN THE OVERCURRENT DEVICE AND THE CARBON MONOXIDE ALARM,

b. BE EQUIPPED WITH AN ALARM THAT IS AUDIBLE WITHIN BEDROOMS WHEN THE INTERVENING DOORS ARE

CLOSED, WHERE LOCATED ADJACENT TO A SLEEPING

CONFORM TO

CAN/CSA-6.19, "RESIDENTIAL CARBON MONOXIDE ALARMING DEVICES", OR UL2034, "SINGLE AND MULTIPLE STATION CARBON MONOXIDE ALARMS"

SOU GAS CONTROL (\*DBC 9.13.4.)

PROVIDE CONSTRUCTION TO PREVENT LEAKAGE OF SOIL GAS INTO THE BUILDING AS REQUIRED.

2012 CODE

**COMPLIANCE PACKAGE "A1"** FOR STRUCTURE ONLY The undersigned has reviewed and takes responsibility for this REGION DESIGN INC. **GENERAL NOTES** design, and has the qualifications and meets the requirements set 8700 DUFFERIN ST.

CONCORD, ONTARIO

P (416) 736-4096

F (905) 660-0746

L4K 4S6

5.			
4.			
3.			
2.			
1.	ISSUED FOR PERMIT	JUL 30, 2018	
REVISIONS			

out in the Ontario Building Code to be a designer. QUALIFICATION INFORMATION Required unless design is exempt under DIvIsIon C, Subsection 3.2.5 of the building code

VIKAS GAJJAR

NAME

28770



**JULY 2018** 

PAGE No N.T.S.

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED. Greenpark.

> PROJECT NAME ROUNDEL

City of Richmond Hill **Building Division** 

Refer to attached general notes and drawings.

**REVIEWED** 

\_Date: 10/31/2022

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

Richmond H<u>ill</u>

By: **KER** 

Windows, sliding glass doors and skylights shall comply with OBC 2012, SB-12, 3.1.1.9 for maximum U-Value



# **INSPECTION NOTICES - HOUSING**

ou are required to notify the Inspection Section of the eadiness to inspect at the following construction stages

- Footings (prior to concrete placement)
- Building sewers (laterals)
  Water service pipe (lateral)
  Foundation (prior to backfill)
- Building drains (under slab)

- Air barrier (prior to exterior cladding)
  Structural Framing (exterior cladding completed)
  Insulation (include vapour barrier)
  Solid fuel burning appliances
  Occupancy Pormit
- lease contact the Inspection Section by one of the
- Inspection Request Line: 905-771-5465
- A minimum of 2 business days is required.

  An inspection may be refused if permit documents and a copy of the permit are not present on site.

  Please refer to other inspection information on the reverse of the permit card.

CITY OF RICHMOND HILL **BUILDING DIVISION** 

09/22/2022

RECEIVED Per: ioshua.nabua

2012 CODE **COMPLIANCE PACKAGE "A1"** 

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED. **GENERAL NOTES Greenpark** N.T.S. PROJECT NAME 2 **ROUNDEL** JULY 2018

WINDOWS -CANADA ZONE C

(1) MINIMUM BEDROOM WINDOW (\*OBC 9.9.10.1.) AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.35m2 (3.8 SQ.FT.) UNOBSTRUCTED GLAZED OPENABLE AREA WITH MIN. CLEAR WIDTH OF 380mm (1'-3") GLASS AREA NOT MORE THAN 17% OF GROSS PERIPHERAL WALL AREA. MAXIMUM U-VALUE 0.28

(2) WINDOW GUARDS

(\*OBC 9.8.8.1(6)) A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 480mm (1'-6") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FIN. FLOOR TO THE ADJACENT GRADE IS GREATER THAN 1800mm (5'-11")

GENERAL:

(1) MECHANICAL VENTILATION

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

(2) RAINFORCEMENT FOR GRAB BARS (\*OBC 9.5.2.3.) RAINFORCEMENT OF STUD WALLS FOR FUTURE GRAB BARS SHALL BE INSTALLED ADJACENT TO WATER CLOSETS AND SHOWER OR BATHTUB IN MAIN BATHROOM. SEE DETAIL ON PAGE II.

LUMBER:

1.) ALL LUMBER SHALL BE SPRUCE-PINE-FIR No.1 \$ 2 GRADE, UNLESS NOTED OTHERWISE.

2) LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE-PINE-FIR No.142 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED OTHERWISE.

3.) ALL BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY TRUSS MANUFACTURER.

4.)LVL BEAMS SHALL BE 2.0E (Fb=2800psi MIN.). NAIL EACH PLY OF LVL WITH &9mm (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 1/2" (13mm) DIA, GALVANIZED BOLTS BOLTED AT MID-DEPTH OF BEAM @ 915mm

5.)PROVIDE TOP MOUNT BEAM HANGERS FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS NOTED OTHERWISE.

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

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

STRUCTURAL STEEL AND HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W

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

ELECTRIC VEHICLE CHARGING SYSTEM (EVCS): ROUGH-IN FOR FUTURE VEHICLE SUPPLY EQUIPMENT (CHARGING SYSTEM) TO BE INSTALLED. ROUGH-IN SHALL

INCLUDE:

- A MINIMUM 200amp PANEL BOARD,

- CONDUIT THAT IS NOT LESS THAN I I/I6" (27mm)
TRADE SIZE,

A SQUARE 4 11/16" (119mm) TRADE SIZE ELECTRICAL OUTLET BOX,
FUME-PROFFED ELECTRICAL OUTLET BOX TO BE

INSTALLED IN THE GARAGE OR CARPORT OR ADJACENT TO DRIVEWAY.

REFER TO 2012 O.B.C. 9.34.4

JAN 31, 201

STABILITY OF NARROW (20'-25')

& TALL (±30) Houses

BUILDER TO PROVIDE SUFFICIENT TEMPORARY BRACING TO RESIST WIND LOADING WHEN UNDER CONSTRUCTION. FURTHER RECOMMENDATIONS:

I.) REDUCE THE FOUNDATION WALL SILL PLATE ANCHOR BOLT SPACING FROM 2400mm o.c. (7'-10") TO 1220mm o.c. (4'-0") FOR STANDARD CONDITIONS.

2.) USE 9.5mm (3/8") THICK PLYWOOD OR WAFERBOARD FOR THE EXTERIOR WALL SHEATHING

3.)TO STIFFEN THE STRUCTURE IN TRANSVERSE DIRECTION USE 9.5mm (3/8") THICK PLYWOOD NAILED TO THE INTERIOR PARTITIONS ON EACH FLOOR FOR A MINIMUM 2 INTERIOR PARTITION WALLS ON BOTH SIDES AND PERPENDICULAR TO THE LONG WALLS.

BRICK VENEER LINTELS

WLI = 3-1/2"x3-1/2"x1/4"L (90x90x6,0L) + 2-2"x8" SPR, No.2 ML2 = 4"x3-1/2"x5/16"L(100x90x8.0L) + 2-2"x8" SPR. No.2WL3 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 2-2"x10" SPR. No.2ML3 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 2-2"x10" SPR. No.2
ML4 = 6"x3-1/2"x3/8"L (150x90x10.0L) + 2-2"x12" SPR. No.2
ML5 = 6"x4"x3/8"L (150x100x10.0L) + 2-2"x12" SPR. No.2
ML6 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 2-2"x12" SPR. No.2
ML7 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 3-2"x12" SPR. No.2
ML8 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 3-2"x12" SPR. No.2 WL9 = 6"x4"x3/8"L (150x100x10.0L) + 3-2"x12" SPR. No.2

WOOD LINTELS AND BEAMS

WBI = 2-2"x8" SPR. No.2 (2-38x184 SPR. No.2)
WB2 = 3-2"x8" SPR. No.2 (3-38x184 SPR. No.2)
WB3 = 2-2"x10" SPR. No.2 (2-38x235 SPR. No.2)
WB4 = 3-2"x10" SPR. No.2 (3-38x235 SPR. No.2) MB5 = 2-2"x12" SPR. No.2 (2-36x266 SPR. No.2) MB6 = 3-2"x12" SPR. No.2 (3-36x266 SPR. No.2) MB7 = 5-2"x12" SPR. No.2 (5-36x266 SPR. No.2) WB11 = 4-2"x10" SPR. No.2 (4-38x235 SPR. No.2) WB12= 4-2"x12" SPR. No.2 (4-38x286 SPR. No.2)

LOOSE STEEL LINTELS

LI = 3-1/2"x3-1/2"x1/4"L (90x90x6.0L)

L2 = 4"x3-1/2"x5/16"L (100x90x8.0L)L2 = 4 x3-1/2 x5/16 L (100x40x8.0L) L3 = 5"x3-1/2"x5/16"L (125x40x8.0L) L4 = 6"x3-1/2"x3/8"L (150x40x10.0L) L5 = 6"x4"x3/8"L (150x100x10.0L) L6 = 7"x4"x3/8"L (175x100x10.0L)

LAMINATED VENEER LUMBER (LVL) BEAMS

LAMINATED VENEER LUMBER (LVI

LVLIA = I-I 3/4" × 7 I/4" (I-45×I&4)

LVL2 = 3-I 3/4" × 7 I/4" (2-45×I&4)

LVL3 = 4-I 3/4" × 7 I/4" (3-45×I&4)

LVL4A = I-I 3/4" × 9 I/2" (I-45×24O)

LVL4 = 2-I 3/4" × 9 I/2" (2-45×24O)

LVL5 = 3-I 3/4" × 9 I/2" (3-45×24O)

LVL5A = 4-I 3/4" × 9 I/2" (4-45×24O)

LVL5A = 4-I 3/4" × II 7/8" (1-45×3OO)

LVL6A = I-I 3/4" × II 7/8" (3-45×3OO)

LVL7 = 3-I 3/4" × II 7/8" (3-45×3OO)

LVL7A = 4-I 3/4" × II 7/8" (4-45×3OO)

LVLA = 2-I 3/4" × II 7/8" (4-45×3OO) LVL9 = 2-1 3/4" x 14" (2-45x356) LVL9 = 3-1 3/4" x 14" (3-45x356) LVL10 = 2-1 3/4" x 18" (2-45x456)

DOOR SCHEDULE

| = 2'-10" x 6'-8" (865x2033) - INSULATED ENTRANCE DOOR | 1 = 2-10" x 6-8" (865x2033) - INSULATED ENTRANCE DOOR |
| a = 2'-8" x 6'-8" (815x2033) - INSULATED FRONT DOORS |
| 2 = 2'-8" x 6'-8" (815x2033) - WOOD & GLASS DOOR |
| 3 = 2'-8" x 6'-8 x 1-3/4" (815x2033x45) - EXTERIOR SLAB DOOR |
| 4 = 2'-8" x 6'-8" x 1-3/8" (815x2033x35) - INTERIOR SLAB DOOR |
| 5 = 2'-6" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 6 = 2'-2" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 7 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 7 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 8 = 2'-2" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 9 = 2'-2" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 1 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 1 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 1 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 1 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 1 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 2 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 3 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 4 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 5 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 5 = 1'-8" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 6 = 1'-2" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 7 = 1'-15" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 7 = 1'-15" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |
| 7 = 1'-15" x 6'-8" x 1-3/8" (160x2033x35) - INTERIOR SLAB DOOR |

7 = 1'-6" x 6'-8" x 1-3/8" (460x2033x35) - INTERIOR SLAB DOOR

STRUDET INC. PROFESS/ON ਕੂੰ B. MARINKOVIC 1/202 NCE OF ON FOR STRUCTURE ONLY

ISSUED FOR PERMIT

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the Ontario Building Code to be a designer. QUALIFICATION INFORMATION

Required unless design is exempt under Division C, Subsection 3.2.5 of the building code

28770



LEGEND

DJ

TJ

GT

DOUBLE JOIST

TRIPLE JOIST

POINT LOAD

TE FLAT ARCH

F.D.

SA Ø

GIRDER TRUSS

SOLID WOOD BEARING. SOLID BEARING TO BE WIDE

AT LEAST AS SUPPORTED MEMBER. MIN. 3 PIECES.

SMOKE ALARM. SEE NOTE

SMOKE ALARM & CARBON MONOXIDE ALARM. SEE NOTE

**(**43)

 $\langle 44 \rangle$ 

LOAD-BEARING WALL

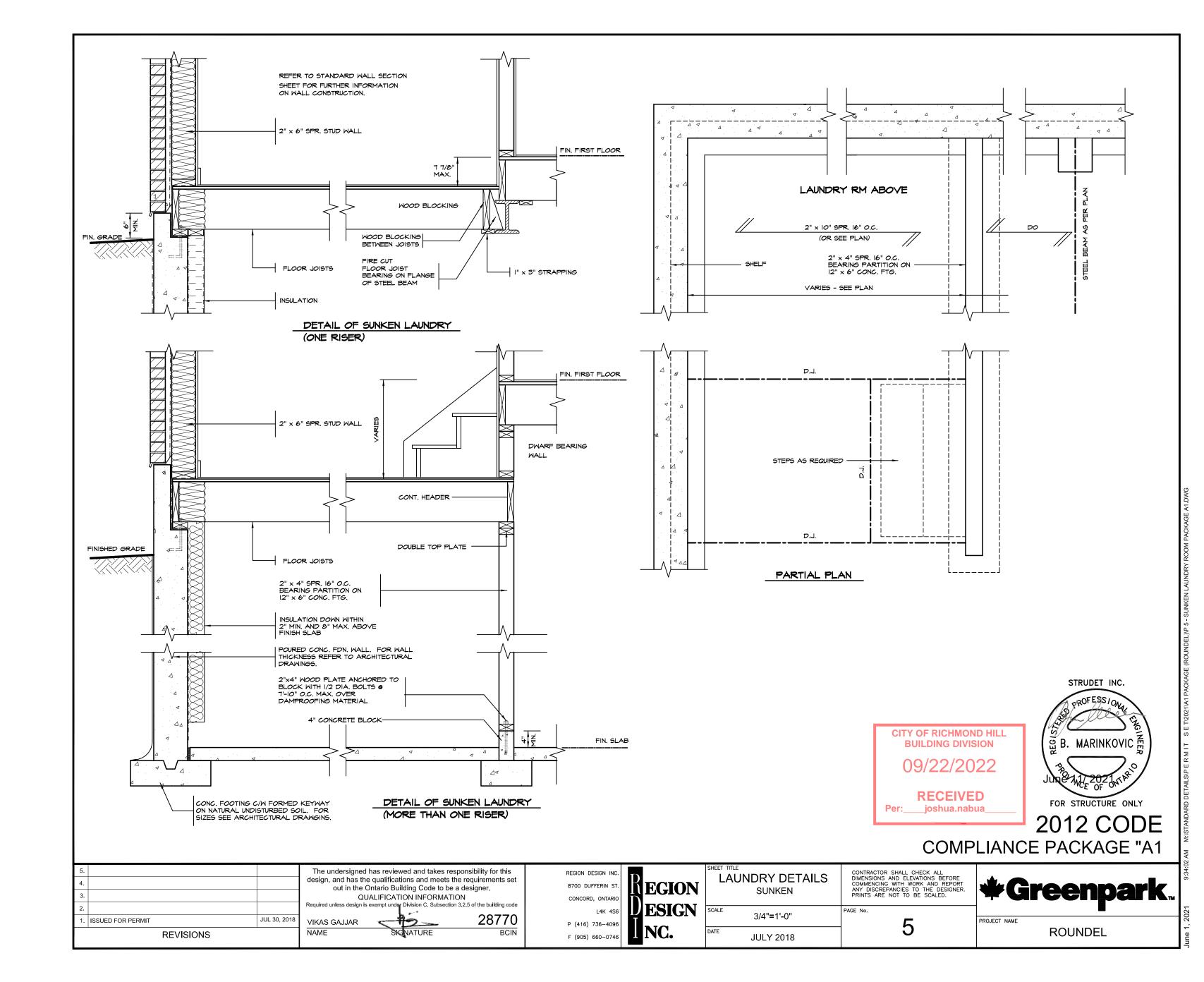
TWO-STOREY WALL, SEE NOTE (39)

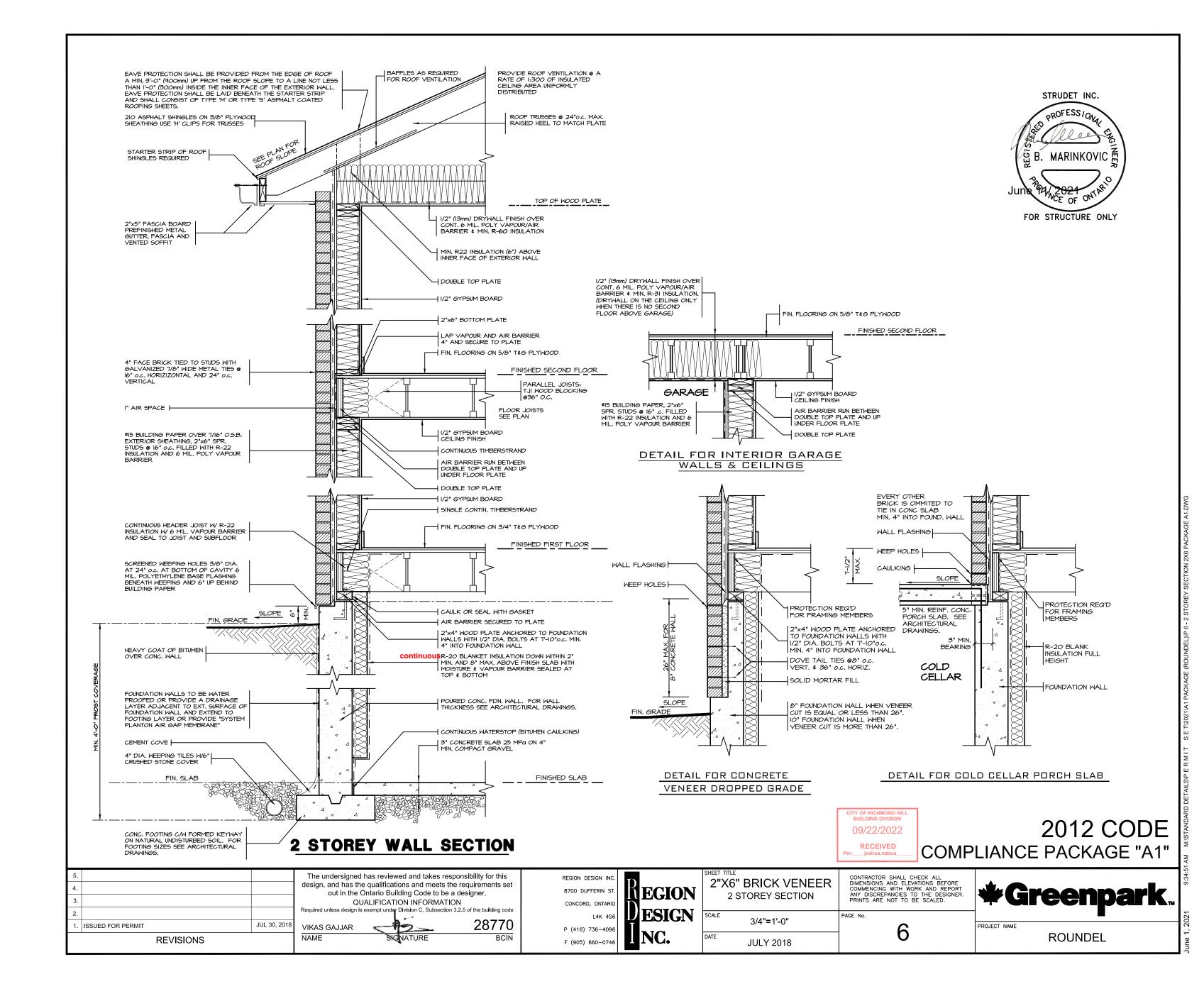
FLOOR DRAIN

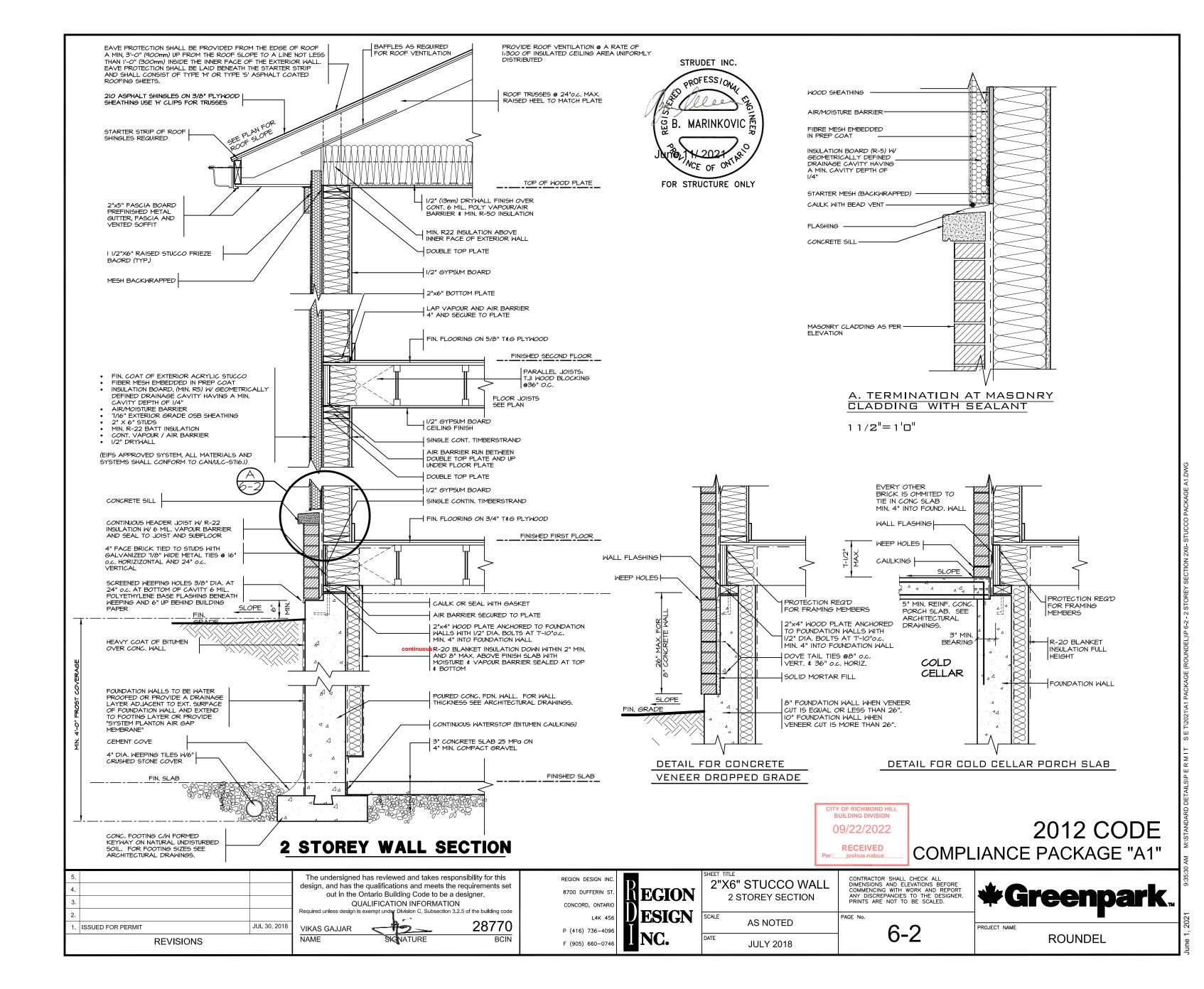
**REVISIONS** 

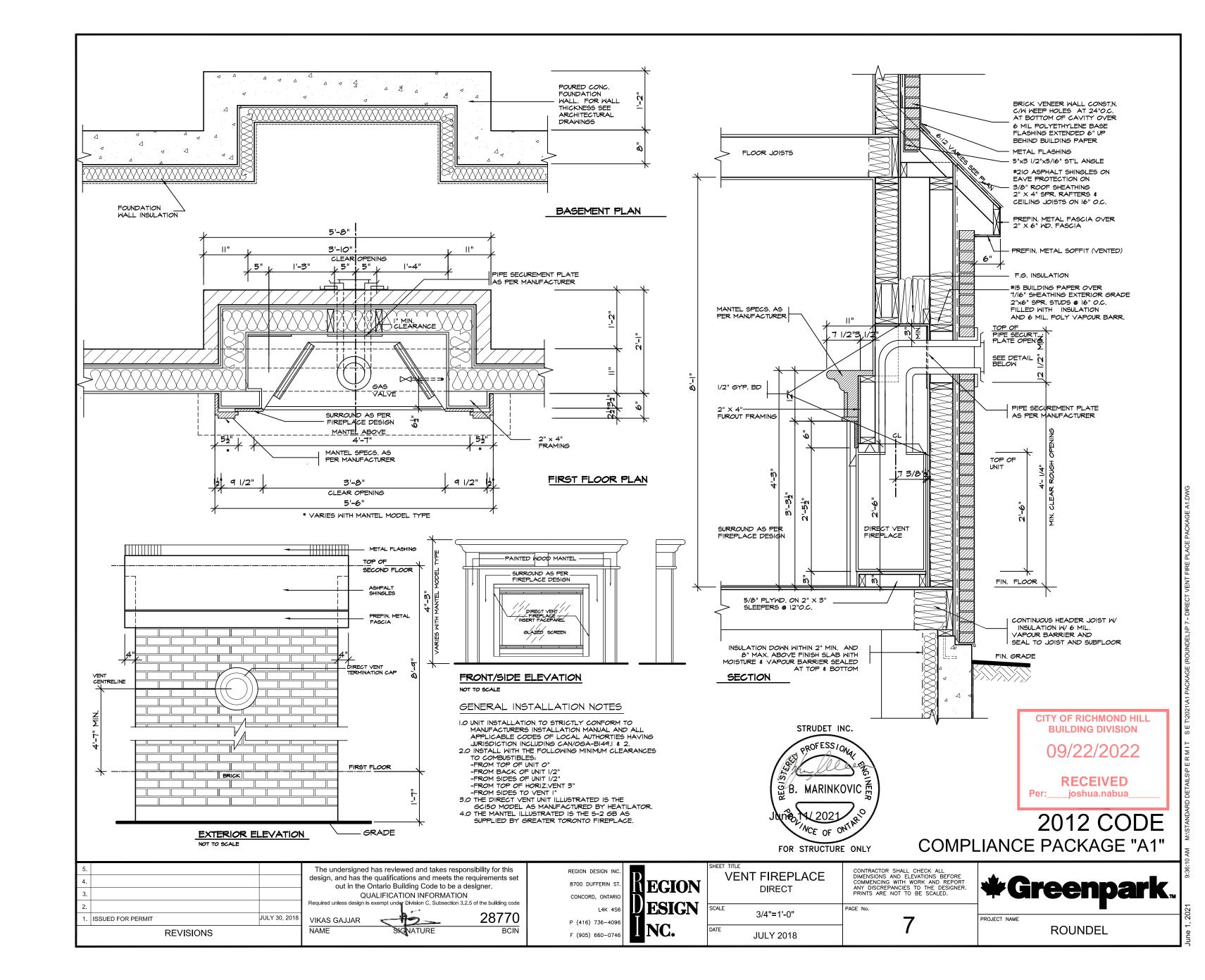
SIGNATURE VIKAS GAJJAR NAME

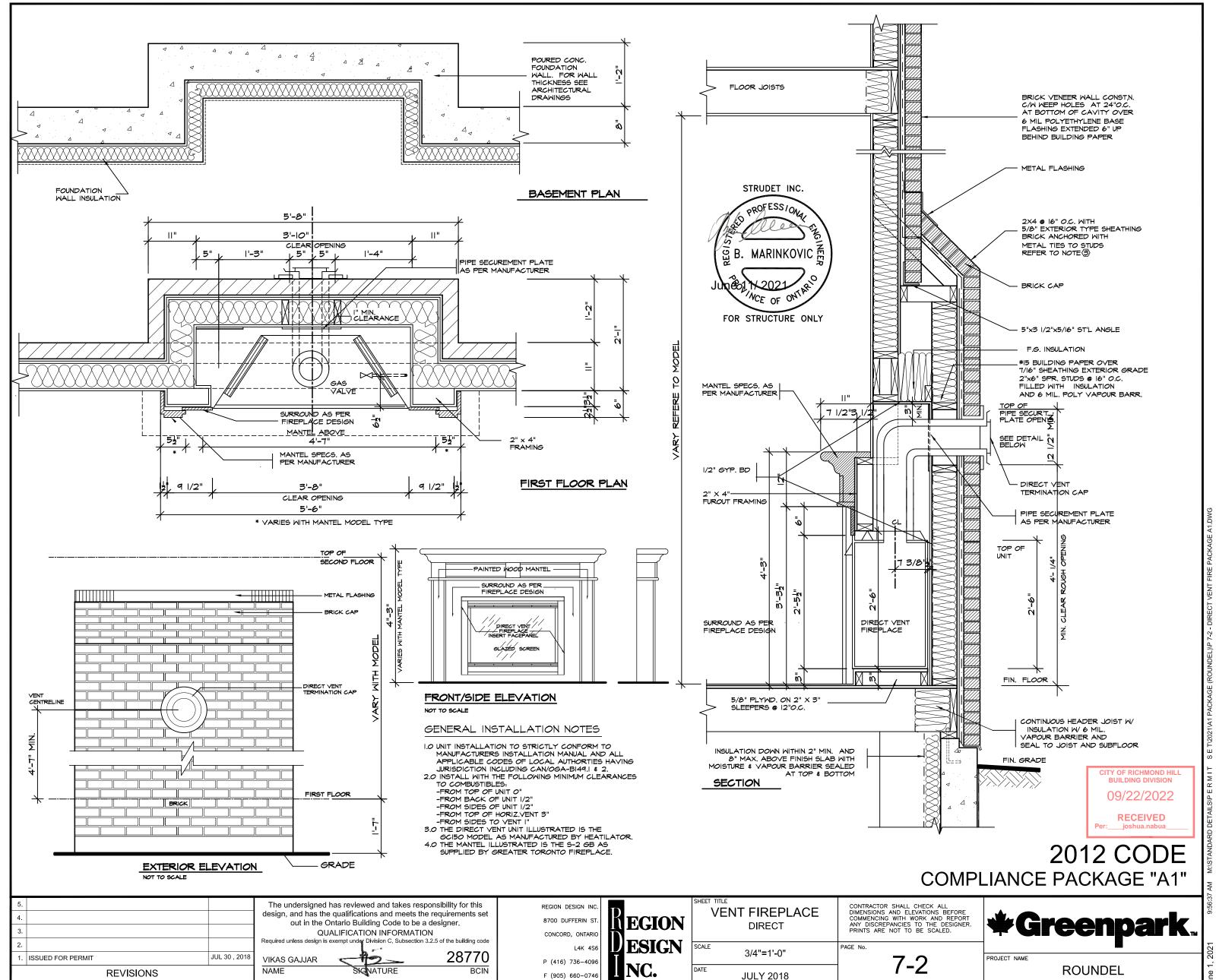
L4K 4S6 P (416) 736-4096 F (905) 660-0746

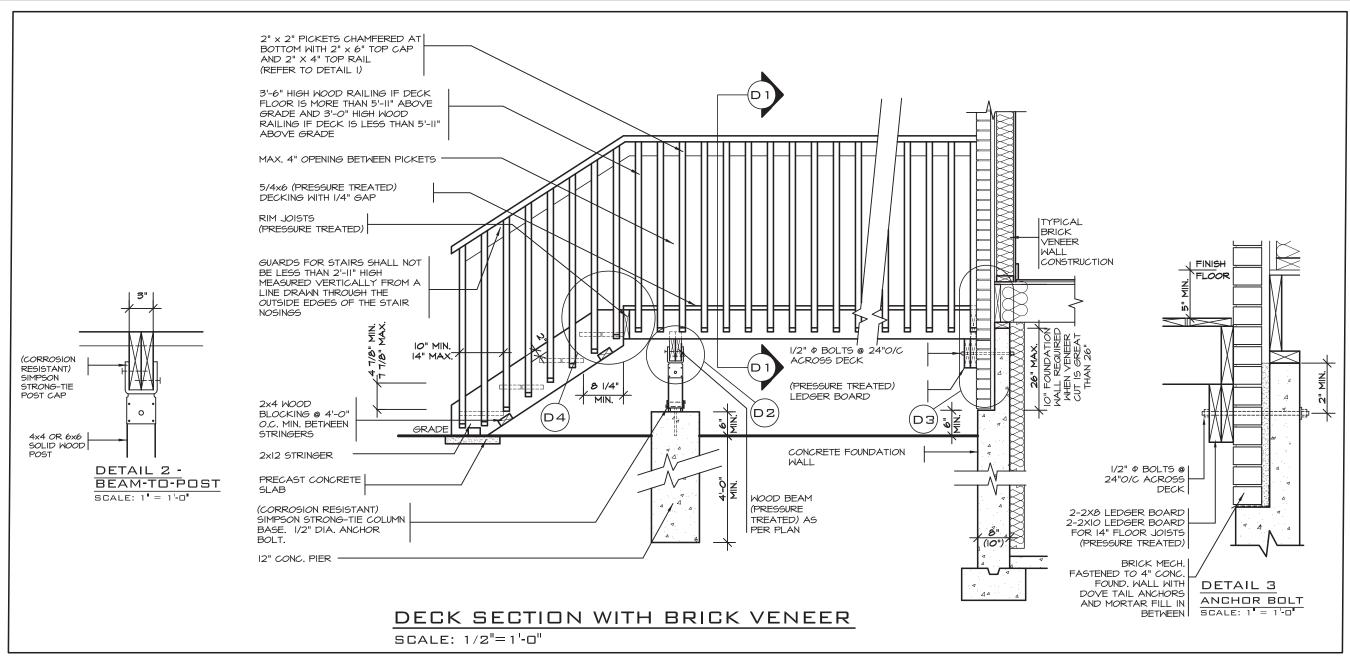


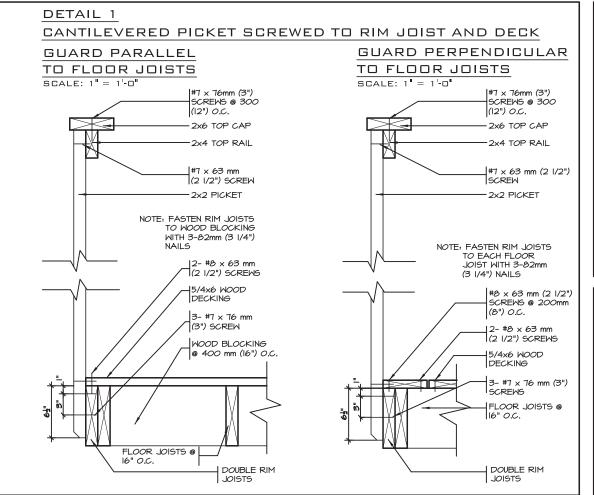


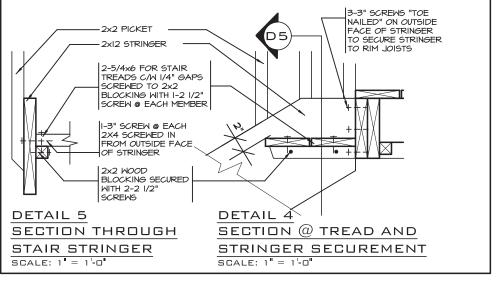












# GENERAL NOTES

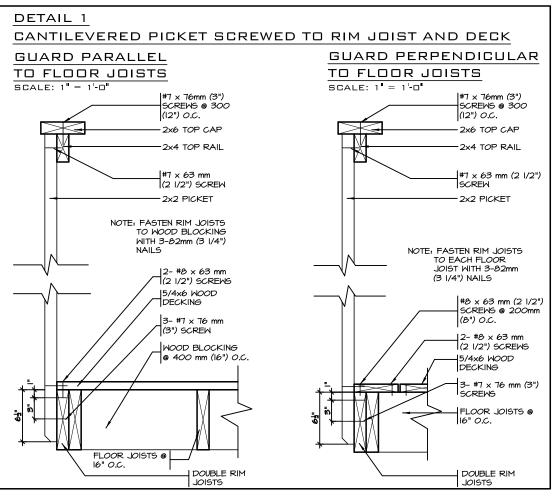
- BRICK TO BE COMPRESSIVE STRENGTH OF 15mPa (2200 p.s.i.) MIN. UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
- 2. MORTAR TO BE TYPE S WITH JOINT THICKNESS OF IOMM (3 /8") MIN. AND 20mm (3 /4")
  - MAX.
- ALL NAILS AND SCREWS TO BE GALVANIZED.
- WOOD FOR CANTILEVERED PICKETS PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.
- THE DECK HAS BEEN DESIGNED TO SAFELY SUPPORT A SUPERIMPOSED LOAD OF I.9kPa [40psf].
- CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 20MPa AT 28 DAYS AND 5-8%
- AIR ENTRAINED. FOOTING TO BE PLACED ON UNDISTURBED SOIL WITH MIN. BEARING PRESSURE OF

150kPa [3130psf].



	<b>PACKAGE</b>	"
JUIVIPL	PAUNAGE	Αı





# GENERAL NOTES

- BRICK TO BE COMPRESSIVE STRENGTH OF 15mPa (2200 p.s.I.) MIN. UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
- MORTAR TO BE TYPE S WITH JOINT THICKNESS OF IOMM (3 /8") MIN. AND 20mm (3 /4") MAX.
- ALL NAILS AND SCREWS TO BE GALVANIZED.
- WOOD FOR CANTILEVERED PICKETS PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.
- THE DECK HAS BEEN DESIGNED TO SAFELY SUPPORT A SUPERIMPOSED LOAD OF I.9kPa [40psf].
- CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 20MPa AT 28 DAYS AND 5-8% AIR ENTRAINED. FOOTING TO BE PLACED ON UNDISTURBED SOIL WITH MIN. BEARING PRESSURE OF 150kPa [3130psf].

CITY OF RICHMOND HILL **BUILDING DIVISION** 09/22/2022

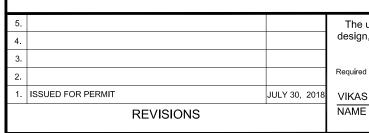
**RECEIVED** \_\_joshua.nabua

STRUDET INC. PROFESSIONA, ố B. MARINKOVIC A June 1, 1/2021 NE

FOR STRUCTURE ONLY

2012 CODE

**COMPLIANCE PACKAGE "A1"** 



The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the Ontario Building Code to be a designer. QUALIFICATION INFORMATION

Division C, Subsection 3.2.5 of the building code 28770 VIKAS GAJJAR

REGION DESIGN IN 8700 DUFFERIN S **EGION** CONCORD, ONTAR **ESIGN** L4K 4S P (416) 736-409 F (905) 660-07



WALK-OUT **DECK DETAILS** AS SHOWN

JULY 2018

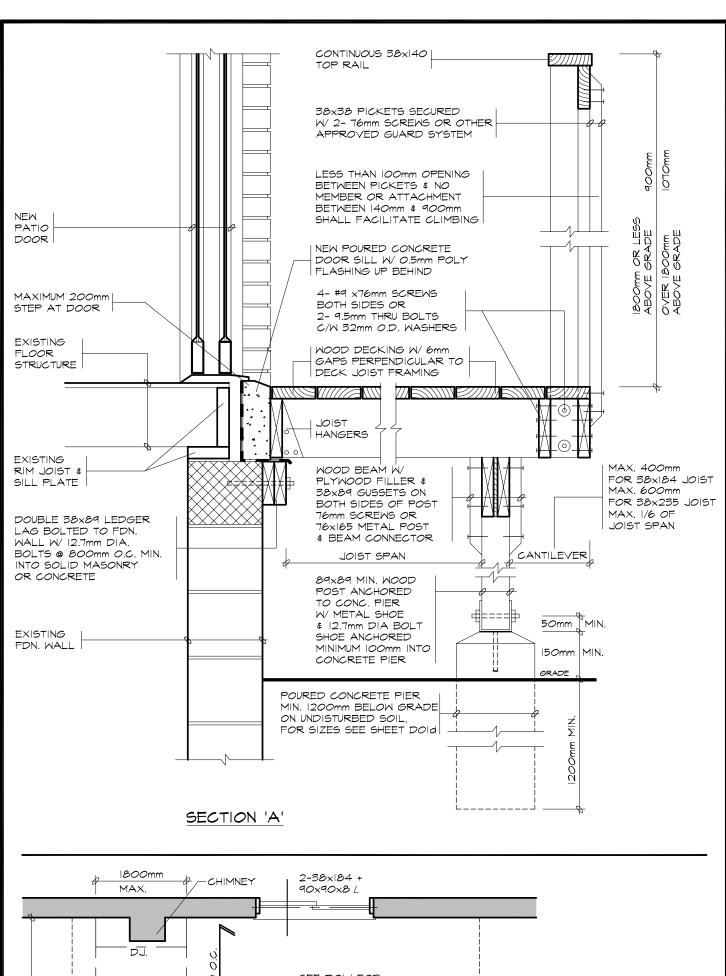
CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER PRINTS ARE NOT TO BE SCALED.

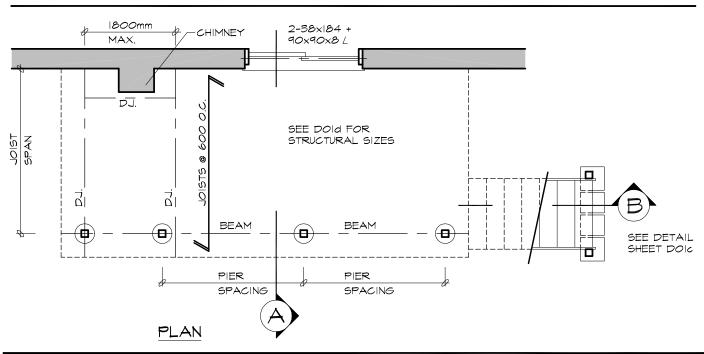
8-2

**Greenpark** 

PROJECT NAME

**ROUNDEL** 





LMCBO STANDARD DETAILS TITLE WOOD DECK

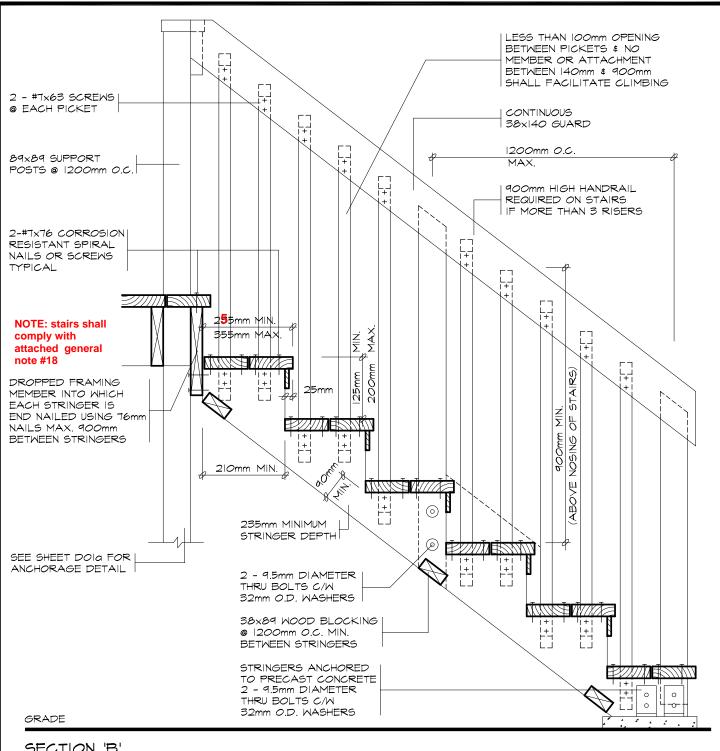
FIXED TO SOLID MASONRY FOUNDATION WALL PLAN & SECTION

NOTE: UNDER THE BUILDING CODE ACT, THE LOCAL MUNICIPALITY IS THE AUTHORITY HAVING
JURISDICTION FOR ENFORCING THE ACT AND IT'S REGULATIONS. IT IS THE RESPONSIBILITY
OF THE OWNER/DESIGNER TO ENSURE THAT ALL DESIGNS SUBMITTED FOR A PERMIT ARE IN
ACCORDANCE WITH THE BUILDING CODE ACT, BUILDING CODE AND ANY OTHER APPLICABLE LAW.

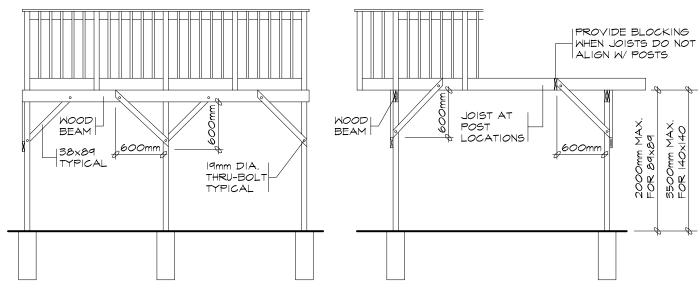
DWG. NO.

DOla

2012



# SECTION 'B'



## BRACING PARALLEL TO BEAM

BRACING PERPENDICULAR TO BEAM

FREE STANDING DECKS GREATER THAN 600mm ABOVE GRADE SHALL RESIST LATERAL LOADING & MOVEMENT. ALL POSTS MUST BE BRACED WHERE THE SUPPORTED AREA EXCEEDS THOSE LISTED IN THE TABLE ON DOID

**LMCBO STANDARD DETAILS** 

TITLE WOOD DECK

STAIR SECTION

LATERAL SUPPORT FOR FREE STANDING DECKS

DOIC

2012

DWG. NO.

NOTE: UNDER THE BUILDING CODE ACT, THE LOCAL MUNICIPALITY IS THE AUTHORITY HAVING JURISDICTION FOR ENFORCING THE ACT AND IT'S REGULATIONS. IT IS THE RESPONSIBILITY OF THE OWNER/DESIGNER TO ENSURE THAT ALL DESIGNS SUBMITTED FOR A PERMIT ARE IN ACCORDANCE WITH THE BUILDING CODE ACT, BUILDING CODE AND ANY OTHER APPLICABLE LAW.

	BEAM SIZING TABLE								
SUPPORTED	LIVE LOAD 1.9 kPa			LIVE LOAD 2.5 kPa		LIVE LOAD 3.0 kPa			
JOIST LENGTH	PIER	SPACING (m	nm)	PIER SPACING (mm)		PIER SPACING (mm)			
(mm)	2000	3000	4000	2000	3000	4000	2000	3000	4000
1500	2/38×140	2/38×184	3/38×235	2/38×140	3/38×184	3/38×235	3/38×140	2/38×235	2/38×286
2000	2/38×140	3/38×184	3/38×235	2/38×184	2/38×235	3/38×286	2/38×184	2/38×235	3/38×286
2500	2/38×184	2/38×235	3/38×286	2/38×184	3/38×235	3/38×286	2/38×184	3/38×235	4/38×286
3000	2/38×184	2/38×235	3/38×286	2/38×184	3/38×235	4/38×286	2/38×184	3/38×235	4/38×286
3500	2/38×184	3/38×235	3/38×286	2/38×184	3/38×235	4/38×286	3/38×184	3/38×286	N/A
4000	2/38×184	3/38×235	4/38×286	2/38×184	3/38×286	N/A	3/38×184	3/38×286	N/A

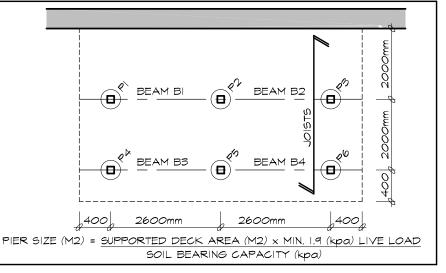
	JOIST SIZING TABLE								
	LIVE LOAD 1.9 kPa			LIVE LOAD 2.5 kPa			LIVE LOAD 3.0 kPa		
JOIST SPAN	J015	T SPACING (r	nm)	JOIST SPACING (mm)			JOIST SPACING (mm)		
(mm)	305	406	610	305	406	610	3 <i>0</i> 5	406	60
2000	38×140	38×140	38×140	38×140	38×140	38×140	38×140	38×140	38×140
2500	38×140	38×140	38×184	38×140	38×140	38×184	38×140	38x184	38×184
3000	38×140	38×184	38×184	38×184	38×184	38×235	38×184	38×184	38×235
3500	38×184	38×184	38×235	38×184	38×235	38×235	38×235	38×235	38×235
4000	38×235	38×235	38×286	38×235	38×235	38×286	38×235	38×235	38×286

FOOTING SIZES					
SOIL BEARING CAPACITIES (KPa)					
SOIL TYPE	BEARING PRESSURE (kPa)				
SOFT CLAY	40				
LOOSE SAND OR GRAVEL	50				
FIRM CLAY	75				
DENSE OR COMPACT SILT	100				
STIFF CLAY	150				
DENSE COMPACT SAND OR GRAVEL	150				
TILL	200				
CLAY SHALE	300				
SOUND ROCK	500				

PIER SIZES				
DIAMETER (mm)	n Y			
200	0.03			
25 <i>0</i>	0.05			
300	0.08			
350	0.10			
400	0.13			
500	0.20			
600	0.30			

	PC	ユニ ニコフト							
		POST SIZING TABLE							
POST	MAXIMUM	MAX. SUPPORTED DECK AREA (M2)							
SIZE	HEIGHT	LIVE LOAD (kPa)							
(mm)	(M)	1.9	2.5	3.0					
	1.0	10.86	8.71	7.48					
89×89	1.5	5.93	4.76	4.09					
	2.0	3.15	2.53	2.17					
	2.0	13.67	10.98	9.43					
	2.5	9.32	7.48	6.43					
	3.0	6.35	5.10	4.38					
	3.5	4.41	3.54	3.04					

	PIERS	SUPPORTED DECK AREA			
7	<u>1</u>	$2 \times 1.7 = 3.4$ m <sup>2</sup>			
	P2	2 × 2.6 = 5.2m <sup>2</sup>			
PLAN	P3	$2 \times 1.7 = 3.4 \text{m}^2$			
ם	P4	$1.4 \times 1.7 = 2.4 \text{m}^2$			
Щ	Þ	$1.4 \times 2.6 = 3.6 \text{m}^2$			
₫	P6	$1.4 \times 1.7 = 2.4 \text{m}^2$			
EXAMPL	BEAMS	SUPPORTED JOIST LENGTH			
X	m	2000mm			
	B2	2000mm			
	B3	14 <i>00</i> mm			
	B4	14 <i>00</i> mm			
	BEAM	<b>SPAN =</b> 2600mm			
	JOIST	<b>SPAN =</b> 2000mm			
		·			



# GENERAL NOTES

- I. A MINIMUM LIVE LOAD OF 1.9 (kPa) SHALL BE APPLIED IN ALL LOCATIONS.
- 2. THE PRESCRIBED SNOW LOAD FOR 225 SELECTED ONTARIO LOCATIONS IS INDICATED IN COLUMN 12 OF TABLE 1.2 IN SUPPLEMENTARY GUIDELINE SB-I OF THE ONTARIO BUILDING CODE. THE SNOW LOAD SHALL BE APPLIED AS THE MINIMUM LIVE LOAD WHERE IT IS GREATER THAN 1.9 (kPa)
- 3. A SITE PLAN OR SURVEY IS REQUIRED SHOWING ALL LOT LINES & DIMENSIONS, SIZE & LOCATION OF ALL EXISTING BUILDINGS & DECKS.
- 4. LUMBER NO. 2 SPF OR BETTER WOOD POSTS MIN. 89x89 (SOLID).
  USE CORROSION RESISTANT SPIRAL NAILS OR SCREWS.
- 5. A DECK IS NOT PERMITTED TO BE SUPPORTED ON BRICK VENEER.
- 6. CANTILEVERED JOISTS AND BEAMS ARE LIMITED TO 1/6 THE MEMBERS LENGTH.
- CONCRETE PIERS SHALL BEAR ON UNDISTURBED SOIL. THE BEARING CAPACITY OF THE SOIL SHALL BE DETERMINED PRIOR TO CONSTRUCTION.
- 8. MAXIMUM HEIGHT REFERS TO THE HEIGHT OF THE POST FROM THE TOP OF THE PIER TO THE DECK SURFACE.
- 9. BEAMS WITH MORE THAN 2 MEMBERS MUST BE SUPPORTED
- IO. THE ALLOWABLE SOIL BEARING PRESSURE SHALL BE REDUCED BY 50% WHILE THE WATER IS AT OR NEAR THE BOTTOM OF THE FOOTING EXCAVATION.
- II. CONTACT YOUR LOCAL BUILDING DEPARTMENT FOR FURTHER INFORMATION ABOUT LOCAL SOIL BEARING CAPACITIES.
- 12. JOISTS SPANNING MORE THAN 2100mm ARE TO HAVE BRIDGING AT LEAST EVERY 2100mm O.C.,

LMCBO STANDARD DETAILS TITLE

WOOD DECK STRUCTURAL SIZING TABLES

NOTE: UNDER THE BUILDING CODE ACT, THE LOCAL MUNICIPALITY IS THE AUTHORITY HAVING
JURISDICTION FOR ENFORCING THE ACT AND IT'S REGULATIONS, IT IS THE RESPONSIBILITY
OF THE OWNER/DESIGNER TO ENSURE THAT ALL DESIGNS SUBMITTED FOR A PERMIT ARE IN
ACCORDANCE WITH THE BUILDING CODE ACT, BUILDING CODE AND ANY OTHER APPLICABLE LAW.

DWG. NO.

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2012

# SB-7 Guards for Housing and Small Buildings

#### 2.1. Materials

#### 2.1.1. Lumber Grades

- (1) The minimum grade of softwood dimension lumber for posts, rails and joists shall be Northern Species, No. 2.
- (2) The minimum grade of softwood dimension lumber for pickets shall be Northern Species, No. 2 Picket grade.
- (3) Wood for pickets shall be free of loose knots. (See Appendix  $A_{\star}$ )

SB-7 Page 1

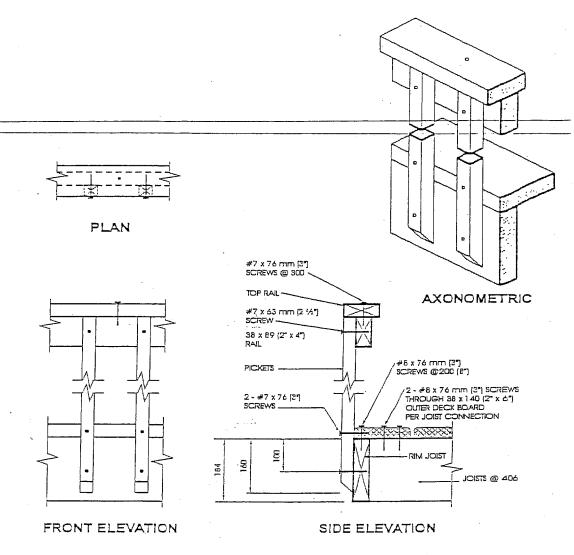
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Table 2.1.2.
Minimum Size of Loadbearing Elements

Guard Element	Minimum Size, mm (in)		
Post	89 x 89 (4" x 4" nominal)		
Top Rail	38 x 89 (2" x 4" nominal)		
Bottom Rail	38 x 89 (2" x 4" nominal)		
Pickel / Baluster	32 x 32 (1 <sup>9</sup> /32" x 1 <sup>9</sup> /32")		
Column 1	2		

Table 2.1.3.
Minimum Size of Floor Elements

Floor Sternent	Minimum size, mm (in)	
	25 x 140 ( <sup>5</sup> /4" x 6" nominal), when each is plank fastened with 2 - 63 mm (2½") naiis	
Dimension Lumber Decking	38 x 89 (2" x 4" nominal), when each plank is fastened with 2 - 75 mm (3") nails	
Dimension Lumber Joists	38 x 184 (2" x 8" nominal)	
Calumn 1	2	



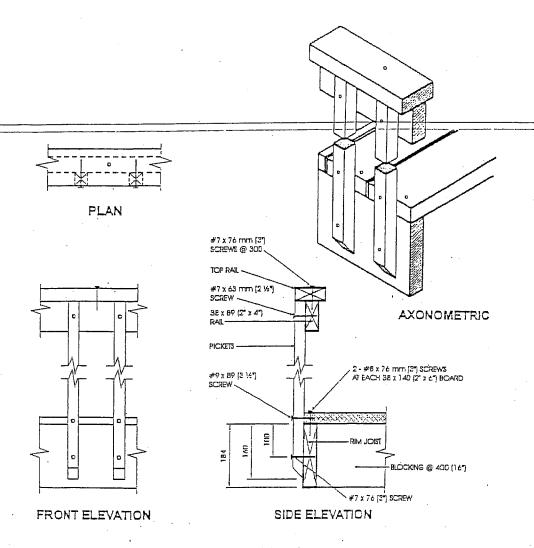
#### Detail ED-3

Exterior Connection: Cantilevered Picket Screwed to Rim Joist and Deck

#### Notes

- 1. Provide a suitable post, return, or solid support at each end of the guard.
- 2. Wood for cantilevered pickers shall be Northern Species.
- Fasien rim joist to each floor joist with 3 82 mm (3½") nails.
- 4. Dimensions shown are in mm unless otherwise specified.

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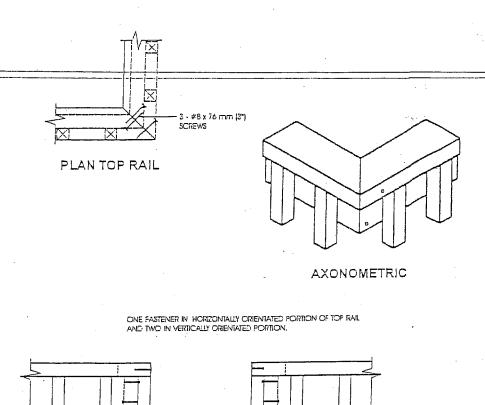


Detail ED-4

Exterior Connection: Cantilevered Picket Screwed to Rim Joist and Deck,
Guard Parallel to Floor Joists

#### Notes:

- 1. Provide a suitable post, return, or solid support at each end of the guard.
- 2. Wood for cantilevered pickets shall be Northern Species.
- 3. Fasten rim joist to blocking with 3 82 mm (31/2") nails.
- 4. Dimensions shown are in mm unless otherwise specified.



# Detail ED-5 Exterior Connection: Corner Joint

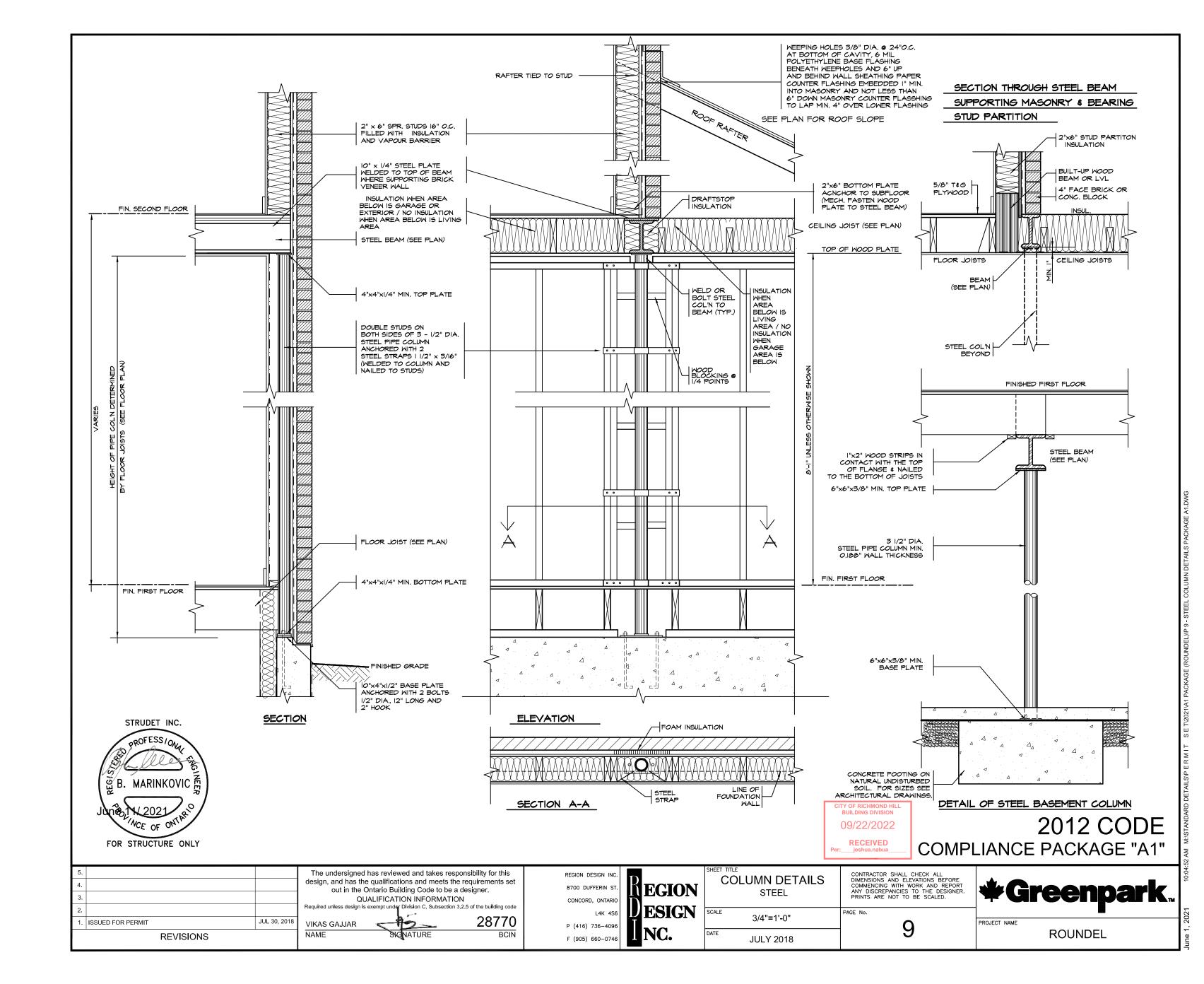
SIDE TOP RAIL

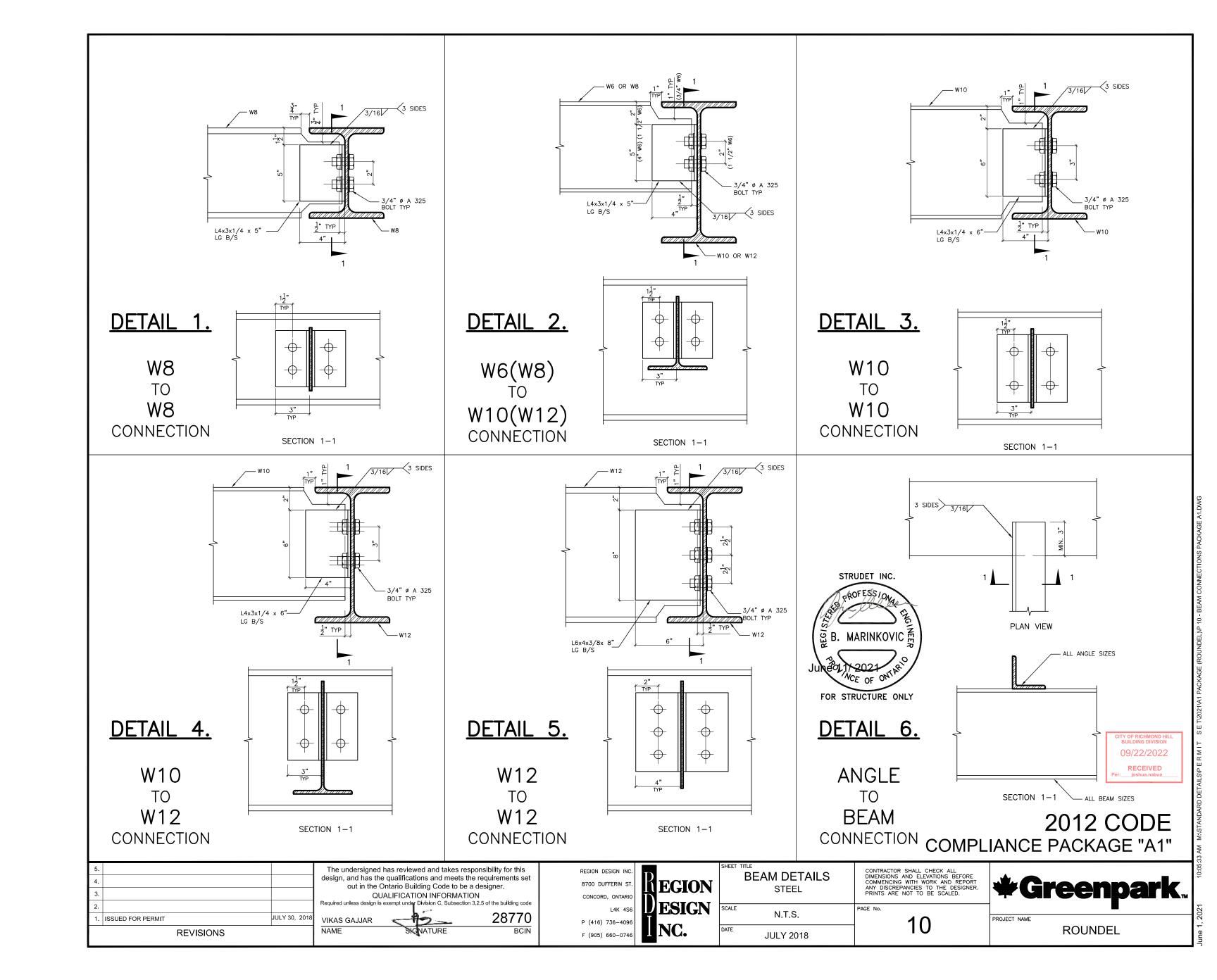
#### Notes

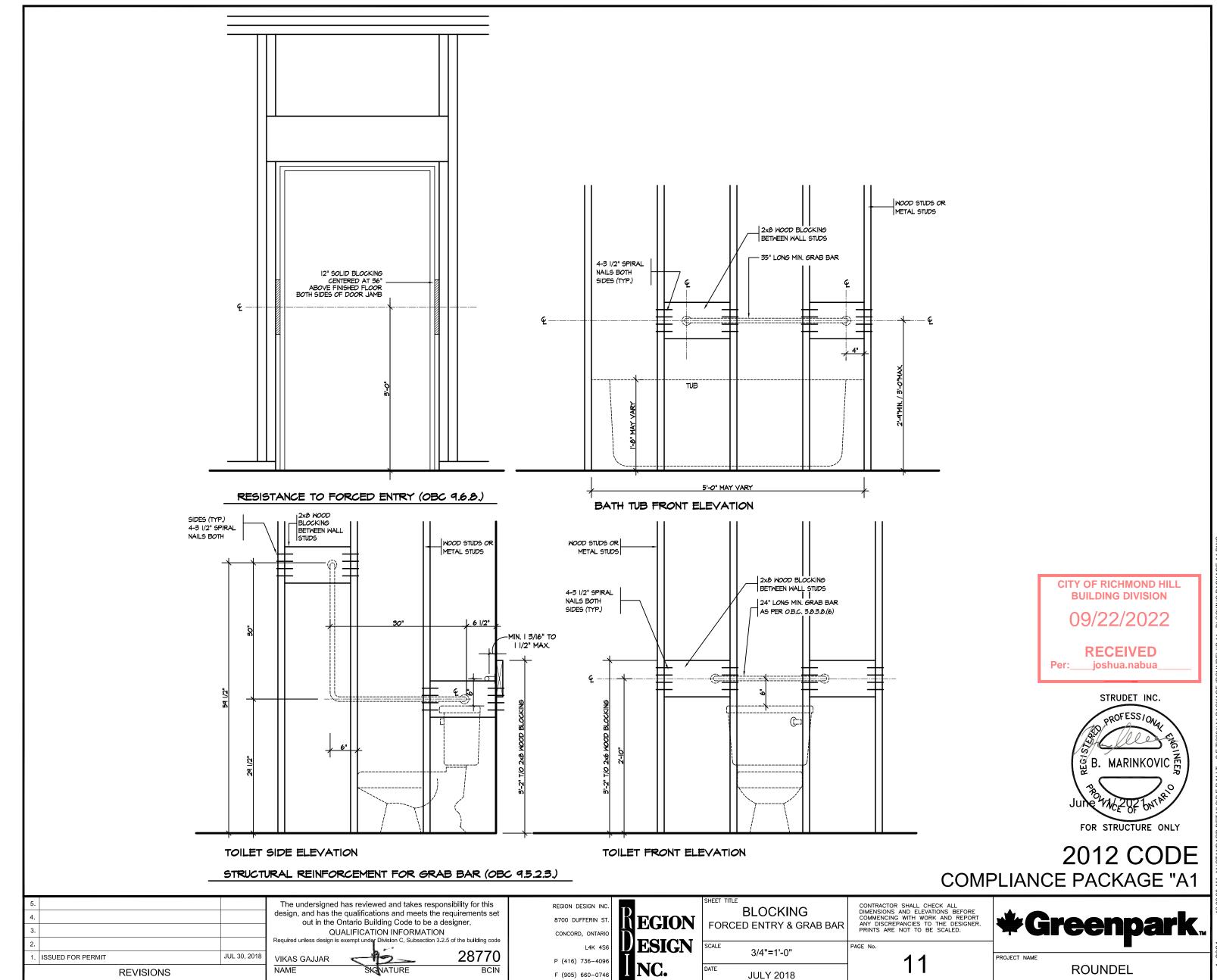
1. Screws fastening pickets are omitted for clarity.

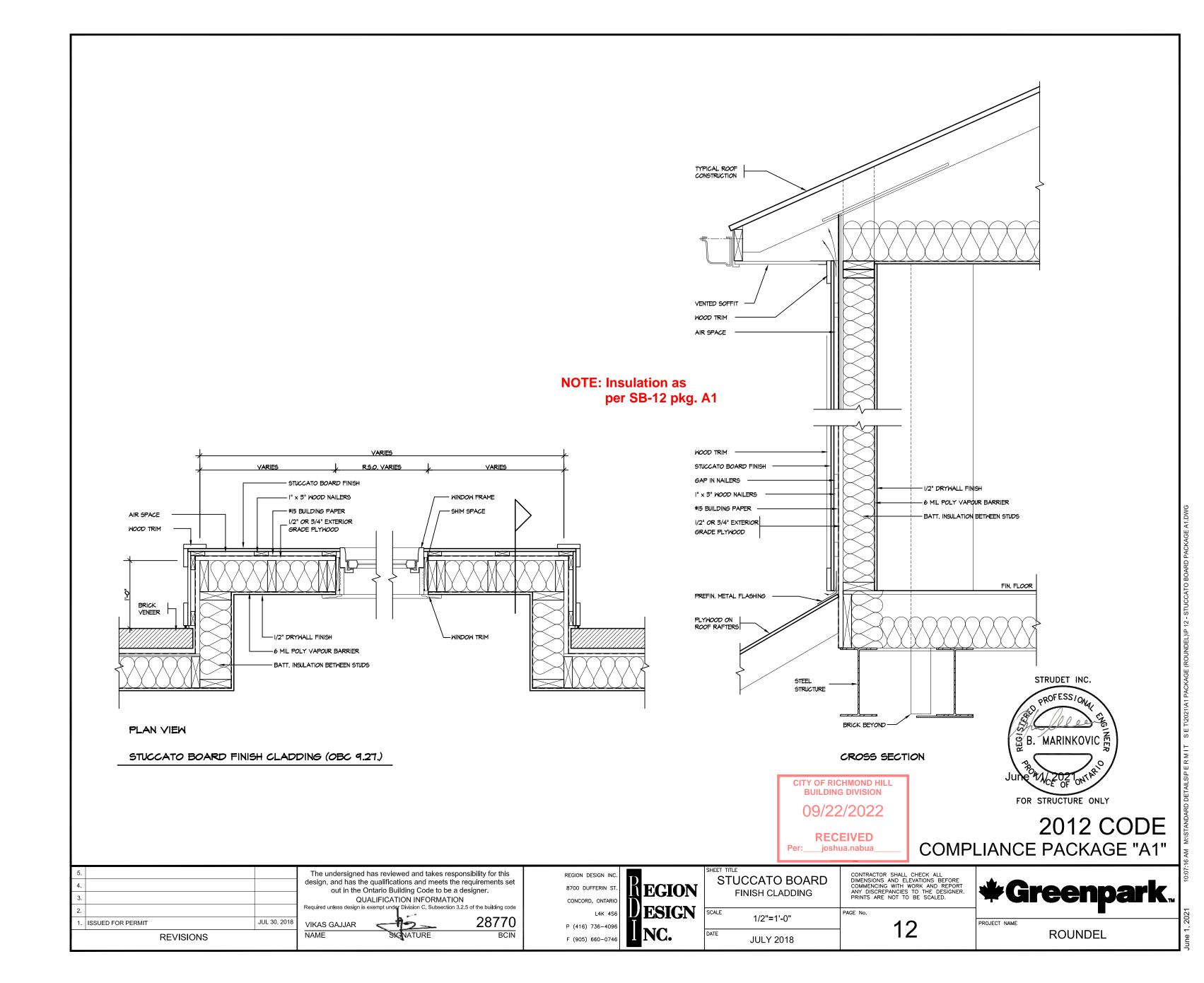
FRONT TOP RAIL

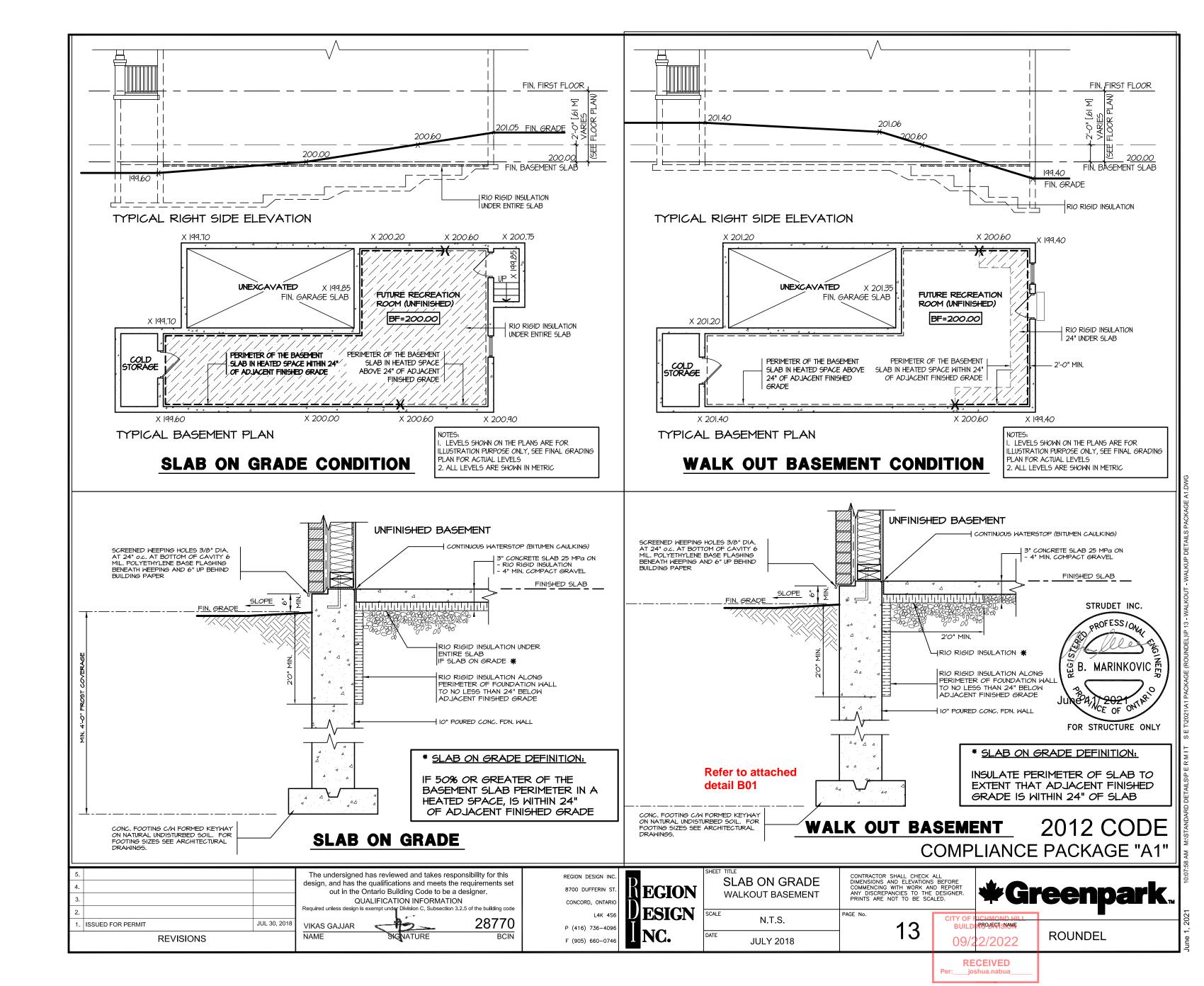
2. Provide a minimum of 10 pickets beyond the return if end restraint of the guard is provided by this return detail only.

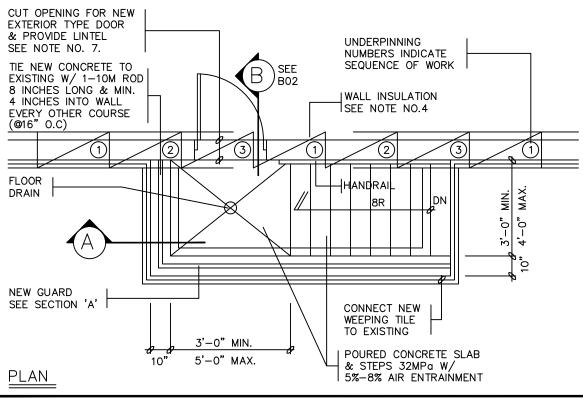


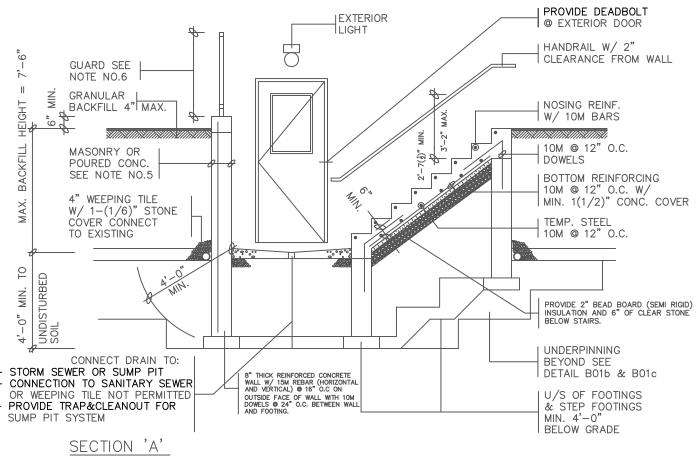












# GENERAL NOTES:

# 1. FOOTINGS:

16"x6" POURED CONC. FOOTING ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OR COMPACTED GRANULAR FILL.

## 2. CONCRETE:

MINIMUM COMPRESSIVE STRENGTH OF 32 MPA @ 28 DAYS W/ 5% TO 8% AIR ENTRAINMENT.

## 3. EXTERIOR STAIRS:

RISER: 4(7/8)"MIN. | 7(7/8)"MAX. RUN: 8(1/4)"MIN. | 14"MAX. TREAD: 9(1/4)"MIN. | 14"MAX.

## 4. INSULATION:

MINIMUM R20c.i. INSULATION W/ VAPOUR BARRIER ON THE INSIDE FACE OF THE EXPOSED FOUNDATION WALL.

# 5. RETAINING WALL:

REINFORCING STEEL IN SIDE WALLS TO BE LOCATED ON OUTSIDE FACE OF WALLS WITH 1(1/2)" CONCRETE COVER.

# 6. GUARDS:

3'-6" HEIGHT WHERE DISTANCE FROM GRADE TO BOTTOM OF WALKOUT EXCEEDS 5'-11"; 2'-11" FOR LESSER HEIGHTS. MAXIMUM 4" BETWEEN VERTICAL PICKETS. GUARDS SHALL BE NON-CLIMBALE AND IN CONFORMANCE WITH OBC 2012 DIV.B 9.8.8 AND SB-7

## 7. LINTELS:

- SOLID MASONRY/CONCRETE: 2-3(1/2)"x3(1/2)"x(1/4)" STEEL ANGLES

   BRICK VENEER: 1-3(1/2)"x3(1/2)"x(1/4)"L + 2-2"x8"

   WOOD FRAME/SIDING: 2-2"x8"

# 8. UNDERPINNING:

UNDERPINNING, OR EXTRA DEPTH FOOTING TO A LEVEL 4 FT. BELOW THE WALKOUT SLAB, IS REQUIRED FOR ALL FOOTINGS WITHIN A 4 FT. RADIUS OF ANY POINT OF THE WALKOUT SLAB.

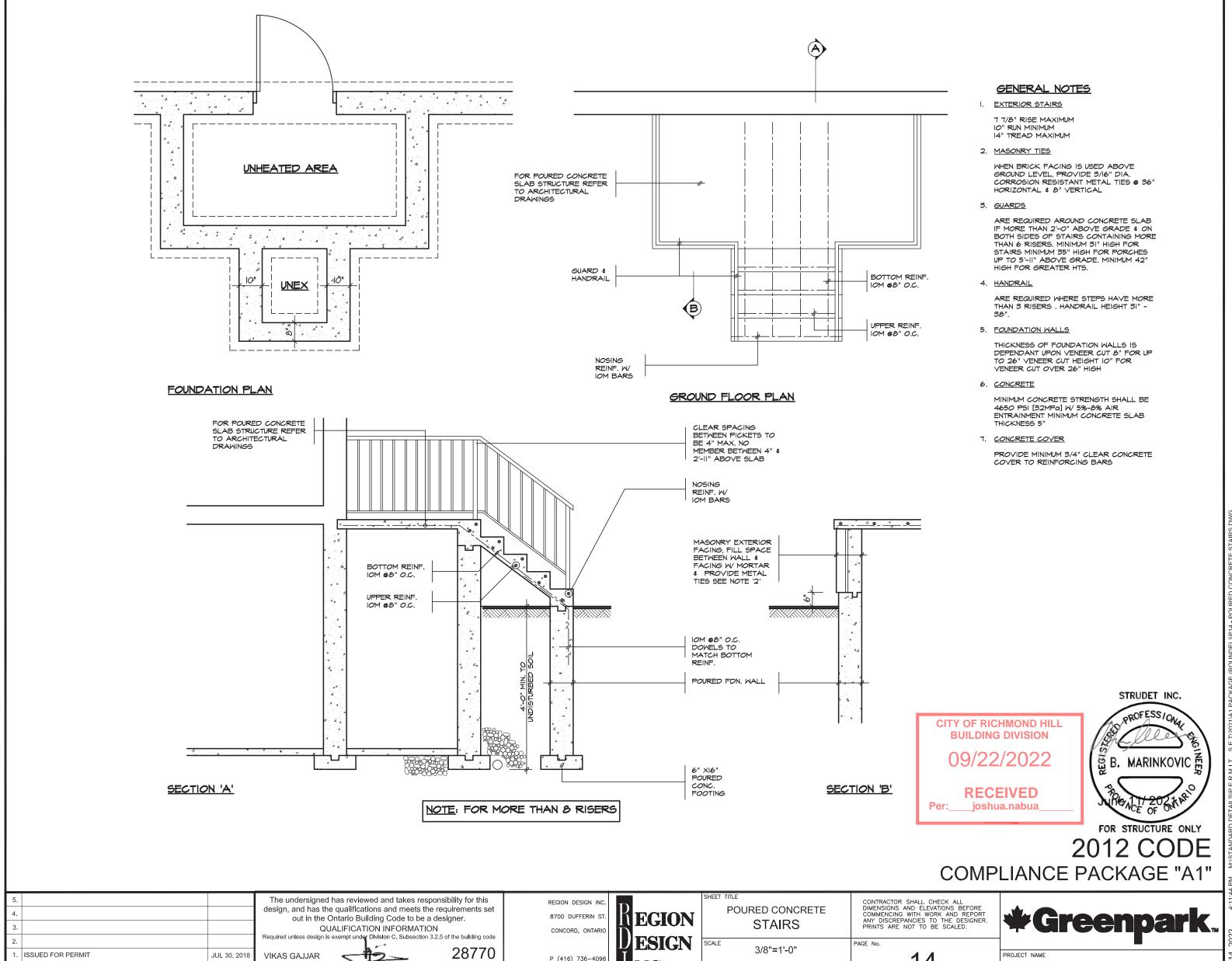


BASEMENT WALKOUT PLAN & SECTIONS

DWG. NO.

B01RH

2020



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**REVISIONS** 

JUL 30, 2018

VIKAS GAJJAR

NAME

ROUNDEL

PROJECT NAME

14

JULY 2018