



ADMINISTRATIVE REPORT

Report Date: January 11, 2016
Contact: Pat Ryan
Contact No.: 604.873.7512
RTS No.: 11281
VanRIMS No.: 08-2000-20
Meeting Date: January 20, 2016

TO: Standing Committee on Policy and Strategic Priorities
FROM: Chief Building Official
SUBJECT: Declaration of Nuisance at 7084 Beechwood Street

RECOMMENDATION

- A. THAT Council declare that a breached aquifer and resulting water flowing from the aquifer on a property located at 7084 Beechwood Street, Vancouver, B.C., with the legal description of LOT 4 BLOCK 2 OF BLOCK 8 DISTRICT LOT 316 PLAN 7713, PID 010-362-495 (the "Property") are a nuisance pursuant to section 324A of the *Vancouver Charter*, S.B.C. 1953, c.55;
- B. THAT Council approve the resolution attached as Schedule "A" to this report, and order the registered owner of the Property to cap or seal the breached aquifer on the Property so as to prevent the flow of water from the aquifer onto the Property within 60 days of a copy of the resolution being served on the owner pursuant to section 324A of the *Vancouver Charter*; and
- C. THAT if the owner fails to comply with this order of Council within 60 days of being given notice of the resolution, Council further orders and hereby authorizes the City Building Inspector or the Chief Building Inspector's designates, to take any and all actions necessary, including entering onto the Property and engaging private contractors, to cap or seal the breached aquifer on the Property so as to prevent the flow of water from the aquifer onto the Property pursuant to Section 324A of the *Vancouver Charter*. Necessary steps may include the use of public streets for the construction of a temporary drainage system.

REPORT SUMMARY

This report recommends that as a precautionary measure Council declare a nuisance regarding the Property, in order to help ensure that a breached aquifer that is resulting in considerable surface water is remediated, and that any costs incurred by the City can be recovered. This will provide the City with appropriate legal authority to step in and address this issue, should that become necessary.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Section 324A of the *Vancouver Charter* authorizes Council to declare by by-law or resolution that any drain, ditch, watercourse, pond, surface water, or any other matter or thing in or upon any private or public lands is a nuisance, and to order that the matter be dealt with in accordance with the by-law or resolution.

Section 324A also authorizes the City to step in and take the action required if the owner fails to do the required work within 60 days of receipt of the notice.

Any expenses incurred as a result of action taken by the City after the 60-day period can be recovered as a debt or as taxes against the owner of the Property pursuant to section 336 of the *Vancouver Charter*.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The Acting City Manager RECOMMENDS approval of the foregoing.

REPORT

Background/Context

The Property is the site of a breached aquifer that is spilling groundwater, and the resulting surface water is flowing onto public lands. The breach in the aquifer resulted from a drilling operation undertaken to install a geoexchange system on the Property. The drilling company engaged by owner did not comply with Provincial regulations.

The City issued an order pursuant to the Building By-law on October 1, 2015, stating that the flow of groundwater amounted to an unsafe condition. A copy of that order is attached as Appendix "B". Since the initial breach of the aquifer the owner has been cooperative, and sought to remediate the issue. The owner has retained a reputable hydrologist/engineer to control, monitor and rectify the problem. The work to date has required considerable effort and expense, but water continues to flow from the breach in the aquifer. A plan to complete the work is in place.

The Regional Water Manager under the *Water Act*, R.S.B.C. 1996, c. 483 issued an order to the owner dated January 8, 2016, which requires the matter to be remediated in accordance with the order. A copy of that order and the accompanying cover letter is attached as Appendix "C".

The agent of the owner of the Property has informed the City and the Province that the owner intends to comply with the Province's order and control and stop the flow of water from the breached aquifer.

The City anticipates that the Province will take steps to complete the work required to seal the breached aquifer if the owner does not comply with the order. However, the remediation has proven to be expensive and the amount of work still needed to be done is significant. In order to seal the artesian well that has resulted on the Property, hundreds of meters of drainage pipe must be erected on the public streets to divert the water to a nearby sewer trunk main. The City is cooperating with the project, but is aware that it involves considerable expertise, and resources. It is possible that the work required is beyond the resources available to the owner. It is also possible that the Province will not be able to act in a timely manner if the owner defaults.

In order to best ensure that the City can take any and all steps necessary to seal the aquifer and recover the costs associated with taking that action, staff recommends that Council declare the surface water to be a nuisance, and authorize action in the event of a default.

Strategic Analysis

The City is not obligated to take any action under the proposed resolution. City staff anticipate that the owner will comply with the Province's order under the *Water Act*. City staff will not need to take any direct action unless the owner fails to do the necessary work, and if the Province does not seek to enforce its order.

If the proposed resolution is adopted and the City needs to take action, the City will be able to recover any expenses incurred under the resolution as a tax against the owner.

Financial

The proposed resolution authorizes the City to recover any expenses incurred as a tax against the owner. This position is preferable to seeking to realize on any expenses incurred as a mere debt.

CONCLUSION

Staff recommend adoption of the attached resolution in order to ensure that the nuisance resulting from the breached aquifer is remediated in a timely and cost effective manner.

* * * * *

In the Matter of Section 324A and Section 336
of the Vancouver Charter, SBC 1953, c.55 and
7084 Beechwood Street, Vancouver, B.C.

RESOLUTION

BE IT RESOLVED by the Council of the City of Vancouver in an open meeting:

1. THAT the breached aquifer and resulting water flowing from the aquifer on the property located at 7084 Beechwood Street, Vancouver, B.C., with the legal description of LOT 4 BLOCK 2 OF BLOCK 8 DISTRICT LOT 316 PLAN 7713, PID 010-362-495 (the "Property") are hereby declared to be a nuisance pursuant to section 324A of the *Vancouver Charter*, S.B.C. 1953, c.55;
2. THAT the registered owner of the Property is hereby ordered to cap or seal the breached aquifer on the Property safely, and under the oversight of a qualified professional engineer, so as to prevent the flow of water from the aquifer onto the Property within 60 days of a copy of this resolution being served on the owner pursuant to Section 324A of the *Vancouver Charter*;
3. THAT if the owner fails to comply with this resolution of Council within 60 days of service of this resolution, Council further orders and hereby authorizes the City Building Inspector or the City Building Inspector's designates, to take any and all steps necessary, including entering onto the Property and engaging private contractors, to cap or seal the breached aquifer on the Property so as to prevent the flow of water from the aquifer onto the Property pursuant to Section 324A of the *Vancouver Charter*. This may include the use of public streets for the construction of a drainage system; and
4. THAT if the City Building Inspector or designates take any steps pursuant to section 3 of this resolution, the City may recover the cost of taking such action against the registered owner of the property in accordance with sections 336 and 324A of the *Vancouver Charter*.

APPENDIX "B"



PLANNING AND DEVELOPMENT SERVICES

REGISTERED AND REGULAR MAIL

PLEASE REFER TO:
Mr. Mark Roozbahani
Deputy Chief Building Official
and Assistant Director
Building Inspections
at 604.873.7533
mark.roozbahani@vancouver.ca
I.R. # VI 11943

ORDER

October 1, 2015

Feng L. Liu (Owner)
2606 Edgar Crescent
Vancouver, BC
V6L 2G4

Libo Sun (Contractor)
5887 Adera Street
Vancouver, BC
V6P 5B9

Dear Sir/Madam:

RE: 7084 Beechwood Street

Dir: [Signature]
To: Jamie Hartley
Date: Oct 5
[Signature]

This concerns an unsafe condition that City staff observed at the above location.

A drilling operation at the above location related to a construction project inadvertently tapped into an aquifer. The drill site continues to discharge significant quantities of water. The water is being managed by pumping into the City storm system on an emergency basis. The subterranean effect of the large amount of water exiting the aquifer on the above ground is unknown.

This amounts to an unsafe condition, and is a violation of Sentence 1.3.3.5.(1) of the Building By-law, which reads as follows:

1.3.3.5. Unsafe Conditions

- 1) No person who is an owner or who is involved in the construction, relocation or occupancy of a building shall cause, allow or maintain any unsafe condition.

The Chief Building Official is authorized to issue orders to remove unsafe conditions. Pursuant to Articles 1.5.3.3 and 1.5.4.2. of Division C of the Building By-law, you are therefore **ORDERED TO:**

1. Stop all work related to construction at this site immediately, except for the work required otherwise by this order; **AND**
2. Cap the drill site and provide a report to the Chief Building Official from a registered professional experienced in the field and a geotechnical engineer of record with required actions and potential impacts no later than **October 3, 2015**.

Until the cap is in place, continue to manage the drainage of the water in coordination with the City of Vancouver Engineering and Building departments so as to minimize impact to City of Vancouver systems and neighbouring properties.

Further construction work may not proceed until the City is satisfied with the measures taken.

In the meantime, the above construction site is to be otherwise maintained in a safe and secure manner until the requirements of this Order have been met.

Yours truly,



P. Ryan, M. Sc., P. Eng.
Chief Building Official and
Director, Building Code and Policy

MC/CW/GM/ss

Copy: Posted on Site

! Sep 30, 2015


Property Report

Page: 1

Folio: 084-802-24-0000
Civic: 7084 BEECHWOOD ST
Size: 62 185.75 WIDTH/DEPTH

Pid: 010-362-495
Legal: LT 4 BLK 2 PL VAP7713 DL 316 NWD

Owner: LIU, FENG L
2606 EDGAR CRES
VANCOUVER BC V6L 2G4
(CA3344927)

 CITY OF VANCOUVER	Title Search Report Title: CA3344927 Printed: Oct. 1, 2015 12:54 PM
Application for registration received on: Sep. 12, 2013 Entered on: Sep. 23, 2013 Declared value: 2750000 From Title: D46898 Taxation Authority: City of Vancouver	
REGISTERED OWNERS IN FEE SIMPLE	
LIU, FENG LIN, BUSINESSMAN 2606 EDGAR CRESCENT VANCOUVER, BRITISH COLUMBIA V6L 2G4	Inc. No:
PARCELS	
Parcel Identifier: 010362495	Short Legal Description: S/7713//1/2//4
Description of Land: LOT 4 BLOCK 2 OF BLOCK 8 DISTRICT LOT 316 PLAN 7713	
LEGAL NOTATIONS	
<i>No legal notations</i>	
CHARGES	
<i>No recorded charges</i>	
* Caution -- all charges may not be shown or appear in order of priority * Current information only -- no cancelled information shown	

APPENDIX "C"



January 8, 2016

File: 38000-25/LMR51-VCR-BXUE

REGISTERED MAIL

Feng Lin Liu
7084 Beechwood Street
Vancouver, BC V6P 5V4

Kevin Li aka Zhikang Li (formal agent for Mr. Feng Lin Liu)
Palace Realty Inc.
5480 Main Street,
Vancouver, BC V5W 2R9

Dear Feng Lin Liu:

Re: Order under the *Water Act* regarding control or stop the flows of the artesian well on the parcel on 7084 Beechwood Street, Vancouver BC

Please find attached Order under the *Water Act* regarding control or stop the flows of the artesian well on the parcel on 7084 Beechwood Street, Vancouver BC.

You are also advised that you have a right to appeal this Order to the Environmental Appeal Board. Notice of any appeal must (1) be in writing, (2) include grounds for the appeal, (3) be directed by registered mail or personally delivered to the Chair, Environmental Appeal Board, 4th Floor, 747 Fort Street, PO Box 9425 Stn Prov Govt, Victoria, BC V8V 9V1, (4) be delivered within 30 days of receiving this Order; and (5) be accompanied by a fee of \$25, payable to the Ministry of Finance. However, if you wish to file an appeal from this Order, you are also reminded that an appeal does not act as a stay or suspend the operation of the Order being appealed unless the Appeal Board orders otherwise (section 92(9) of the *Water Act*).

Please do not hesitate to contact me at remko.rosenboom@gov.bc.ca or 604-586-4400 if you have any questions in regard to this Order.

Yours truly,

Remko Rosenboom
Regional Water Manager under the *Water Act*

Attachment

Ministry of Forests, Lands &
Natural Resource Operations

Resource Authorizations
South Coast Region

Mailing/Location Address:
2nd Fl., 10470-152 Street
Surrey BC V3R 0Y3

Telephone: (604) 582-5222
Facsimile: (604) 930-7119
<http://www.gov.bc.ca/for/>

cc: Patrick Ryan, Patrick Ryan M.Sc. P.Eng, Chief Building Official, City of Vancouver
Murray Watt, Natural Resource Officer, Ministry of Forest, Lands and Natural Resource
Operations



Province of British Columbia
Water Act

ORDER

under the

Section 88 (1) of the *Water Act* of British Columbia, RSBC 1996, c.483

IN THE MATTER the uncontrolled artesian well on the property located a 7084 Beechwood Street, Vancouver BC.

WHEREAS you Feng Lin Liu are listed as the registered owners of this parcel.

AND WHEREAS you hired GeoEnergia to install a geothermal loop on your property. GeoEnergia is not a qualified well driller or qualified professional, as defined by the *Water Act* and the Groundwater Protection Regulation

AND WHEREAS during the drilling required for this geothermal loop a confined aquifer under artesian pressures was encountered, and a flowing artesian well was created.

AND WHEREAS according to Section 77 (2) of the *Water Act* GeoEnergia was obligated to engage a qualified well driller or qualified professional but failed to do so and left the site, disengaging itself from the situation.

AND WHEREAS you are the well owner, as well as the land owner where this well is located, and per Section 77 (4) (5) and (6) of the *Water Act* it is consequently your responsibility to engage a qualified well driller or qualified professional to ensure that the flow of the well is stopped or brought under control.

AND WHEREAS you have previously retained the services of BC Groundwater Consulting Services Ltd. who is a qualified professional experienced in stopping or controlling artesian wells.

AND WHEREAS BC Groundwater Consulting Services Ltd. has to date not been able to either bring the flow of this well under control or stop flow from this well, but recently prepared a plan for next steps to be taken, also referred to as *Bin Xue residence: artesian geothermal borehole control action plan, 7084 Beechwood Street (Vancouver BC)*.

AND WHEREAS this plan is reviewed by Mike Simpson, P.Geo Regional Hydrogeologist with the Ministry of Forest, Lands and Natural Resource Operations and considered to be a reasonable plan to implement as an attempt to control or stop the flow of this artesian well. He recognizes that dependent on the actual effectiveness of this plan and the development of the artesian well itself additional measures could be required.

AND WHEREAS BC Groundwater Consulting Services Ltd. confirmed that the rate of discharge has increased significantly over the last 2 months and that urgent action is required in order to retain the ability to control or completely stop flow from this well. Otherwise the possibility of the formation of a sinkhole would increase, resulting in potential damage to neighbouring properties and public infrastructure.

AND WHEREAS because of the potential for damage to public infrastructure, neighbouring properties and unknown alteration to the groundwater situation in the area, I support the need to completely stop or control the flow of this artesian well as soon as is reasonably possible.

AND WHEREAS there are currently no actions being undertaken to achieve this objective, while you are as per Section 77 (4), (5) and (6) of the *Water Act* responsible to do so.

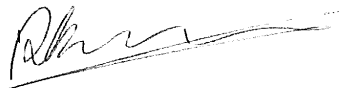
AND WHEREAS failure to do so is considered to be an offence under the Section 93 (3) (i) of the *Water Act*.

AND WHEREAS, pursuant to section 88(1)(d) of the *Water Act*, an Engineer, which includes a Regional Water Manager, may order, among other thing, the closure of works, including a well;

NOW THEREFORE, I, Remko Rosenboom, as Regional Water Manager under the *Water Act*, hereby order, pursuant to sections 77 and 88 of the *Water Act*, that you, Feng Lin Liu undertake the following actions:

1. Confirm in writing by Monday January 11, 2016 5pm that:
 - a. you have engaged a qualified professional or qualified well driller to implement the plan *Bin Xue residence: artesian geothermal borehole control action plan, 7084 Beechwood Street (Vancouver BC)* and any other measures required to comply with Section 77 of the *Water Act*;
 - b. an updated schedule for all these measures will be submitted by January 13, 2016 8pm; and,
 - c. the implementation of this measures will start by the January 15, 2016 8am at the latest.
2. For the duration of these measures to be implemented, have your qualified professional or qualified well driller:
 - a. Submit bi-weekly progress reports which at least include:
 - i. A summary of flow monitoring results;
 - ii. The progress made in scheduled measures;
 - iii. Any unexpected developments; and,
 - iv. Any amendments to measures and schedule.These progress reports should be submitted to Mike Simpson at mike.simpson@gov.bc.ca
 - b. Notify me within 24 hours of any incidents that impacted or could result in impacts to the environment (including aquifer) and assets other than yours to me at remko.rosenboom@gov.bc.ca or 604-586-2803.
 - c. Implement any conditions or directions I might provide to you as a result of information submitted.

Dated at Surrey, British Columbia this 8th day of January, 2016.



Remko Rosenboom
Regional Water Manager under the *Water Act*