

Richmond Public Hearing – May 20, 2015

Richmond's new home building trends are for high ceilings, high stair wells to the second floor and high great rooms.

A house on Glacier Crescent near my parents house is shown in the picture. The great room is shown off the kitchen at the middle back of the house and the ceiling is significantly more than 16ft4in. You can see the max 16ft4in ceiling in the entrance to the house and compare it with the much higher ceiling over the railing looking down towards the great room.

Show picture 1

I went to another house on Glacier Crescent with an inspector from the City. The great room is off the kitchen in the middle back of the house. In this example, there was a dropped ceiling that dropped down to 16ft4in directly above the great room. The inspector told me that the ceiling height was dropped to satisfy the "height requirement".

But meeting the maximum storey height by construction of a false drop ceiling below the level of the roof structure contributes to greater massing! Instead of a drop ceiling an arch or barrel ceiling could easily be constructed and still have the same impact on massing as the space taking up volume. As an aside, the builder, I was told, was only required to show one cross section in his submission and so this is the one he most likely presents.

I went to an open house for another new house at 9240 Chapmond Crescent which had a great room next to the kitchen at the middle back of the house like the other two properties mentioned. The real estate agent told me that the height of the ceilings was about 21ft.

I went to another house on Goldstream Place. It had ceilings, that were about 21ft high in the entrance, as well as the two front rooms and the great room off the kitchen.

Show Picture group 2

I have looked at many MLS pictures and the vast majority have great rooms.

In conclusion, the vast majority of these houses have great rooms that have storeys that exceed 16'4".

I did a study and searched all 93 houses on MLS in Richmond built since 2008 that had a value of \$1.8 million dollars and above.

I have prepared a spreadsheet, illustrating the relationship between finished floor area and permitted floor area as allowed by the lot size.

insert word document

insert spreadsheet

In conclusion, Builders are maximizing the square footage of the houses they are building. Which begs the question, how can they maximize the allowable area of living space and still have these over height rooms?

The double counting rule says that if the height of the floor exceeds 16'4" than it must be double counted as if there were two floors. This means that if the height of a storey is increased beyond 16'4", than the total floor area of the space needs to be subtracted from the maximum permitted area.

Since we confirmed the vast majority of these homes have great rooms the actual square footage of the house must be significantly lower than the maximum permitted area of the house. The maximum living area of these homes should be reduced by the area of these over height great rooms and other over height rooms.

Also, we confirmed the majority of these MLS listing all were built out to the maximum allowable floor area. The majority all of these houses were non conforming visually from the inside and out.

There is a problem

Walking my dog in my neighbourhood, a subcontractor allowed me to view one of the Goldstream houses under construction. I walked all the rooms in the house. Again from the second floor looking towards the front of the house I noted the same 16ft4in ceilings dropping down, in the rooms in either side of the foyer, and the great room. The drop in the ceiling was achieved by using large coffers. The coffers were about 5 feet in height at their maximum, in fact the full height of the storey was still about 21 feet.

I alerted City staff and an inspector was sent to take pictures of the ceiling. I requested to know the square footage of the house and he informed me that the actual size of the house was 4,000 square feet. The maximum calculated square footage of the house is 4,019 square feet. So apparently no deduction was made to the size of the house for these oversize rooms.

There is a problem

I have been informed that Staff in the Building Approval Division review all house plans before a Building Permit is issued. All Building Permits issued by the City are reviewed to ensure compliance with the City's Zoning Bylaw and the BC Building Code. Any internal building area with a storey shown on the building permit drawings to be constructed at a height of more than 5 m (16.4 ft) has that area counted as if it is comprised of two floors for the purpose of determining the maximum floor area permitted.

There is a problem - it's not happening

Conclusion

- Enforce the Bylaw
- Stop taking ceiling measurement to false drop ceilings of any kind (barrel, back framed, drop,coffer)
- Require the builder to provide multiply cross sections of a house for review to the City.
- Get rid of 16'4" ceilings all together and change them to 12'1'.
Result: This will stop new houses from making the leap from **16ft4inch ceilings to 21ft as the new normal.**

Kathryn McCreary, P.Eng.

Calculation

Study

- Looks at 93 houses built since 2008, and
- Houses on the market listed at \$1.8 million dollars or more asking price

Example Calculation: 7531 Glacier Crescent

Maximum Floor Area permitted for Single Family Residential Zoning

- Based on total area of the lot
- Maximum Buildable Area = 55% on the first 5,000ft², and
30% on the remaining lot area
= $0.55 * 5000 + 0.30 * 3556$
= 3,817 square feet
Finished Floor Area
= 3,807 square feet (MLS)

Sample Calculation:

Ratio of Finished Floor Area / Maximum Permitted Buildable Area
= $3,817 / 3807$
= 1.003

Conclusion:

Average of 93 houses on the Market, on April 18, 2015

-Ratio = 1.004/1

Suggests Builders are maxing out on allowable square footage

Source Information:

-<http://www.realtylink.org/>

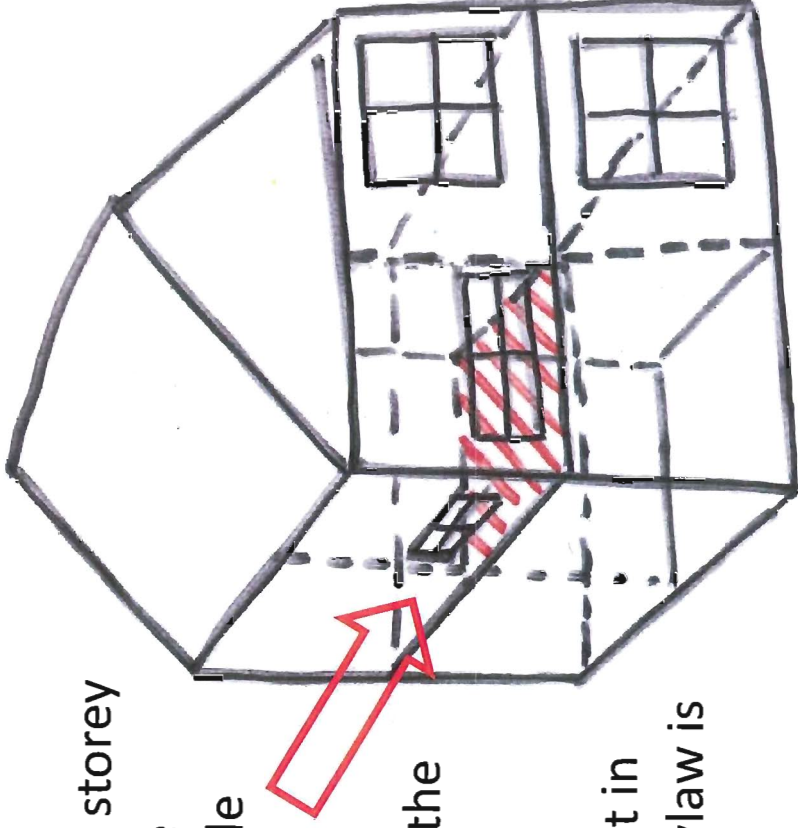
-<http://www.bcassessment.ca>

This house has maxed out its FSR (floor space ratio).

This room has exceeded the maximum storey height and the square footage must be counted against the maximum buildable area.

The saleable area must be reduced by the same floor area as this room.

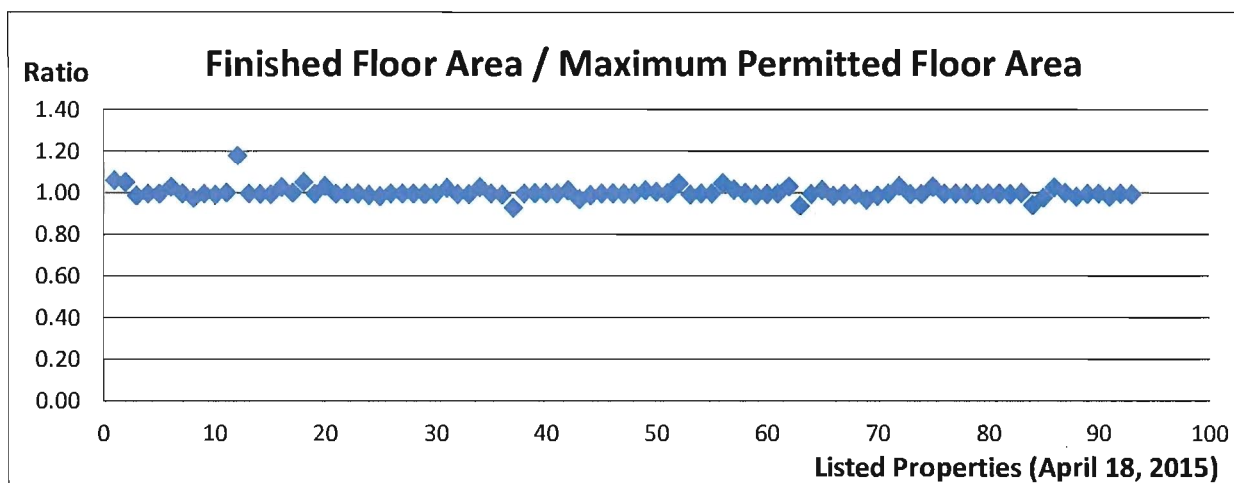
In the vast majority of new houses built in Richmond this section of the Zoning Bylaw is not being enforced.



MLS Richmond Listings

Date: April 18, 2015
Price Range: > \$1,800,000
Age: Houses built after the year 2008
Source(s): <http://www.realtylink.org>
<http://www.bcassessment.ca>
Real estate open houses
Author(s): Kathryn McCreary P.Eng.
John ter Borg B.Eng., MLWS, LEED AP

Graph:









Summary:















































New houses coming on the market in Richmond are being built to maximize 100% of the permitted floor area available.























The majority of new houses constructed in Richmond are in violation of the double height standard in the Zoning Bylaw.

These new houses in Richmond breaching the double height standard are not sacrificing walkable square footage as required by the Zoning Bylaw.

Data:

Address		Age	Lot Area (ft2)	Actual Livable Area (ft2)	Maximum Permitted Area (ft2)	Ratio	Breach Double Height	MLS Image
9271 WELLMOND RD	1	4	7,200	3,623	3,410	1.06	?	
9220 WELLMOND RD	2	6	7,920	3,820	3,626	1.05	Y	
3560 FRANCIS RD	3	3	7,920	3,589	3,626	0.99	Y	
5520 CHEMAINUS DR	4	2	7,000	3,347	3,350	1.00	y	
8820 ST ALBANS RD	5	5	7,920	3,625	3,626	1.00	y	
3506 ULLSMORE AV	6	2	7,030	3,462	3,359	1.03	?	
8228 ELSMORE RD	7	3	7,100	3,378	3,380	1.00	y	
9091 WELLMOND RD	8	5	7,920	3,550	3,626	0.98	y	

9411 DESMOND RD	9	5	7,920	3,624	3,626	1.00	y	
9871 PARSONS RD	10	8	7,920	3,604	3,626	0.99	?	
10560 SOUTHDALE RD	11	4	8,118	3,700	3,685	1.00	y	
3240 SPRINGFIELD DR	12	2	6,996	3,961	3,349	1.18	?	
9611 BAKERVIEW DR	13	1	8,694	3,858	3,858	1.00	?/y	
7680 DAMPIER DR	14	1	7,074	3,367	3,372	1.00	?	
9500 PINEWELL CR	15	3	7,920	3,614	3,626	1.00	y	
9240 CHAPMOND CR	16	2	7,551	3,620	3,515	1.03	y	
3191 PLEASANT ST	17	6	5,940	3,042	3,032	1.00	No	
10311 AMETHYST AV	18	1	7,980	3,841	3,644	1.05	y	
3611 LAMOND AV	19	2	7,350	3,447	3,455	1.00	?	
3311 SPRINGTHORNE C	20	0	6,699	3,370	3,260	1.03	y	
4911 WESTMINSTER HY	21	0	8,177	3,700	3,703	1.00	?/y	
8040 FAIRDELL CR	22	2	7,507	3,498	3,502	1.00	y	
4911 WESTMINSTER HY	23	0	8,172	3,700	3,702	1.00	y	
9740 BATES RD	24	6	6,717	3,241	3,265	0.99	n	
8328 BOWCOCK RD	25	6	8,554	3,766	3,816	0.99	No	
8751 ST. ALBANS RD	26	7	8,580	3,823	3,824	1.00	No	
4891 WESTMINSTER HY	27	0	7,937	3,629	3,631	1.00	?	
9720 HERBERT RD	28	8	7,994	3,646	3,648	1.00	?	
8180 SEAFAIR DR	29	3	7,484	3,490	3,495	1.00	N/?	
9180 WELLMOND RD	30	2	7,919	3,626	3,626	1.00	N/?	
4300 BLUNDELL RD	31	2	9,800	4,295	4,190	1.03	No	
9340 GORMOND RD	32	0	7,262	3,417	3,429	1.00	?/Y	
7660 RAILWAY AV	33	1	9,200	3,994	4,010	1.00	y/?	
7151 MONTANA RD	34	0	7,020	3,450	3,356	1.03	?	
5151 CALDERWOOD CR	35	4	9,207	4,010	4,012	1.00	No	
8800 ST. ALBANS RD	36	0	7,920	3,601	3,626	0.99	y	
9811 PINEWELL CR	37	4	14,777	5,300	5,683	0.93	y	
3500 NEWMORE AV	38	0	7,029	3,358	3,359	1.00	?	
7291 LINDSAY RD	39	1	8,323	3,750	3,747	1.00	y	
10120 LEONARD RD	40	2	8,844	3,907	3,903	1.00	y	
5291 LANCING RD	41	4	8,450	3,782	3,785	1.00	y	
4391 CORLESS RD	42	0	8,778	3,930	3,883	1.01	y	
8711 GARDEN CITY RD	43	3	11,818	4,667	4,796	0.97	y	
9131 DESMOND RD	44	4	7,920	3,595	3,626	0.99	?/y	
3480 FRANCIS RD	45	4	7,920	3,621	3,626	1.00	y	
3320 FRANCIS RD	46	0	7,907	3,622	3,622	1.00	?	
7511 AFTON DR	47	5	7,392	3,459	3,468	1.00	y	
11451 No. 2 Road	48	3	7,202	3,405	3,411	1.00	y	
9131 DIAMOND RD	49	5	8,120	3,737	3,686	1.01	y	
5491 CATHAY RD	50	2	7,854	3,631	3,606	1.01	y	
8191 CATHAY RD	51	1	7,500	3,507	3,500	1.00	y	
10226 BAMBERTON DR	52	1	6,480	3,337	3,194	1.04	?/y	
9120 WELLMOND RD	53	0	7,920	3,603	3,626	0.99	y	
6671 RIVERDALE DR	54	3	7,200	3,408	3,410	1.00	y	
7400 GRANDY RD	55	2	8,040	3,663	3,662	1.00	y	

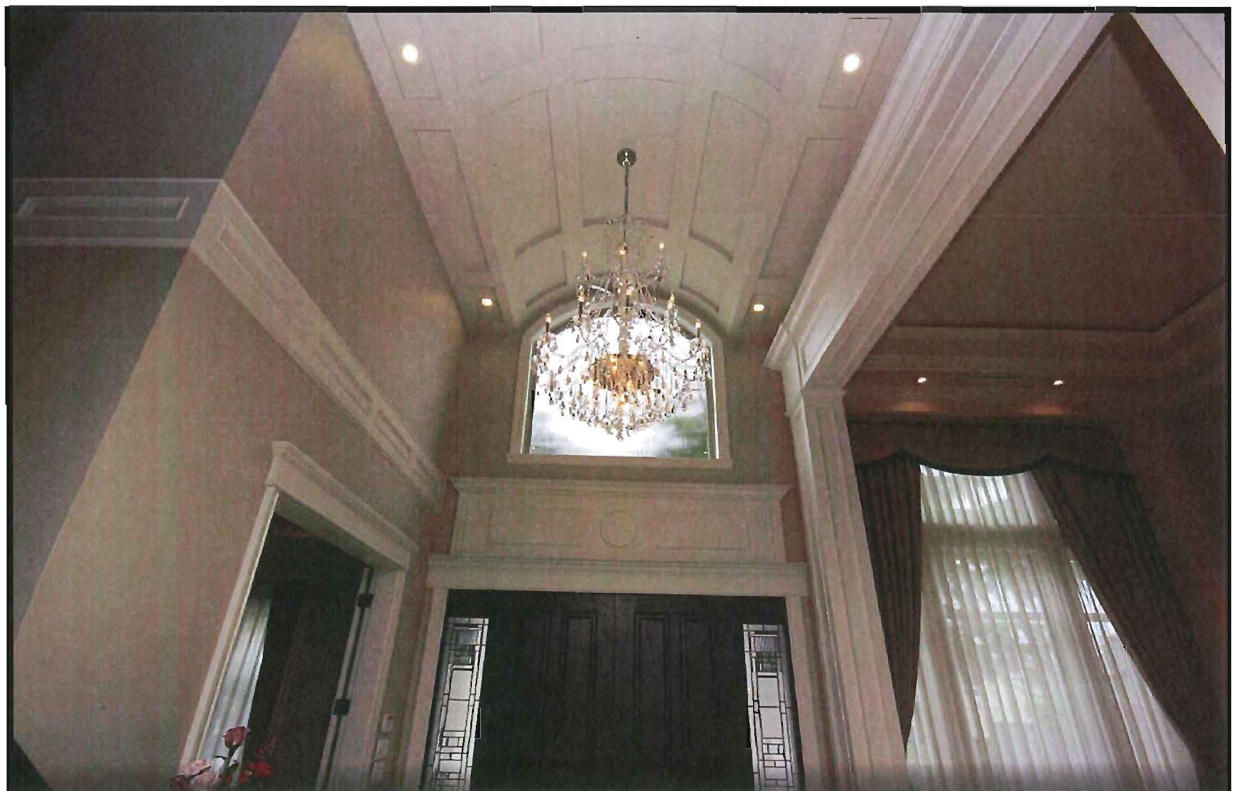
5771 FRANCIS RD	56	8	10,758	4,690	4,477	1.05	y	
7328 BARKERVILLE CT	57	1	7,000	3,408	3,350	1.02	y	
4300 COLD FALL RD	58	2	9,240	4,024	4,022	1.00	y	
5851 MCCALLAN RD	59	4	8,640	3,811	3,842	0.99	y	
5100 WILLIAMS RD	60	0	10,890	4,500	4,517	1.00	?	
7480 CHELSEA RD	61	3	7,992	3,645	3,648	1.00	y	
9471 PINEWELL CR	62	1	7,955	3,750	3,637	1.03	y	
8531 BOWCOCK RD	63	4	10,688	4,196	4,456	0.94	?/y	
7891 GABRIOLA CR	64	0	8,063	3,658	3,669	1.00	y	
9760 BATES RD	65	0	6,801	3,340	3,290	1.02	y	
9740 GILHURST CR	66	3	9,378	4,015	4,063	0.99	y	
3531 SOLWAY DR	67	4	9,128	3,972	3,988	1.00	y	
8480 PIGOTT RD	68	6	9,768	4,158	4,180	0.99	y	
7900 BELAIR DR	69	5	8,841	3,790	3,902	0.97	y	
7580 REEDER RD	70	7	7,559	3,474	3,518	0.99	N	
7391 BATES RD	71	2	7,257	3,428	3,427	1.00	y	
4388 GRANVILLE AV	72	4	9,728	4,308	4,168	1.03	y	
8620 PIGOTT RD	73	4	8,828	3,885	3,898	1.00	?	
5760 LANGTREE AV	74	0	7,022	3,351	3,357	1.00	?	
7251 LISMER AV	75	2	7,000	3,450	3,350	1.03	?	
8511 CALDER RD	76	0	7,634	3,538	3,540	1.00	?	
5760 RIVERDALE DR	77	1	8,073	3,671	3,672	1.00	?	
6188 Sheridan Rd	78	3	8,580	3,820	3,824	1.00	y	
7520 AFTON DR	79	2	8,118	3,668	3,685	1.00	y	
5780 RIVERDALE DR	80	0	8,073	3,672	3,672	1.00	?/y	
4571 PENDLEBURY RD	81	2	8,910	3,922	3,923	1.00	?/y	
6031 MAPLE RD	82	3	9,243	4,008	4,023	1.00	?	
8880 COOPER RD	83	7	11,696	4,767	4,759	1.00	y	
3240 FRANCIS RD	84	5	7,920	3,428	3,626	0.95	?	
10920 BAMBERTON DR	85	0	8,475	3,717	3,793	0.98	?	
5891 MURCHISON RD	86	1	8,073	3,777	3,672	1.03	?	
7680 RAILWAY AV	87	0	10,147	4,307	4,294	1.00	?	
9620 PINEWELL CR	88	2	14,783	5,600	5,685	0.99	y	
7531 GLACIER CR	89	2	8,556	3,807	3,817	1.00	y	
7440 LUCAS RD	90	2	9,102	3,981	3,981	1.00	No	
7960 SUNNYMEDE CR	91	5	9,741	4,107	4,172	0.98	?	
7720 SUNNYHOLME CR	92	4	9,918	4,220	4,225	1.00	y	
10211 THIRLMERE DR	93	0	8,280	3,719	3,734	1.00	y	
AVERAGE		2.7	8,354	3,766	3,756	1.004		

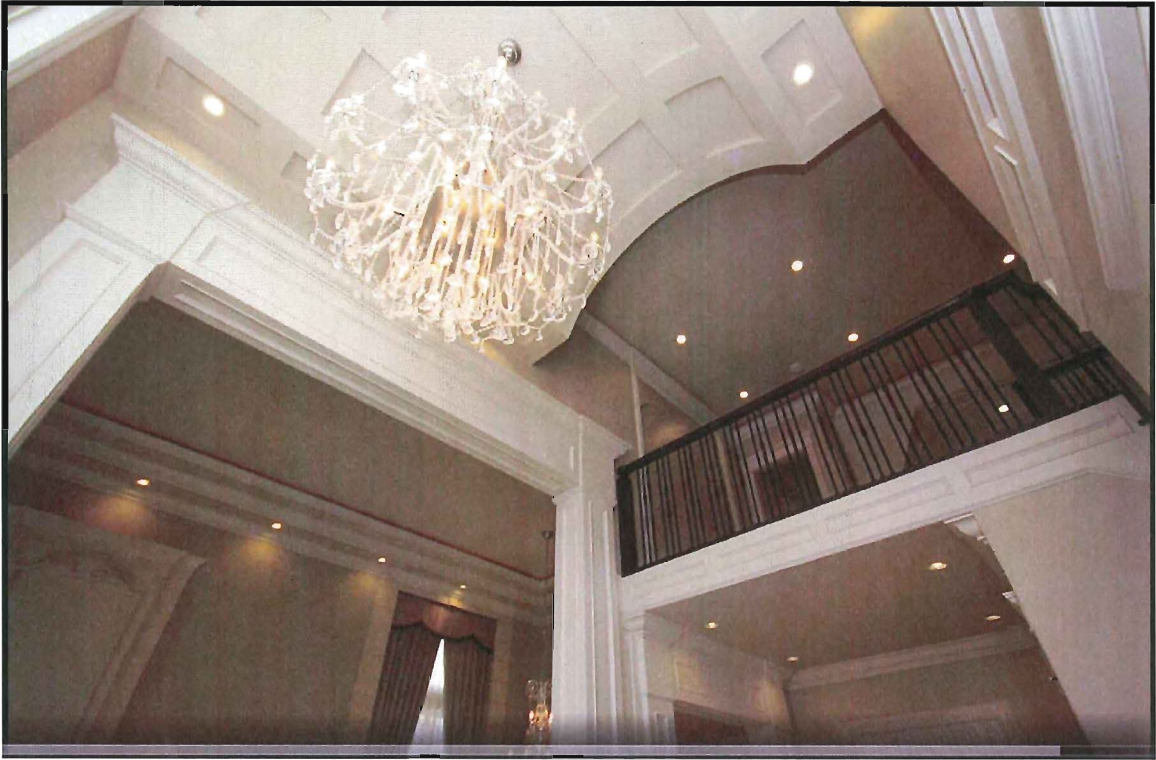
7531 Glacier Crescent (Back)











7900 Goldstream Place

