

City of Richmond

Report to Committee

To:

Planning Committee

From:

Jenny Beran, MCIP

Planner, Urban Development

Re:

DRAINAGE PLANS

To Council- June 24/02

To Planning- June 18/02 Date: May 30, 2002

File: 8060-20-7313

8060-20-7317

8060-20-7318

8060-20-7325 8060-20-7326

Staff Recommendation

That Bylaws:

7313 for 10571 Williams Road;

7314 for 11171 and 11191 Williams Road;

7317 for 11231 Williams Road;

7318 for 11671 Williams Road;

7325 for 10091 Williams Road; and

7326 for 11271 Williams Road

for rezoning from Single Family Housing District, Subdivision Area E (R1/E), to Single Family Housing District, Subdivision Area K (R1/K), be forwarded to Public Hearing.

Sevelopment Applications

Att.

FOR ORIGINATING DIVISION USE ONLY		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Sewerage & Drainage	Y 🖬 🗥 🗆	Muid wall

Staff Report

Origin

A number of rezoning applications in the 10,000 and 11,000 blocks of Williams Road (Attachment 1) were in differing stages of processing when it became apparent that the subject area was experiencing some drainage problems that may be affected by an increase in the number of housing units in the area.

Bylaws 7313, 7314, 7317, and 7318 were considered at the February Public Hearing (see Attachment 2 for full report) and Bylaws 7325 and 7326 were considered at the March Public Hearing (see Attachment 3 for full report). Council passed resolutions that the applications be referred to another Public Hearing subject to the rezoning requirement that the applicant provide a drainage plan for each lot that demonstrates no substantial increase in storm water runoff over what is permitted under the existing zoning. Council at this time also passed a resolution putting a hold on future redevelopment in this area until further information is available regarding the sanitary sewerage and storm drainage issues.

The City is now in receipt of the drainage plans for all of the subject properties and this report brings these applications forward once again for consideration at Public Hearing.

Findings Of Fact

Engineering Planning staff have reviewed the drainage plans submitted (one sample is shown on **Attachment 4**) for the subject properties and have found them to comply with the requirements to show that there is no substantial increase in runoff for the proposals over what is permitted under the existing zoning.

Analysis

The drainage plans provided for each of the subject rezoning applications show that there is no increase in the runoff that would result for the subject applications over what would be permitted to be built under the existing zoning. Staff do note that most of the existing dwellings result in 50% impervious surface on the properties whereas 80% is permitted under the R1 zone. Therefore, while there is not an increased runoff in terms of what is permitted, there will be an increased runoff when compared to what is actually built on these properties.

Financial Impact

None.

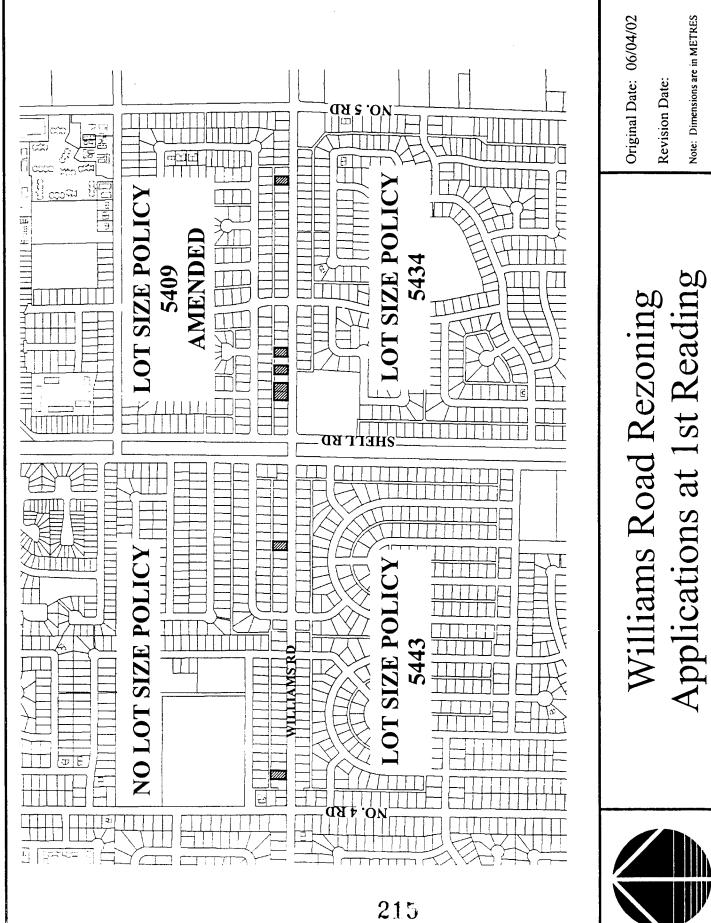
Conclusion

Drainage plans in conformance to the Council referral have been submitted for the rezoning applications along the 10,000 and 11,000 blocks of Williams Road. The bylaws for these six applications (seven properties) are currently sitting at first reading and staff recommend that they be forwarded to Public Hearing.

Jenny Beran, MCIP

Planner, Urban Development

JMB:cas





City of Richmond Urban Development Division

Manager, Development Applications

Report to Committee

To:

Planning Committee

Date:

December 20, 2001

From:

Joe Ercea

File:

RZ 01-195817

RZ 01-196031

RZ 01-197729

RZ 01-197785

Re:

APPLICATION BY BALJINDER LALLY FOR REZONING AT 10571 WILLIAMS ROAD FROM SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA E (R1/E) TO SINGLE-

FAMILY HOUSING DISTRICT, SUBDIVISION AREA K (R1/K)

APPLICATION BY OREST PERRY FOR REZONING AT 11171 & 11191 WILLIAMS ROAD FROM SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA E (R1/E) TO SINGLE-

FAMILY HOUSING DISTRICT, SUBDIVISION AREA K (R1/K)

APPLICATION BY M.C.S. DEVELOPMENT LTD. FOR REZONING AT 11231 WILLIAMS ROAD FROM SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA E (R1/E) TO

SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA K (R1/K)

APPLICATION BY UNIQUE DEVELOPMENTS LTD. FOR REZONING AT 11671 WILLIAMS ROAD FROM SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA E (R1/E) TO SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA K (R1/K)

Staff Recommendation

- 1. That Bylaw No. 7313, for the rezoning of 10571 Williams Road from "Single-Family Housing District, Subdivision Area E (R1/E)" to "Single-Family Housing District, Subdivision Area K (R1/K)", be introduced and given first reading.
- 2. That Bylaw No. 7314, for the rezoning of 11171 and 11191 Williams Road from "Single-Family Housing District, Subdivision Area E (R1/E)" to "Single-Family Housing District, Subdivision Area K (R1/K)", be introduced and given first reading.
- 3. That Bylaw No. 7317, for the rezoning of 11231 Williams Road from "Single-Family Housing District, Subdivision Area E (R1/E)" to "Single-Family Housing District, Subdivision Area K (R1/K)", be introduced and given first reading.
- 4. That Bylaw No. 7318, for the rezoning of 11671 Williams Road from "Single-Family Housing District, Subdivision Area E (R1/E)" to "Single-Family Housing District, Subdivision Area K (R1/K)", be introduced and given first reading.

Joe Erceg

Manager, Development Applications

JE:imb Att.

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Staff Report

Origin

Applications have been received by:

- Baljinder Singh Lally at 10571 Williams Road (Attachment 1)
- Orest Perry at 11171 and 11191 Williams Road (Attachment 2)
- Amarjit Nahal at 11671 Williams Road (Attachment 3); and
- Michael Li at 11231 Williams Road (Attachment 4).

to rezone from Single-Family Housing District, Subdivision Area E (Rl/E) (18m or 59 ft wide lots) to Single-Family Housing District, Subdivision Area K (Rl/K) (10m or 32.8 ft wide lots) in order to permit each property to be subdivided into two single-family residential lots.

Findings of Fact

Item	Existing	Proposed	
Owner	10571 Williams - Baljinder & Baljit Lally	To be determined	
	11171 Williams - Regis Ribaille & Cui Mo		
	11191 Williams – International Earthcare Inc.		
	11671 Williams – Rapinder Aujla, Unique Developments, Dhian Mehat		
	11231 Williams- Yuen Wu		
Applicant	10571 Williams - Baljinder & Baljit Lally	No change	
	11171 & 11191 Williams - Orest Perry		
	11671 Williams Road - Amarjit Nahal		
	11231 Williams Road - Michael Li		
Site Size	10571 Williams - 674 m² (7255 ft²)	Five additional lots – 10	
	11171,11191,11671 & 11231 Williams - 651 m ² (7008 ft ²)	new small lots in total. Each lot approx. 330 m ² (3552 ft ²)	
Land Uses	Single Family	No change	
OCP Designation	Low-Density Residential	No change	
Zoning	R1/E	R1/K	

Surrounding Development

Development along Williams Road is primarily older single family homes zoned R1/E with some new homes and townhomes. The majority of the lots in these two blocks have similar development potential due to the existing lane systems.

Related Policies & Studies

Lot Size Policy

The Lot Size Study for the lots in the 11,000 block of Williams Road was recently amended to remove the lots fronting Williams Road from the Study area. There are no Lot Size Policies for the neighbourhoods surrounding the 10,000 block of Williams Road. As the subject lots are along arterial roads, there is no need to conduct Lot Size studies.

Lane Policy

The subject sites are currently serviced by existing 6 m (20 ft) wide lanes. However, the lanes are not built to current standards, therefore the applicants will be responsible for the costs associated with upgrading the lanes.

Arterial Road Redevelopment Policy

The proposed rezonings are consistent with the Arterial Road Redevelopment Policy which supports single family character housing generally along major roads in conjunction with lanes.

Staff Comments

Land Use

There are approximately 200 lots along arterial roads throughout Richmond that are served by lanes that have the potential to subdivide to R1/K (10 m or 32.8 ft wide lots) and 15 lots that have the potential to subdivide to R1/A (9 m or 29.5 ft wide lots). The City has now approved rezoning for five of these lots and it is expected that there will continue to be a number of other applications to rezone and subdivide these lots.

Staff have discussed the possibility of rezoning the complete block face with the individual applications in order to alleviate the necessity to bring each property forward individually for rezoning. However, there are some issues with prezoning which include the potential affect on the assessed values of properties, the ability to assess Neighbourhood Improvement Charges at the subdivision stage and that it would create concern for those who have no intention of redeveloping their property.

Engineering Comments

Prior to final reading of the bylaws the developers shall enter into standard "NIC" agreements complete with payments for full lane upgrades based on frontage times the current rates for lighting, roll curb & gutter and storm sewer.

As per the new Residential Lot Access Regulation Bylaw 7222, access to arterial roads is restricted where alternate vehicular access exists. Therefore a covenant is no longer required limiting vehicular access to Williams Road. The existing driveway to 10571 Williams Rd. will be removed as a condition of subdivision approval when the servicing fees, DCC's and other monies to be collected will be determined.

No offsite works are required for Williams Road as it was just fully upgraded about three years ago, with the possible exception of a tree being placed where the driveway currently is at 10571 Williams Road.

Analysis

The subject applications are consistent with Official Community Plan Policy and the Arterial Road Redevelopment Policy which support the introduction of single family character housing along arterial roads in conjunction with lanes. This form of redevelopment is the prime opportunity to introduce smaller more affordable housing into Richmond and is consistent with population projections over the next 20 to 30 years.

Financial Impact

None.

Conclusion

Applications have been made to rezone 10571, 11171, 11191, 11231 and 11671 Williams Road to R1/K size lots (10m or 32.8 ft wide lots). All sites are along major arterial roads and are served by existing lanes. Staff are supportive of the applications as they provide opportunities to introduce smaller, affordable housing units.

Jenny Beran, MCIP

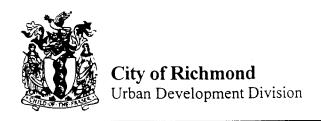
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Planner, Urban Development

JMB:cas

There are requirements to be dealt with prior to final adoption:

Prior to final reading of the bylaws the developers shall enter into standard "NIC" agreements complete with payments for full lane upgrades (lighting, roll curb & gutter and storm sewer).



Report to Committee

To:

Planning Committee

Date:

January 14, 2002

From:

Joe Erceg

File:

RZ 01-198983

Manager, Development Applications

RZ 02-199174

Re:

APPLICATION BY CHANE SINGH FOR REZONING AT 10091 WILLIAMS ROAD

FROM SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA E (R1/E) TO

SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA K (R1/K)

APPLICATION BY JOE UPPAL FOR REZONING AT 11271 WILLIAMS ROAD FROM SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA E (R1/E) TO

SINGLE-FAMILY HOUSING DISTRICT, SUBDIVISION AREA K (R1/K)

Staff Recommendation

That Bylaw No. 7325, for the rezoning of 10091 Williams Road from "Single-Family Housing District, Subdivision Area E (R1/E)" to "Single-Family Housing District, Subdivision Area K (R1/K)", be introduced and given first reading.

That Bylaw No. 7326, for the rezoning of 11271 Williams Road from "Single-Family Housing District, Subdivision Area E (R1/E)" to "Single-Family Housing District, Subdivision Area K (R1/K)", be introduced and given first reading.

Manager, Development Applications

JE:jmb Att.

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CONCURRENCE OF GENERAL MANAGER

Staff Report

Origin

Two applications that have been received by:

- Chane Singh at 10091 Williams Road (Attachment 1); and
- Joe Uppal at 11271 Williams Road (Attachment 2)

to rezone from Single-Family Housing District, Subdivision Area E (Rl/E) (18m or 59 ft wide lots) to Single-Family Housing District, Subdivision Area K (Rl/K) (10m or 32.8 ft wide lots) in order to permit each property to be subdivided into two single-family residential lots.

Findings of Fact

PART 1

Item	Existing	Proposed
Owner	10091 Williams – Uttam Chane & Jaspal Chane	To be determined
	11271 Williams – Dora Yeung & Saleh Haidar	
Applicant	10091 Williams – Chane Singh	No change
	11271 Williams – Joe Uppal	
Site Size	10091 Williams - 744 m² (8008 ft²)	Two lots 372 m ² (4004 ft ²)
	11271 Williams - 651 m² (7008 ft²)	Two lots 325.5 m ² (3504 ft ²)
Land Uses	Single Family	No change
OCP Designation	Low-Density Residential	No change
Zoning	R1/E (18m or 59 ft wide)	R1/K (10m or 32.8 ft wide)

Surrounding Development

Development along Williams Road is primarily older single family homes zoned R1/E with some new homes and townhomes. The majority of the lots in these two blocks have similar development potential due to the existing lane systems.

Including the subject applications, there have now been 12 applications along the 10,000 and 11,000 blocks of Williams Road to subdivide into two lots. It is expected that this trend will continue.

Related Policies & Studies

Lot Size Policy

The Lot Size Study for the lots in the 11,000 block of Williams Road was recently amended to remove the lots fronting Williams Road from the Study area. There are no Lot Size Policies for the neighbourhoods surrounding the 10,000 block of Williams Road. As the subject lots are along arterial roads, there is no need to conduct Lot Size studies.

Lane Policy

The subject sites are currently serviced by existing 6 m (20 ft) wide lanes. However, the lanes are not built to current standards, therefore the applicants will be responsible for the costs associated with upgrading the lanes.

Arterial Road Redevelopment Policy

The proposed rezonings are consistent with the Arterial Road Redevelopment Policy which supports single family character housing generally along major roads in conjunction with lanes.

Staff Comments

Land Use

City-wide, there are approximately 200 lots along arterial roads that are already served by lanes that have the potential to subdivide to R1/K (10 m or 32.8 ft wide lots) and 15 lots that have the potential to subdivide to R1/A (9 m or 29.5 ft wide lots). This proposed redevelopment is consistent with the OCP, Arterial Road Redevelopment Policy and population projections.

Engineering Comments

Prior to final reading of the bylaws the developers shall enter into our standard "NIC" agreement complete with payment for full lane upgrade based on frontage times the current rates for street lighting, roll curb & gutter, and lane improvements (includes storm sewer).

As per the Residential Lot Access Regulation Bylaw 7222, no vehicular access is permitted to Williams Road as there is an existing lane.

The portion of the driveway for 10091 Williams Road must be removed and the curb restored at the developers sole cost at the subdivision stage.

Servicing fees and DCC's will be determined with the future subdivisions. No offsite works are required for Williams Road as it was just upgraded about four years ago.

Analysis

The subject applications are consistent with Official Community Plan Policy and the Arterial Road Redevelopment Policy which support the introduction of single family character housing along arterial roads in conjunction with lanes. This form of redevelopment is the prime opportunity to introduce smaller more affordable housing into Richmond and is consistent with population projections over the next 20 to 30 years.

Financial Impact

None.

Conclusion

Applications have been made to rezone 10091 and 11271 Williams Road to R1/K size lots (10m or 32.8 ft wide lots). All sites are along major arterial roads and are served by existing lanes. Staff are supportive of the applications as they provide opportunities to introduce smaller, affordable housing units.

Jenny Beran, MCIP

Planner, Urban Development

JMB:cas

There are requirements to be dealt with prior to final adoption:

Prior to final reading of the bylaws the developers shall enter into standard "NIC" agreements complete with payments for full lane upgrades (lighting, roll curb & gutter and storm sewer)

cc Paul Lee

6 May 2002

City of Richmond 6911 No. 3 Road Richmond, BC V6Y 2C1

Attn: Jenny Beran

Re: RZ 01-198983

10091 Williams Road

Dear Jenny,

Further to your letter of May 1, 2002, we have assessed the drainage matters you have referred to and present our findings herein.

Under the current zoning, the maximum flow calculation is as follows.

Current zoning:

R1/E

Site Area:

0.074Ha

According to bylaw 5300, section 202.3

Maximum non-porous coverage:

80%

Therefore

Non-porous area = 80% of 0.074 =

0.059Ha

Landscape Area = 20% of 0.074 =

0.015Ha

Run off generated = (run off coefficient)(area)(rain intensity)

 $= \{0.9(non-porous area) + 0.25(landscape area)\}\{19.5/360\}$

 $= \{0.9(0.059) + 0.25(0.015)\}\{19.5/360\}$

= 0.0031 cms

*denotes David S. Lee Engineering Ltd.

Telephone: (604) 276-2555 Suite 308 - 8171 Cook Rd, Richmond, BC, Canada V6Y 3T8 Facsimile: (604) 276-0050 Email: davelee@dslengineering.com Web Site: www.dslengineering.com 224

For the proposed new zoning of the subject parcel, the maximum flow calculation is as follows.

Proposed zoning:

R1/K

Site Area:

0.074Ha

According to bylaw 5300, section 202.3

Maximum non-porous coverage:

80%

Therefore

Non-porous area = 80% of 0.074 =

0.059Ha

Landscape Area = 20% of 0.074 =

0.015Ha

Run off generated = (run off coefficient)(area)(rain intensity)

= {0.9(non-porous area) + 0.25(landscape area)}{19.5/360}

 $= \{0.9(0.059) + 0.25(0.015)\}(19.5/360)$

= 0.0031 cms

Based on the zoning regulations contained in bylaw 5300 and these calculations there is no increase in the storm runoff generated by maximum build-out under the proposed zoning compared to maximum build-out under the existing zoning.

Yours truly,

DS Lee Engineering

: 559



REPORT TO COUNCIL

TO: Richmond City Council To Council- MARCH 25,2002

DATE: March 21, 2002

FROM:

Councillor Bill McNulty, Chair

FILE: 8060-20-

7313/7314/7317/7318

Planning Committee

RE:

WILLIAMS ROAD REZONING APPLICATIONS STATUS UPDATE

The Planning Committee, at its meeting held on Tuesday, March 19, 2002, considered the attached report, and recommends as follows:

COMMITTEE RECOMMENDATION

- (1) That new applicants for rezoning in the 10,000 and 11,000 block of Williams Road, the 10,000 block of Shell Road and the 10,000 block of No. 4 Road be advised that their applications will not be processed until staff report to Council in approximately one vear with further information regarding the sanitary sewerage and storm drainage issues in the area:
- (2) That the rezoning applications which have not received first reading or proceeded to Committee or Council (11111 Williams Road (RZ 02-201789), 11471 Williams Road (RZ 02-200844), 10120 Williams Road (RZ 01-198290) and 10451 Shell Road (RZ 01-198474)), be given the option of withdrawing their applications with a full refund, or having their applications put on hold for approximately one year when staff will report back to Council with further information regarding the sanitary sewerage and storm drainage issues in the area.
- (3) That the rezoning applications that proceeded to the February and March Public Hearings with the appropriate rezoning signage (10571 Williams Road - RZ 01-195817 - Bylaw 7313; 11171 and 11191 Williams Road - RZ 01-196031 - Bylaw 7314; 11231 Williams Road - RZ 01-197729 – Bylaw 7317 be referred to another Public Hearing subject to each applicant providing a drainage plan for each lot (showing that there is no substantial increase in runoff over what is permitted under the existing zoning) prior to consideration of adoption.
- (4) That the rezoning application that proceeded to the February 2002 Public Hearing without the appropriate rezoning signage (RZ 01-197785 - 11671 Williams Road -Bylaw 7318) be referred to another Public Hearing, subject to the rezoning requirement that the applicant provide a drainage plan for each lot that demonstrates no substantial increase in stormwater runoff over what is permitted under the existing zonina.

Councillor Bill McNulty, Chair Planning Committee

Attach.

VARIANCE

Please note that staff recommended the following for (3) and (4):

- (3) That the rezoning applications that proceeded to the **February Public Hearing** with the appropriate rezoning signage (10571 Williams Road RZ 01-195817 Bylaw 7313; 11171 and 11191 Williams Road RZ 01-196031 Bylaw 7314; 11231 Williams Road RZ 01-197729 Bylaw 7317) be given second and third reading subject to each applicant providing a drainage plan for each lot (showing that there is no substantial increase in runoff **over the existing situation**) prior to consideration of adoption.
- (4) That the rezoning application that proceeded to the February 2002 Public Hearing without the appropriate rezoning signage (RZ 01-197785 11671 Williams Road Bylaw 7318) be referred to another Public Hearing, subject to the rezoning requirement that the applicant provide a drainage plan for each lot that demonstrates no substantial increase in stormwater runoff **over the existing situation.**



City of Richmond

Report to Committee

To Council- MARCH 25, 2002

To Planning MARCH 19, 2002

To:

Planning Committee

Date:

March 6, 2002

From:

Joe Ercea

File:

8060-20-7313, 8060-20-7314,

Manager, Development Applications

8060-20-7317, 8060-20-7318

Re:

WILLIAMS ROAD REZONING APPLICATIONS STATUS UPDATE

Staff Recommendation

- 1. That the City advise new applicants for rezoning in the 10,000 and 11,000 block of Williams Road, the 10,000 block of Shell Road and the 10,000 block of No. 4 Road that their applications will not be processed until staff report back to Council in approximately one year with further information regarding the sanitary sewerage and storm drainage issues in the area;
- 2. That the rezoning applications which have not received first reading or proceeded to Committee or Council (11111 Williams Road (RZ 02-201789), 11471 Williams Road (RZ 02-200844), 10120 Williams Road (RZ 01-198290) and 10451 Shell Road (RZ 01-198474)) be given the option of withdrawing their applications with a full refund or having their applications put on hold for approximately one year when staff will report back to Council with further information regarding the sanitary sewerage and storm drainage issues in the area.
- 3. That the rezoning applications that proceeded to the February Public Hearing with the appropriate rezoning signage (10571 Williams Road - RZ 01-195817 - Bylaw 7313; 11171 and 11191 Williams Road - RZ 01-196031 - Bylaw 7314; 11231 Williams Road - RZ 01-197729 - Bylaw 7317) be given second and third reading subject to each applicant providing a drainage plan for each lot (showing that there is no substantial increase in runoff over the existing situation) prior to consideration of adoption.
- 4. That the rezoning application that proceeded to the February 2002 Public Hearing without the appropriate rezoning signage (RZ 01-197785 - 11671 Williams Road - Bylaw 7318) be referred to another Public Hearing subject to the rezoning requirement that the applicant provide a drainage plan for each lot that demonstrates no substantial increase in stormwater runoff over the existing situation.

Joe Erceg

Manager, Derelopment Applications

Att.

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Engineering Planning	Y Ø N 🗆	Muchilelle	

Staff Report

Origin

There are currently 12 applications in various stages of the rezoning process with the City in the area of Williams and Shell Roads (see chart below and Attachment 1).

File	Address	Bylaw	Status
RZ 01-114608	11611, 11631, 11651	7239	Adopted
	Williams Road		702 Policy 5409 Amended
		-	Not yet Subdivided
RZ 01-194842	10531 Williams Road	7295	Adopted
			Not yet Subdivided
RZ 01-195817	10571 Williams Road	7313	Public Hearing Feb 18, 2002
			Referred to staff
RZ 01-196031	11171, 11191 Williams	7314	Public Hearing Feb 18, 2002
	Road		Referred to staff
RZ 01-197729	11231 Williams Road	7317	Public Hearing Feb 18, 2002
			Referred to staff
RZ 01-197785	11671 Williams Road	7318	Public Hearing Feb 18, 2002
			Referred to staff
RZ 01-198983	10091 Williams Road	7325	Public Hearing March 18, 2002
RZ 02-199174	11271 Williams Road	7326	Public Hearing March 18, 2002
RZ 01-198290	10120 Williams Road		702 Policy 5443 Requires Amending
RZ 01-198474	10451 Shell Road		702 Policy 5443 Requires Amending
RZ 02-200844	11471 Williams Road		In Circulation
RZ 02-201789	11111 Williams Road		In Circulation

Council has recently heard from the public and staff regarding some sanitary and storm drainage issues in this area. The purpose of this report is to:

- Recommend actions with regard to the rezoning applications currently still in process with the City in the subject area; and
- Respond to the following Council referral from the February 18th, 2002 Public Hearing:
 - 1) confirmation that a Development Application Permit sign was in place on the subject property; and
 - 2) a report on the drainage issues of the area which would include:
 - i) information on the impact of fill required for new development;
 - ii) the street elevations;
 - iii) what development can take place without drainage implications;
 - iv) a timeline in which the issues would be addressed.

Findings Of Fact

Sanitary

System Description

The sanitary system in the subject area is approximately 35 years old and is a part of the Edgemere and Sherman pump station catchments. Both stations pump sewage into the trunk forcemain along Williams Road, which was extended about five years ago to connect to the Shell Road forcemain, and then flows south along Shell Road into the GVRD trunk main and eventually to the Lulu Island Treatment Plant (see Figure 2).

Issue

There are two sanitary sewer issues in this area. The first more pressing issue has to do with some overflows from the forcemain along Williams Road. The second issue relates to the service to individual properties. Both issues are exacerbated in periods of high rainfall due to high inflow and infiltration from groundwater and rainfall into the system. Staff are not clear as to the exact cause of each of the issues, however, problems with service to individual properties, which occurs in all parts of Richmond to some degree, can relate in part to maintenance problems such as roots or grease in the system.

Response

- 1. City crews have already started undertaking structural assessments of the system to remove blockages and mend broken pipes which helps the problems with service to the individual properties. This work will continue throughout the whole Shellmont catchment area over the next few months and should increase the effectiveness of the system.
- 2. Staff has also just begun working on a sanitary hydraulic model which will help determine the causes of the overflows in the forcemain as well as enable staff to assess whether the system can handle additional capacity from the subdivision of properties. This flow monitoring work will be **complete in approximately September of 2002** at which time staff will be able to provide a more detailed assessment of the situation, make recommendations on improvements to the sanitary system for the neighbourhood and make a recommendation to Council on whether to permit additional rezoning of lots.
- 3. In the meantime, staff have made some temporary adjustments to the Williams Road forcemain system to address the overflow problems while further analysis occurs.

Storm Drainage

System Description

The storm sewers within the subject neighbourhoods are approximately 37 years old while the portion along Williams Road was upgraded in 1996 when Williams Road was widened. The system directs the flow along Williams Road to a major ditch on Shell Road and then a lift station at Shell Road and Steveston Hwy moves the stormwater towards the Horseshoe Slough pump station (see Figure 1).

Issue

Annually, for at least the last 5 years, numerous flooding occurrences have been reported by the public as well as by staff in the area south of Williams Road between No. 4 Road and Shell Road and in the area north of Williams Road between Shell Road and No. 5 Road. The storm drainage system for the City as a whole was designed in such a way that it was deemed acceptable for the system to surcharge from time to time, however, this area seems to be affected by flooding to a greater degree and staff and Council have heard from numerous residents in the area with regard to flooding of individual properties.

Response

- 1. The pump station at Shell Rd and Steveston Hwy was inspected for possible malfunctions and improper settings and repairs have been made to one pump and settings have been adjusted that should assist with the drainage problems.
- 2. A video inspection of the storm pipes in the area is being carried out to determine whether localized problems are present such as blocked or collapsed pipes.
- 3. Staff are currently reviewing the replacement program for the numerous pump stations throughout the City and the pump station at Shell Rd/Steveston Hwy has been identified as a priority. The infill of the Shell Road ditch has been scheduled in the Capital Program, and staff will be reviewing the timing for this work.
- 4. Staff have recently conducted a geographic survey of the area to help identify possible causes of the flooding (i.e. low spots, reverse grade). However, because the drainage system is a complicated system of interconnected pipes and pumps, the cause of the problem is not always easy to identify. In order to properly identify the causes of the problems a computer drainage model is being developed by Engineering Planning to simulate the real life conditions and will be **complete in approximately March 2003**. At that time staff can report back to Council on the sources of the problems and options to remedy the situation.
- 5. In the meantime, City staff do take measures to try to reduce the flooding in the City by pumping down the water in the ditches immediately prior to a storm to provide additional storage capacity. While the pumps are set to turn on automatically at different levels they can not always keep up with the large storms like the City experienced in December 2001.

Development Application Signage

Of the five applications that were reviewed at the February 18th, 2002 Public Hearing, one applicant (11671 Williams - RZ 01-197785) failed to erect signage but has since, at the time of writing this report, erected the necessary rezoning sign. The Clerk advises that this application will have to be reviewed once again at another Public Hearing.

Two of the newer applications that are still being processed need signage before they will be presented to Committee or Council.

Analysis

One of the more common concerns that staff and Council hear from some of the long time residents in Richmond have to do with flooding of individual properties in periods of high rainfall. This is symptomatic of Richmond being situated in a floodplain and its heavy reliance on its pumping and dyke system. As redevelopment occurs in Richmond overall, storm drainage will continue be an issue and will likely become more acute, especially for the older lower lying properties.

This is for two reasons. As more properties are raised there are less places for the water to sit while it is absorbed into the groundwater system. Additionally, drainage from impervious surfaces such as roofs or driveways funnels water more directly into the storm drainage system creating higher peak volumes than when the water would have entered the system more slowly through the ground or yards.

Staff note that there are no requirements to fill individual properties to a certain level either:

- to meet building requirements; or
- to meet floodproofing requirements as West Richmond is in the Floodplain Exemption Area.

With the work that is being done on the assessment of the sanitary and storm drainage systems, staff will be better able to pinpoint the areas with the greatest problems, such as the subject area, make adjustments to accommodate the problems and make recommendations as to some of the capital investments that will be required to improve service.

In the meantime, dispersed redevelopment of properties elsewhere over West Richmond is not a concern. However, in the subject area where there are some existing drainage issues coupled with a higher level of redevelopment activity with the potential to add 40 new people per year over the next few years, a specific response is required.

In terms of dealing with the rezoning applications in the area, staff recommend that the applications that have not yet proceeded to Planning Committee or Council be put on hold, however, for the seven lots that have had 1st reading Council has three options:

Option 1 – Permit the Applications to Proceed

Under this option, the applications would proceed to Council for 2nd and 3rd readings and there would be the potential to add additional lots in the area. This option recognizes that the applicants have made some financial and time commitments. However, engineering staff point out that while they can't say the exact effect of the additional development due in part to the unpredictable nature of the weather, there will be a greater chance of additional flooding in these neighbourhoods. In view of this situation, the City Solicitor does not support this option.

Option 2 – Put the Applications on Hold

Under Option 2, the applications would be put on hold for approximately 12 months until staff reports back to Council with further information regarding the sanitary sewerage and storm drainage issues in the area. However, while this option would be justifiably cautious, staff believe that there should be some other options available that address the issues at hand and don't require the seven lots to be put on hold.

Option 3 – Permit the Applications to Proceed with Drainage Sensitive Designs

Option 3 recognizes that there may be some other ways to address the drainage issues. Under this option the applicants would submit a drainage plan for each new lot which demonstrates that stormwater runoff will not increase substantially, and which Engineering staff have agreed to review, as part of the 4th reading requirements. These drainage designs could address details such as the level of fill of the lot, the extent and method of containing roof top runoff, or the amount of impervious surface. Ultimately, Engineering Planning would have to be satisfied that the designs will not substantially increase the amount of runoff over what is permitted to be built under the existing zoning or compound the surface drainage issues.

It should be noted that with any of these options the applicants could abandon their rezoning applications in favour of building a large house on the property (which could not be denied based on sanitary sewerage or storm drainage issues).

The following chart outlines the rezoning applications in their various stages and the corresponding recommended actions.

Status of Rezoning Application	Application	Recommended Action
Potential new applications		Advise applications will not be processed until staff reports back
Not received 1 st reading	RZ 02-201789 (11111 Williams) RZ 02-200844 (11471 Williams)	Put on hold with option of withdrawal
Not received 1 st reading but 702 Policy amendment process initiated by staff	RZ 01-198290 (10120 Williams) RZ 01-198474 (10451 Shell)	Put on hold with option of withdrawal
Received 1 st reading and proceeded to Feb 18 th , 2002 Public Hearing	RZ 01-195817 (10571 Williams) RZ 01-196031 (11171 Williams, 11191 Williams) RZ 01-197729 (11231 Williams)	Proceed with Drainage Sensitive Designs
Received 1 st reading and proceeded to Feb 18 th , 2002 Public Hearing	RZ 01-197785 (11671 Williams)	Send back to Public Hearing (signage) & Proceed with Drainage Sensitive Designs
Received 1 st reading and will be proceeding to Mar 18 th , 2002 Public Hearing	RZ 01-198983 (10091 Williams) RZ 02-199174 (11271 Williams)	To be determined
Received 4 th reading	RZ 01-114608 (11651 Williams, 11631 Williams, 11611 Williams) RZ 01-194842 (10531 Williams)	Complete. Subdivision status still to be resolved.

Financial Impact

None.

Conclusion

There are a number of applications in process with the City in the Williams and Shell Road areas. Until staff report back to Council in approximately six months regarding the sanitary sewerage and in approximately one year regarding the storm drainage issues in the neighbourhood, it is recommended that:

- New applications in the area be tabled until staff reports back to Council regarding the sanitary sewerage and storm drainage issues in the area;
- Applications that have recently been received by the City or which involve a proposed Lot Size Policy amendment, but have not been considered by Committee or Council, have the option of withdrawing their applications with a full refund or being put on hold until staff reports back to Council regarding the sanitary sewerage and storm drainage issues in the area; and
- Applications from this area that have proceeded to the February 2002 Public Hearings be permitted to proceed if Engineering Planning approves the drainage designs for the new properties.

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