

ITEM 17  
MANAGER'S REPORT NO. 23  
COUNCIL MEETING Mar. 28/77

Re: MacINNIS PLACE HOUSING DEVELOPMENT

The following report from the Chief Building Inspector contains information on the MacInnis Place Housing Development which was the subject of an inquiry at the March 14, 1977 meeting of Council.

An article which appeared in the March 19, 1977 edition of The Vancouver Sun announced that The Honourable Hugh Curtis recently announced that any tenant who is dissatisfied about conditions of construction will be permitted to sell their unit back to the government for the original price. Units bought back, the article stated, would be repaired and offered for resale.

This is for the information of Council.

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To: MUNICIPAL MANAGER

DATE: March 16, 1977

From: CHIEF BUILDING INSPECTOR

Subject: MacInnis Place Housing Development

During the enquiry period of Council Meeting on March 14, 1977 a suggestion was raised that alleged construction deficiencies or problems have occurred in the construction of MacInnis Housing Development. Before dealing with the specific alleged deficiencies raised during the enquiry period, some background might be helpful.

Background:

At 7:00 p.m. on Friday, March 11th, C.B.U.T. Vancouver, on the Hourglass show, ran a television interview with one of the owners of a Strata Unit in MacInnis Place. The interview was conducted by Mr. Jack Wasserman and centered around complaints of a Mr. and Mrs. Black of #204 - 9235 Gildwood Drive, MacInnis Place. The Blacks purchased their unit in November and it was implied on the television show that since that time their home is literally rotting from within due to vast amounts of condensation. The T.V. camera showed shots of windows in the Blacks' home completely obscured by condensation, walls rotting and mildew forming around window openings, and generally a miserable situation. The Blacks described to Mr. Wasserman on the show their contacts with the Housing Corporation of B. C. and other agencies and the standard response they obtained from all persons who came to view their plight "leave your windows open". In my opinion, a viewer could be left with an impression that there is a conspiracy of silence on the part

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of government agencies, including the Housing Corporation of B.C. and others, to stifle any publicity on this alleged serious condition. Also the impression was left that apparently no effort is being made to determine the cause of and to remedy the condition for the Blacks and for other occupants of the development.

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During the interview, Mr. Black stated that he had called the Municipal Building authority and that on February 10th Mr. Harold Swift of the Burnaby Building Department had visited him at his home, confirmed that there was an abnormal amount of moisture in the dwelling, and repeated the advice "leave your windows open".

This statement by Mr. Black is not accurate -- in fact it is untrue.

On February 9th Mr. Swift received a telephone call from Mr. Black of 9235 Gildwood Drive. Mr. Black described the condensation condition in his home and Mr. Swift took particulars and made some enquiries of Mr. Black regarding his location in the building, his housekeeping habits and other such enquiries which might give a clue as to the cause of condensation. Mr. Swift agreed to have an inspection made and on February 10th dispatched Mr. Omer Eberg of the Building Department to Mr. Black's home. Mr. Eberg has conducted most of the building inspections of the MacInnis Place Housing Development for the Municipal Building Department. Mr. Eberg met Mr. Black on February 10th but was unable to determine a cause of excess condensation in the Blacks' home. Mr. Eberg made no statement at all to Mr. Black regarding "leaving windows open".

Mr. Black mentioned to Mr. Eberg that the B. C. Housing Corporation and/or other agencies had the complaint before them and the request to rectify the condition in the Blacks' home and other homes in the project wherein condensation was occurring.

Alleged Construction deficiencies -- from enquiry period March 14th.

a) "The floor moving when you walk on it".

On Friday, March 11th and Monday, March 14th Mr. Eberg of the Building Dept. answered a complaint of Mr. & Mrs. V. Smith of 9218 Gildwood Drive of a squeak and springiness in the living room floor of their housing unit. The Smiths live in one of the detached patio houses. On Monday, March 14th Mr. Eberg was accompanied by Mr. D. Woodward and Mr. K. Konsog of the B. C. Housing Corporation during his investigation of this complaint. The floor joists under the living room were noted to be 2" x 10" at 16" centres spanning a distance of 15'3". Two rows of 1" x 4" bridging properly nailed to the underside of the joists were in place at the third points of the span. The construction as herein described meets the requirements of the National Building Code of Canada and cannot be termed a deficiency.

This is the only matter we can relate to the statement a "floor moving when you walk on it".

Notwithstanding code compliance it is understood the Housing Corporation is going to have an intermediate beam support placed under the centre of the floor to stiffen it and overcome the complaint of springiness.

b) "Apparent lack of insulation in the outside walls".

We respectfully doubt the truth of this statement and would have to be shown an outside wall lacking insulation.

Our records indicate insulation inspections took place for all of the housing blocks in this project by our municipal inspector as well as inspections by C.M.H.C. and the Housing Corporation personnel.

- c) "No floor in the bottom of crawl spaces, just dirt and no barriers in that case".

Again this is an unfounded allegation. Where crawl spaces occur beneath housing units the ground surface is sealed by a moisture barrier of 4 mil polyethelene generally overlaid by a layer of sand/gravel to hold the polyethelene in place and protect it from workmen or other persons who occasionally may have to enter the crawl space. All crawl spaces were inspected during construction, again by various inspection authorities.

On this point we are informed that on March 14, 1977 the contractor, Frank Stanzl Construction Ltd. together with R. M. Hardy, Construction Materials Testing Engineers checked all crawl spaces and verified the presence of ground seals.

- d) "There are cases where the toilet drips so much from the condensation that people in the suite below get wet".

During the T. V. show on Friday, March 11/77, the Blacks stated that they had to use an umbrella one-week end when they used facilities in their bathroom. The Blacks allowed this was probably due to a blockage of the plumbing system of the suite overhead and an overflow onto the bathroom floor, through the floor into the ceiling of the Blacks' bathroom.

Condensation on a toilet tank is a common household condition brought about by humidity of the interior space, temperature of the interior space and temperature of cold water to the plumbing system. Where the household occupancy causes a high humidity level and where high ambient indoor temperature is maintained, condensation on the outer face of the toilet tank, up to the depth of the water in the tank, will probably take place. In fact drip pans have been on the market to place behind the water closet and under the toilet tank to aid in mopping up condensation. There is also on the market a styrofoam liner to place in the toilet tank to overcome condensation on the outer surface of the tank.

If condensation forms on the toilet tank in such quantity to drop and form pools on the bathroom floor and not be mopped up, it would be possible for the pool of water to drip through the floor system. This is not a building deficiency.

- e) "In some areas the condensation is so bad there is mold growing around the window sills, down the walls and on to the drapes in some cases".

This is the same condensation as with the toilets, brought about by a combination of occupancy, humidity and temperature in the absence of sufficient ventilation.

The units in MacInnis Place are electrically heated and hence

lack the conventional chimney vent associated with oil, gas or hard fuel heating systems. Moreover, the units are well insulated and thoroughly equipped with vapour barriers.

Human habitation of an interior building space results in the production of water vapour in the atmosphere. If the interior building space is heated above the temperature of the outdoors, the water vapour produced in the building space will tend to migrate to the cooler outdoor space or surfaces. When the migrating vapour comes in contact with the cold glass window and metal frame, it condenses on the inner face of that cold surface when the surface is below the dew point temperature. Where gypsum board finish abuts the wet window frame or wet window sill, moisture will be absorbed by the gypsum board. The composition of gypsum board is such that when it is wetted and is in a warm atmosphere, it becomes a fine spawning ground for the formation of mildew, mold or other fungi growth. The drapes which may be drawn back to the edge of the wet windows and perhaps drag on wet window sills tend to shield the gypsum board, cut off air circulation to the gypsum board and thereby aid in the development of mildew growth on the board and on the drapes themselves.

While this is not a desirable condition, the construction in which it occurs does not violate the Building Code nor can the construction per se be blamed for causing the condition. The particular construction system employed in MacInnis Place is limited in its ability to respond to a wide range of temperature/humidity conditions, but prudent use of the ventilation means built into the housing units will permit occupants to control condensation comfortably provided the occupants are prepared to adjust their living habits in some cases.

f) "There are no studs in part of a wall".

The project calls for studs at 16" centres throughout and this practice was followed for all main partitions in the development.

During inspection of the Smiths house (9218 Gildwood) by Mr. Eberg on March 14, 1977, Mr. Smith complained to the B. C. Housing Corporation representatives of excess stud spacing. The location complained of by Mr. Smith was a dwarf wall approximately 2'0" high at the back of a large, walk-in closet off the master bedroom and formed under the run of the sloped roof. The wall simply closes off the remaining space under the roof for which it is impractical to make any use. We understand that the Housing Corporation will alter the wall for the Smiths, but the present construction is not a deficiency nor a Code violation.

g) "There are possible electrical problems".

This inspection department has had no complaint of electrical problems in the project and is unaware at this time of what could be meant by the statement.

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SUMMARY:

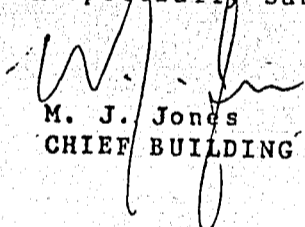
MacInnis Place is a well designed and well constructed large scale housing project of 216 units. This project was first intended by the previous Provincial Government to provide rental or co-operative housing accommodation of an adequate but modest standard. It does not have automatic ventilation throughout the housing units, nor is it centrally heated, nor are the units equipped with thermal glass. It is sound housing, but not luxury housing.

All 216 units in the project received inspection throughout the entire construction period and all units are known to comply with the requirements of the National Building Code of Canada. Occupancy Certificates were posted in the various component housing blocks following final inspection thereof.

During the time this report has been in preparation this week, the B. C. Housing Corporation has met with strata owners and tenants of MacInnis Place. At the mid-week meeting a Housing Corporation official stated that a number of government housing projects, including MacInnis Place, had been assigned under the New Home Warranty Program of British Columbia. This in effect will provide strata owners full warranty service during the first year of ownership, protection to a maximum of \$20,000 for cost of repair of any major structural defects occurring during the second to fifth years of ownership and it also provides for mediation of any unresolved dispute over defects, with the finding of mediation binding on both parties, i.e. the owner and the Housing Corporation.

Following that statement of warranty, the Minister of Housing the Honourable Hugh Curtis has announced a buy-back arrangement to any owner still wishing to leave MacInnis Place.

Respectfully submitted,



M. J. Jones  
CHIEF BUILDING INSPECTOR

MJI/cg

cc: PLANNING DIRECTOR  
MUNICIPAL SOLICITOR