

# CONSTRUCTION NOTES (Unless otherwise noted)

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND SPEC'S AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12-2012 OBC.

## 1. ROOF CONSTRUCTION

NO.210 (10.25mm/m<sup>2</sup>) ASPHALT SHINGLES, 10mm (3/8") PLYWOOD SHEATHING WITH "H" CUPS. APPROVED WOOD TRUSSES @ 610mm (24") O.C. MAX. APPROVED EAVES PROTECTION TO EXTEND 900mm (3'-0") FROM EDGE OF ROOF AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL. (EAVES PROTECTION NOT REQUIRED FOR ROOF SLOPES 8:12 OR GREATER) 38x89 (2"x4") TRUSS BRACING @ 1830mm (6'-0") O.C. AT BOTTOM CHORD. PREFIN. ALUM. EAVESTROUGH, FASCIA, RAIL & VENTED SOFFIT. PROVIDE ICE & WATER SHIELD TO ALL ROOF/WALL SURFACES SUSCEPTIBLE TO ICE DAMMING. ROOF SHEATHING TO BE FASTENED 150 (6") C/C ALONG EDGES & INTERMEDIATE SUPPORTS WHEN TRUSSES SPACED GREATER THAN 406 (16"). ATTIC VENTILATION: 1300 OF INSULATED CEILING AREA WITH MIN. 25% AT EAVES & MIN. 25% AT RIDGE (OBC 9.19.1.2).

## 2. FRAME WALL CONSTRUCTION (2"x6") (SB-12-TABLE 3.1.1.2.A)

SIDING AS PER ELEV. 19x39 (1 1/2") VERTICAL WOOD FLOORING, CONTIN. SHEATHING MEMBRANE, 11mm (7/16") EXT. TYPE SHEATHING OR OBC COMPLIANT EQUIVALENT, 38x140 (2"x6") STUDS @ 406mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPR. VAPOUR BARRIER AND APPR. CONTIN. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH. SIDING TO BE MIN. 200mm (8") ABOVE FINISH GRADE. REFER TO OBC SB-12, CHAPTER 3 FOR REQUIRED MINIMUM THERMAL INSULATION REQUIREMENTS.

## 2B. FRAME WALL CONSTRUCTION (2"x4") - GARAGE WALLS

SIDING AS PER ELEV. 19x39 (1 1/2") VERTICAL WOOD FLOORING, CONTIN. SHEATHING MEMBRANE, 11mm (7/16") EXT. TYPE SHEATHING OR OBC COMPLIANT EQUIVALENT, 38x89 (2"x4") STUDS @ 406mm (16") O.C. (MAX. HEIGHT 3000mm (9'-10")). WITH APPR. DIAGONAL WALL BRACING. REFER TO NOTE 19 WHERE FLOOR EXISTS ABOVE GARAGE. SIDING TO BE MIN. 200mm (8") ABOVE FINISH GRADE.

## 2C. STUCCO WALL CONSTRUCTION (2"x6") (SB-12-TABLE 3.1.1.2.A)

STUCCO CLADDING SYSTEM CONFORMING TO O.B.C. 9.27.1.1.(2) & 9.28 THAT EMPLOY A MINIMUM 10mm AIR SPACE BEHIND THE CLADDING WITH POSITIVE DRAINAGE TO THE EXTERIOR AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 25mm (1") MIN. EXTRUDED OR EXPANDED RIGID POLYSTYRENE ON APPR. AIR/MOISTURE BARRIER ON 38x140 (2"x6") STUDS @ 406 (16") O.C. (MAX. HEIGHT 3000mm (9'-10")). WITH APPR. DIAGONAL WALL BRACING. REFER TO NOTE 19 WHERE FLOOR EXISTS ABOVE GARAGE. STUCCO TO BE MIN. 200 (8") ABOVE FINISH GRADE.

## 2D. WALLS ADJACENT TO ATTIC - NO CLADDING

11mm (7/16") EXT. TYPE SHEATHING OR OBC COMPLIANT EQUIVALENT, 38x140 (2"x6") STUDS @ 406mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPR. VAPOUR BARRIER AND APPR. CONTIN. AIR BARRIER, 13mm (1/2") INTERIOR DRYWALL FINISH. MID-HEIGHT BLOCKING REQ'D IF NO SHEATHING APPLIED. REFER TO OBC SB-12, CHAPTER 3 FOR ADDITIONAL THERMAL INSULATION REQUIREMENTS.

## 2E. BRICK VENEER CONSTRUCTION (2"x6") (SB-12-TABLE 3.1.1.2.A)

90mm (4") FACE BRICK, 25mm (1") AIR SPACE, 22x180x76mm (7/8"x7"x3") GY. METAL TIES @ 406mm (16") O.C. HORIZONTAL 610mm (24") O.C. VERTICAL. APPROVED SHEATHING PAPER, 11mm (7/16") EXTERIOR TYPE SHEATHING OR OBC COMPLIANT EQUIVALENT, 38x140 (2"x6") STUDS @ 406mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPROVED VAPOUR BARRIER WITH APPROVED CONTIN. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH. PROVIDE VEEB HOLES @ 600mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN. 150mm (6") ABOVE FINISH GRADE. REFER TO OBC SB-12, CHAPTER 3 FOR REQUIRED MINIMUM THERMAL INSULATION REQUIREMENTS.

## 2F. BRICK VENEER CONSTRUCTION (2"x4") - GARAGE WALLS

90mm (4") FACE BRICK, 25mm (1") AIR SPACE, 22x180x76mm (7/8"x7"x3") GY. METAL TIES @ 406mm (16") O.C. HORIZONTAL 610mm (24") O.C. VERTICAL. APPROVED SHEATHING PAPER, 11mm (7/16") EXTERIOR TYPE SHEATHING OR OBC COMPLIANT EQUIVALENT, 38x89 (2"x4") STUDS @ 406mm (16") O.C. (MAX. HEIGHT 3000mm (9'-10")). WITH APPROVED DIAGONAL WALL BRACING. REFER TO NOTE 19 WHERE FLOOR EXISTS ABOVE GARAGE. PROVIDE VEEB HOLES @ 600mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN. 150mm (6") ABOVE FINISH GRADE.

## 2G. STUCCO WALL CONSTRUCTION (2"x4") (SB-12-TABLE 3.1.1.2.A)

STUCCO CLADDING SYSTEM CONFORMING TO O.B.C. 9.27.1.1.(2) & 9.28 THAT EMPLOY A MINIMUM 10mm AIR SPACE BEHIND THE CLADDING WITH POSITIVE DRAINAGE TO THE EXTERIOR AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 25mm (1") MIN. EXTRUDED OR EXPANDED RIGID POLYSTYRENE ON APPR. CONTIN. AIR/MOISTURE BARRIER ON 38x140 (2"x6") STUDS @ 406mm (16") O.C. (MAX. HEIGHT 3000mm (9'-10")). WITH APPR. DIAGONAL WALL BRACING. REFER TO NOTE 19 WHERE FLOOR EXISTS ABOVE GARAGE. STUCCO TO BE MIN. 200 (8") ABOVE FINISH GRADE. REFER TO OBC SB-12, CHAPTER 3 FOR REQUIRED MINIMUM THERMAL INSULATION REQUIREMENTS.

## INTERIOR STUD PARTITIONS

FOR BEARING PARTITIONS 38x89 (2"x4") @ 406mm (16") O.C. FOR 2 STOREYS AND 305mm (12") O.C. FOR 3 STOREYS. NON-BEARING PARTITIONS 38x89 (2"x4") @ 610mm (24") O.C. PROVIDE 38x89 (2"x4") BOTTOM PLATE @ 38x89 (2"x4") TOP PLATE, 13mm (1/2") INT. DRYWALL BOTH SIDES OF STUDS, PROVIDE 38x140 (2"x6") STUDS/PLATES WHERE NOTED.

## 3. FOUNDATION WALL/FOOTINGS: (9.15.3, 9.15.4, 9.13.2, 9.14.2.1.(2))

200mm (8") POURED CONC. FDN. WALL 150mm (6") WITH BITUMINOUS DAMPROOFING AND DRAINAGE LAYER. DRAINAGE LAYER REQ'D. WHEN BASEMENT INSL. EXTENDS 900 (2'-11") BELOW FIN. GRADE. DRAINAGE LAYER IS NOT REQ'D. IF FOUNDATION WALL IS WATERPROOFED. MAXIMUM POUR HEIGHT 2380 (7'-10") ON 500x155 (2"x6") CONTINUOUS REIN. CONC. FTG. GRADE FDN. WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL.

## STRIP FOOTINGS - FOR TOWNHOUSES

FOR STRIP FOOTING SIZES REFER TO BLOCK FOUNDATION PLAN. ASSUMED 120 KPa (16 p.s.i.) SOIL BEARING CAPACITY FOR TOWNHOUSES. TO BE VERIFIED ON SITE.

-MAXIMUM FLOOR LIVE LOAD OF 2.4KPa (50psf) PER FLOOR. -REFER TO SOILS REPORT FOR SOIL CONDITIONS AND BEARING CAPACITY.

## 4. FOUNDATION DRAINAGE OBC 9.14.2 & 9.14.3

100mm (4") DIA. FOUNDATION DRAINAGE TILE 150mm (6") CRUSHED STONE OVER AND AROUND DRAINAGE TILES.

## 5. BASEMENT SLAB OBC 9.3.1.6(1)(b), 9.16.4.5(1), 9.25.3.3(1b)

50mm (2") MIN. 25MPa (3600psi) CONC. SLAB ON 100mm (4") COARSE GRANULAR FILL OR 200mm (8") CONC. WITH DAMPROOFING BELOW SLAB. UNDER SLAB INSULATION PER SB-12; 3.1.1.7(2)(b) where required. ALL SLAB JOINTS & PENETRATIONS TO BE SEALED TO MAINTAIN AIR BARRIER.

## 6. WOOD SUBFLOORS (SEE OBC 9.23.14 & 9.20.2.1)

-19mm (3/4") MIN. 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 UNDERLAYMENT UNDER RESILIENT & PARQUET FLOORING.

## 7. ATTIC INSULATION (SB-12-TABLE 3.1.1.2.A) (SB-12-3.1.1.8)

RSI 0.58 (R60) BLOWN IN ROOF INSULATION AND APPROVED VAPOUR BARRIER. 150mm (6") INT. DRYWALL FINISH OR APPROVED EQUAL. RSI 3.52 (R20) MIN. ABOVE INNER SURFACE OF EXTERIOR WALL.

## 8. ALL STAIRS/EXTERIOR STAIRS - OBC 9.8

UNIFORM RISE 190mm (7 1/2") MAX. BETWEEN ADJACENT TREADS OR LANDINGS. -10mm (1/2") MAX. BETWEEN TALLEST & SHORTEST RISE IN FLIGHT.

MAX. RISE = 200 (7'-7 1/8") MIN. RUN = 210 (6'-11 1/4") MIN. TREAD = 235 (9'-1 1/4") MAX. NOSING = 25 (1") MIN. HEADROOM = 1950 (6'-5") RAIL @ LANDING = 900 (2'-11") RAIL @ STAIR = 865 (2'-10") TO 965 (3'-2") MIN. STAIR WIDTH = 860 (2'-10")

## FOR CURVED STAIRS

MIN. RUN = 150 (6") MIN. AVG. RUN = 200 (8") HANDRAILS - OBC 9.8.2

FINISHED RAILING ON PICKETS SPACED MAXIMUM 100mm (4") BETWEEN PICKETS. CLEARANCE BETWEEN HANDRAIL AND SURFACE BEHIND IT TO BE 50 (2") MIN. HANDRAILS TO BE CONTINUOUS EXCEPT FOR LEVEL POST AT CHANGES OF DIRECTION.

## INTERIOR GUARDS - OBC 9.8.1.1

INTERIOR GUARDS: 900mm (2'-11") MIN. HIGH. EXTERIOR GUARDS - OBC 9.8.8

## 9. EXTERIOR GUARDS - OBC 9.8.8

900mm (36") HIGH GUARD WHERE DISTANCE FROM PORCH TO FIN. GRADE IS LESS THAN 1600mm (71"). 1070mm (42") HIGH GUARD IS REQUIRED WHERE DISTANCE EXCEEDS 1800mm (71").

## 10. SILL PLATE ANCHORAGE

38x89 (2"x4") SILL PLATE WITH 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") O.C., CALCULATING OR 25 (1") MIN. MINERAL WOOL BETWEEN PLATE AND TOP OF FDN. WALL. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED.

## 11. BASEMENT INSULATION (SB-12-3.1.1.2), 9.25.3.3, 9.13.2.6

FOUNDATION WALLS ENCLOSING HEATED SPACE SHALL BE INSULATED FROM THE UNDERSIDE OF THE SUBFLOOR TO NOT MORE THAN 200mm (8") ABOVE THE FINISHED FLOOR & NO CLOSER THAN 50mm (2") OF THE BASEMENT SLAB. RSI 3.52 (R20) BLANKET INSULATION TO HAVE APPROVED VAPOUR BARRIER RECOMMENDED DAMPROOFING WITH BUILDING PAPER BETWEEN THE FOUNDATION WALL AND INSULATION UP TO GRADE LEVEL. NOTE: FULL HEIGHT INSULATION AT COLD CELLAR WALLS. AIR BARRIER TO BE SEALED TO FOUNDATION WALL WITH CAULKING. CONTINUOUS INSULATION (ci) IS NOT TO BE INTERRUPTED BY FRAMING.

## 12. BASEMENT HEARING STUD PARTITION

38x89 (2"x4") STUDS @ 406mm (16") O.C. 38x89 (2"x4") SILL PLATE ON DAMPROOFING MATERIAL, 13mm (1/2") DIA. ANCHOR BOLTS 230mm (9") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") O.C. 100mm (4") HIGH CONC. CURB ON 305x155 (12"x6") CONC. FOOTING. ADD HORIZ. BLOCKING AT MID-HEIGHT IF WALL IS UNFINISHED.

## 13. STEEL BASEMENT COLUMN (SEE O.B.C. 9.18.3.3)

80mm (3-1/2") DIA x 478mm (18 7/8") STL. COL WITH A MIN. CAPACITY OF 108 KN (24,000lbs) WITH 150x150x6.5 (6"x6"x3/8") STL. TOP & BOTTOM PLATE.

## 14. STEEL COLUMN

80mm (3-1/2") DIA x 478mm (18 7/8") STL. COL WITH 100x100x6.0 (4"x4"x1/4") TOP & BOTTOM PLATES. FIELD WELD BOTTOM PLATE TO 100x200x12.5 (4"x10"x1/2") BASE PLATE C/W 2-12mm DIA. x 200mm LONG x30mm HOOK ANCHORS (2-1/2"x1/2"x2"). THE COLUMN TO STUD WALL WITH 2-38x3.175 (1 1/4"x1/8") STEEL STRIP WELDED TO COLUMN AND FASTENED TO STUD WITH 2-SOS 6.35x38 (1/4"x1/2") SCREWS MANUF. BY SIMPSON STRONG TIE.

## CONCRETE PLASTER

BEAM POCKET OR 200x200 (8"x8") POURED CONC. NIS WALLS. MIN. BEARING 90mm (3-1/2")

## 17. 19x39 (1 1/2") CONTINUOUS WOOD STRAPPING BOTH SIDES OF STEEL BEAM. (OBC 9.2.3.4.3(c))

## 18. GARAGE SLAB

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

## 19. INTERIOR GARAGE WALLS & CEILING (SB-12-TABLE 3.1.1.2.A)

13mm (1/2") GYPSUM BOARD ON WALL AND CEILING BEHIND HOUSE AND GARAGE. RSI 3.87 (R22) IN WALLS, RSI 5.45 (R31) IN CEILING TAPE AND SEAL ALL JOINTS AIRTIGHT PER O.B.C. 9.16.3.18. REFER TO SB-12, TABLE 3.1.1.2.A. FOR REQUIRED THERMAL INSULATION.

## 20. DOOR AND FRAME GASPROOFED. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHERSTRIPPING PER OBC 9.10.13.15.

## 21. EXTERIOR STEP

PRECAST CONCRETE STEP OR WOOD STEP WHERE NOT EXPOSED TO WEATHER. MAX. RISE 200mm (7-7/8") MIN. TREAD 250mm (9-2/32"). SEE OBC 9.8.9.2, 9.8.6.3, & 9.8.10.

## 22. DRYER VENT (OBC 9.2.3.8(7) & 9.2.4.11)

CAPPED DRYER EXHAUST VENTED TO EXTERIOR. (USE 100mm (4") DIA. SMOOTH WALL VENT PIPE).

## 23. INSULATED ATTIC ACCESS (OBC 9.13.2.1 & SB-12-3.1.1.8)

ATTIC ACCESS HATCH WITH MIN. DIMENSION OF 545x700mm (21'-1/2"x2'-7") & A MIN. AREA OF 0.32 SQ.M. (3.44 SQ.FT.) WITH WEATHERSTRIPPING. RSI 3.52 (R20) RIGID INSULATION BACKING SEE OBC SB-12, 3.1.1.8.

## 24. FIREPLACE CHIMNEYS - OBC 9.2.1

TOP OF FIREPLACE CHIMNEY SHALL BE 910mm (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.

## 25. LINEN CLOSETS

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

## 26. MECHANICAL EXHAUST

MECHANICAL EXHAUST FAN VENTED TO EXTERIOR AS REQUIRED BY OBC 9.2.3.5, & 9.2.3.10.

## 27. STEEL BEARING PLATE FOR MASONRY WALLS

280x280x18 (11"x11"x3/8") STL. PLATE FOR STL BEAMS AND 280x280x12 (11"x11"x1/2") STL. PLATE FOR WOOD BEAMS. BEARING ON CONC. BLOCK PARTIALLY. ANCHORED WITH 7-19mm (3/4") x 200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHRINK GROUT.

## 27A. SOLID WOOD BEARING FOR WOOD STUD WALLS

SOLID BEARING TO BE AT LEAST AS WIDE AS THE SUPPORTED MEMBER. SOLID WOOD BEARING COMPRISED OF BUILT-UP WOOD STUDS TO BE CONSTRUCTED IN ACCORDANCE WITH OBC 9.17.4.2(2).

## 28. 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.

## 29. BASEMENT WOOD POST (OBC 9.17.4.2)

3-38x140 (3-2"x6") BUILT-UP POST ON METAL BASE SHOE ANCHORED TO CONC. WITH 12.7 DIA. BOLT. 406x406x203 (16"x16"x8") CONC. FTG. OR AS OTHERWISE SPECIFIED ON DRAWING.

## 30. STEPPED FOOTINGS (OBC 9.13.3.9)

MIN. HORIZ. STEP = 100mm (4") MIN. VERT. STEP = 600mm (24")

## 31. SLAB ON GRADE

MIN. 100mm (4") CONCRETE SLAB ON GRADE ON 100mm (4") COARSE GRANULAR FILL. REINFORCED WITH 6-16x180x12.5 MPa PLACED NEAR MID-DEPTH OF SLAB. CONC. STRENGTH 32 MPa (4640 psi) WITH 5-8% AIR ENTRAINMENT ON COMPACTED SUB-BASE. UNDER SLAB INSULATION AS PER OBC SB-12 3.1.1.7(2)(b) AND SB-12, TABLE 3.1.1.2.A. where required. ALL JOINTS & PENETRATIONS OF INTERIOR SLABS TO BE SEALED TO MAINTAIN AIR BARRIER.

## LOOSE STEEL LINTELS

1. = 3-1/2" x 3-1/2" x 1/4" (90x90x6.0) 2. = 4" x 3-1/2" x 5/16" (100x90x6.0) 3. = 3-1/2" x 5/16" (125x90x6.0) 4. = 4" x 3-1/2" x 3/8" (150x90x10.0) 5. = 5" x 4" x 3/8" (150x100x10.0) 6. = 7" x 4" x 3/8" (180x100x10.0)

## PAID FOOTINGS

120 KPa. UNDES. SOIL 90 KPa. ENGINEERED FILL SOIL  
F1 = 42"x42"x18" CONCRETE PAD F1 = 48"x48"x20" CONCRETE PAD  
F2 = 36"x36"x16" CONCRETE PAD F2 = 40"x40"x18" CONCRETE PAD  
F3 = 30"x30"x12" CONCRETE PAD F3 = 34"x34"x14" CONCRETE PAD  
F4 = 24"x24"x12" CONCRETE PAD F4 = 28"x28"x12" CONCRETE PAD  
F5 = 18"x18"x8" CONCRETE PAD F5 = 18"x18"x8" CONCRETE PAD

## DOOR SCHEDULE

| NO. | WIDTH | HEIGHT | 8" or 10" or 12" or 14" or 16" or 18" or 20" or 22" or 24" or 26" or 28" or 30" or 32" or 34" or 36" or 38" or 40" or 42" or 44" or 46" or 48" or 50" or 52" or 54" or 56" or 58" or 60" or 62" or 64" or 66" or 68" or 70" or 72" or 74" or 76" or 78" or 80" or 82" or 84" or 86" or 88" or 90" or 92" or 94" or 96" or 98" or 100" | MORE  | TYPE                    |
|-----|-------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------|
| 1   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | INSULATED ENTRANCE DOOR |
| 2   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | INSULATED FRONT DOORS   |
| 3   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | WOOD & GLASS DOOR       |
| 4   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | EXTERIOR SLAB DOOR      |
| 5   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | INTERIOR SLAB DOOR      |
| 6   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | INTERIOR SLAB DOOR      |
| 7   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | INTERIOR SLAB DOOR      |
| 8   | 2'-0" | 6'-0"  | 6'-0"                                                                                                                                                                                                                                                                                                                                 | 0'-0" | INTERIOR SLAB DOOR      |

## WOOD LINTELS AND BEAMS

|                                          |                      |                                      |
|------------------------------------------|----------------------|--------------------------------------|
| WL1 = 3-1/2" x 3-1/2" x 1/4" (90x90x6.0) | + 2-2"x8" SPR. No.2  | WB1 = 2-2"x8" (2-38x184) SPR. No.2   |
| WL2 = 4" x 3-1/2" x 5/16" (100x90x7.0)   | + 2-2"x8" SPR. No.2  | WB2 = 2-2"x8" (3-38x184) SPR. No.2   |
| WL3 = 5" x 3-1/2" x 5/16" (125x90x7.0)   | + 2-2"x10" SPR. No.2 | WB3 = 2-2"x10" (2-38x235) SPR. No.2  |
| WL4 = 6" x 3-1/2" x 7/16" (150x90x11.0)  | + 2-2"x12" SPR. No.2 | WB4 = 2-2"x10" (3-38x235) SPR. No.2  |
| WL5 = 6" x 4" x 7/16" (150x100x11.0)     | + 2-2"x12" SPR. No.2 | WB5 = 2-2"x12" (2-38x286) SPR. No.2  |
| WL6 = 5" x 3-1/2" x 5/16" (125x90x7.0)   | + 2-2"x12" SPR. No.2 | WB6 = 3-2"x12" (3-38x286) SPR. No.2  |
| WL7 = 5" x 3-1/2" x 5/16" (125x90x7.0)   | + 3-2"x12" SPR. No.2 | WB7 = 5-2"x12" (5-38x286) SPR. No.2  |
| WL8 = 5" x 3-1/2" x 5/16" (125x90x7.0)   | + 3-2"x10" SPR. No.2 | WB11 = 4-2"x10" (4-38x235) SPR. No.2 |
| WL9 = 5" x 4" x 7/16" (150x100x11.0)     | + 3-2"x10" SPR. No.2 | WB12 = 4-2"x12" (4-38x286) SPR. No.2 |

## DIRECT VENTING GAS FURNACE VENT

DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A GAS REGULATOR. MIN. 300mm (12") ABOVE FIN. GRADE. FROM ALL OPENINGS, EXHAUST AND INTAKE VENTS, HRY INTAKE TO BE A MIN. OF 1830mm (6'-0") FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE. ALL AIR INTAKES SHALL BE LOCATED SO THAT THEY ARE SEPARATED FROM KITCHEN EXHAUST BY 3.0M IN COMPLIANCE WITH O.B.C. DIV-B TABLE 6.2.3.12.

## DIRECT VENTING GAS FIREPLACE VENT

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 AND BRIDGING (SEE OBC 9.23.9.4)

16mm (5/8") T & G SUBFLOOR ON WOOD FLOOR JOISTS. FOR CERAMIC TILE APPLICATION (SEE OBC 9.20.2.6) 6mm (1/4") PANEL TYPE UNDERLAY UNDER RESILIENT & PARQUET FLOORING. (SEE OBC 9.20.2.9)

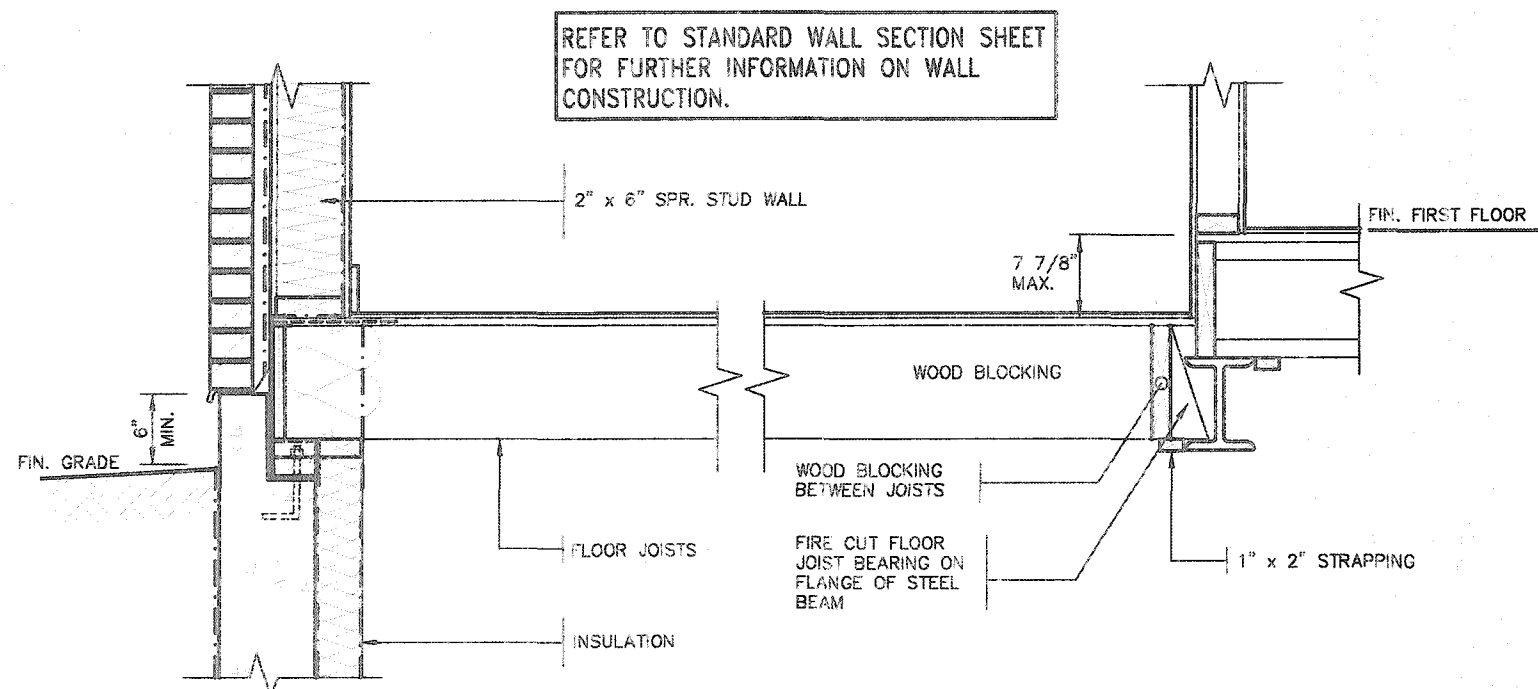
## FLOOR JOISTS WITH SPANS OVER 2100mm (6'-11") TO BE BRIDGED WITH 38x89 (2"x4") CROSS BRACING OR SOLID BLOCKING @ 2100mm (6'-11") O.C. MAX. AND WHERE SPECIFIED BY JOIST TABLES A-1 OR A-2 STRAPPING SHALL BE 19x64 (1"x3") @ 2100mm (6'-11") O.C. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED. (SEE OBC 9.23.9.4)

## EXPOSED BUILDING FACE - OBC 9.10.15

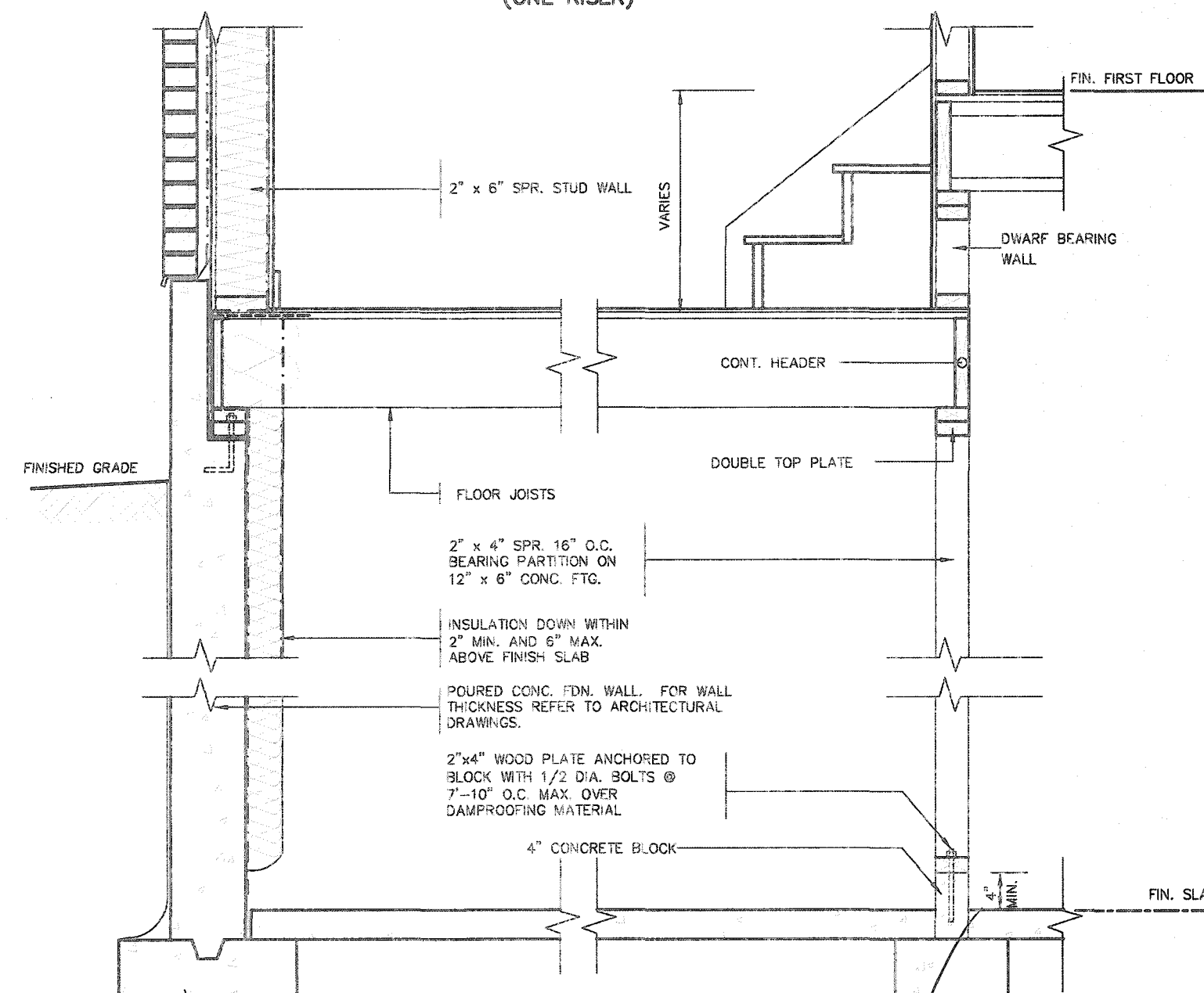
EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 min. WHERE LIMITING DISTANCE (LD) IS LESS THAN 1.2M (3'-11"). WHERE THE LD IS LESS THAN 1000mm (3'-0") THE EXPOSING FACE SHALL BE CLAD IN NON-COMBUSTIBLE MATERIAL. SEE ELEVATIONS FOR ADDITIONAL NOTES.

## COLD CELLAR PORCH SLAB (OBC 9.3.9)

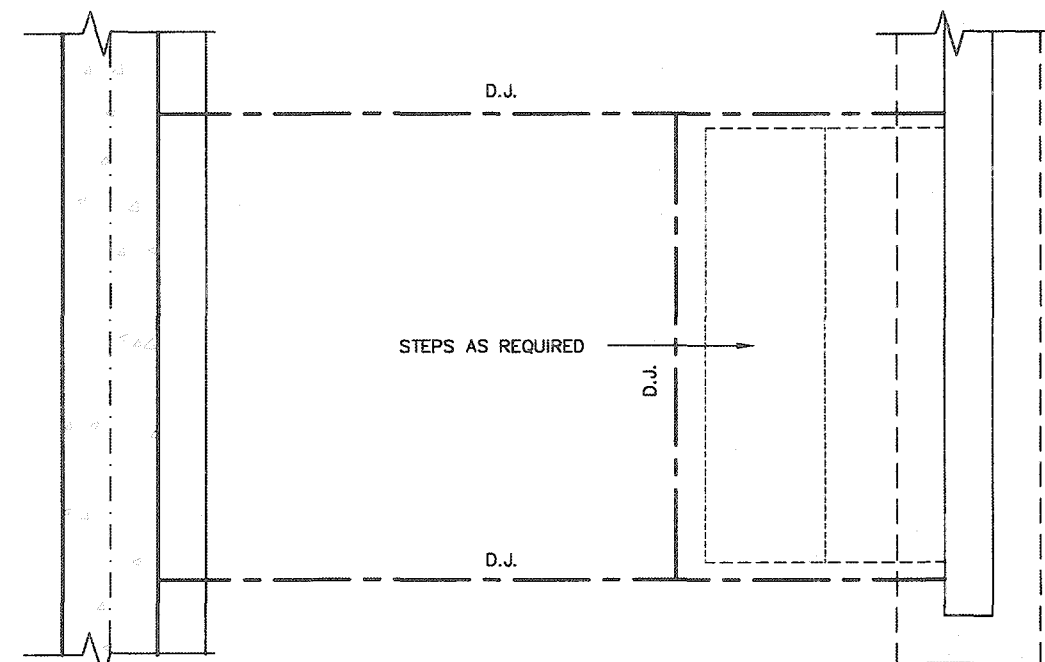
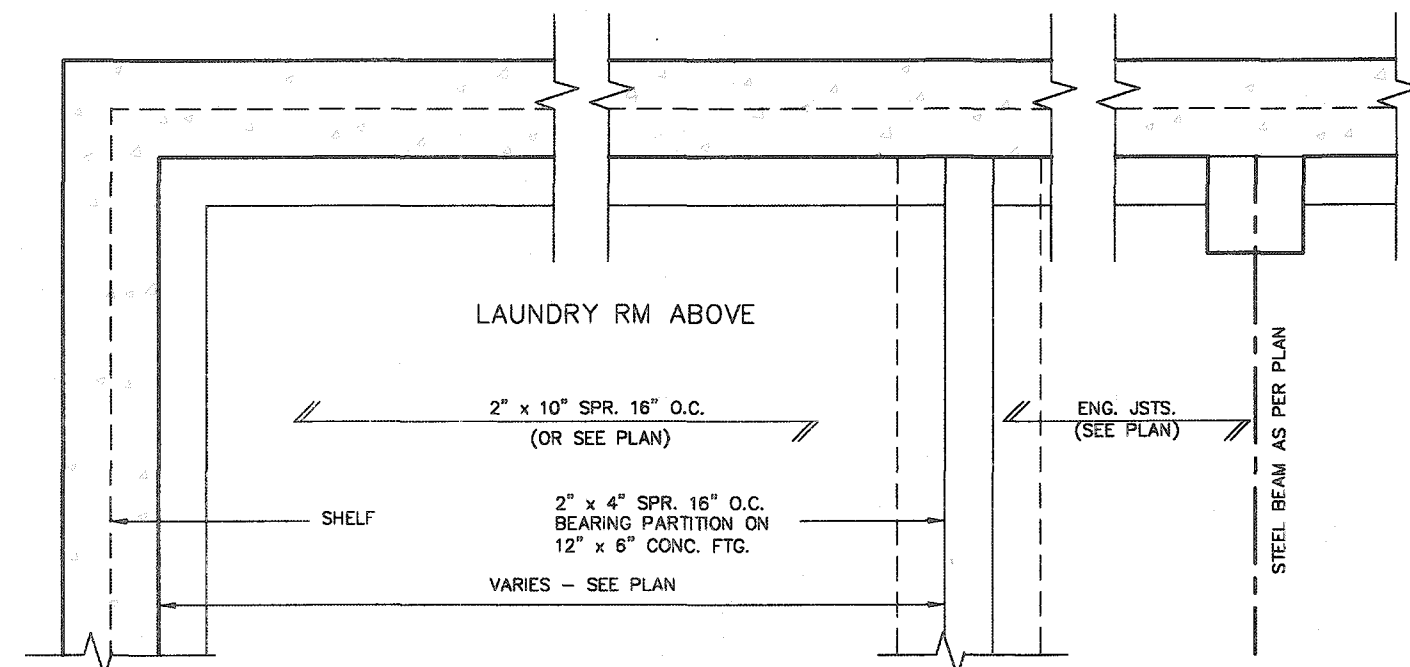
FOR MAX. 2500 mm (8'-2") PORCH DEPTH (SHORTEST DIM.), 125mm (4 7/8") 32MPa (4640psi) CONC. SLAB WITH 5



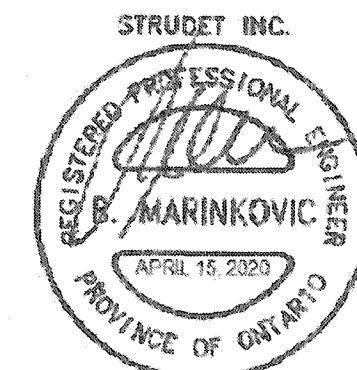
DETAIL OF SUNKEN LAUNDRY/ENTRY  
(ONE RISER)



DETAIL OF SUNKEN LAUNDRY/ENTRY  
(MORE THAN ONE RISER)



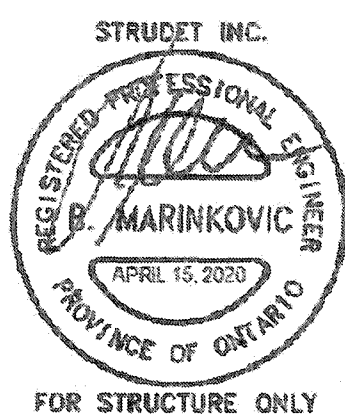
PARTIAL FOUNDATION PLAN



FOR STRUCTURE ONLY

# 2012 CODE COMPLIANCE PACKAGE A1

|                                                                                                                                   |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                |                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>9</p> <p>8</p> <p>7</p> <p>6</p> <p>5</p> <p>4</p> <p>3</p> <p>2</p> <p>1</p> <p>ISSUED FOR PERMIT.</p> <p>no. description</p> | <p>APR 13/20</p> <p>GW</p> <p>date</p> <p>by</p> | <p>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.</p> <p>qualification information</p> <p>Richard Vink</p> <p>signature</p> <p>24488</p> <p>BCO</p> <p>name</p> <p>registration information</p> <p>VAS Design Inc.</p> <p>42858</p> <p>Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled.</p> | <p><b>VAS DESIGN</b></p> <p>255 Consumers Rd Suite 120</p> <p>Toronto ON M2J 1R4</p> <p>t 416.630.2255 f 416.630.4782</p> <p>vasdesign.com</p> | <p><b>Greenpark.</b></p> <p>project name</p> <p>RUSSELL GARDENS PH. 3</p> <p>manipulation</p> <p>WATERDOWN</p> <p>project no.</p> <p>19014</p> <p>drawing no.</p> <p>2</p> |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



|     |                    |              |                                                                                                                                                                                                                                                                                                               |
|-----|--------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                    |              | The undersigned has reviewed and takes responsibility for this design                                                                                                                                                                                                                                         |
| 9   | -                  | -            | and has the qualifications and meets the requirements set out in the                                                                                                                                                                                                                                          |
| 8   | -                  | -            | Ontario Building Code to be a Designer.                                                                                                                                                                                                                                                                       |
| 7   | -                  | -            | qualification information                                                                                                                                                                                                                                                                                     |
| 6   | -                  | -            | <b>Richard Vink</b> <i>R Vink</i> 24488                                                                                                                                                                                                                                                                       |
| 5   | -                  | -            | name registration information BCN                                                                                                                                                                                                                                                                             |
| 4   | -                  | -            | <b>VAS Design Inc.</b> 42658                                                                                                                                                                                                                                                                                  |
| 3   | -                  | -            |                                                                                                                                                                                                                                                                                                               |
| 2   | -                  | -            | Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be copied. |
| 1   | ISSUED FOR PERMIT. | A/R 13/20 GW |                                                                                                                                                                                                                                                                                                               |
| no. | description        | date by      |                                                                                                                                                                                                                                                                                                               |

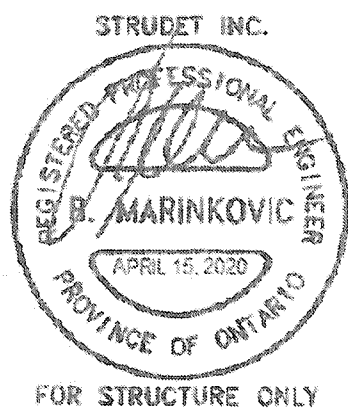
**VAS DESIGN**  
255 Consumers Rd Suite 120  
Toronto ON M2J 1R4  
t 416.630.2255 f 416.630.4782  
[vasdesign.com](#)

## Greenpark™

| project name                 |  | municipality                         | project no.                                 |
|------------------------------|--|--------------------------------------|---------------------------------------------|
| <b>RUSSELL GARDENS PH. 3</b> |  | <b>WATERDOWN</b>                     | <b>19014</b>                                |
| date<br><b>APRIL 2020</b>    |  | <b>2"x6" BRICK VENEER SECTIONS</b>   |                                             |
| drawing by<br><b>GW</b>      |  | checked by<br><b>-- Not To Scale</b> | file name<br><b>19014-GP-STD_DETAILS_A1</b> |

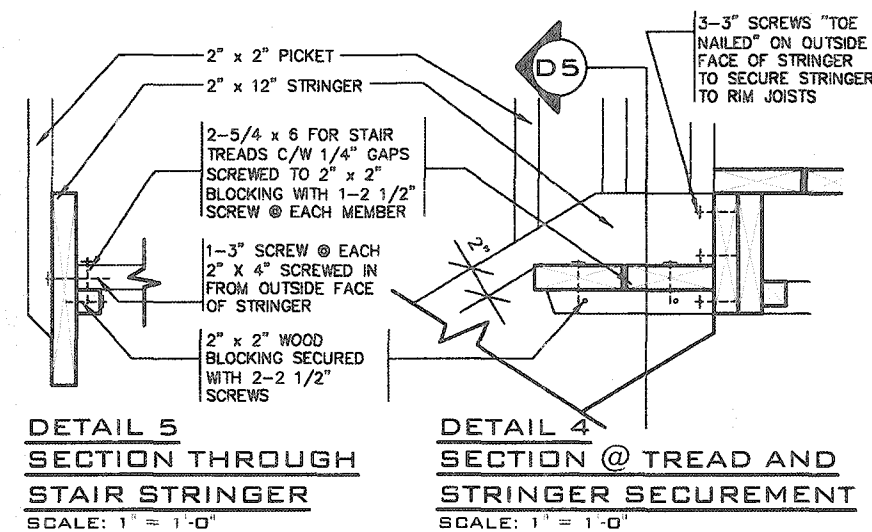
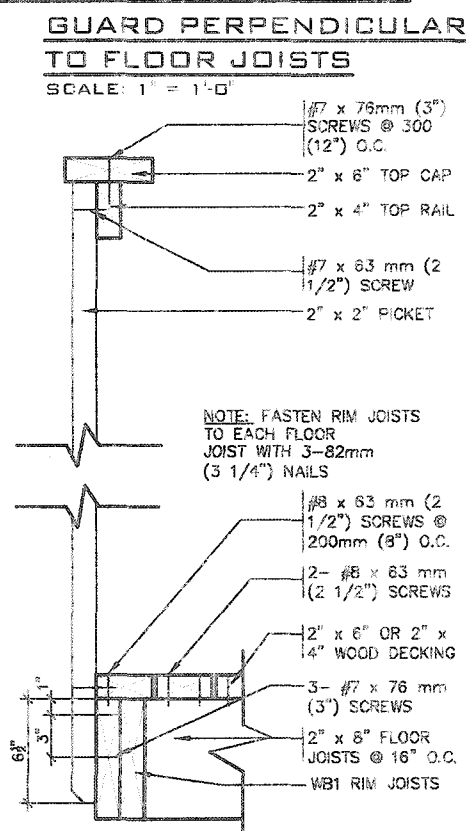
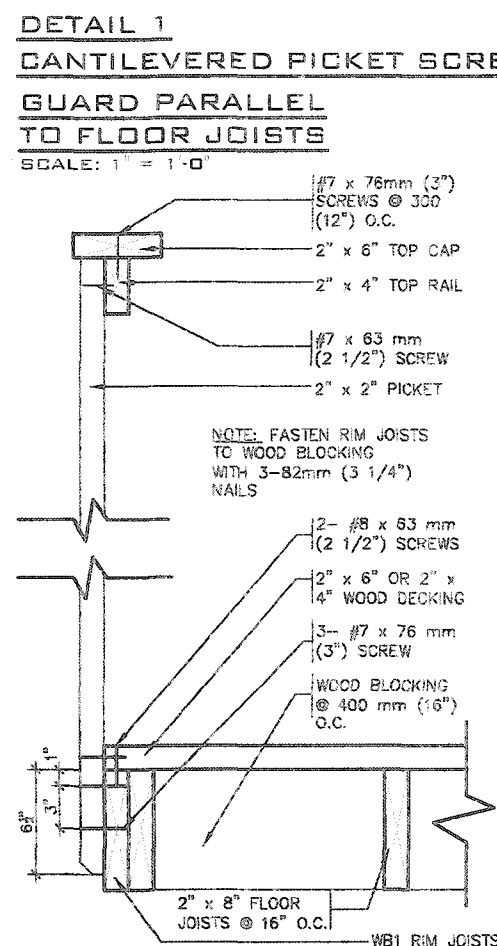
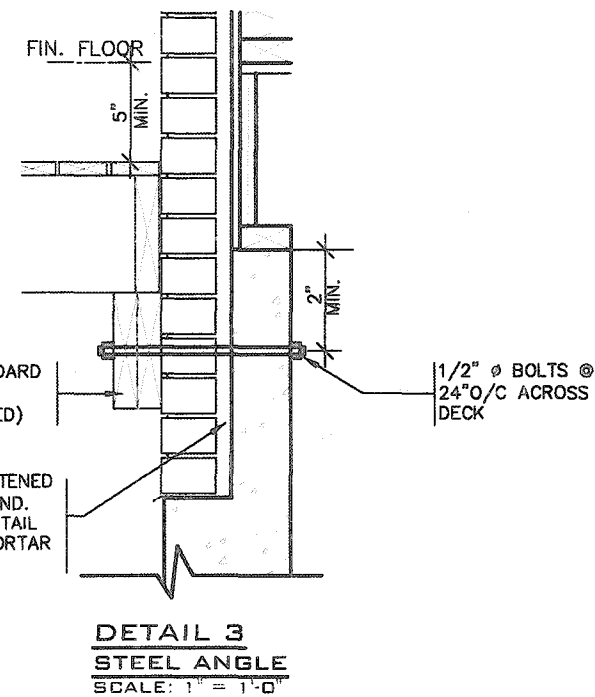
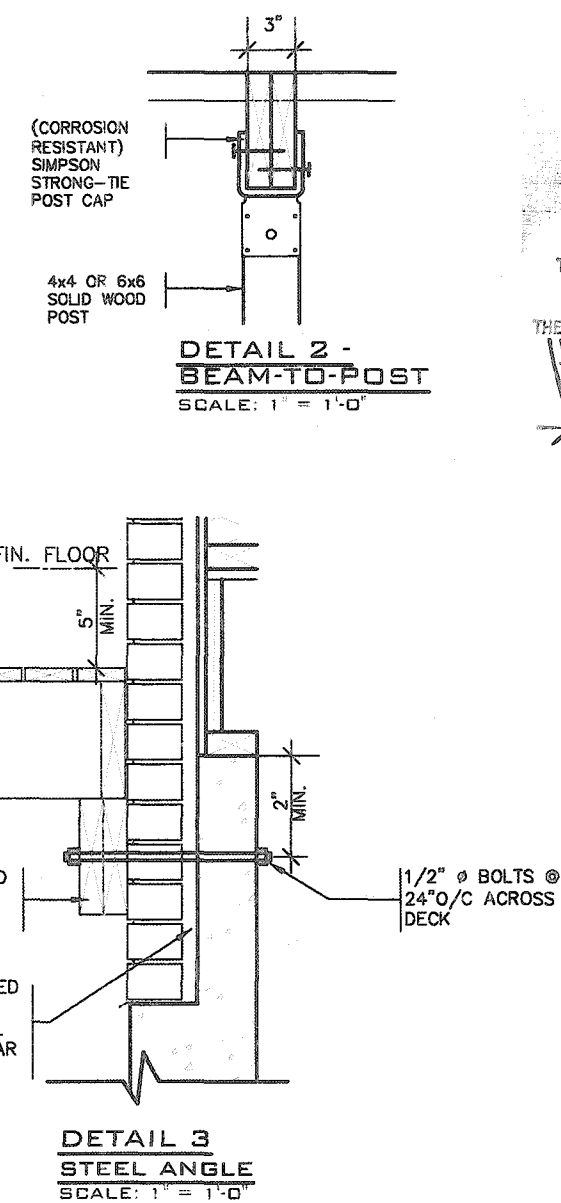
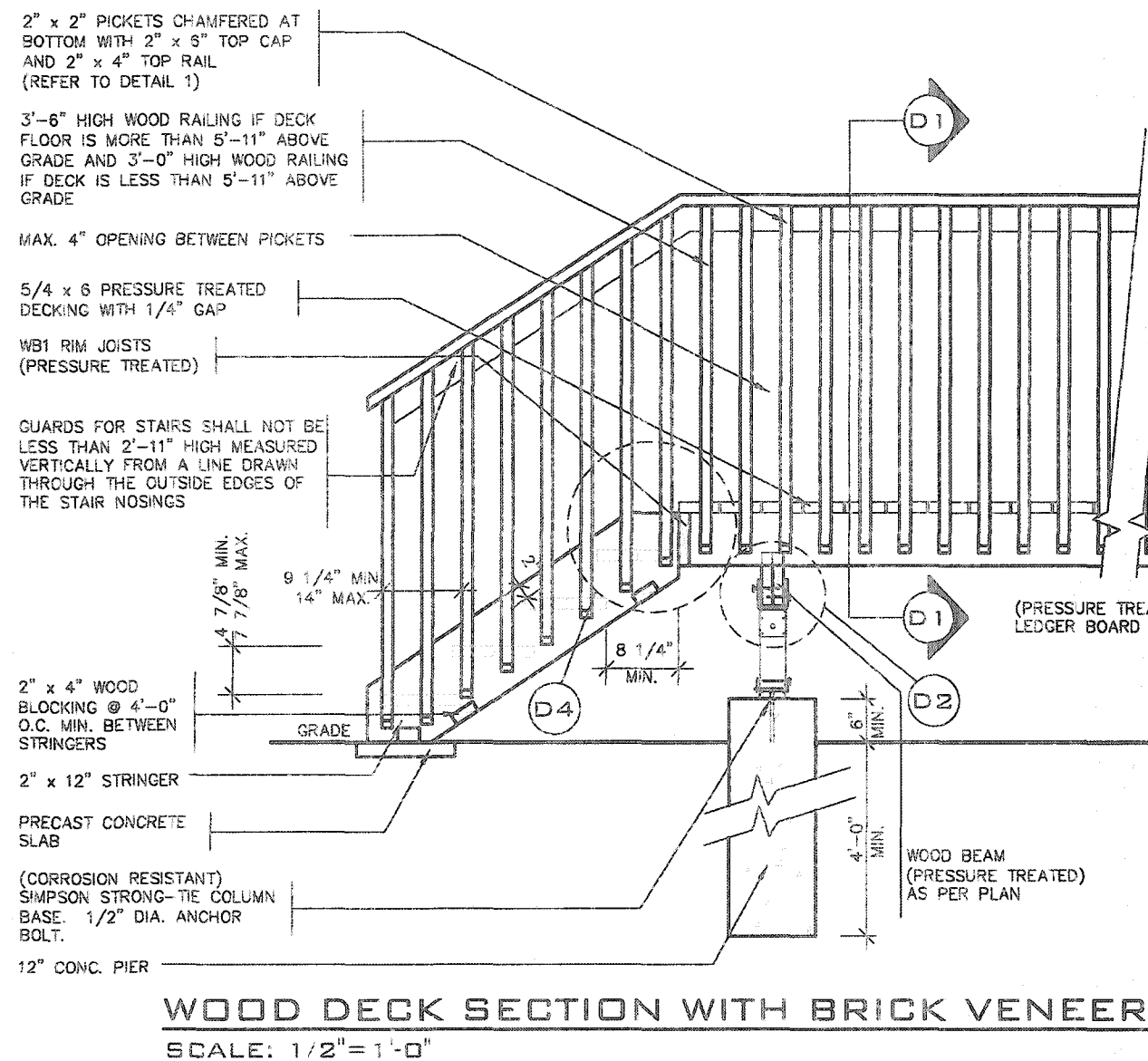
3

*All drawings specifications, related documents and design are the copyright property of VAS DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VAS DESIGN's written permission.*



|     |                    |           |                                         |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
|-----|--------------------|-----------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------|
| 9   |                    |           |                                         | The undersigned has reviewed and taken responsibility for this design and has the qualifications and meets the requirements set out in the Ontario Building Code to be a Designer.                                                                                                                            | <br>255 Consumers Rd Suite 120<br>Toronto ON M2J 1R4<br>t 416.630.2255 f 416.630.4782<br>va3design.com | <br>project name<br><b>RUSSELL GARDENS PH. 3</b> | municipality<br><b>WATERLOON</b> | project no.<br><b>19014</b> |
| 8   |                    |           | qualification information               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| 7   |                    |           | Richard Vink <i>R Vink</i> 24485        |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| 6   |                    |           | signature                               |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| 5   |                    |           | name registration information BCN 42658 |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| 4   |                    |           |                                         | Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be copied. |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| 3   |                    |           |                                         |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| 2   |                    |           |                                         |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| 1   | ISSUED FOR PERMIT. | APR 13/20 | GW                                      |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |
| no. | description        | date      | by                                      |                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                             |                                                                                                                                       |                                  |                             |

All drawings specifications, related documents and design are the copyright property of VAS DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VAS DESIGN's written permission.



- ## GENERAL NOTES
1. BRICK TO HAVE COMPRESSIVE STRENGTH OG 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 10mm (3/8") MIN. AND 20mm (3/4") MAX.
  3. THE DECK HAS BEEN DESIGNED TO SAFELY SUPPORT A SUPERIMPOSED LOAD OF 1.9kPa. [40psf].
  4. ALL NAILS AND SCREWS TO BE GALVANIZED.
  5. WOOD FOR CANTILEVERED PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.
  6. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 20MPa. AT 28 DAYS AND 5-8% AIR ENTRAINED.
  7. FOOTING TO BE PLACED ON UNDISTURBED SOIL WITH MINIMUM BEARING PRESSURE OF 150kPa [3130psf].
  8. WB1= 2- 2"x8" (PRESSURE TREATED)  
WB3= 2- 2"x10" (PRESSURE TREATED)

CITY OF HAMILTON  
Building Division

Permit No. 20-199041

THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE

THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH  
THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAW

These drawings and/or specifications have been reviewed by

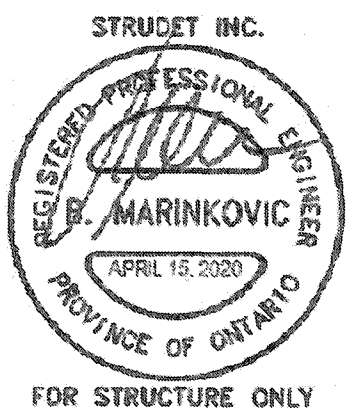
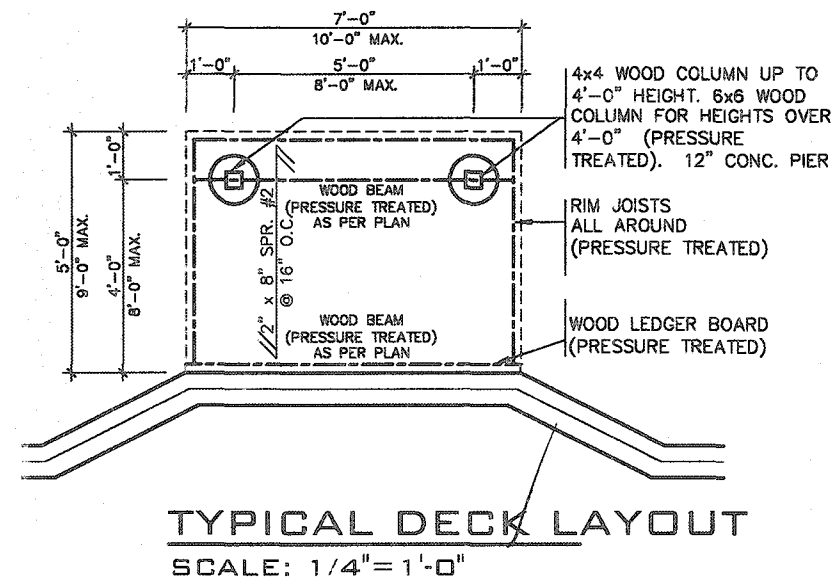
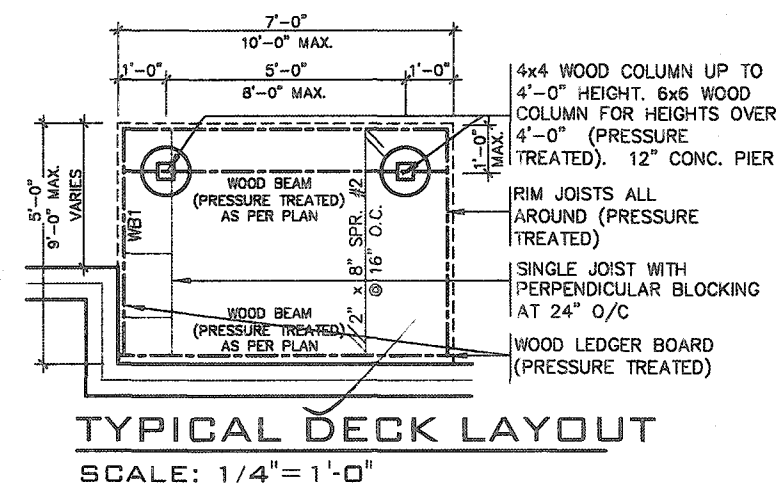
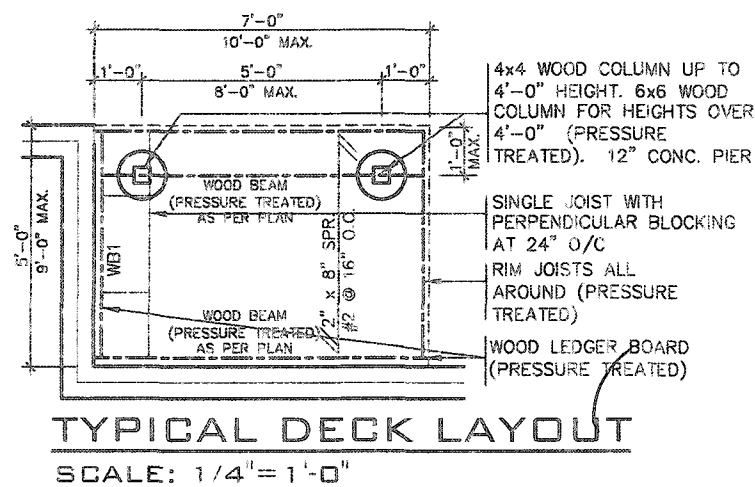
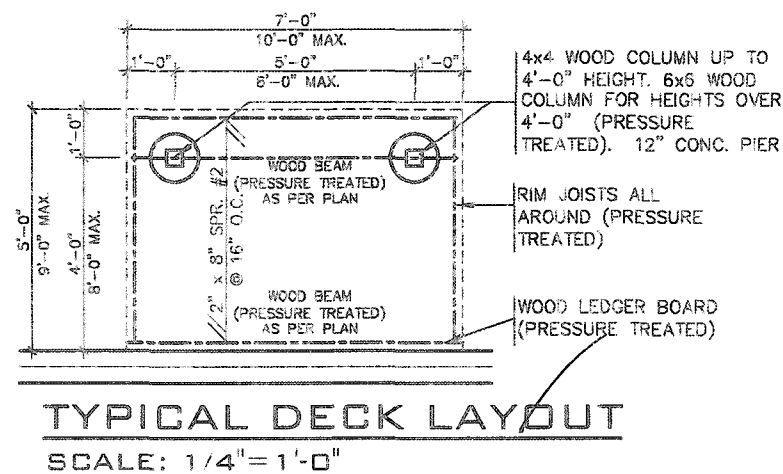
JAN 15 2021

FOR THE BUILDING OFFICIAL

DATE

2012 CODE  
COMPLIANCE PACKAGE A1

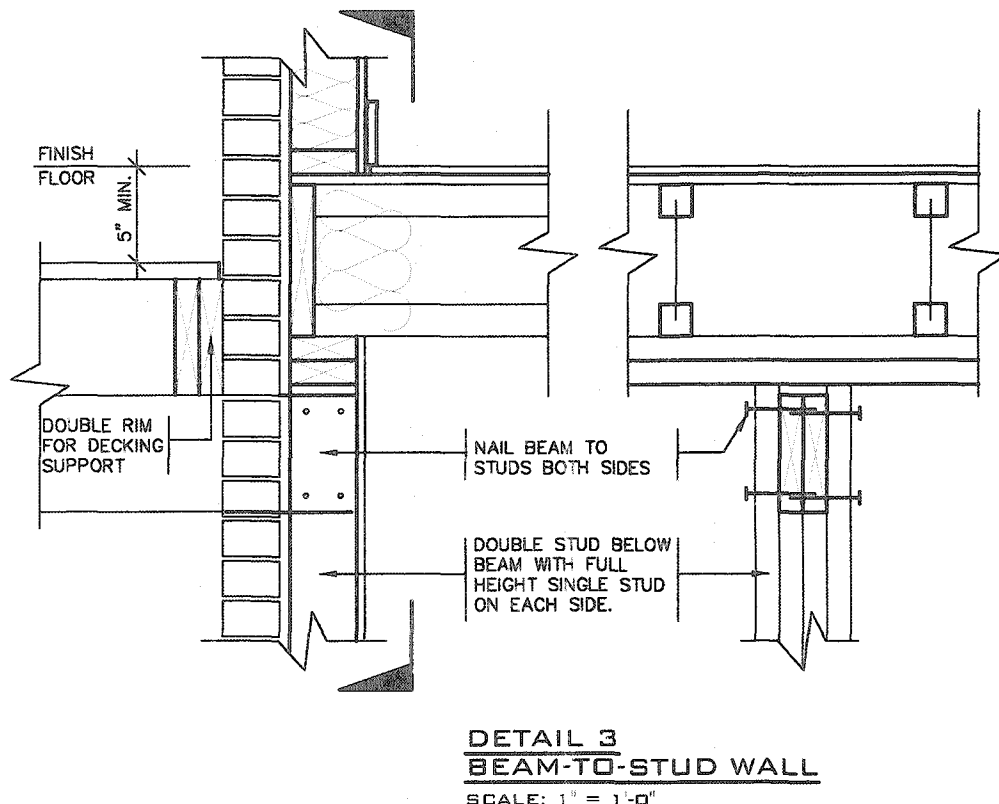
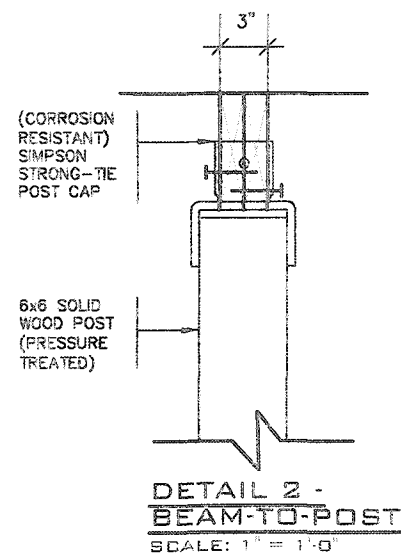
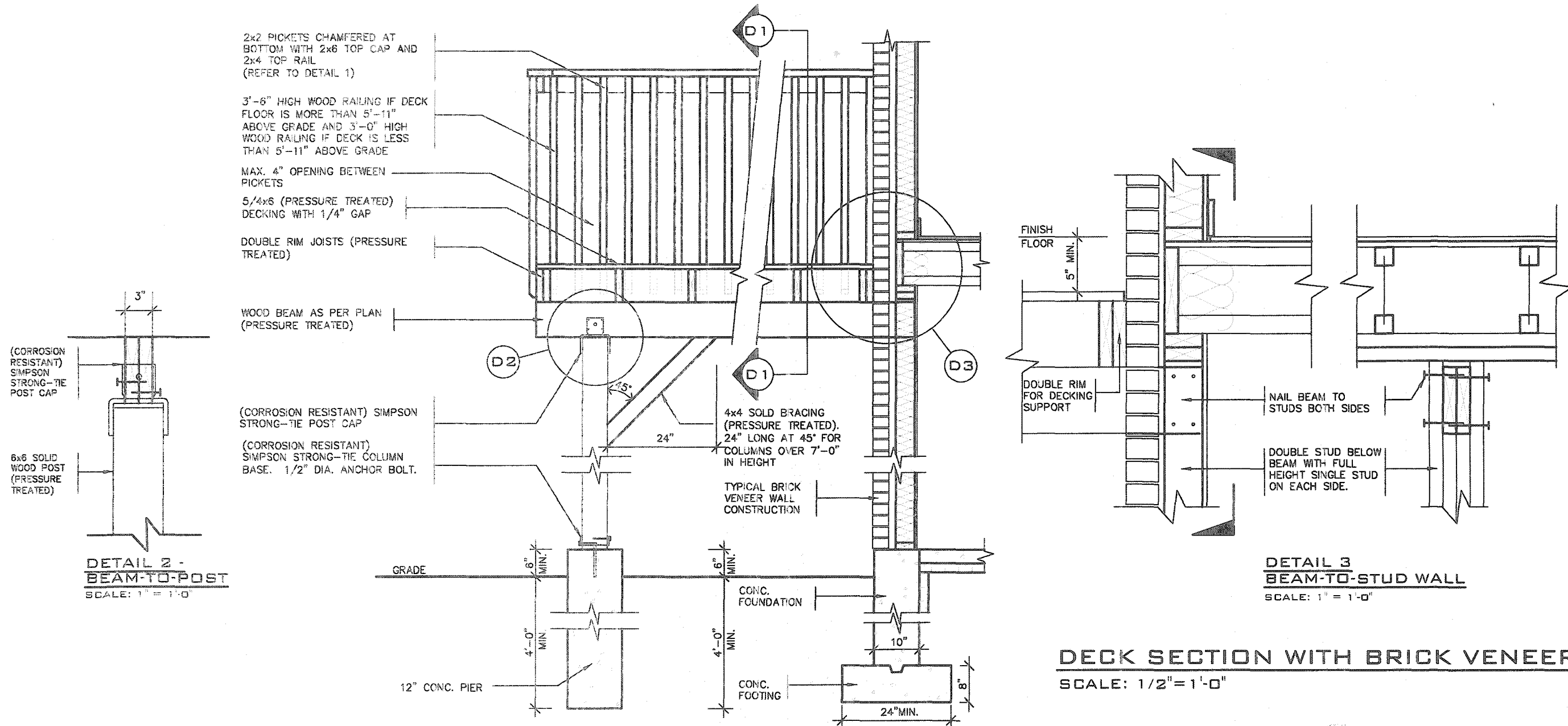
|                 |                    |           |    |                                    |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
|-----------------|--------------------|-----------|----|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------|----------------------|
| 9               |                    |           |    |                                    | 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.                                                                                                                              | <br>255 Consumers Rd Suite 120<br>Toronto ON M2N 1R4<br>t 416.630.2255 f 416.630.4762<br>va3design.com | <br><b>Greenpark.</b> | <b>SINGLES</b><br>- | project no.<br>19014 |
| 8               |                    |           |    | qualification information          |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 7               |                    |           |    | Richard Vink 244B8                 |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 6               |                    |           |    | name registration information BCON |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 5               |                    |           |    | VA3 Design Inc. 42658              |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 4               |                    |           |    |                                    | Contractor must verify all dimensions on the job and report any discrepancies to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be copied. | 255 Consumers Rd Suite 120<br>Toronto ON M2N 1R4<br>t 416.630.2255 f 416.630.4762<br>va3design.com                                                                                          | <br><b>Greenpark.</b> | <b>SINGLES</b><br>- | project no.<br>19014 |
| 3               |                    |           |    |                                    |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 2               |                    |           |    |                                    |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 1               |                    |           |    |                                    |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 0               |                    |           |    |                                    |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| 1               | ISSUED FOR PERMIT. | APR 13/20 | GW |                                    |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |
| no. description | date               | by        |    |                                    |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                             |                                                                                                            |                     |                      |



## 2012 CODE COMPLIANCE PACKAGE A1

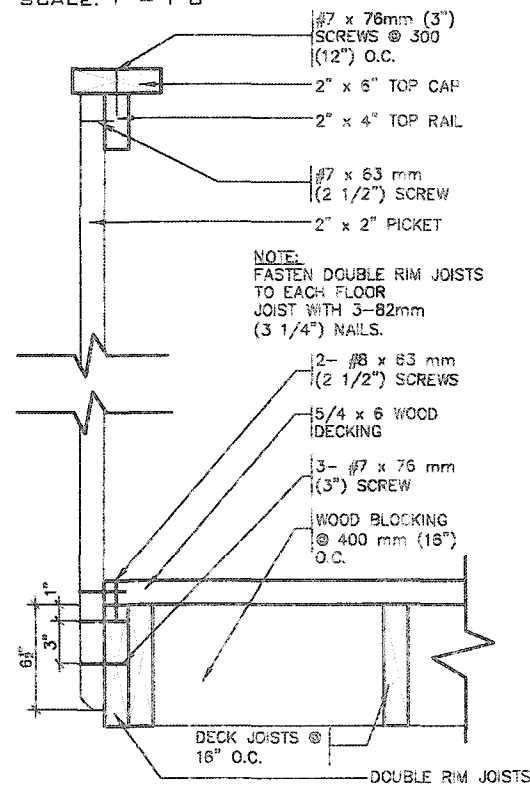
|                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                              |                                                                                                                                                                                 |                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <p>9</p> <p>8</p> <p>7</p> <p>6</p> <p>5</p> <p>4</p> <p>3</p> <p>2</p> <p>1</p> <p>ISSUED FOR PERMIT.</p> <p>date</p> | <p>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.</p> <p>signature</p> <p>Richard Vink</p> <p>24488</p> <p>BCIN</p> <p>42658</p> <p>Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled.</p> <p>date</p> <p>APR 13/20</p> <p>GW</p> | <p><b>VAS</b></p> <p><b>DESIGN</b></p> <p>255 Consumers Rd Suite 120</p> <p>Toronto ON M2J 1R4</p> <p>t 416.630.2255 f 416.630.4782</p> <p>vasdesign.com</p> | <p><b>Greenpark</b></p> <p>project name</p> <p>RUSSELL GARDENS PH. 3</p> <p>date</p> <p>APRIL 2020</p> <p>drawn by</p> <p>GW</p> <p>checked by</p> <p>As Shown</p> <p>scale</p> | <p><b>SINGLES</b></p> <p>project no.</p> <p>19014</p> <p>drawing no.</p> <p>5-1</p> <p>WOOD DECK PLANS</p> <p>19014-GP-STD-DETAILS_A1</p> |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

All drawings specifications, related documents and design are the copyright property of VAS DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VAS DESIGN's written permission.

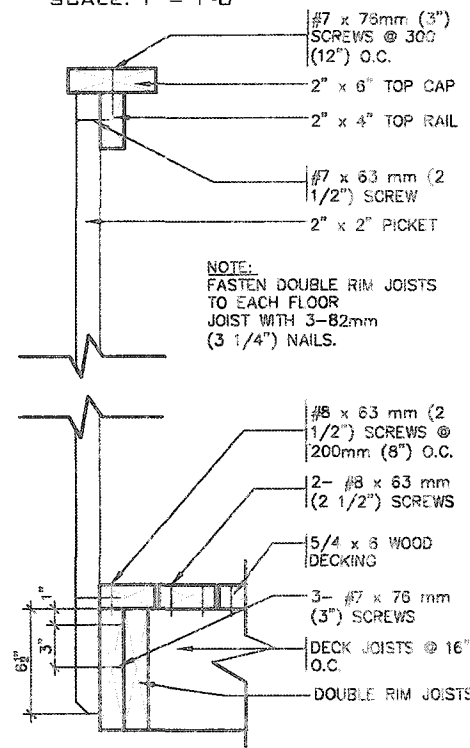


**DECK SECTION WITH BRICK VENEER**  
SCALE: 1/2" = 1'-0"

**DETAIL 1**  
**CANTILEVERED PICKET SCREWED TO RIM JOIST AND DECK**  
**GUARD PARALLEL TO FLOOR JOISTS**  
SCALE: 1" = 1'-0"



**GUARD PERPENDICULAR TO FLOOR JOISTS**  
SCALE: 1" = 1'-0"



**GENERAL NOTES**

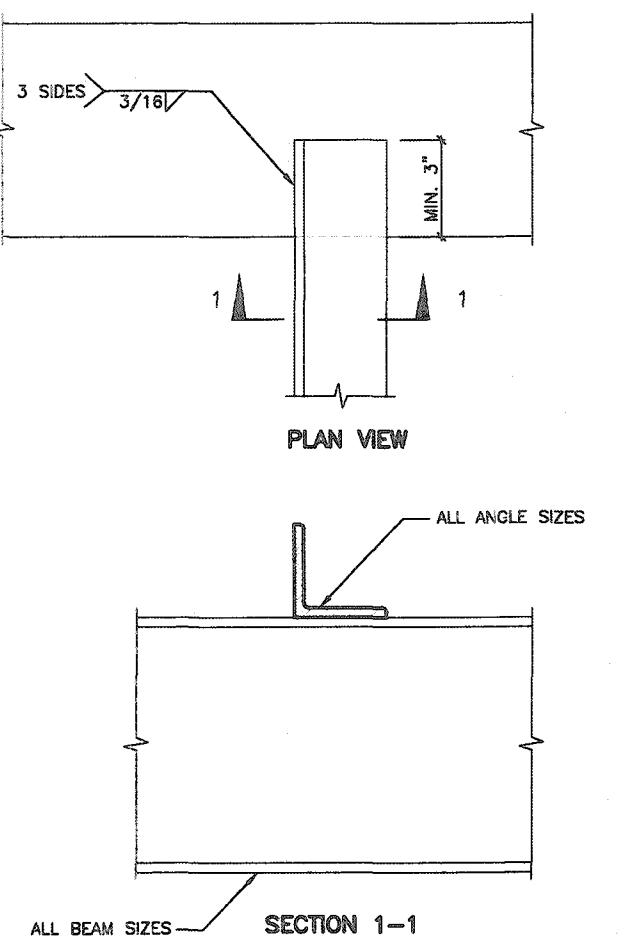
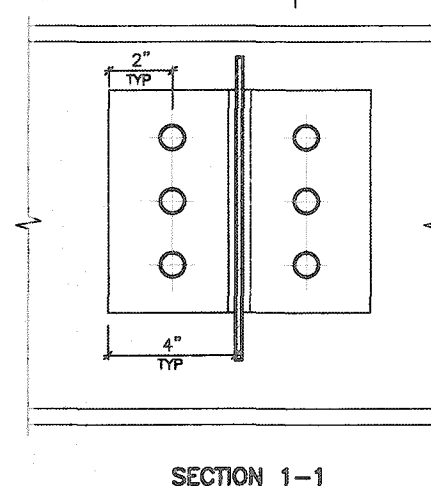
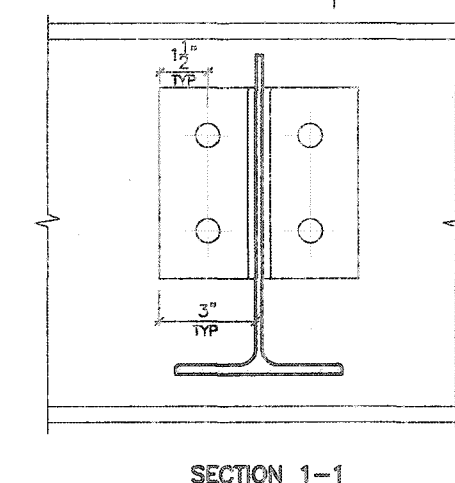
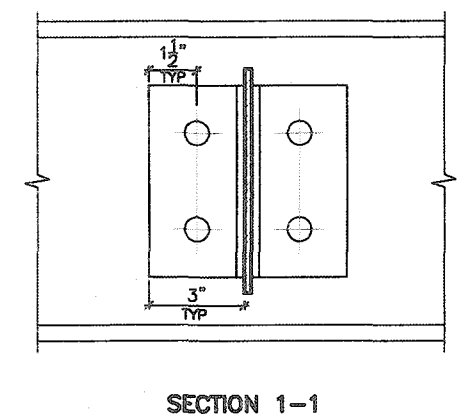
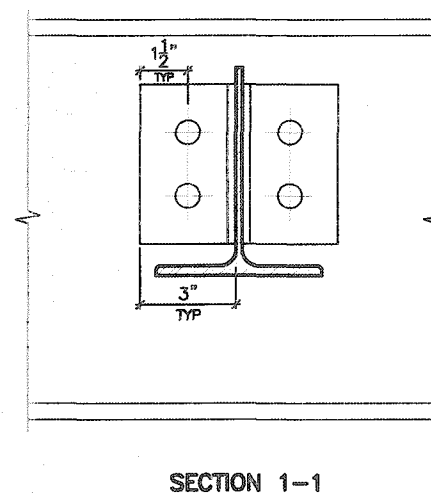
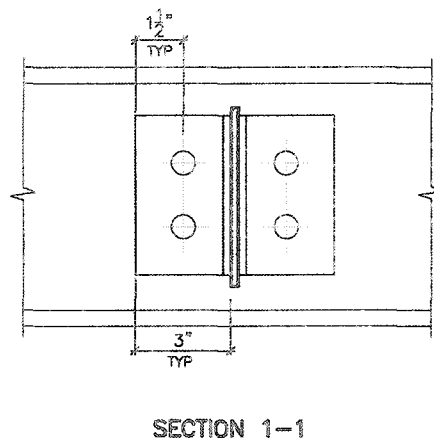
1. BRICK TO HAVE COMPRESSIVE STRENGTH OG 15mPa (2200 p.s.i) MIN. UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
2. MORTAR TO BE TYPE 'S' WITH JOINT THICKNESS OF 10mm (3/8") MIN. AND 20mm (3/4") MAX.
3. THE DECK HAS BEEN DESIGNED TO SAFELY SUPPORT A SUPERIMPOSED LOAD OF 1.9kPa. [40psf].
4. ALL NAILS AND SCREWS TO BE GALVANIZED.
5. WOOD FOR CANTILEVERED PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.
6. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 20MPa. AT 28 DAYS AND 5-8% AIR ENTRAINED.
7. FOOTING TO BE PLACED ON UNDISTURBED SOIL WITH MINIMUM BEARING PRESSURE OF 150kPa [3130psf].
8. WB1= 2- 2"x8" (PRESSURE TREATED)  
WB3= 2- 2"x10" (PRESSURE TREATED)

CITY OF HAMILTON  
Building Division  
Permit No. **20-199041**  
THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE  
THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH  
THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAW  
These drawings and/or specifications have been reviewed by  
**JAN 15 2021**  
DATE  
FOR CITY BUILDING OFFICIAL



**2012 CODE COMPLIANCE PACKAGE A1**

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|



THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE

THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH  
THE MINNAPOLIS BUILDING CODE AND ALL OTHER APPLICABLE LAWS

These drawings and/or specifications have been reviewed by

4" ø A 328 JAN 15 2021  
LT TYP FOR REVIEWING OFFICIAL DATE

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER  
B. MARINKOVIC  
APRIL 15, 2020  
PROVINCE OF ONTARIO

FOR STRUCTURE ONLY

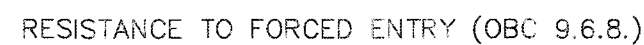
# 2012 CODE COMPLIANCE PACKAGE

|   |                       |           |    |   |                                                                                                                                                                                                                                                                                                               |
|---|-----------------------|-----------|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9 | -                     | -         | -  | - | The undersigned has reviewed and takes responsibility for this design and from the qualifications and meets the requirements set out in the Ontario Building Code to be a Designer.                                                                                                                           |
| 8 | -                     | -         | -  | - |                                                                                                                                                                                                                                                                                                               |
| 7 | -                     | -         | -  | - | qualification information                                                                                                                                                                                                                                                                                     |
| 6 | -                     | -         | -  | - | <b>Richard Vink</b> 24455                                                                                                                                                                                                                                                                                     |
| 5 | -                     | -         | -  | - |  signature BCR                                                                                                                                                                                                           |
| 4 | -                     | -         | -  | - | name                                                                                                                                                                                                                                                                                                          |
| 3 | -                     | -         | -  | - | registration information                                                                                                                                                                                                                                                                                      |
| 2 | -                     | -         | -  | - | <b>VAS Design Inc.</b> 42655                                                                                                                                                                                                                                                                                  |
| 1 | -                     | -         | -  | - |                                                                                                                                                                                                                                                                                                               |
| 9 | 1 (ISSUE) FOR PERMIT. | APR 13/20 | GW |   | Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings are specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be copied. |
| 8 | no. description       | date      | by |   |                                                                                                                                                                                                                                                                                                               |

**VA3  
DESIGN**  
255 Consumers Rd Suite 120  
Toronto ON M2J 1R4  
t 416.630.2255 f 416.630.4782  
va3design.com

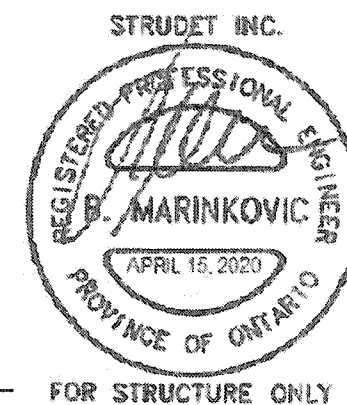
|                                                                                                         |  |                                             |  |
|---------------------------------------------------------------------------------------------------------|--|---------------------------------------------|--|
|  <b>Greenpark.</b> |  | <b>SINGLES</b><br>-                         |  |
| project name<br><b>RUSSELL GARDENS PH. 3</b>                                                            |  | municipality<br><b>WATERDOWN</b>            |  |
| date<br><b>APRIL 2020</b>                                                                               |  | project no.<br><b>19014</b>                 |  |
| drawn by<br><b>GW</b>                                                                                   |  | checked by<br>-                             |  |
| title<br><b>STEEL BEAM CONNECTIONS</b>                                                                  |  | drawing no.<br><b>7</b>                     |  |
| scale<br><b>Not to Scale</b>                                                                            |  | file name<br><b>19014-GP-STD_DETAILS_A1</b> |  |

All drawings, specifications, related documents and design are the copyright property of VA3 DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VA3 DESIGN's written permission.



STRUCTURAL REINFORCEMENT FOR GRAB BAR (OBC 9.5.2.3.)

FOR MAIN BATH ONLY



FOR STRUCTURE ONLY

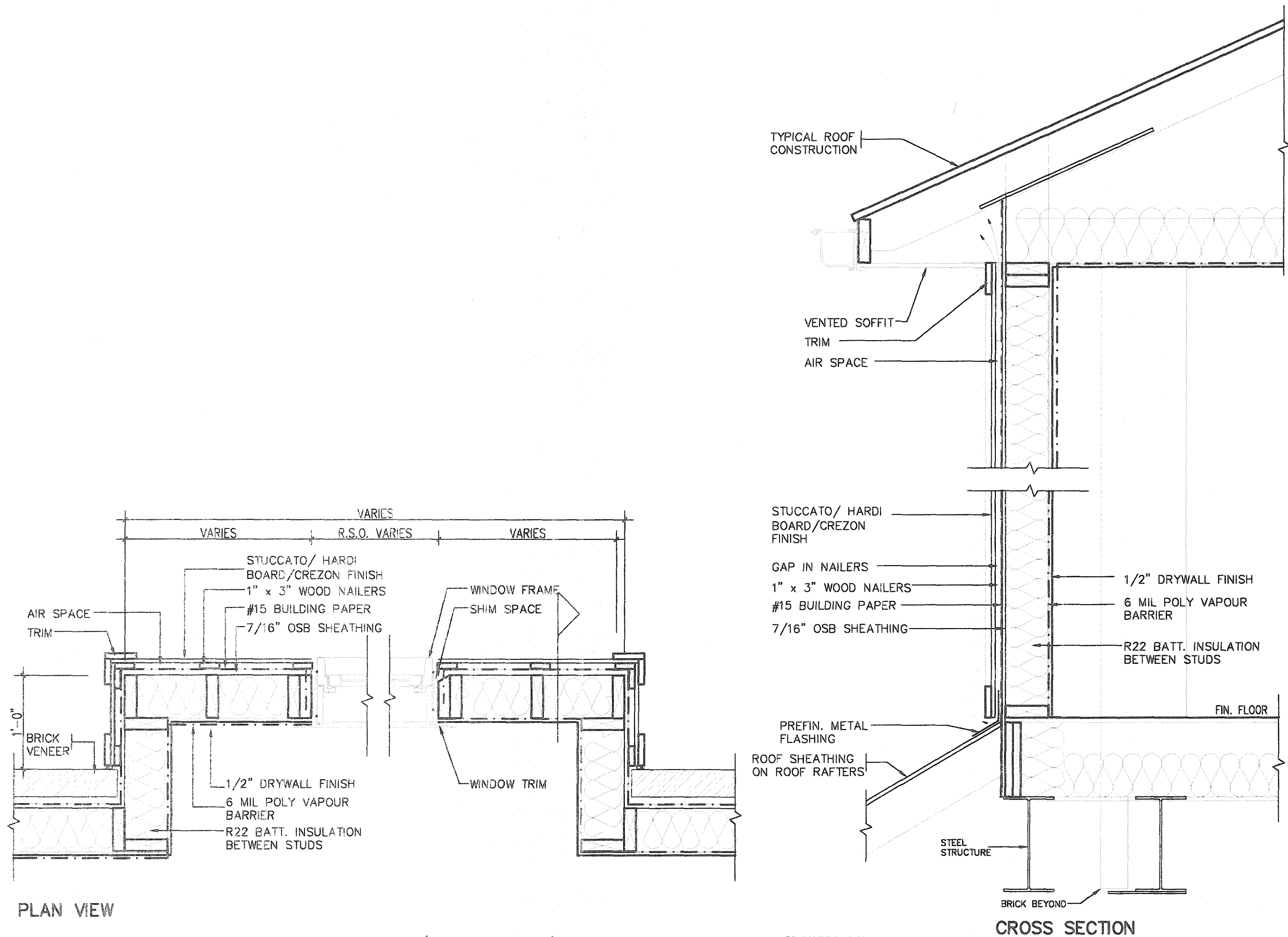
# 2012 CODE COMPLIANCE PACKAGE

|              |                    |           |    |                                                                                                                                                                                                                                                                                                               |
|--------------|--------------------|-----------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9            |                    | -         | -  | 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.                                                                                                                            |
| 8            |                    | -         | -  | qualification information                                                                                                                                                                                                                                                                                     |
| 7            |                    | -         | -  | Richard Vink 2448B                                                                                                                                                                                                                                                                                            |
| 6            |                    | -         | -  | <i>R Vink</i> signature BCI                                                                                                                                                                                                                                                                                   |
| 5            |                    | -         | -  | name                                                                                                                                                                                                                                                                                                          |
| 4            |                    | -         | -  | registration information                                                                                                                                                                                                                                                                                      |
| 3            |                    | -         | -  | VAS Design Inc. 4265B                                                                                                                                                                                                                                                                                         |
| 2            |                    | -         | -  |                                                                                                                                                                                                                                                                                                               |
| 1            | ISSUED FOR PERMIT. | APR 13/20 | GW | Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be copied. |
| REGISTRATION | date by            |           |    |                                                                                                                                                                                                                                                                                                               |

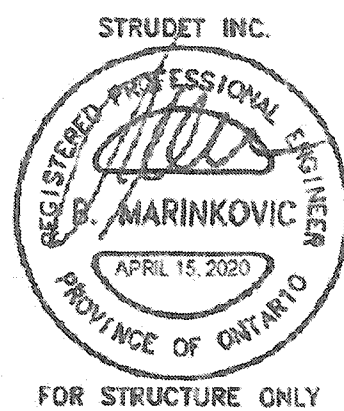
**VA3**  
**DESIGN**  
255 Consumers Rd Suite  
Toronto ON M2J 1R4  
t 416.630.2255 f 416.630  
va3design.com

|                                                                                                         |  |                                             |  |
|---------------------------------------------------------------------------------------------------------|--|---------------------------------------------|--|
|  <b>Greenpark.</b> |  | <b>SINGLES</b><br>-                         |  |
| project name<br><b>RUSSELL GARDENS PH. 3</b>                                                            |  | municipality<br><b>WATERDOWN</b>            |  |
| date<br><b>APRIL 2020</b>                                                                               |  | project no.<br><b>19014</b>                 |  |
| drawn by<br><b>GW</b>                                                                                   |  | checked by<br>-                             |  |
| scale<br><b>Not to Scale</b>                                                                            |  | file name<br><b>19014-GP-STD_DETAILS_A1</b> |  |
| drawing no.<br><b>8</b>                                                                                 |  |                                             |  |

All drawings, specifications, related documents and design are the copyright property of VA3 DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VA3 DESIGN's written permission.



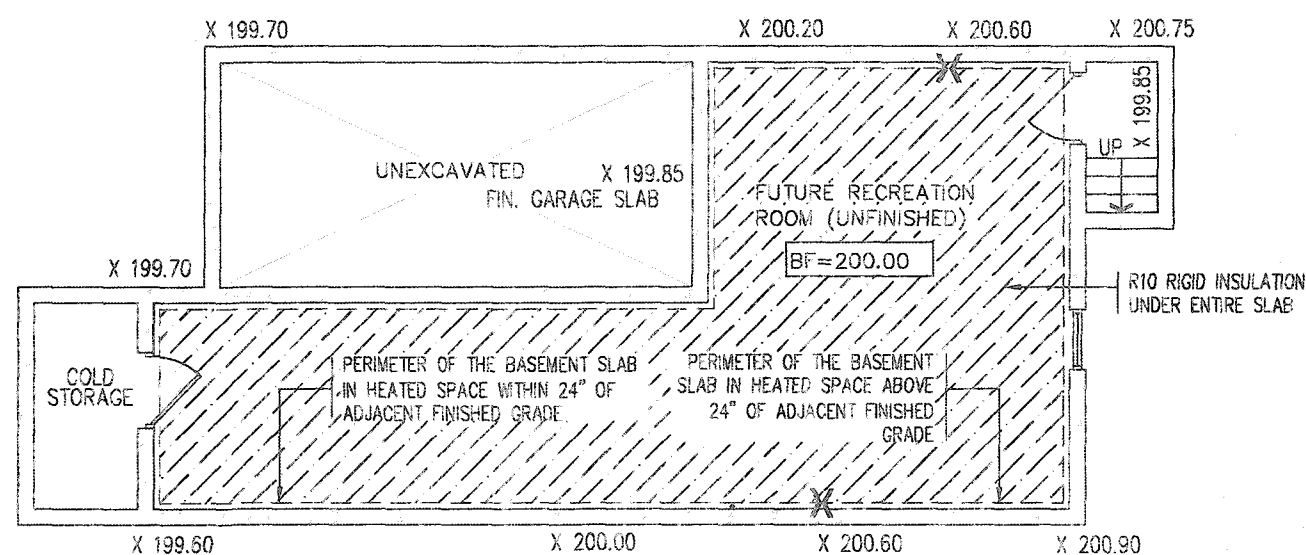
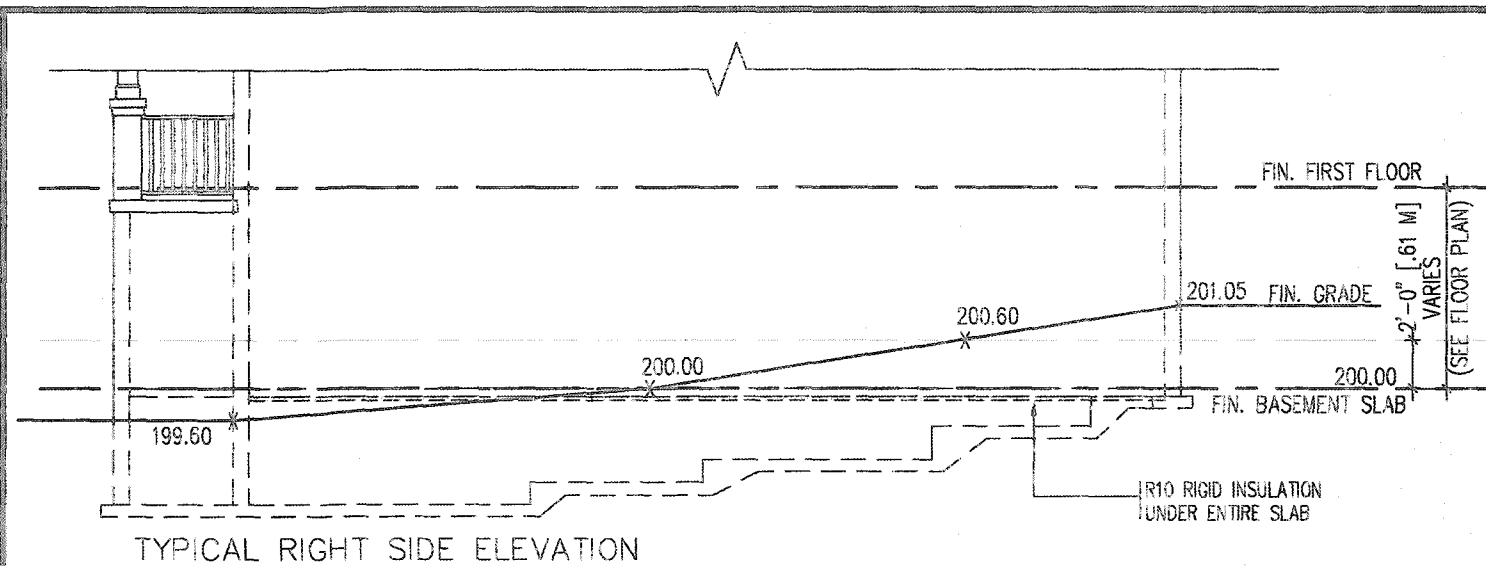
STUCCATO BOARD FINISH CLADDING OR EQUAL (OBC 9.27.)



2012 CODE COMPLIANCE PACKAGE A1

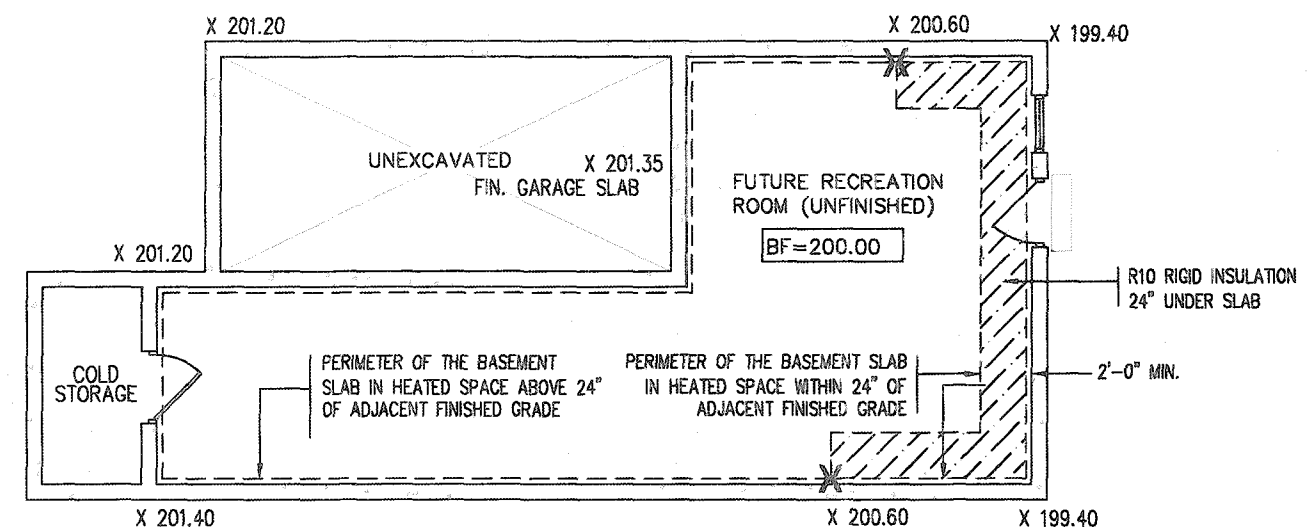
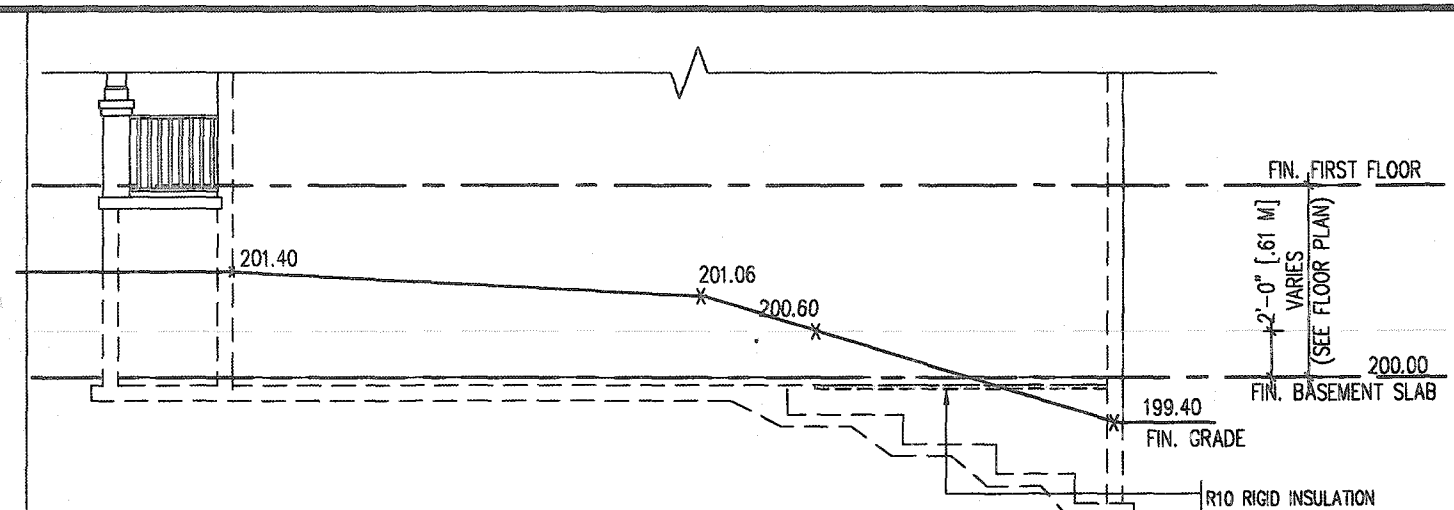
|                                                                 |  |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                         |                                                                                                                                               |                                                                       |                                                                    |
|-----------------------------------------------------------------|--|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------|
| 9<br>8<br>7<br>6<br>5<br>4<br>3<br>2<br>1<br>ISSUED FOR PERMIT. |  | APR 13/20<br>GW | The undersigned has reviewed and taken responsibility for the design and has the qualifications and meets the requirements set out in the Ontario Building Code to be a Designer.<br>qualification information<br>Richard Vink 24488<br>name BCN<br>registration information<br>VAS Design Inc. 42658<br>Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled. | <b>VA3 DESIGN</b><br>255 Consumers Rd Suite 120<br>Toronto ON M2J 1R4<br>t 416.630.2255 f 416.630.4782<br>va3design.com | <b>Greenpark</b><br>project name<br>RUSSELL GARDENS PH. 3<br>date<br>APRIL 2020<br>drawn by<br>GW<br>checked by<br>-<br>scale<br>Not to Scale | municipality<br>WATERDOWN<br>project no.<br>19014<br>drawing no.<br>9 | SINGLES<br>STUCCATO/ HARDI BOARD FINISH<br>19014-GP-STD_DETAILS_A1 |
|-----------------------------------------------------------------|--|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------|

All drawings specifications, related documents and design are the copyright property of VAS DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VAS DESIGN's written permission.



## SLAB ON GRADE CONDITION

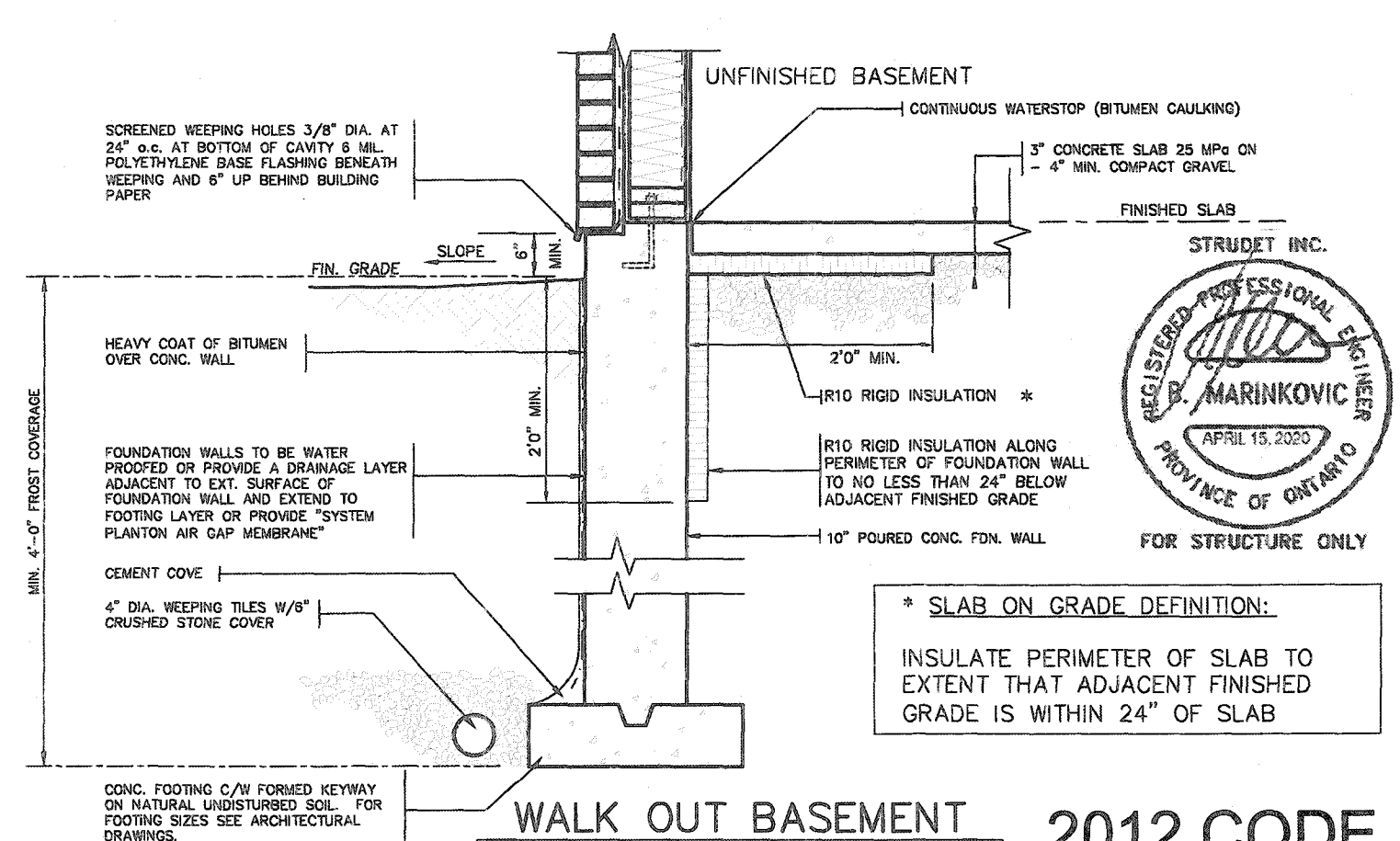
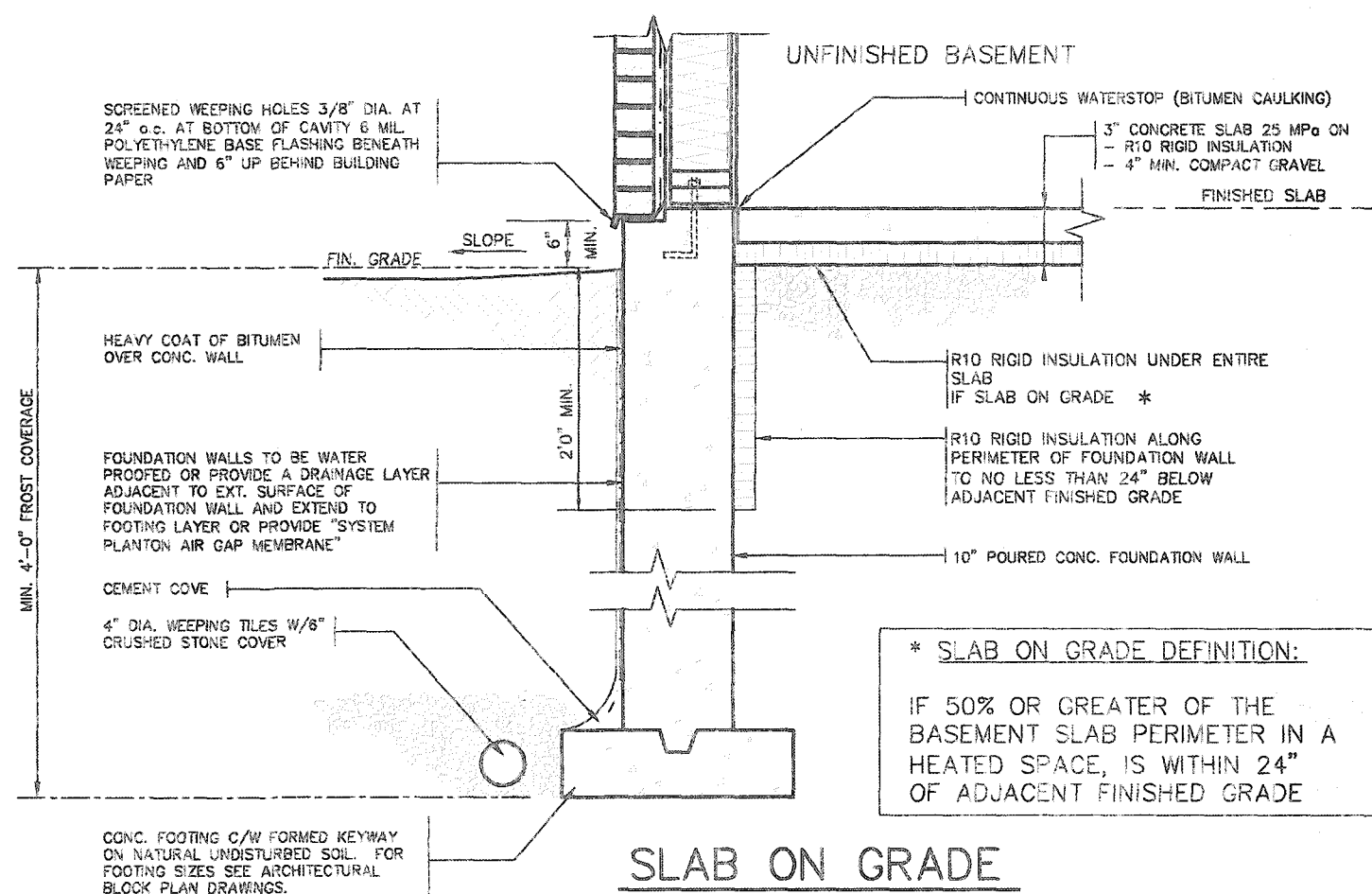
NOTES:  
1. LEVELS SHOWN ON THE PLANS ARE FOR ILLUSTRATION PURPOSE ONLY, SEE FINAL GRADING PLAN FOR ACTUAL LEVELS  
2. ALL LEVELS ARE SHOWN IN METRIC



## WALK OUT BASEMENT CONDITION

NOTES:

1. LEVELS SHOWN ON THE PLANS ARE FOR ILLUSTRATION PURPOSE ONLY, SEE FINAL GRADING PLAN FOR ACTUAL LEVELS
2. ALL LEVELS ARE SHOWN IN METRIC



\* SLAB ON GRADE DEFINITION:

INSULATE PERIMETER OF SLAB TO  
EXTENT THAT ADJACENT FINISHED  
GRADE IS WITHIN 24" OF SLAB

# OUT BASEMENT 2012 CODE COMPLIANCE PACKAGE

|   |                    |           |    |  |                                                                                                                                                                                                                                                                                                                                              |
|---|--------------------|-----------|----|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9 |                    |           |    |  | The undersigned has reviewed and takes responsibility for this design and has the qualifications and meets the requirements set out in it.                                                                                                                                                                                                   |
| 8 |                    |           |    |  | Ontario Building Code to be a Designer.                                                                                                                                                                                                                                                                                                      |
| 7 |                    |           |    |  | qualification information                                                                                                                                                                                                                                                                                                                    |
| 6 |                    |           |    |  | Richard Vink                                                                                                                                                                                                                                                                                                                                 |
| 5 |                    |           |    |  | 2448                                                                                                                                                                                                                                                                                                                                         |
| 4 |                    |           |    |  | BC                                                                                                                                                                                                                                                                                                                                           |
| 3 |                    |           |    |  | signature                                                                                                                                                                                                                                                                                                                                    |
| 2 |                    |           |    |  | VAS Design Inc.                                                                                                                                                                                                                                                                                                                              |
| 1 |                    |           |    |  | 2450                                                                                                                                                                                                                                                                                                                                         |
|   |                    |           |    |  | Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be reproduced without written permission. |
|   | ISSUED FOR PERMIT. | APR 13/20 | CU |  |                                                                                                                                                                                                                                                                                                                                              |
|   | no. description    | date      | by |  |                                                                                                                                                                                                                                                                                                                                              |

# VA3

## DESIGN

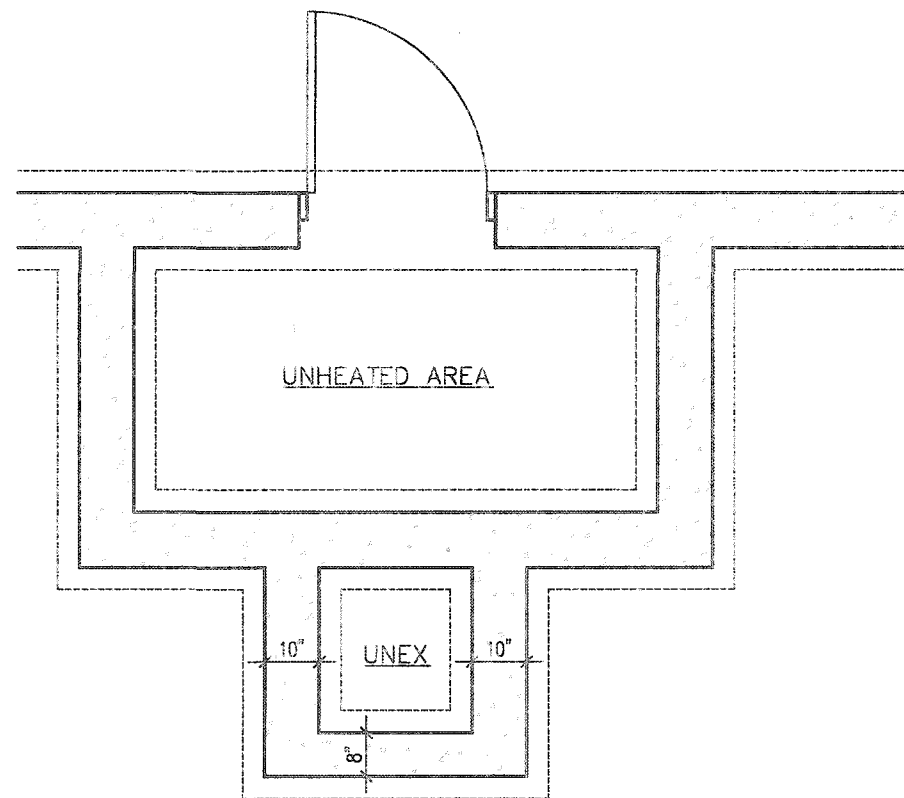
**DESIGN**  
255 Consumers Rd Suite 120  
Toronto ON M2J 1R4  
t 416.630.2255 f 416.630.478  
va3design.com



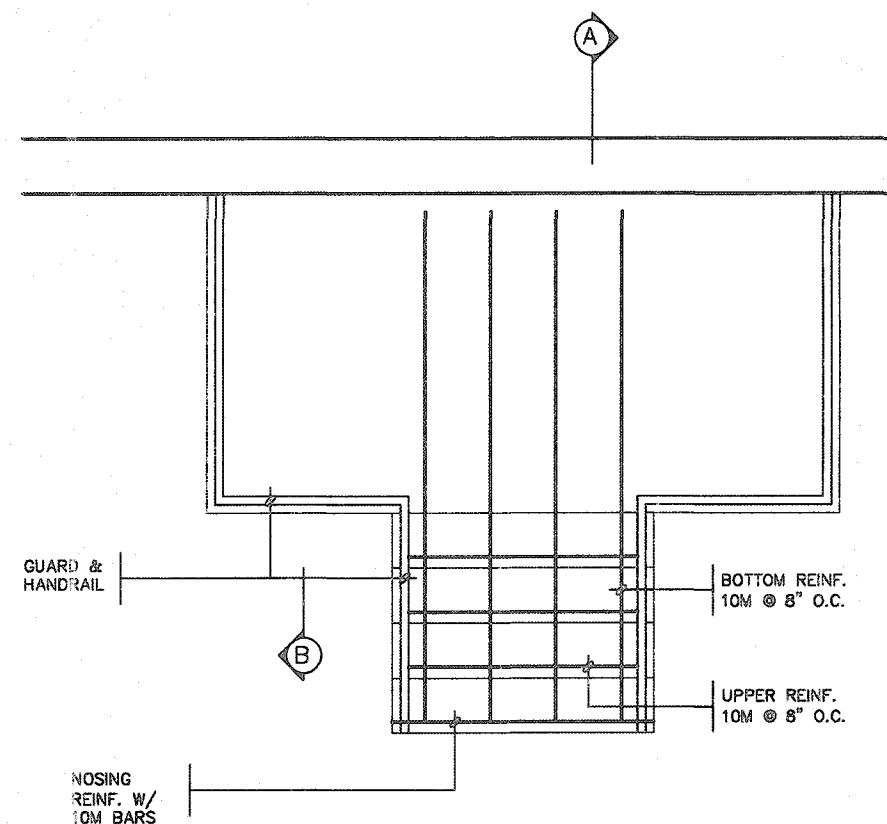
|                       |                          |
|-----------------------|--------------------------|
| project name          | project no.              |
| RUSSELL GARDENS PH. 3 | 19014                    |
| city                  | draining no.             |
| WATERDOWN             | 10                       |
| date                  | SLAB ON GRADE INSULATION |
| APRIL 2020            |                          |
| drawn by              | file name                |
| GW                    | 19014-GP-STD_DETAILS_A1  |
| checked by            |                          |
| -                     |                          |
| scale                 |                          |
| Not To Scale          |                          |

## SINGLES

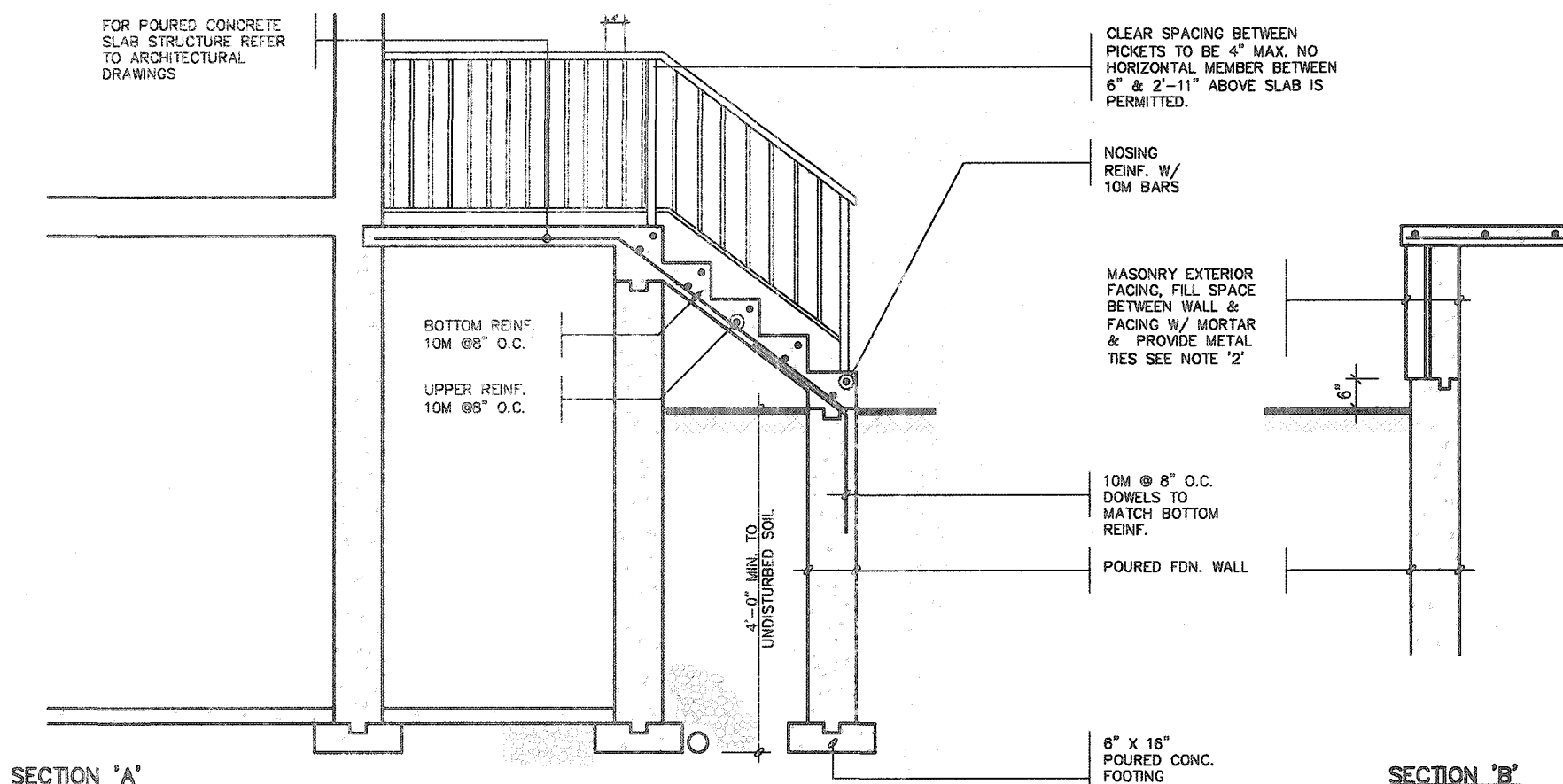
0



FOUNDATION PLAN



GROUND FLOOR PLAN



SECTION 'A'

SECTION 'B'

NOTE: FOR MORE THAN 8 RISERS

# GENERAL NOTES

## 1. EXTERIOR STAIRS

7 7/8" RISE MAXIMUM  
8 1/4" RUN MINIMUM  
9 1/4" TREAD MINIMUM

## 2. MASONRY TIES

WHEN BRICK FACING IS USED ABOVE GROUND LEVEL, PROVIDE 3/16" DIA. CORROSION RESISTANT METAL TIES @ 36" HORIZONTAL & 8" VERTICAL

## 3. GUARDS

ARE REQUIRED AROUND CONCRETE SLAB IF MORE THAN 2'-0" ABOVE GRADE & ON BOTH SIDES OF STAIRS CONTAINING MORE THAN 6 RISERS. MINIMUM 34" HIGH FOR STAIRS MINIMUM 36" HIGH FOR PORCHES UP TO 5'-11" ABOVE GRADE. MINIMUM 42" HIGH FOR GREATER HTS.

## 4. HANDRAIL

ARE REQUIRED WHERE STEPS HAVE MORE THAN 3 RISERS. HANDRAIL HEIGHT 34" - 38".

## 5. FOUNDATION WALLS

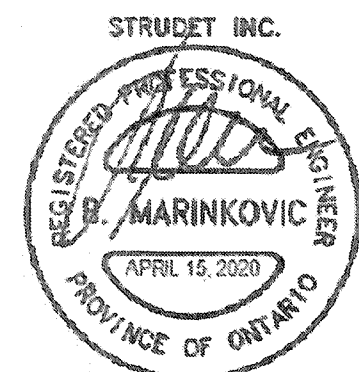
THICKNESS OF FOUNDATION WALLS IS DEPENDANT UPON VENEER CUT 8" FOR UP TO 26" VENEER CUT HEIGHT 10" FOR VENEER CUT OVER 26" HIGH

## 6. CONCRETE

MINIMUM CONCRETE STRENGTH SHALL BE 4650 PSI [32MPa] W/ 5%-8% AIR ENTRAINMENT MINIMUM CONCRETE SLAB THICKNESS 5"

## 7. CONCRETE COVER

PROVIDE MINIMUM 3/4" CLEAR CONCRETE COVER TO REINFORCING BARS

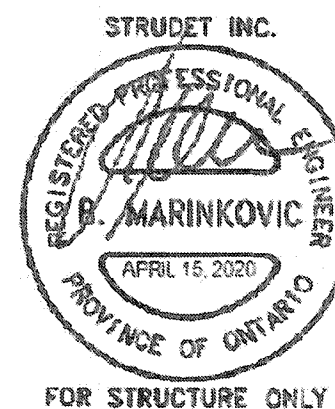
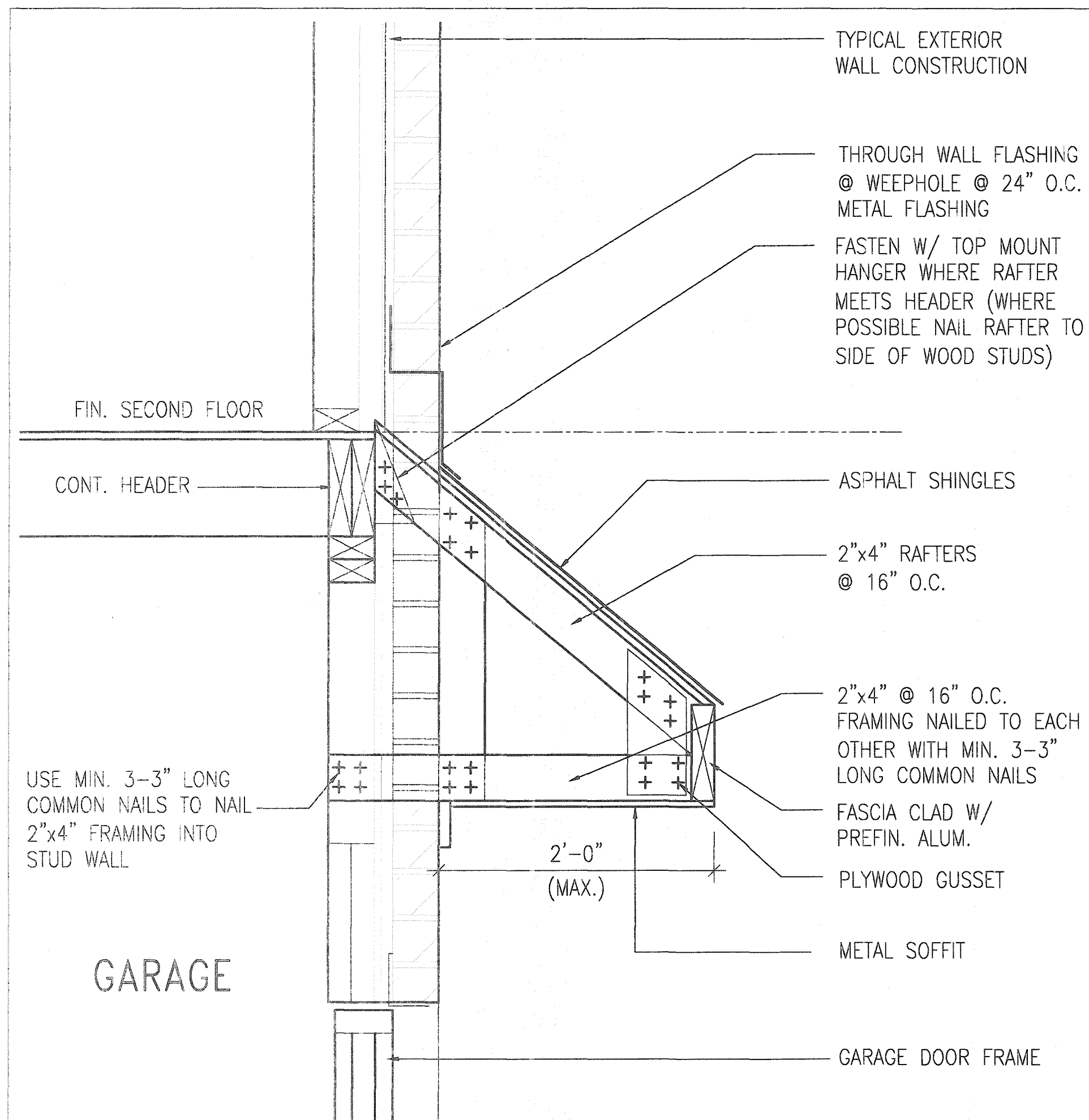


FOR STRUCTURE ONLY

# 2012 CODE COMPLIANCE PACKAGE A1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>9. 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.</p> <p>8. qualification information</p> <p>7. Richard Vink 24488</p> <p>6. name signature BCN</p> <p>5. registration information</p> <p>4. VAS Design Inc. 42658</p> <p>3. Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled.</p> <p>2. ISSUED FOR PERMIT. AFR 13/20 GW</p> <p>1. no. description date by</p> | <p>10. 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.</p> <p>9. qualification information</p> <p>8. Richard Vink 24488</p> <p>7. name signature BCN</p> <p>6. registration information</p> <p>5. VAS Design Inc. 42658</p> <p>4. Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled.</p> <p>3. ISSUED FOR PERMIT. AFR 13/20 GW</p> <p>2. no. description date by</p> | <p>11. 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.</p> <p>10. qualification information</p> <p>9. Richard Vink 24488</p> <p>8. name signature BCN</p> <p>7. registration information</p> <p>6. VAS Design Inc. 42658</p> <p>5. Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled.</p> <p>4. ISSUED FOR PERMIT. AFR 13/20 GW</p> <p>3. no. description date by</p> | <p>12. 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.</p> <p>11. qualification information</p> <p>10. Richard Vink 24488</p> <p>9. name signature BCN</p> <p>8. registration information</p> <p>7. VAS Design Inc. 42658</p> <p>6. Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled.</p> <p>5. ISSUED FOR PERMIT. AFR 13/20 GW</p> <p>4. no. description date by</p> | <p>13. 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.</p> <p>12. qualification information</p> <p>11. Richard Vink 24488</p> <p>10. name signature BCN</p> <p>9. registration information</p> <p>8. VAS Design Inc. 42658</p> <p>7. Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled.</p> <p>6. ISSUED FOR PERMIT. AFR 13/20 GW</p> <p>5. no. description date by</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

All drawings specifications, related documents and design are the copyright property of VAS DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VAS DESIGN's written permission.



## B ROOF OVERHANG DETAIL OVER GARAGE

2012 CODE  
COMPLIANCE PACKAGE A1

|                                                  |  |                                                                                                                                                                                                                                                                                                    |  |                                                                                                                         |  |                                                                                                                                          |  |                                                                        |  |
|--------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------|--|
| 9<br>8<br>7<br>6<br>5<br>4<br>3<br>2<br>1        |  | The undersigned has reviewed and taken responsibility for this design and has the qualifications and meets the requirements set out in the Ontario Building Code to be a Designer.<br>qualification information<br>Richard Vink 24488<br>name<br>registration information<br>VAS Design Inc. 42658 |  | <b>VA3 DESIGN</b><br>255 Consumers Rd Suite 120<br>Toronto ON M2J 1R4<br>t 416.630.2255 f 416.630.4782<br>va3design.com |  | <b>Greenpark</b><br>project name<br>RUSSELL GARDENS PH. 3<br>date<br>APRIL 2020<br>drawn by<br>GW<br>checked by<br>Not to Scale<br>scale |  | municipality<br>WATERDOWN<br>project no.<br>19014<br>drawing no.<br>12 |  |
| ISSUED FOR PERMIT.<br>no. description<br>date by |  | APR 13/20 GW<br>date by                                                                                                                                                                                                                                                                            |  | DETAIL OF EXTENDED ROOF<br>file name<br>19014-GP-STD_DETAILS_A1                                                         |  | SINGLES<br>-                                                                                                                             |  | 12                                                                     |  |

SUPPORTED STEEL  
ANGLE UP TO  
11'-7". OTHERWISE  
TO BE REVIEWED BY  
ENGINEER.

BRICK/  
STONE  
VENEER

INVERTED  
3-1/2"x3-1/2"x1/4"  
(90x90x6.0)  
STEEL ANGLE

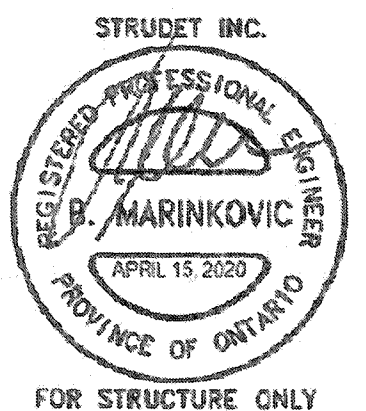
MIN. 12"

INVERTED  
3-1/2"x3-1/2"x1/4"  
(90x90x6.0)  
STEEL ANGLE

BRICK/  
STONE  
VENEER

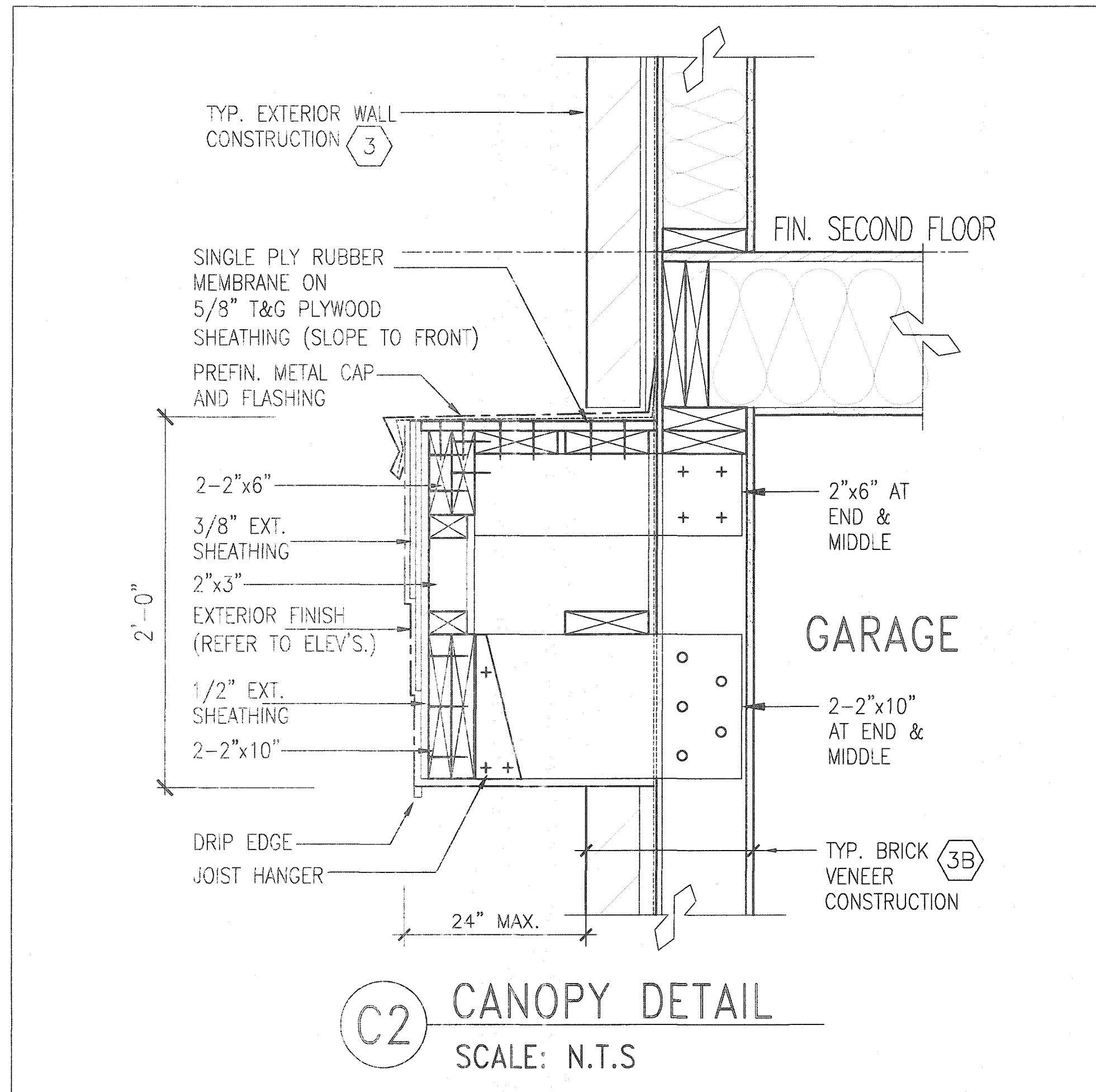
SUPPORTED STEEL  
ANGLE UP TO 11'-7".  
OTHERWISE TO BE  
REVIEWED BY ENGINEER.

## INVERTED STEEL ANGLE DETAIL

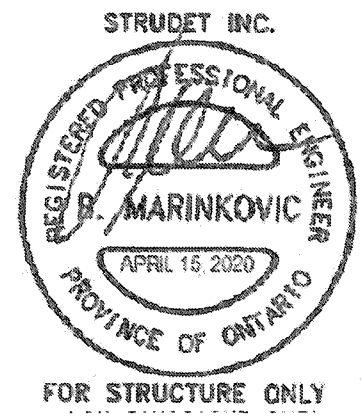


2012 CODE  
COMPLIANCE PACKAGE A1

|                                           |  |                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                               |  |                                                                                                   |  |                                                                       |  |                                           |  |
|-------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------|--|-------------------------------------------|--|
| 9<br>8<br>7<br>6<br>5<br>4<br>3<br>2<br>1 |  | 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.<br>qualification information<br>Richard Vink 24468<br>name BCW<br>registration information<br>VAS Design Inc. 42658 |  | <b>VA3</b><br><b>DESIGN</b><br>255 Consumers Rd Suite 120<br>Toronto ON M2J 1R4<br>t 416.630.2255 f 416.630.4782<br>va3design.com                                                                                                                                                                             |  | <b>Greenpark</b><br>project name<br>RUSSELL GARDENS PH. 3<br>date<br>APRIL 2020<br>drawn by<br>GW |  | municipality<br>WATERDOWN<br>checked by<br>-<br>scale<br>Not to Scale |  | project no.<br>19014<br>drawing no.<br>13 |  |
| 1 ISSUED FOR PERMIT.<br>no. description   |  | APR 13/20 GW<br>date by                                                                                                                                                                                                                                                                                |  | Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be scaled. |  | INVERTED STEEL ANGLE<br>19014-GP-STD_DETAILS_A1                                                   |  | SINGLES                                                               |  | 2012 CODE<br>COMPLIANCE PACKAGE A1        |  |



CITY OF HAMILTON  
Building Division  
Permit No. **20-199041**  
THESE STAMPED DRAWINGS SHALL BE AVAILABLE ON SITE  
THE OWNER AND/OR CONTRACTOR SHALL COMPLY WITH  
THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE LAW  
These drawings and/or specifications have been reviewed by  
*[Signature]* BUILDING OFFICIAL  
DATE **JAN 15 2021**



**C2** CANOPY DETAIL  
SCALE: N.T.S

2012 CODE  
COMPLIANCE PACKAGE A1

|                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                         |                                                                                                                                                                                                                                                    |                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 9. 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.<br>8. qualification information<br>7. Richard Vink 24488<br>6. name<br>5. registration information<br>4. VAS Design Inc. 42658<br>3.<br>2.<br>1. ISSUED FOR PERMIT. APR 13/20 GW<br>no. description date by |  | 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.<br><i>[Signature]</i><br>Richard Vink 24488<br>name<br>registration information<br>VAS Design Inc. 42658<br>Contractor must verify all dimensions on the job and report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work. Drawings are not to be copied. | <b>VA3 DESIGN</b><br>255 Consumers Rd Suite 120<br>Toronto ON M2J 1R4<br>t 416.630.2255 f 416.630.4782<br>va3design.com | <b>Greenpark</b><br>project name<br>RUSSELL GARDENS PH. 3<br>date<br>APRIL 2020<br>drawn by<br>GW<br>checked by<br>-<br>scale<br>Not to Scale<br>municipality<br>WATERDOWN<br>CANOPY ROOF AT GARAGE DETAIL<br>file name<br>19014-GP-STD_DETAILS_A1 | project no.<br>19014<br>drawing no.<br><b>14</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|

All drawings specifications, related documents and design are the copyright property of VAS DESIGN. Reproduction of this property in whole or in part is strictly prohibited without VAS DESIGN's written permission.