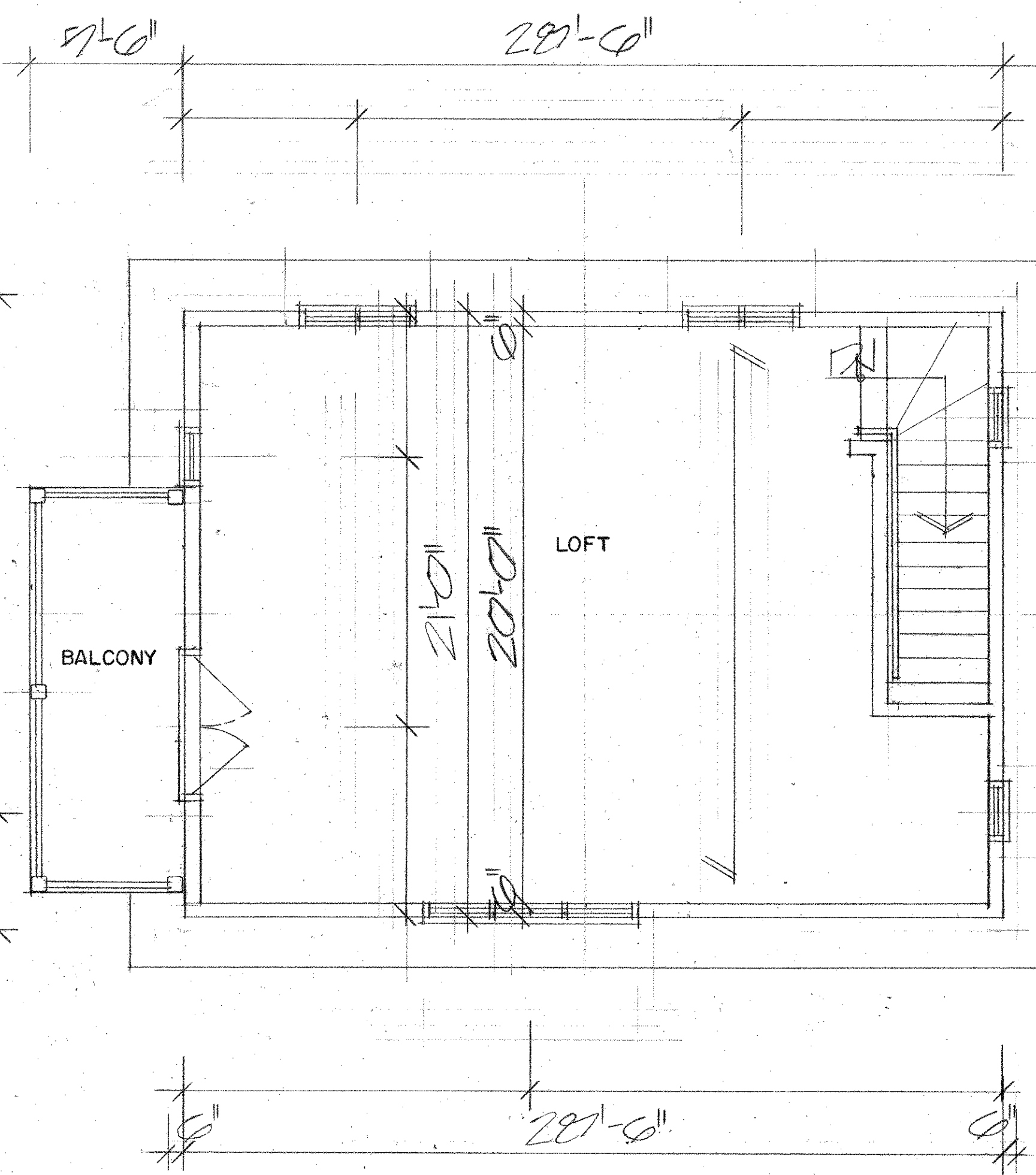


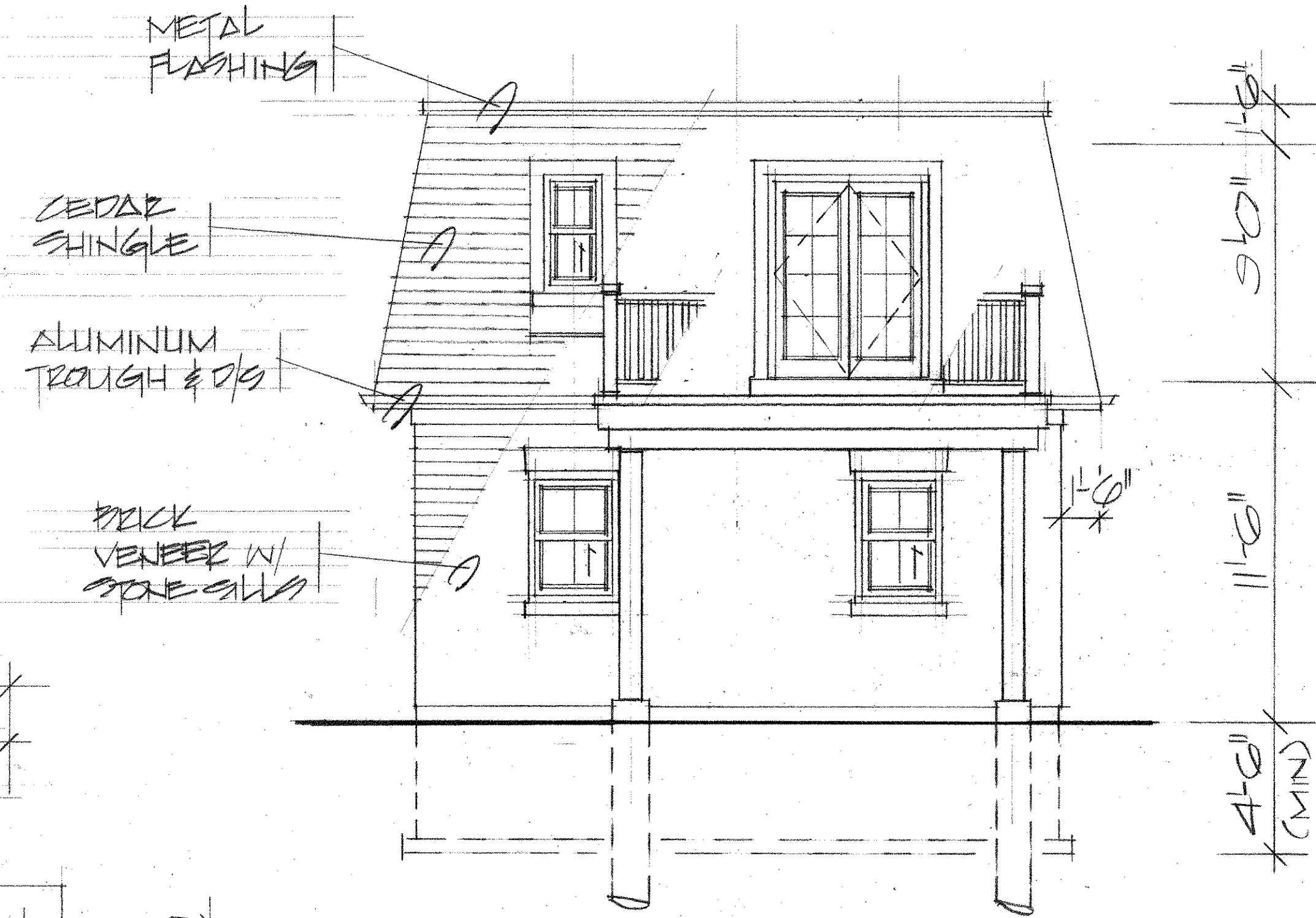
**GROUND FLOOR PLAN**

BUILDING AREA = 649 SQ.FT.



**LOFT PLAN**

FLOOR AREA = 5700 SQ.FT.

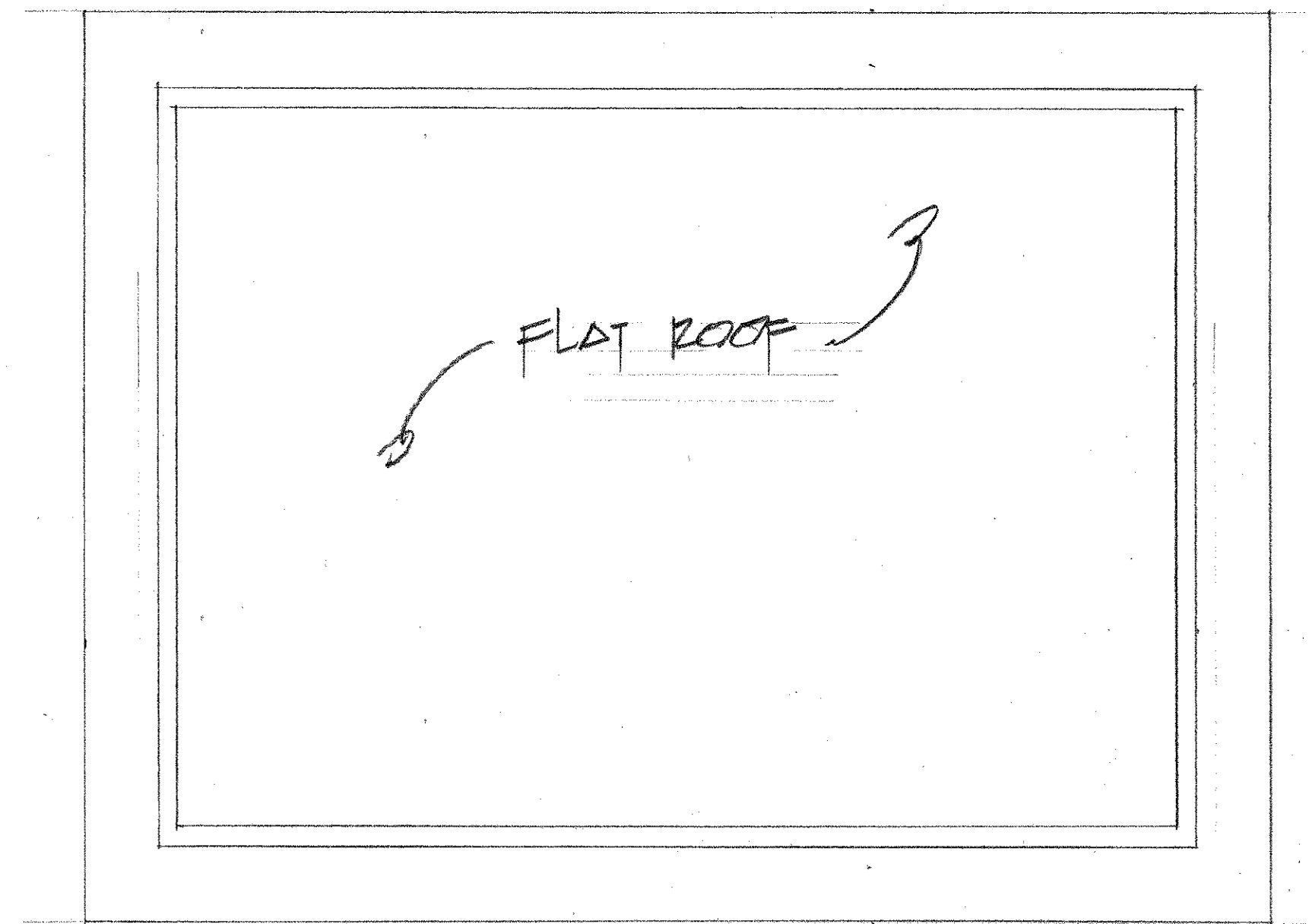


**WEST SIDE**

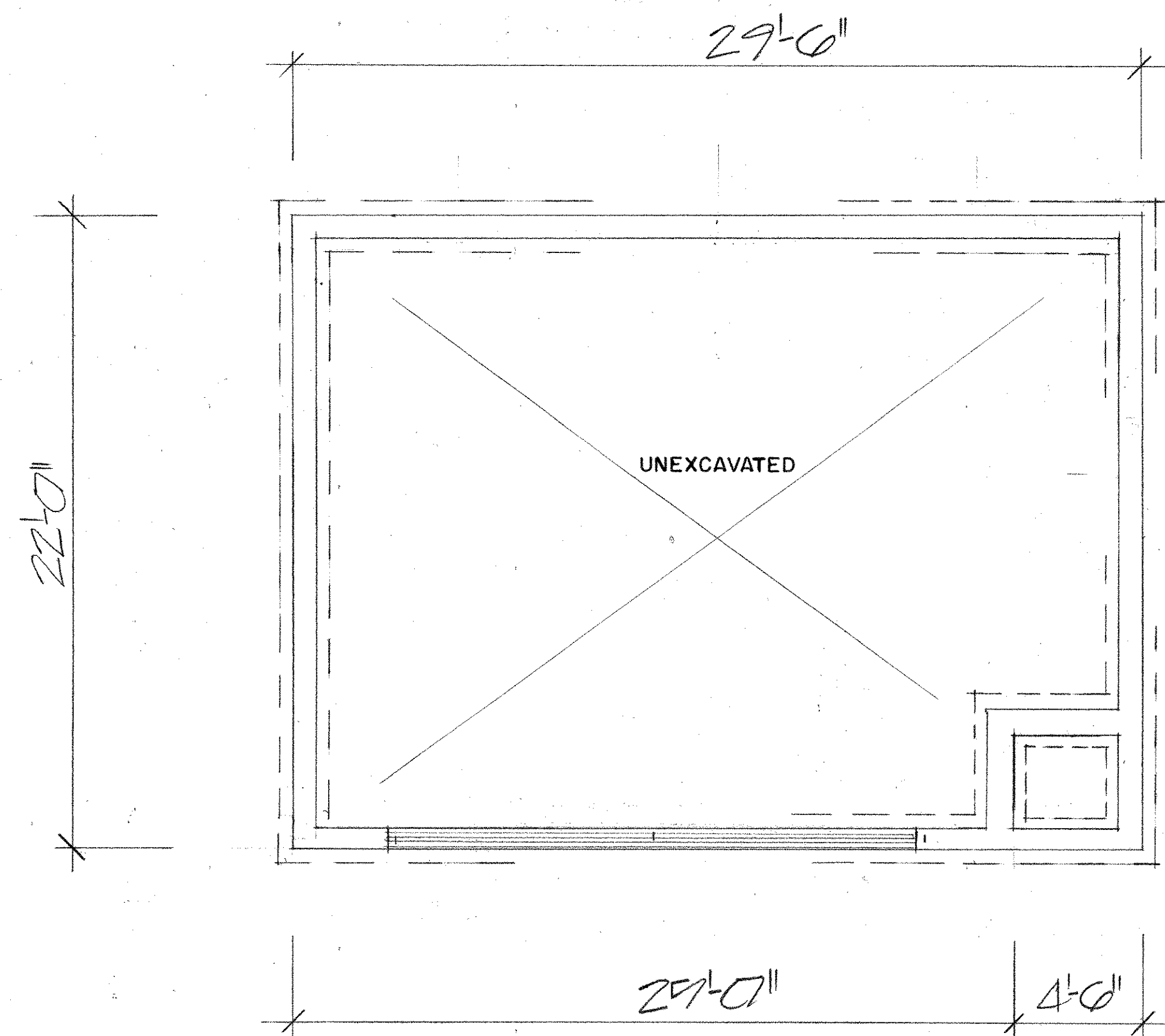


**SOUTH SIDE**

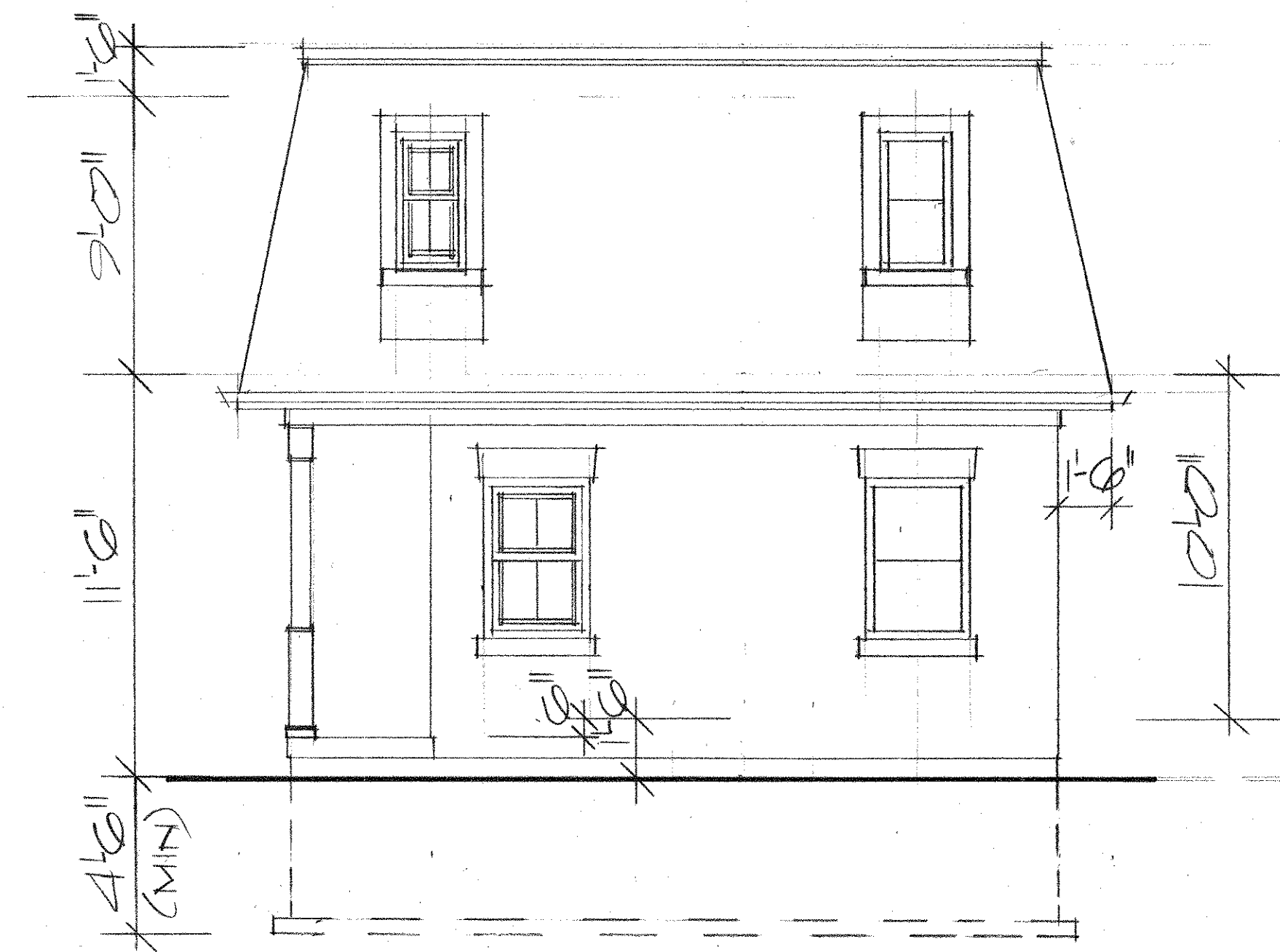
<p>PROJECT:</p> <p><b>GARAGE WITH LOFT</b></p> <p><b>123 MAIN ST. (UNIONVILLE)</b></p> <p><b>CITY OF MARKHAM</b></p> <p><b>THE GREGORY DESIGN GROUP</b></p> <p>50 McINTOSH DRIVE, SUITE 140</p> <p>MARKHAM, ONTARIO, L3R 9T3</p> <p>OFFICE (905) 479-4767</p> <p>FAX (905) 479-8496</p> <p>russ@gregorydesigngroup.net</p>	<p>I review and take responsibility for this work on behalf of a firm registered under subsection 27(1) of the Building Code, I am qualified, and I am registered, in the appropriate class(es) of the Building Code.</p> <p>INDIVIDUAL B.C.N. - 25925</p> <p>FIRM B.C.N. - 35599</p> <p>Russ Gregory</p> <p>NAME: _____ SIGNATURE: _____</p> <p>GENERAL NOTES:</p> <p>All construction is to conform to section "9" of the Ontario Building Code (latest edition).</p> <p>Contractor shall check and verify all notes and dimensions.</p> <p>Do not scale drawings.</p> <p>Owner/contractor designer is responsible to re-claim and destroy all previous and un-revised copies of this drawing.</p> <p>These drawings are the property of the Gregory Design Group and/or its clients only.</p> <p>Building permits should be obtained prior to commencing construction.</p>	<p>DRAWN:</p> <p>R. GREGORY</p> <p>DATE:</p> <p>8/30/19</p> <p>SCALE:</p> <p>1/4"=1'-0"</p> <p>PROJECT NO.:</p> <p>2110218</p> <p>DRAWING NO.:</p> <p><b>A-1</b></p>
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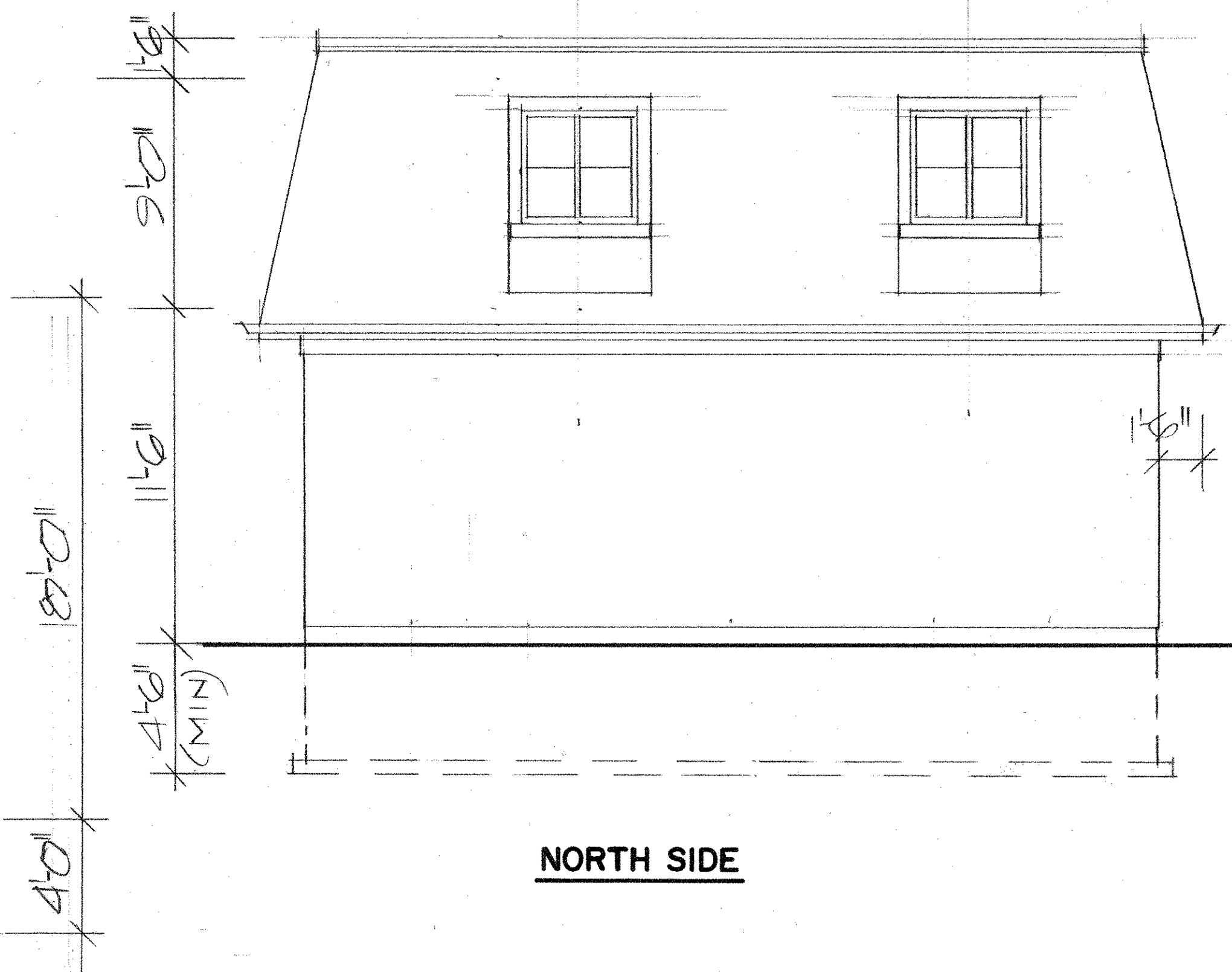
**ROOF PLAN**



**FOUNDATION PLAN**



**EAST SIDE**



**NORTH SIDE**

<b>PROJECT:</b> <b>GARAGE WITH LOFT</b>	I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4 of Division C of the Building Code, I am qualified, and the firm registered, in the appropriate classification categories.  INDIVIDUAL B.C.I.N. - 25525 FIRM B.C.I.N. - 30506  Russ Gregory NAME SIGNATURE	<b>DRAWN:</b> R. GREGORY <b>DATE:</b>  <b>SCALE:</b> 1/4"=1'-0"
<b>THE GREGORY DESIGN GROUP</b> 50 McINTOSH DRIVE, SUITE 140 MARKHAM, ONTARIO, L3R 9T3 OFFICE (905) 479-4767 FAX (905) 479-8496 russ@gregorydesigngroup.net	<b>GENERAL NOTES:</b> All construction is to conform to section "9" of the Ontario Building Code (latest edition). Contractor shall check and verify all notes and dimensions. Do not scale drawings. Owner/contractor designer is responsible to re-claim and destroy all previous and un-revised copies of this drawing. These drawings are the property of the Gregory Design Group and/or its clients only. Building permits should be obtained prior to commencing construction.	<b>PROJECT NO.:</b> 2110-180 <b>DRAWING NO.:</b> <b>A-2</b>



GENERAL NOTES

1. 4" face brick or concrete block or stone facing with ½" weep holes @24"o/c in starter course, metal ties @16"o/c horizontal and 24"o/c vertical, 1" air space, 15lb building paper over approved house wrap on ½" plywood sheathing on 2"x6" wood studs @16"o/c, filled with R-24 batt insulation, 6 mil poly vapour barrier, ½" drywall taped, sanded and painted. (Insulation and vapour barrier in garage walls is optional).
2. Exterior finish (see elevation) on ½" plywood sheathing on 2"x6" wood studs @16"o/c filled with R-22 batt insulation, 6 mil poly vapour barrier, ½" drywall taped, sanded and painted. (Insulation and vapour barrier in garage walls is optional).
3. ½" drywall, taped only on 2"x6" wood studs @16"o/c filled with R-24 batt insulation, 6 mil vapour barrier, ½" drywall taped, sanded and painted. (Use 4" concreted block where masonry above) Provide caulking at bottom of drywall for gas proofing.
4. 4" stone sill or wood window sill with proper flashing.
5. 4" stone faced Indiana Limestone sill or banding in masonry areas.
6. 10" brick, stone or precast concrete arch (with optional keystone).
7. 8" brick, stone or precast concrete arch (with optional keystone).
8. 2-15mm rebar @ 1" from bottom of 22" wide x 6" deep poured concrete footing (minimum 20MPa) keyed for poured walls, with 15mm dowels 18" long @ 36"o/c (max). *O.B.C. 9.15.3* Footings must rest on stable soils with an allowable bearing pressure of 75kPa or greater(provide min 48" coverage from frost). *O.B.C. 9.15.1.1*
9. Approved drainage layer over damp proofing, sprayed on exterior of 10" thick poured concrete foundation (minimum 20MPa) or damp proofing sprayed on ½" cement parging on exterior face of concrete block foundation walls. All rod holes to be plugged and parged (refer to building section for structural requirements). ICF foundation to be designed by structural engineer.
10. ½" drywall (optional) on 2"x6" wood studs @16"o/c filled with R-10 batt insulation to basement slab, R-10 rigid (or foam) insulation applied directly to concrete foundation wall with adhesive.
11. Perimeter poured or concrete block foundation to extend 48" below exterior grade.
12. 2" rigid insulation (R-12) to extend 36" below exterior grade and 48" in from exterior wall (under concrete slab).
13. Stepped concrete footing (minimum 20MPa) on stable soils with an allowable bearing pressure of 75kPa or greater, maximum rise 24", minimum run 48". *O.B.C. 9.15.3.9*
14. 2"x6" wood sill plate anchored to foundation wall with ½" diameter anchor bolts @96"o/c (max). *O.B.C. 9.23.6.1*
15. 4" diameter plastic weepers in filter sock in 6" stone cover with sleeves through footings (run to storm sewer or drain pit).
16. 4" concrete *basement slab* (minimum 25MPa) on 6" clear stone on stable soil. Min. R-12 styrofoam insulation around perimeter to min. 48" from exterior walls. (basement slab only). *O.B.C. 9.16.4.5*
17. 4" concrete *garage slab* (minimum 30MPa) with 6"x6" wire mesh on 6" clear stone on undisturbed soil or compacted fill (use 5-10mm rebar in 10"x10" grade beams if span is greater than 19'-0"). *O.B.C. 9.16.4.5*
18. 6" poured concrete *porch slab* (minimum 25MPa) with 15mm rebar @10"o/c both ways connected to 15mm dowels at foundation wall. Forms to be removed after 28 days of curing.
19. *Concrete garage slab, porch, beams or columns* to be designed by Professional Engineer.
20. Specified steel beam on 3½" diameter steel column with 6"x6"x½" plates on top and bottom, on 40"x40"x12" deep concrete pad footing with two rows of 15mm rebar each way at bottom of footing. Footings to rest on stable soils.
21. Specified wood beam on 6"x6" wood post on 24"x24"x6" deep concrete pad footing. Footings to rest on stable soils.
22. 6"x6" wood post on metal saddle on 12" diameter tube footing with 16" dia. base footing, or 16"x16" block pier (to extend 48" below grade) on 24"x24"x6" concrete pad footing.
23. ½" drywall (optional) on 2"x6" wood studs @12"o/c on 4" ashlar block course or curb on 18" wide x 6" deep poured concrete strip footing. *O.B.C. 9.15.3.6*. (Load bearing partition)
24. ½" drywall taped, sanded and painted on both sides of 2"x4" or 2"x6" wood studs @16"o/c (double top plates and double studs at openings).
25. Beam pocket in foundation wall (use steel plates and solid masonry for leveling).
26. ½" "ceiling board" taped, sanded and painted on u/s of approved floor joists.
27. ½" drywall, or perforated soffit, on u/s of approved floor joists filled with R-32, 2lb spray foam insulation.
28. ½" "ceiling board" taped, sanded and painted on 6 mil poly vapour barrier on u/s of approved trusses or ceiling joists filled with R-60 blown in insulation. Recessed lighting or other penetrations to be protected as required.
29. ½" drywall taped, sanded and painted, on u/s of approved roof rafters filled with R-32, 2lb spray foam insulation.
30. Asphalt shingles (or equal) on ½" exterior type plywood on approved roof trusses or roof rafters. (Use 'H' clips if spacing is greater than 16"o/c)
31. Finished floor on ¾" SPF plywood sub floor glued and nailed to approved engineered floor joists (joints to be sanded if necessary).
32. Type 'S' rolled roofing eaves protection to extend 36" (min) from the edge of the roof to a line not less than 12" inside the inner face of the exterior wall. Not required if roof slope is greater than 8:12. *O.B.C. 9.26.5.1*
33. Provide 1 sq.ft. of roof ventilation per 300 sq.ft. of insulated ceiling area ceiling area. Ventilation to be split equally between soffit venting and roof venting. *O.B.C. 9.19.1*
34. Aluminum eaves trough, perforated soffit, fascia and rain water leaders (premium gauge or copper optional). Refer to elevation drawings for material to be used for fascia and soffit.
35. 2"x4" ledger at bottom of 2"x12" pressure treated header attached to the existing house frame with ½" lag bolts and washers @24"o/c (max).
36. Existing footings and foundations to be underpinned or have a bench footing constructed. Professional Engineers design will be prepared after excavation to determine conditions.
37. 26 gauge galvanized metal flashing cut into brick or under exterior finish, caulked and counter-flashed.
38. Basement and exterior stairs: *O.B.C. 9.B.1 - 9.B.4*
- Maximum rise - 7½" Minimum treads - 9½" Minimum head room - 77"
39. Main and exit stairs: *O.B.C. 9.B.1 - 9.B.4*
- Maximum rise - 7½" Minimum treads - 9½" Minimum head room - 77"
40. Wood handrail on wood or metal pickets with 4" (max) spacing. Handrail to be 34" (min) above nosing and 38" (min) above landings.
41. Precast concrete steps (lag bolted to foundation wall if necessary).
42. ½" drywall on both sides of 2"x4" studs to a height of 36" (min) above highest adjacent floor.
43. 2"x4" wood top rail on 1"x2" wood pickets (or metal railing) @4"o/c (max) to a height of 36" if greater than 24" above grade to meet specifications of SB-7 of O.B.C. Pickets and rail s to be primed and painted prior to installation.
44. 2"x4" or 2"x6" wood decking (or equal) across approved pressure treated joists and framing.
45. Bathroom vent to exterior (min. 50 cfm). Duct to be insulated.
46. Kitchen vent to exterior (see kitchen design for cabinet and appliance details).
47. Cold storage vent to exterior (min. 3" diameter sleeve).
48. Vent furnace, hot water tank and HRV to exterior as required.
49. 4" diameter dryer vent to exterior.
50. Vanity or pedestal sink with mirror (medicine cabinet in main bathroom) or 30" deep laundry room counter. (see cabinet designs for details)
51. Tiled shower stall/bathtub enclosure (with light fixtures) on water resistant drywall.
52. Oval tub (jets optional) in 28" high wood framed tub deck (fully tiled).
53. Gas or propane fireplace installed and vented to manufacturer's specifications. Owner to provide information to contractor prior to installation.
54. 200 amp electrical service (breaker type). Separate permit required from E.S.A.
55. Inter-connected smoke detector and carbon monoxide detector on each floor to be wired to house current. Inter-connected smoke detector in each bedroom and any hallways accessing bedrooms. Smoke alarms to have a visual signalling component as per *O.B.C. 9.10.19.3*
56. Basement area floor drain connected to sanitary sewer.

57. Sewage ejection pit connected to sanitary drain or septic system.
58. Water holding tank and pump from well.
59. Fireplace facing and detail to be provided by owner.
60. Clothes closet with hanging rod and 10" shelf.
61. Broom closet with 4 shelves.
62. Linen closet with 5 shelves.
63. 22"x30" insulated access hatch with weather stripping.
64. Overhead panel garage door and track (see plans for dimensions).
65. 8"x12" clay flue for fireplace (optional flue for basement fireplace).
66. Poured concrete door sill.
67. Top of chimney to be 36"(min) above roof ridge or 24"(min) above roof surface within 10' from chimney.
68. Galvanized metal window well to weepers. Window well to extend 4" above grade.
69. Decorative brick design or louvered vent or window (see elevations).
70. New concrete footing and foundation connected to existing footings and foundations with 2-15m rebar drilled 4" into existing footing and 8" into new footing. Foundations connected with 2 metal brick ties at each block course or 15m rebar @12"o/c drilled into existing foundation the same as footings. Make connection water tight. New weeping tile to be connected to existing perimeter weeping tile of building.
71. 17"x17"x2" concrete pad on 16"x16"x36" high brick pier on full concrete foundation.
72. Double glazed dome skylight in drywalled shaft with vapour barrier and R-32 batt insulation (see drawings for dimensions) or solar tube for additional lighting. Installed to manufacturer's specifications.
73. Gas tight door and frame with self closer and weather stripping.
74. Sump pit and pump for weepers to storm sewer or drain pit.
75. Approximate location of Hydro meter.
76. Approximate location of Gas meter.
77. Approximate location of A/C unit.
78. 1"x3" prefinished V-groove wood soffit with recessed lighting as required.
79. See landscape plan for details of "armour stone" retaining wall. Provide guards and handrails for retaining walls and steps as required by O.B.C. 8"x8" area drain to storm sewer or sump pit if required.
80. Waterproof membrane over ¾" exterior plywood on approved joists. Roof to drain to eaves trough and downspout.
81. Wood decking across 2"x2" wood sleepers on waterproof membrane over ¾" exterior plywood on approved joists. Roof to drain to eaves trough and downspouts.
82. Refer to kitchen manufacturer specifications for all cabinet measurements and details. (to be provided by owner)
83. Sewage ejection system to be installed if required.
84. Provide stud wall reinforcement in Main Bathroom adjacent to water closet and shower or tub. *OBC 9.31.2.3*
85. Drain water heat recovery unit to be installed on every shower drain if more than two showers in dwelling.

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Structural Information

- All floor joists and structural beams must be designed and installed to manufacturer's specifications and have proper bearing.
- All joist spacing to be 16"o/c (max) unless noted otherwise in drawings.
- Joist spans based on ¾" sub-floor being glued and nailed and ½" drywall on underside of joists.
- Owner/Contractor must supply engineered design drawings to the Gregory Design Group and local building department for review.

Lintel / Header Schedule

- W1 - 2-2"x6" Spruce
- W2 - 2-2"x8" Spruce
- W3 - 3-2"x8" Spruce
- W4 - 2-2"x10" Spruce
- W5 - 3-2"x10" Spruce
- W6 - 4-2"x10" Spruce
- W7 - 2-2"x12" Spruce
- W8 - 3-2"x12" Spruce
- All LVL beams to be designed by suppliers
- W9 - 2-1½"x7½" LVL Beam
- W10 - 3-1½"x7½" LVL Beam
- W11 - 2-1½"x9½" LVL Beam
- W12 - 3-1½"x9½" LVL Beam
- W13 - 2-1½"x11½" LVL Beam
- W14 - 3-1½"x11½" LVL Beam
- W15 - 2-1½"x14" LVL Beam
- W16 - 3-1½"x14" LVL Beam
- W17 - 2-1½"x16" LVL Beam
- W18 - 3-1½"x16" LVL Beam

Steel Lintel Schedule

- L1 - 3½"x3½"x½"
- L2 - 4"x3½"x½"
- L3 - 4½"x3½"x½"
- L4 - 5"x3½"x½"
- L5 - S10X23 steel beam with 8"x3" steel plate on bottom
- L6 - W10X21 steel beam with 8"x3" steel plate on bottom

Post Schedule

- P1 - 2-2"x4" wood post
- P2 - 3-2"x4" wood post
- P3 - 2-2"x6" wood post
- P4 - 3-2"x6" wood post
- P5 - 6"x6" solid wood post
- P6 - 8"x8" solid wood post
- P7 - 3.5" dia. steel post
- P8 - 4" HSS column

Door Schedule

- 1 36"x80"x1½" Steel or fiberglass insulated door
- 2 36"x80"x1½" Solid wood door
- 3 34"x80"x1½" Steel or fiberglass insulated door
- 4 32"x80"x1½" Steel or fiberglass insulated door
- 5 36"x80"x1½" Garden door
- 6 30"x80"x1½" Garden door
- 7 60"x80" Glazed sliding door
- 8 72"x80" Glazed sliding door
- 9 96"x80" Glazed sliding door
- 10 32"x80"x1½" Insulated door with weather-strip (self closer required for house/garage entry doors)
- 11 32"x80"x1½" Solid core door
- 12 84" high sliding closet doors (mirrored)
- 13 36"x80"x1½" Hollow core passage door
- 14 32"x80"x1½" Hollow core passage door
- 15 30"x80"x1½" Hollow core passage door
- 16 26"x80"x1½" Hollow core passage door
- 17 24"x80"x1½" Hollow core passage door
- 18 20"x80"x1½" Hollow core passage door
- 19 30"x80"x1½" Hollow core pocket door
- 20 24"x80"x1½" Hollow core pocket door
- 21 Bi-fold doors

Note: In areas with ceiling heights 10' or higher, doors are to be 96" high.

10" Concrete Foundation Walls Over 8' High

- All poured concrete foundation walls over 8'-0" are to have 15m rebar @16"o/c (max) vertical and horizontal.
- Vertical bars @1.25" from inside wall face.
- Vertical bars tied to 15m dowels extending 20" above concrete footings.
- 6"x24" concrete footings to have 2-15m bars @ 2" from bottom.
- All concrete to have compressive strength of 20 mpa after 28 days.

✓ X	APPROVAL / REQUIRED DRAWING		DATE
✓	TOPOGRAPHIC SURVEY	REQUESTED	
	Prepared by	RECEIVED	
✓	LOT GRADING PLAN	REQUESTED	
	Prepared by	RECEIVED	
✓	ENGINEERING APPROVAL	APPLIED	
	Lot grading & services	APPROVED	
✓	CONSERVATION APPROVAL	APPLIED	
	Local authority	APPROVED	
✓	TREE INVENTORY/REPORT	REQUESTED	
	Prepared by	RECEIVED	
✓	PRE-CONSULTATION APP.	APPLIED	
		APPROVED	
✓	SITE PLAN APPLICATION	APPLIED	
	APPL. #	APPROVED	
✓	ZONING CERTIFICATE	APPLIED	
	APPL. #	APPROVED	
✓	COMMITTEE OF ADJUSTMENT	APPLIED	
	APPL. #	APPROVED	
✓	H.V.A.C. DESIGN	REQUESTED	
	Prepared by	RECEIVED	
✓	TRUSSES, JOISTS & BEAMS	REQUESTED	
	Prepared by	RECEIVED	
	SEPTIC DESIGN	REQUESTED	
	Prepared by	RECEIVED	
✓	BUILDING PERMIT	APPLIED	
	APPL. #	APPROVED	
		ISSUED	
PROJECT:		I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4 of Division C, of the Building Code, 1st edition, and the firm registered in the appropriate classification category.  INDIVIDUAL S.C.N. - 29825 FIRM S.C.N. - 30000  Russ Gregory NAME: _____ SIGNATURE: _____	DRAWN: R. GREGORY DATE: _____  SCALE: _____
THE GREGORY DESIGN GROUP  16 Church Street Markham, Ontario, L3P 2L6 416-720-4667 russ@gregorydesigngroup.net		GENERAL NOTES: All construction is to conform to section "9" of the Ontario Building Code (latest edition). Contractor shall check and verify all notes and dimensions. Do not scale drawings. Owner/contractor/designer is responsible to re-claim and destroy all previous and un-revised copies of this drawing. These drawings are the property of the Gregory Design Group and/or its clients only. Building permits should be obtained prior to commencing construction.	PROJECT NO.: _____  DRAWING NO.: _____