

NO: R115

COUNCIL DATE: July 13, 2020

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **July 9, 2020**

FROM: **General Manager, Engineering**

FILE: **5480-01**

SUBJECT: **East Clayton Pilot Parking Update and Improvements**

RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information; and
2. Approve the recommended direction to implement measures to increase parking supply in East Clayton, attached as Appendix "I" and as described in this report.

INTENT

The intent of this report is to provide Council with an update on the East Clayton queuing street pilot program engagement, as outlined in Corporate Report No. R201; 2019 attached as Appendix "II", and to seek approval to implement the recommended measures to increase parking supply.

BACKGROUND

East Clayton was designed with the expectation that convenient and frequent public transit would connect the neighbourhood to the surrounding region. Achieving this long-term transit vision has taken longer than anticipated, but the ultimate completion of the Surrey-Langley Skytrain will bring the quality transit connections anticipated by the 1999 Clayton General Land Use Plan. Since 2012, the City has undertaken numerous initiatives to respond to concerns regarding parking supply; unfortunately, most of these efforts had only limited success. As a result, the on-street parking challenges facing East Clayton persist.

Corporate Report No. R201; 2019 recommended a pilot project for queuing streets, which has the advantage of increasing parking supply without adding costs to residents and without the City incurring additional enforcement costs. Subsequently, Council authorized staff to proceed with a residential engagement for a potential queuing street pilot project.

DISCUSSION

Historically, service requests related to parking in East Clayton have been consistent over the years, with the City receiving between 40-66 requests annually between 2011-2018. In 2019, 89 service requests were received, with the higher than average number attributed to the anticipated residential engagement for a queuing street pilot program.

The City conducted a comprehensive analysis of East Clayton on-street parking demand in 2017. Staff found the majority of locations in East Clayton showed peak on-street parking demand below 85%. The locations with the highest peak demand were included in the 2019/2020 queuing street pilot project survey to residents.

A queuing street conversion is the process by which a street with a narrow roadway width is converted from “parking on one side” to “parking on both sides”, resulting in a street with a single traffic lane such that vehicles sometimes have to pull over to the side and stop to wait for opposing traffic to pass. Queuing streets were planned on several local roads in the East Clayton Neighbourhood Concept Plan, but to-date have only been implemented in limited locations. Queuing streets offer the following benefits:

- Increased parking supply in areas where demand is high;
- No direct costs to residents (i.e., no permit fees);
- No additional enforcement costs;
- Project costs are low and limited to costs of surveys, signage, and staff time; and
- Traffic speed is reduced, and road safety is improved.

Queuing Street Pilot Residential Engagement

Design and Process

Staff identified 14 potential queuing street pilot locations in East Clayton and a communications package was delivered to each dwelling fronting the candidate streets. The package included: a letter explaining the pilot project and detailing the proposed changes; an illustrated guide to queuing street operations; a location-specific map; and a survey card and pre-paid return envelope. Residents were asked to indicate their support or opposition to the queuing street proposal on their street by completing a mail-in survey card or completing an online survey. Residents who responded online had the option to complete a short survey and provide additional comments. Only one response was permitted per dwelling. The packages were delivered the week of December 18, 2019 and residents were asked to submit their responses by January 24, 2020.

Survey Response and Results

In total, 225 responses were received, representing 51% of dwelling units on the candidate streets. The response rate across the 14 locations ranged from 20% to 80%. While this is a moderate response rate, it also means that nearly half of the affected residents chose not to participate in the process, and therefore there is no indication as to whether they support queuing streets or not. Additionally, the surveys were distributed to residents of the primary dwellings only, with suite tenants not accounted for in the survey.

The results of the survey are summarized in the table below. Overall, across all 14 locations, 28% of residents who responded expressed support and 72% were opposed. Locations 1 and 12 had the highest level of support for a pilot program, at 41% and 50% respectively, which is less than 66% for recommendation of implementing a pilot.

Location Number	Location Name	Housing Units	Response Rate	Supportive	Opposed
1	72A Avenue: 189 Street to 190 Street	109	40%	41%	59%
2	69A Avenue: 192 Street to 193 Street	26	58%	27%	73%
3	68B Avenue: 190 Street to 192 Street	38	63%	17%	83%
4	192A Street: 68A Avenue to 69 Avenue	16	50%	38%	62%
5	68A Avenue: 192 Street to 192A Street	10	70%	29%	71%
6	68A Avenue: 190 Street to 192 Street	45	62%	14%	86%
7	193A Street: 65 Avenue to 67 Avenue	41	46%	32%	68%
8	193B Street: 65 Avenue to 66 Avenue	41	66%	26%	74%
9	73B Avenue: 193 Street to 194 Street	26	46%	8%	92%
10	73A Avenue: 193 Street to 194 Street	22	41%	22%	78%
11	194 Street: 72A Avenue to 73 Avenue	7	29%	0%	100%
12	71A Avenue: 195 Street to 195A Street	10	80%	50%	50%
13	194B Street: 70 Avenue to 71A Avenue	35	57%	25%	75%
14	195A Street: 70 Avenue to 70A Avenue	12	42%	20%	80%
All	TOTALS/Averages	438	51%	28%	72%

Supplementary Survey Responses

The online survey asked additional questions to help understand the parking concerns of neighbourhood residents.

- 56% of respondents indicated they have no issues or find it easy to find on-street parking (i.e., on-street parking is not an issue on their street);
- 73% of respondents said they have not experienced issues with vehicles driving too fast on their street, and therefore did not see any advantage of a queuing street to help reduce speeds; and
- 61% of respondents have found queuing streets to be inconvenient and/or frustrating.

Data from these surveys has informed the City's perspective that queuing streets may be more acceptable in neighbourhoods which experience excessive speeding.

The online survey also invited residents to provide additional comments on parking in East Clayton more generally. Of the 98 online surveys, 56 provided additional comments. Residents who chose to provide additional comments were overwhelmingly opposed to the proposed queuing streets. The most common concerns cited in the comments were related to "triple suites", meaning a secondary suite plus coach house, as well as emergency vehicle access and the general operation of queuing streets.

Increasing Parking Supply – Measures for consideration

Redundant Fire Hydrants

As discussed in the October 2019 Corporate Report, staff identified eight (8) redundant fire hydrants in East Clayton that can be decommissioned. Staff reassessed other potential hydrant reductions and one more location, and all recommended locations are shown in the attached Appendix "III". The decommissioning of these nine hydrants is supported by SFS as a pilot specific to East Clayton and will result in an additional 14 to 18 on-street parking spaces.

Decommissioned hydrants will remain in-place as they can continue to be utilized for Engineering water operations flushing and maintenance programs. To differentiate from a conventional hydrant, the hydrants will be painted blue and labelled "inactive - parking permitted". In the event of an emergency, these hydrants could still be used by SFS as a secondary option.

Elimination of Mid-Block Curb Bulges

After further consideration, in June 2020 staff identified the removal of mid-block curb bulges as another potential measure to increase parking supply. Mid-block curb bulges are not common in all areas of Surrey, and typically implemented near schools or parks where there is an increased pedestrian crossing.

Staff identified two locations on 68A Avenue, between 190 Street and 192 Street, as shown in the attached Appendix "IV", where mid-block crossing exists and that are not located adjacent to a park nor school zone, nor encumbered with utilities. Thus, these represent opportunities for removal and would provide four to six more parking spaces.

Redesign Curb Returns Concurrent with Future Roadworks

Staff assessed other opportunities to increase parking supply and identified the potential to re-design the curb returns at intersections to have a smaller radius, which over the distance of long road segments could increase parking supply.

East Clayton was designed and constructed under the engineering road standards at the time. Since then, improvements to the City's standards continue to evolve and are being implemented with new construction across the City.

It would be cost prohibitive to complete a large-scale capital project to replace the curb returns in East Clayton as a stand-alone project. However, in the event the curbs returns are being removed as a result of a utility project, the curb return could be re-instated at the newer design standard, which would increase parking supply.

One example of such is the anticipated 2022-2023 construction of a watermain along the east side of 190 Street, between 68 Avenue and 70 Avenue. As part of the capital water main project, the curb and asphalt requires removal and replacement, and provides an opportunity to re-design the curb frontage, at minimal incremental costs, to add 12 to 15 additional parking spaces along this segment.

Similar opportunities will continue to be explored as capital projects occur in the area.

2020 Parking Service Requests/Complaints

For the months of March to May, the City has seen a significant reduction (200%) in parking service requests/complaints in East Clayton, when compared to the same period last year. City-wide for this same period, there has been an average reduction of 58%. While not a permanent trend, it is anticipated that it will be a year or more before traffic volumes and transportation patterns return to normal.

CONCLUSION

Based on the low level of resident support across all 14 proposed queuing streets, staff recommend not proceeding with the queuing street pilot project at this time.

Staff will proceed with decommissioning the nine redundant fire hydrants and removal of mid-block curb bulges in 2020, and complete re-design of curb frontages as part of future utility projects in East Clayton. These measures are anticipated to increase parking supply by an additional 18 to 24 on-street parking spaces by September 2020 to address resident parking concerns.

Scott Neuman, P.Eng.
General Manager, Engineering

SSL/RG/cc

Appendix "I" – Recommended Direction

Appendix "II" – Corporate Report No. R201; 2019

Appendix "III" – East Clayton Redundant Fire Hydrant Locations

Appendix "IV" - East Clayton Redundant Curb Bulge Locations

Recommended Direction

It is recommended that staff work to implement additions to parking supply through the following initiatives:

- Decommissioning nine redundant fire hydrants;
- Removing mid-block curb bulges in 2020; and
- Re-designing curb frontages, as part of future utility projects.



CORPORATE REPORT

NO: R201

COUNCIL DATE: October 21, 2019

REGULAR COUNCIL

TO: Mayor & Council

DATE: October 17, 2019

FROM: Acting General Manager, Engineering

FILE: 5480-01

SUBJECT: East Clayton Parking Strategy

RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information; and
2. Endorse staff to proceed with a residential engagement and queuing street conversion pilot project for up to four streets for a one-year term in East Clayton.

INTENT

The purpose of this report is to update Council on staff's review of the parking strategies for East Clayton and to seek Council approval of a one-year queuing street pilot project to help alleviate parking challenges facing the neighbourhood.

BACKGROUND

East Clayton was designed based on the sustainable development principles established by the Clayton General Land Use Plan (1999), emphasizing narrow streets and lots to enhance affordability, reduce development costs, conserve land, and preserve the natural environment. The neighbourhood was also planned with the expectation that convenient public transit would connect East Clayton to the surrounding region.

By 2013, as the neighbourhood approached build-out, it became evident that demand for on-street parking was high in many areas, primarily due to unanticipated proliferation of secondary suites, both legal and illegal. There are other factors that contribute to the problem, such as:

- Garage space use for goods storage rather than vehicles;
- Large vehicles and trailers being parked on-street;
- Under-use of tandem parking stalls;
- Laneway parking pads being converted into yard space; and
- Some local streets only having parking on one side.

Since 2012, the City has undertaken numerous initiatives to respond to concerns regarding parking supply:

Initiative Description	Year
Updated Off-street Residential Parking Requirements	2012 & 2016
Inventory of Transitional Parking Supply	2013
Issue Survey on East Clayton Parking Concerns	2014
Give Your Car a Home Contest	2014
Information Brochures on City Parking Regulations	2014/2015
Queuing Street Conversion Survey	2014/2015
Analysis of Boulevard Conversion	2015/2016
Exploration of use of School District Parking	2017
Amended Design Standards	2017

Unfortunately, most of these efforts had only limited success, with the exception of the implementation of queuing street where supported by the residents. As a result, the on-street parking challenges facing East Clayton still persist.

The updates to minimum parking requirements in 2016 and amendments to road design standards in 2017 have ensured that the problem will not expand and that the same challenges will not emerge in other neighbourhoods in the City.

DISCUSSION

In general, in East Clayton, on-street parking is available on all roads. On portions of arterial roads that have yet to be fully utilized, future travel lanes have been temporarily designated as parking lanes. On collector roads, parking is available in parking pockets interspersed throughout the road network leading to some streets with parking on both sides and some with very limited on-street parking. On local roads, some roads have been constructed as queuing streets since the neighbourhood's inception, and thus have a high number of parking spaces. On other local roads, parking has only been provided on one side of the street, leading to situations where the number of houses exceed the number of available on-street parking spaces.

Surveys show that on a typical weekday evening, 75% of all available parking spaces across the neighbourhood are filled, and therefore there are 1,300 on-street parking spaces free out of a total of 5,200. However, parking supply and demand varies on a street-by-street basis. In areas with generally smaller lots and more coach houses and suites, on-street parking can become completely filled overnight and spill over onto surrounding streets. On roads with larger lots with large driveways, demand for on-street parking is much lower.

In April 2019, staff re-evaluated possible solutions to East Clayton's parking problems, including evaluating the merits of a residential parking permit ("RPP") program, use of queuing streets and other potential strategies. Over the past several months, staff have conducted an examination of potential parking strategies for East Clayton, including analysis of East Clayton road design and land uses, parking complaints and violations, and research into parking management best practices.

Residential Parking Permit Program Considerations

An RPP program employs a parking management system where permit holders are authorized to park in designated permit-only areas. Those without permits must park in non-permit spaces or in off-street spaces on private property. Permit programs can be an effective tool to protect residential on-street parking supply from high external demand from non-residential users in certain areas, such as near hospitals, adjacent to rapid transit stations, or bordering popular commercial areas. An RPP program does not increase the supply of parking, but rather manages who may utilize the available parking spaces.

East Clayton does not possess any of the traditional characteristics suitable for an RPP program, as the on-street parking issues are related exclusively to residential demand. In this context, in order to impact parking demand, an RPP program would rely on two key elements:

1. Market pricing for permits; and
2. Strict enforcement.

As a permit program does not increase parking supply, to have any impact on the challenges being experienced in East Clayton the permit program must limit the demand for parking. In order to achieve this, households must choose to have fewer vehicles or modify their parking behaviour to fully utilize their off-street supply (driveways, garages, and parking pads) instead of on-street parking. To effect that change, a sufficiently high monthly fee for a parking permit would be required. Without such an economic incentive, households are unlikely to alter their parking behaviour, which would simply preserve the status quo. Strict enforcement is necessary to ensure compliance and would likely be unpopular with residents. Enforcement is also very costly, requiring regular vehicle patrols 12-14 hours a day. The most cost-effective way to conduct enforcement is using electronic permits and license plate recognition technology mounted on Bylaw Enforcement vehicles, which the City does not currently have.

Equity of Residential Parking Permit Program

In the course of staff's analysis of parking permit program designs, it proved very difficult to design an equitable RPP program that works for all of East Clayton due to the diversity of housing types and street design. As noted above, there are many streets in East Clayton where the number of houses exceed the number of on-street parking spaces. Under an RPP program, where each household is eligible for one permit, permit holders would be competing for a limited supply of parking, resulting in spillover onto adjacent blocks, which is precisely what is happening now. If households were allowed to have two permits or more, the spillover effect would be even worse, and the neighbourhood's parking challenges would continue.

Scale of Residential Parking Permit Program

The primary issue with implementation of an RPP program within a small area of East Clayton is that residents within the permit area would be able to park in the designated area, but could also park in the adjacent areas outside the permit area. As a result, there could be increased competition for parking spaces on the streets outside the pilot area, thus increasing parking issues for residents on those streets.

Resident Consultation

As part of the evaluation, staff initiated some initial consultation with resident groups on streets with limited parking supply. These discussions provided insight into the neighbourhood's parking challenges, how an RPP program could be received by the neighbourhood, and other potential solutions. Specific feedback included:

- Fees for permits would be unpopular;
- A permit program will be divisive and could pit suite-owners against non-suite owners;
- A one-size fits all permit program (e.g., one permit per lot) would not be effective; and
- The City should proceed with queuing street conversions in all possible locations.

Based on the analysis and resident feedback, staff concluded that an RPP program would not likely improve the parking situation in East Clayton. The two essential components of a permit system, fees and enforcement, would not likely be supported by residents, and the annual costs of such a program would be very high.

Increasing Parking Supply Option – Queuing Street Conversions

A queuing street conversion is the process by which a street with narrow roadway width is converted from “parking one side” to “parking both sides”, resulting in a queuing street with a single traffic lane such that vehicles sometimes have to pull over to the side and stop to wait for opposing traffic to pass.

Queuing streets were planned on a number of the local roads in the East Clayton Neighbourhood Concept Plan, but to date have only been implemented in limited locations. Queuing street conversions not only increase on-street parking supply, but they also improve neighbourhood safety by reducing traffic speed on local roads, consistent with key elements of the Vision Zero Surrey Safe Mobility Plan.

Staff previously explored queuing streets as a solution to East Clayton parking issues in 2014-2015. Residents of several potential queuing street locations were surveyed to assess support. The majority of these residents initially did not support a conversion on their street, with 40% supporting and 60% opposing. However, one year later in March 2015, a subsequent survey of East Clayton residents living on queuing streets indicated that support increased to 65% in support of a queuing street. After living with queuing streets for a period of time, the majority of residents (65%) prefer living on a street with on-street parking on both sides and queuing operation.

Queuing Streets and Traffic Flow

There are some concerns that adding queuing streets in East Clayton will reduce road capacity, and therefore increase congestion. However, staff do not anticipate this being the case, as all streets originally planned to be queuing streets are local roads with relatively low traffic volumes. East Clayton was designed with a fine grain road network, including collector and arterial roads, that will continue to be primary means of conveying traffic throughout the neighbourhood.

Queuing Street Pilot Project

Staff recommend proceeding with converting up to four potential streets in East Clayton to queuing streets for a one-year pilot. A queuing street pilot presents numerous advantages over an RPP program:

- Queuing street conversions will increase parking supply in areas where demand is high;
- There are no direct costs to residents (i.e., no permit fees);
- There are no additional enforcement costs;
- Resident support for queuing streets is proven to increase after having experienced them;
- Project costs are low and limited to costs of surveys, signage and staff time; and
- Queuing streets reduce traffic speed and improve road safety, consistent with the City's Vision Zero Surrey Safe Mobility Plan.

Staff have 14 potential streets in East Clayton that could be candidate pilot locations. The potential queuing street locations are shown in Appendix "I" and the number of additional parking spaces are shown in Appendix "II".

Prior to implementing a pilot, residents will receive a communication package by mail explaining queuing streets, outlining the benefits and trade-offs of queuing street conversions, and providing a summary of the queuing street pilot project. The package will also include a simple survey question that asks residents if they support a queuing street conversion on their street. The results of the surveys will be reviewed by staff and queuing street conversions will be undertaken on up to four streets that have the highest support. Each queuing street conversion will be designed to ensure there are sufficient passing areas to minimize inconvenience to residents. Prior to initiating the pilot project, affected residents will receive a communication package explaining the pilot project, how it affects them, and including departmental contact information if they have any questions or concerns.

A survey of on-street parking demand will be conducted before and after the projects on pilot streets and surrounding blocks to measure changes in parking demand. Similarly, affected residents will be surveyed before and after the pilot project to measure any changes in support for queuing streets and to identify any concerns.

The proposed pilot project timeline is as follows:

Action	Timeline
Pre-pilot peak parking demand survey	Mid-November
Pre-pilot survey of all affected residents	Mid-November
Resident follow up and assessment of survey results	December
Pilot communication/mailout to all affected residents	January 2020
Install new signage and initiate pilot project	February 2020
Mid-year parking demand survey	June 2020
Post-pilot peak parking demand survey	February 2021
Post-pilot survey of all affected residents	February 2021
Post-pilot report	March 2021

Increasing Parking Supply – Redundant Fire Hydrants

In addition to expanding on-street parking supply through a queuing street pilot, there may be an opportunity to increase supply through the decommissioning of redundant fire hydrants in the neighbourhood. Staff have identified eight potential redundant fire hydrants and will consider removal of the hydrants when they are scheduled for maintenance and/or replacement, or in conjunction with other capital work in the immediate area.

Fire Services Review

The content of this report has been reviewed by Fire Services and Engineering will be coordinating with Fire Services on the implementation to ensure that there will be sufficient space and opportunities for fire trucks to deploy their equipment within the roadway in the case of an emergency.

FUNDING

The work and costs associated with this pilot project will be absorbed under the existing functions and operating budget of Parking Services.

SUSTAINABILITY CONSIDERATIONS

Increasing the supply of parking in East Clayton supports the objectives of the City's Sustainability Charter 2.0. In particular, this work relates to Sustainability Charter 2.0 theme of Infrastructure. Specifically, this project supports the following Desired Outcomes ("DO"):

- All Infrastructure DO₂: Infrastructure systems provide safe, reliable and affordable services; and
- Transportation DO₁₁: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations.

CONCLUSION

Based on the above discussion, implementation of a public engagement and one-year queuing street pilot on up to four streets in East Clayton could provide a significant increase in on-street parking supply.

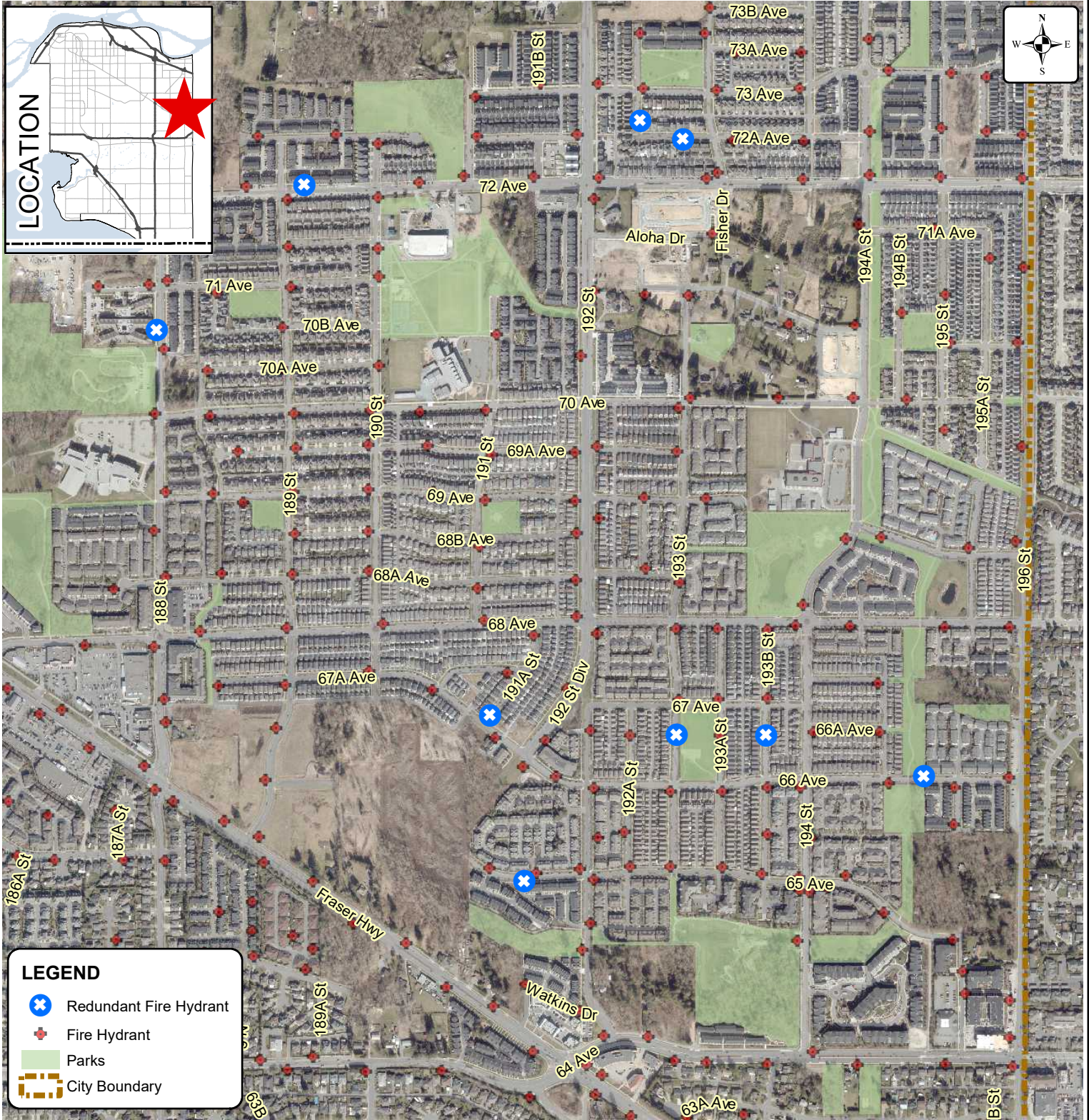


Scott Neuman, P.Eng.,
Acting, General Manager,
Engineering

JB/RG/AK/cc

Appendix "I" – East Clayton Potential Queuing Street Conversion Pilot Locations
Appendix "II" – East Clayton Potential Queuing Street Conversions Data Table

AERIAL PHOTOGRAPH OF SITE

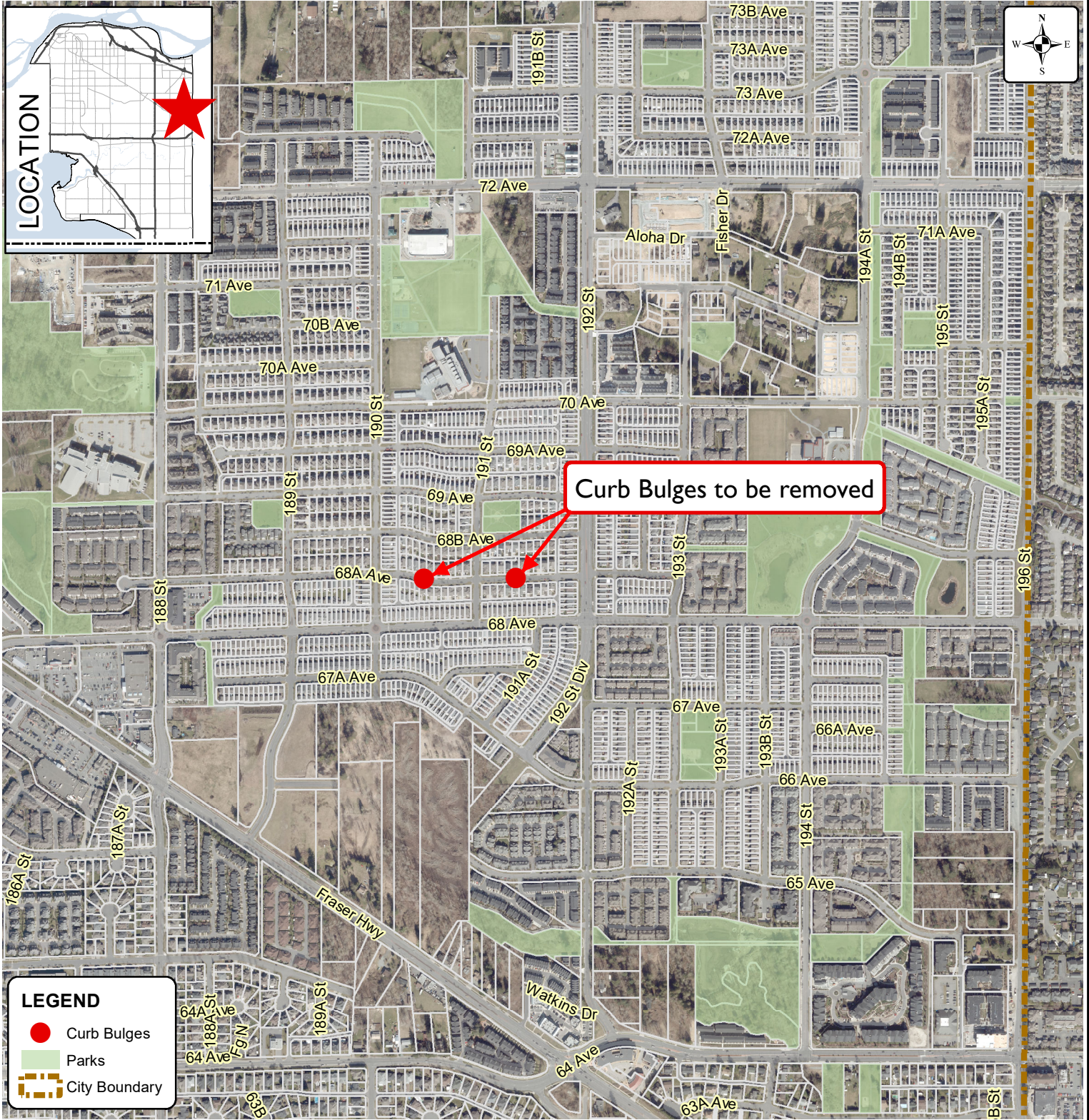


East Clayton Redundant Fire Hydrant Locations

ENGINEERING
DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey.
This information is provided for information and convenience purposes only.
Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.

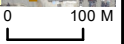
AERIAL PHOTOGRAPH OF SITE APPENDIX "IV"



Produced by GIS Section: 03-Jul-2020, P205934

Date of Aerial Photograph: March 2019

Scale: 1:10,000



East Clayton Curb Bulges Location

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