

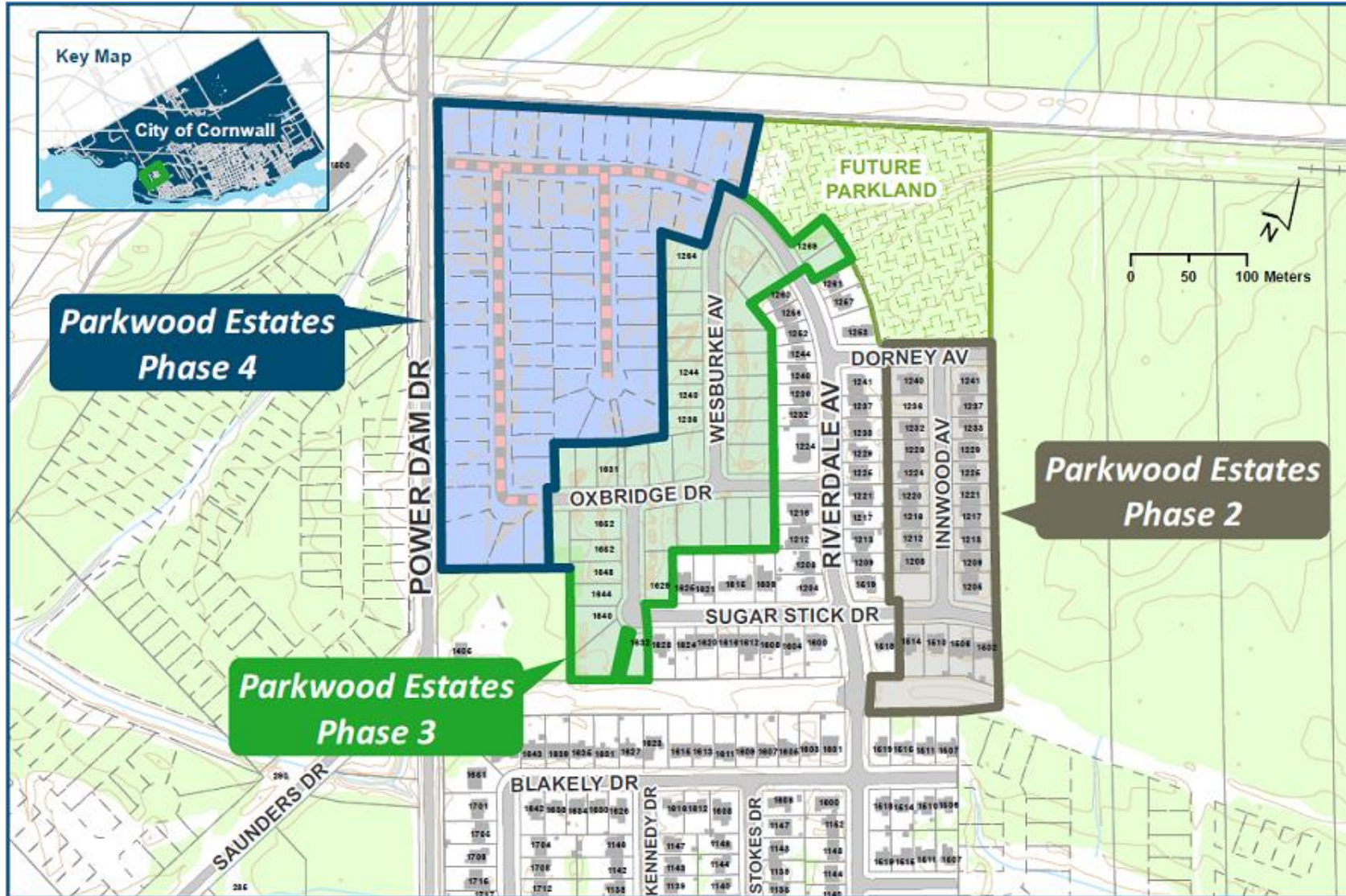
Riverdale Avenue North Council Presentation

Monday, February 22nd, 2021.

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Division Manager, Infrastructure Planning

Bill de Wit, CET
General Manager, Infrastructure & Municipal Works

Parkwood Estates – Phases 3 & 4



- Phase 2
 - # of lots: 24
 - Construction: 2008 to 2009*
- Phase 3
 - # of lots: 39
 - Construction: 2017 to 2019*
- Phase 4
 - # of lots: 62
 - Construction: TBD

* Subdivision Construction (Roads, Water, Sewer, etc.)

Parkwood Estates Phase 3

Construction Complaints

- 1) Heavy truck traffic from the construction of the subdivision using Riverdale Ave. and Grant Ave. to access the site;
- 2) Request for a permanent or temporary alternate access to the site be constructed;
- 3) Construction traffic from the subdivision was damaging Riverdale Ave. and Grant Ave.;
- 4) Construction traffic and vehicular traffic was speeding, rolling stop signs, etc., posing a health and safety issue; and
- 5) Construction traffic was tracking mud/debris/dust onto adjacent roadways and it was not sufficiently being cleaned up/addressed.

Heavy Truck Traffic

No-Truck Routes - Purpose

- The purpose of a 'No-Truck' Route is to limit to the greatest extent possible, heavy truck traffic on roadways in residential areas and to minimize heavy truck intrusion into residential areas.
- The intent of a 'No-Truck' Route is to prevent heavy trucks from using the street as a cut-through route to avoid traffic congestion, construction, etc., in order to reach a destination more quickly, not to prevent or inconvenience heavy trucks with a legitimate reason from being on the street or in the neighbourhood.
- Deliveries or collections from premises which cannot be reached by a highway are exempt provided that the route taken is the shortest possible on the 'No-Truck' Route.
- The intent of a 'No-Truck' Route is to restrict/limit to the greatest extent possible the use of roadways in residential areas by heavy trucks but not completely eliminate it.

Heavy Truck Traffic on Riverdale Ave./ Grant Ave.

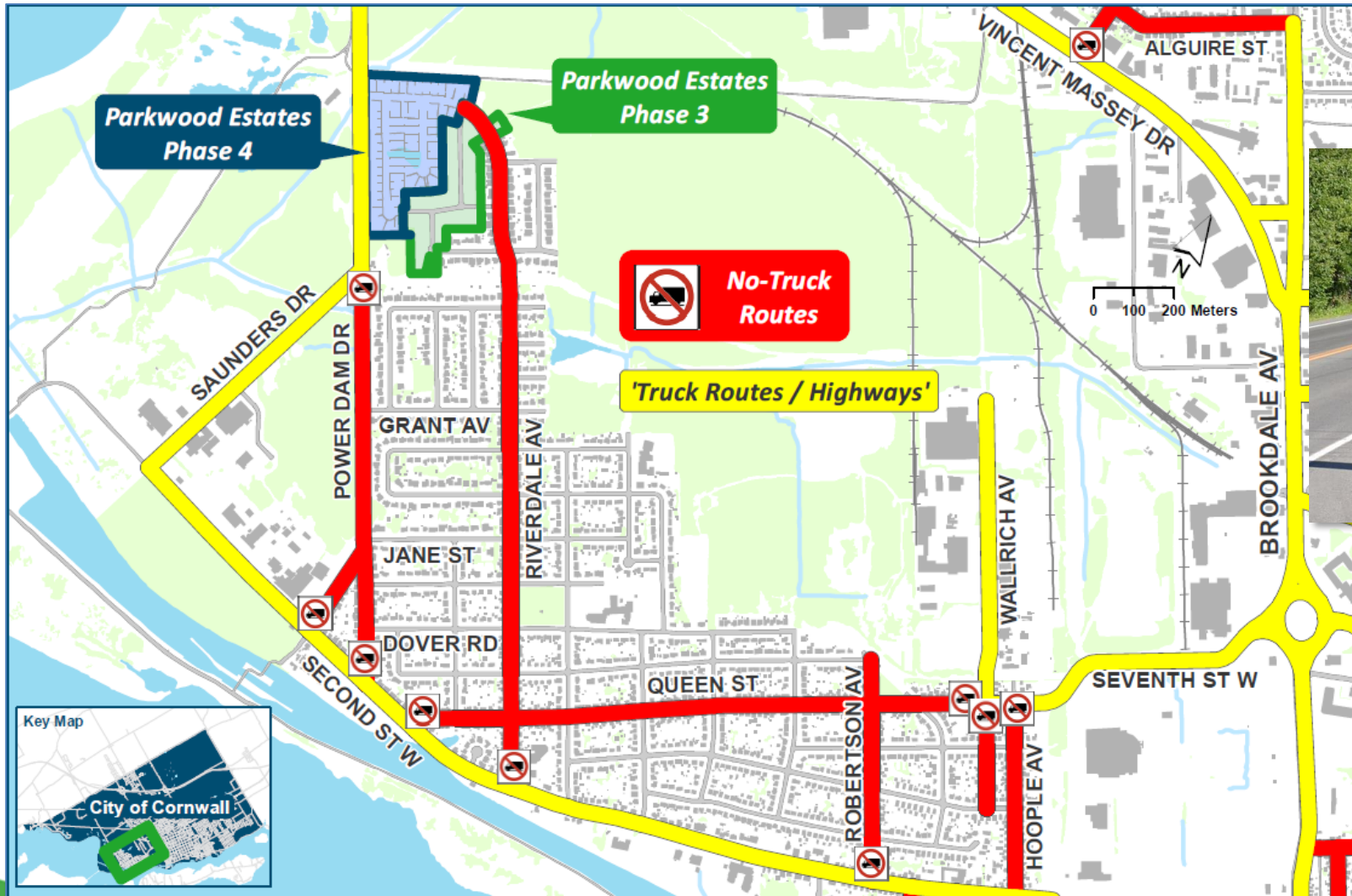
City of Cornwall – Traffic By-Law 069-1989

| HEAVY TRAFFIC | |
|------------------------|---|
| <u>No Truck Routes</u> | |
| 34. | (1) Except as provided in subsection (2), where official signs to that effect are displayed, no person shall move, drive, park or operate a heavy vehicle as defined in Section 1, subsection (11) of this by-law on any highway set out in column 1 of <u>Schedule XVIII</u> to this by-law, between the limits set out in column 2 of the said Schedule during the times or days set out in column 3 of the said Schedule. |
| | (2) Subsection (1) shall not apply to any vehicle actually engaged in making a delivery to or a collection from premises which cannot be reached except by way of a highway or a portion of highway referred to in the said section or to prohibit the use of such vehicles for such purpose, provided that in making such delivery or collection, the said highway or portion of highway is travelled only insofar as is unavoidable in getting to and from such premises. |

- Deliveries or collections from premises which cannot be reached by a highway are exempt provided that the route taken is the shortest possible on the 'No-Truck' route
- City By-Law is consistent with other municipalities

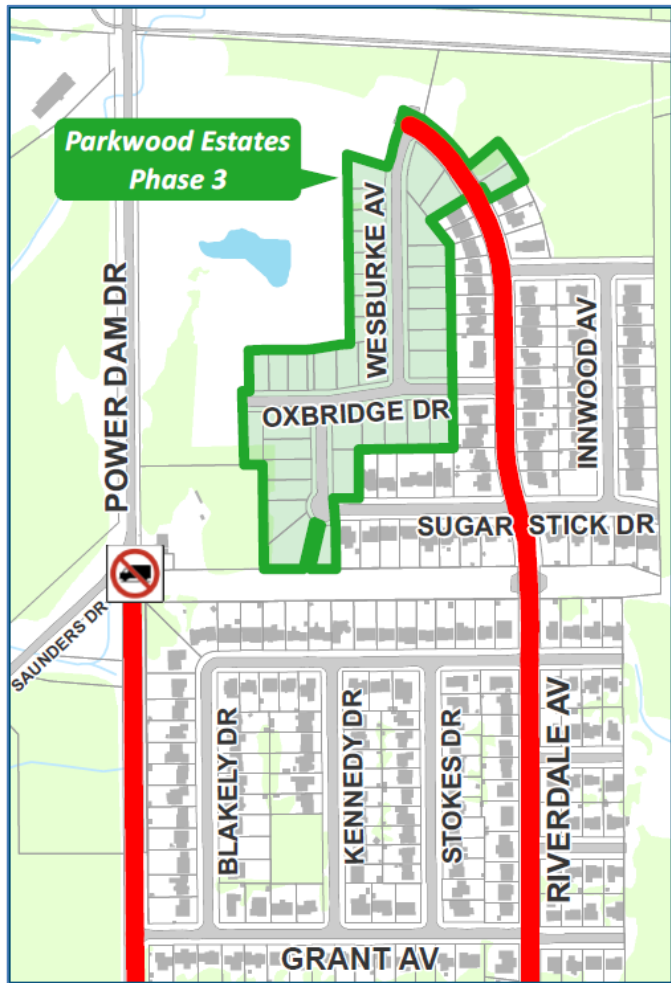
Heavy Truck Traffic on Riverdale Ave. / Grant Ave.

No-Truck Routes



Parkwood Estates Phase 3

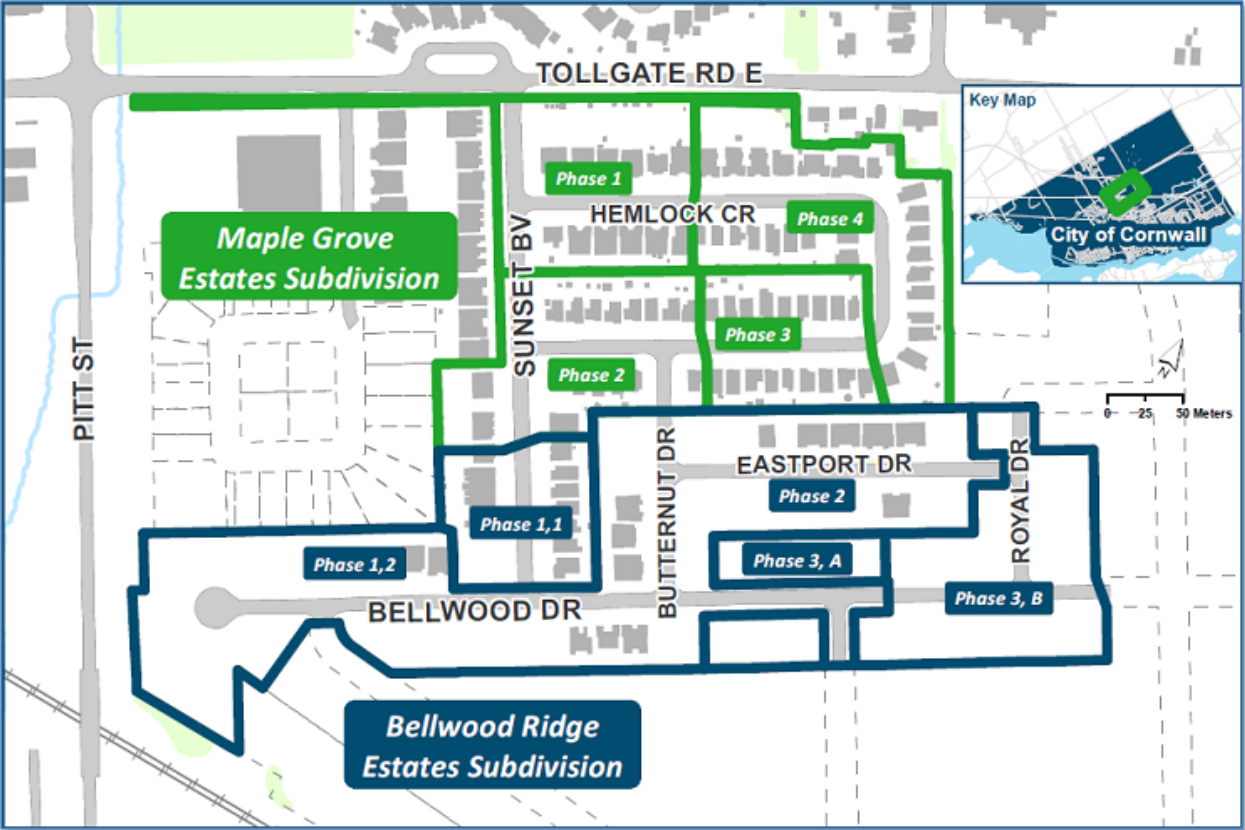
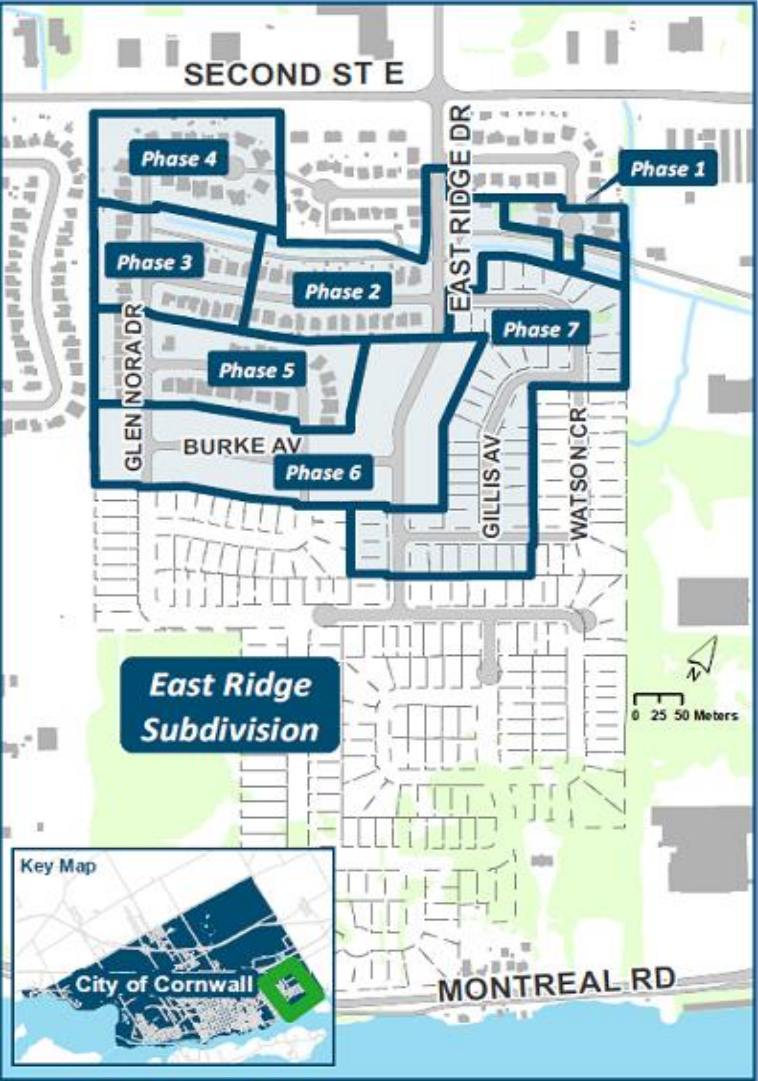
No-Truck Routes



- Phase 3 cannot be accessed by a 'Truck' route.
- As a result, construction traffic can use the 'No-Truck' Route provided that the route taken is the shortest distance possible to and from the site (Power Dam Dr. → Grant Ave. → Riverdale Ave.)
- This rule applies to subdivision construction traffic in other areas of the City, City capital construction projects, private construction projects, home construction, business deliveries, etc.

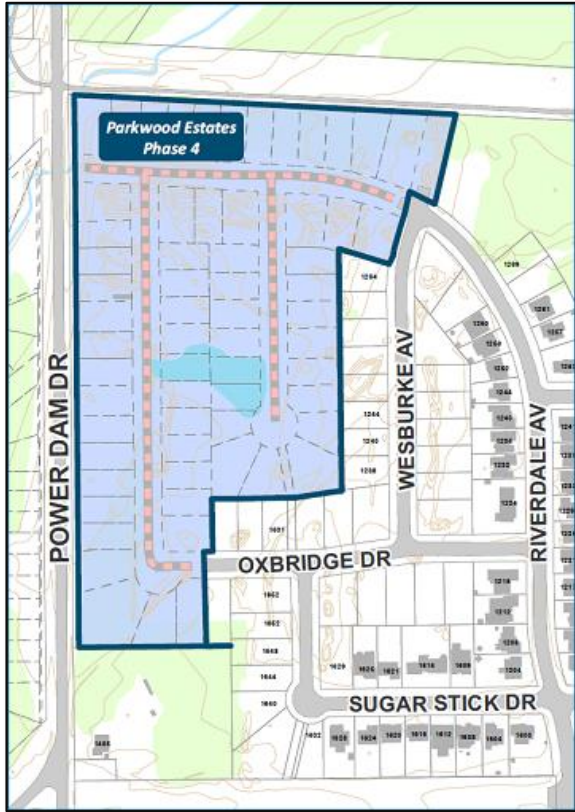
Similar Construction Activity in Other Areas of the City

Phased Construction



Parkwood Estates Phase 4

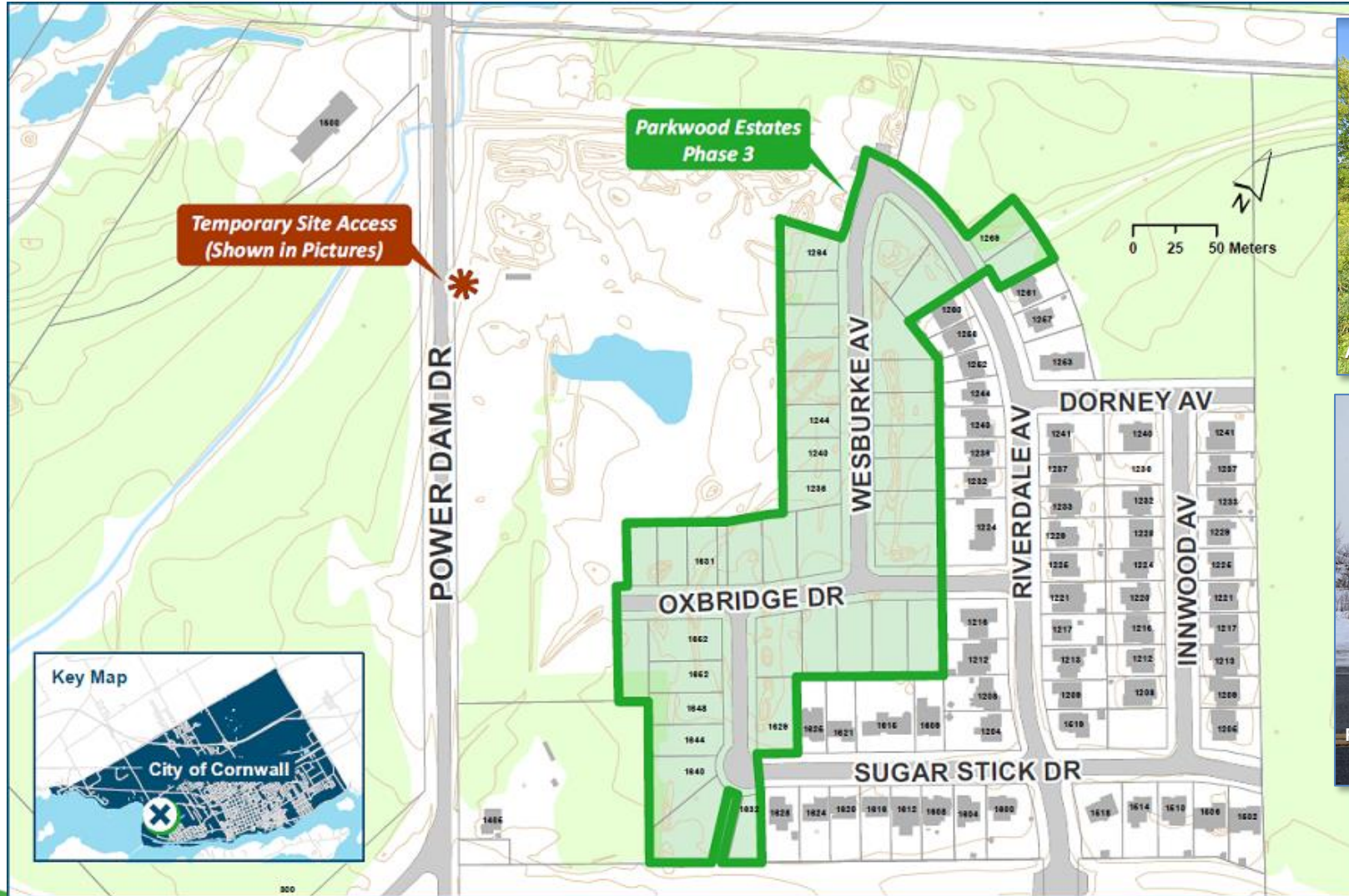
No-Truck Routes



- Construction of Phase 3 of the Parkwood Estates Subdivision was completed in 2019/2020. Only home construction is currently occurring within Phase 3.
- Phase 4 will include the extension of Riverdale Ave. to Power Dam Dr.
- Since Phase 4 will have direct access to Power Dam Dr. (Arterial Road - Truck Route), construction traffic **cannot** access Phase 4 via Grant Ave. / Riverdale Ave.
- Phase 4 construction could occur as early as 2022 depending on lot sales, market demand, economic conditions, etc.

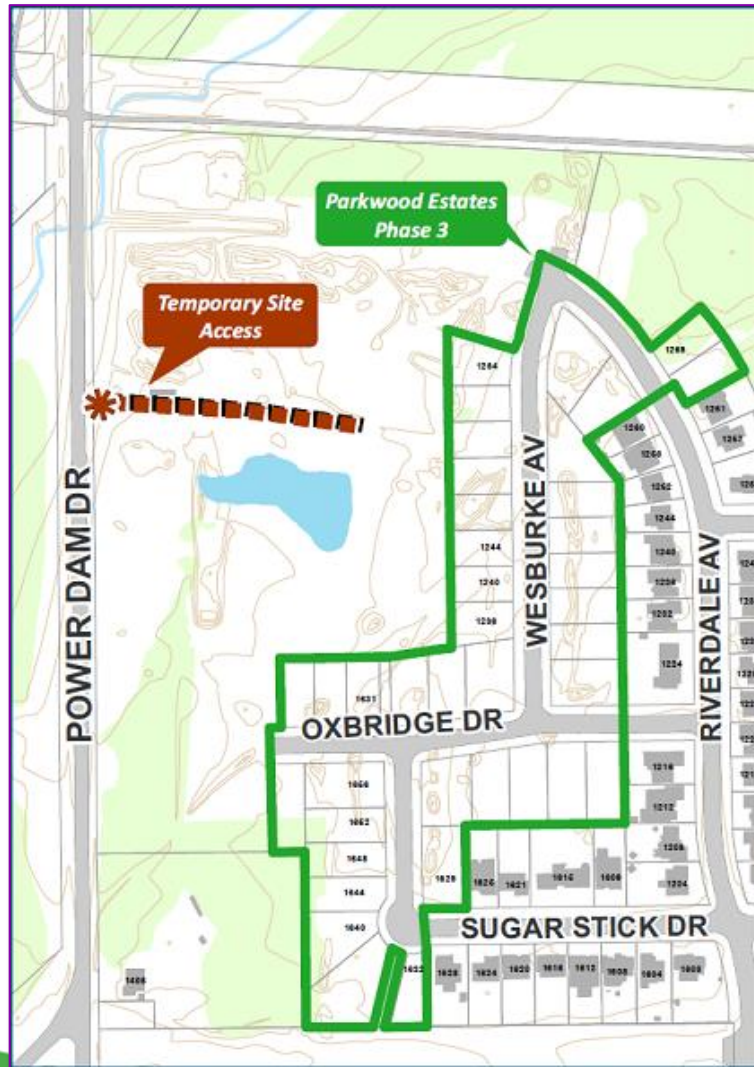
Alternate Access to Riverdale North

Temporary Site Access



Alternate Access to Riverdale North

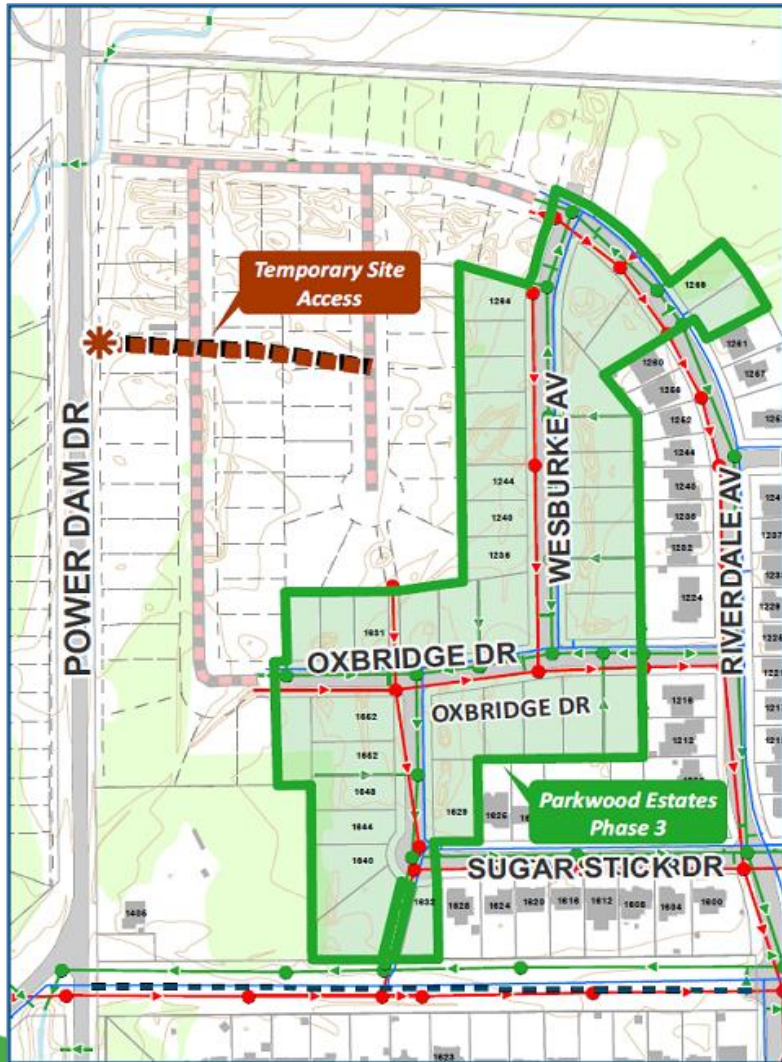
Temporary Site Access



- Temporary site access is not a legal roadway to the site (area shown in green)
- The City cannot force the developer and/or home building contractors to use this access
- The subdivision developer has every legal right to use Grant Ave. and Riverdale Ave. while building the subdivision

Alternate Access to Riverdale North

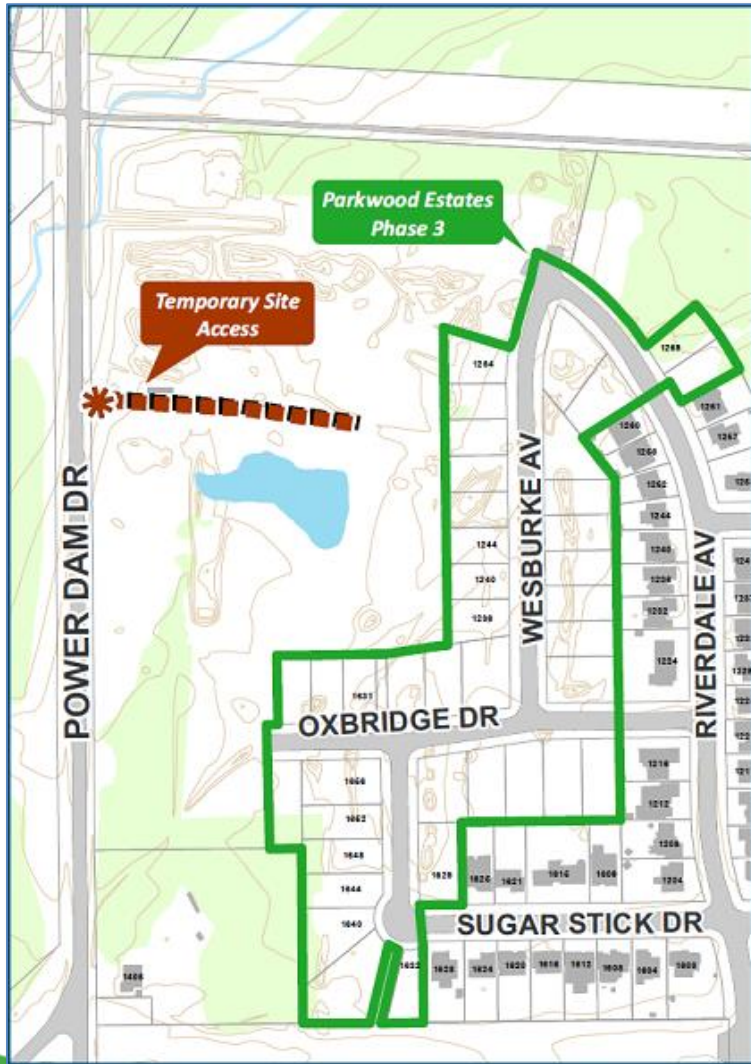
Temporary Site Access



- Subdivision developer was instructed to use this access as much as reasonably possible based on construction activities to minimize traffic on Grant Ave./Riverdale Ave.
- Trucks being used for cutting/filling, grading, moving surplus material, etc., can use this entrance. If fill needed to be moved to the property east of Riverdale Ave., the developer was to use Ninth St. Extension to avoid the road network.
- Although the developer was legally entitled to use Grant Ave. and Riverdale Ave., the City requested that they refrain from doing so as much as reasonably possible to minimize disruption.

Alternate Access to Riverdale North

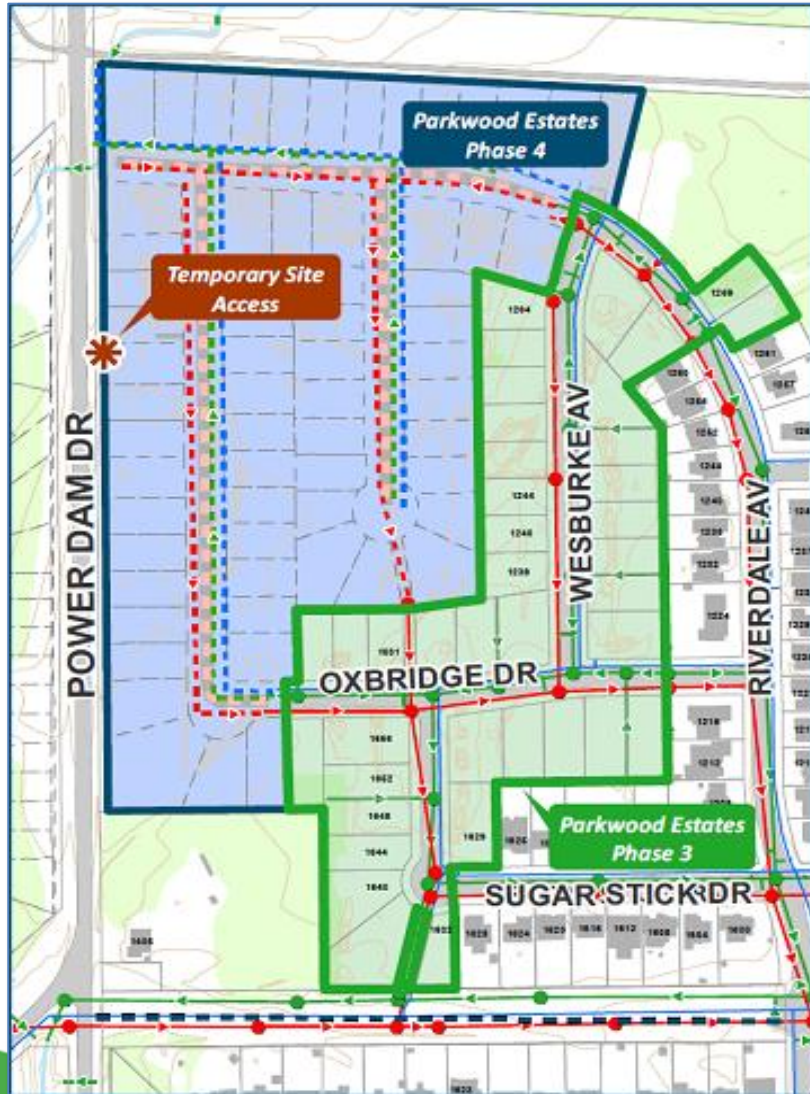
Temporary Site Access



- For the purpose of road construction (asphalt, granular, concrete), underground infrastructure installation (sanitary sewer, storm sewer, watermain), material deliveries, etc., the temporary access off of Power Dam Dr. is not suitable for use.
- Asphalt trucks, concrete trucks, and material delivery trucks cannot go through that area (cannot withstand the load) and are legally permitted to use Grant Ave. and Riverdale Ave.

Alternate Access to Riverdale North

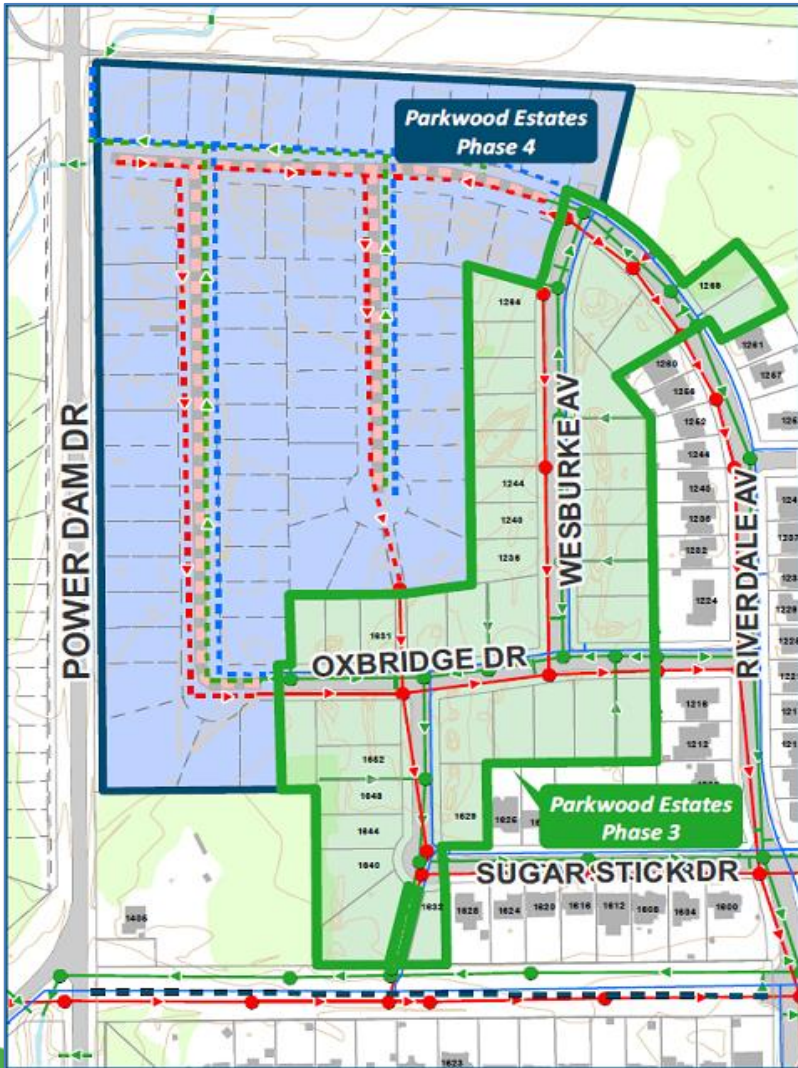
Temporary Site Access



- The temporary access cannot be used for road construction and underground linear infrastructure based on proper construction practices.
- If the temporary access had been used, it would have compromised the infrastructure being constructed.
- To use the temporary access, temporary granular roads would need to be built throughout Phase 4 to access Phase 3 which are costly and would ultimately be removed in Phase 4.

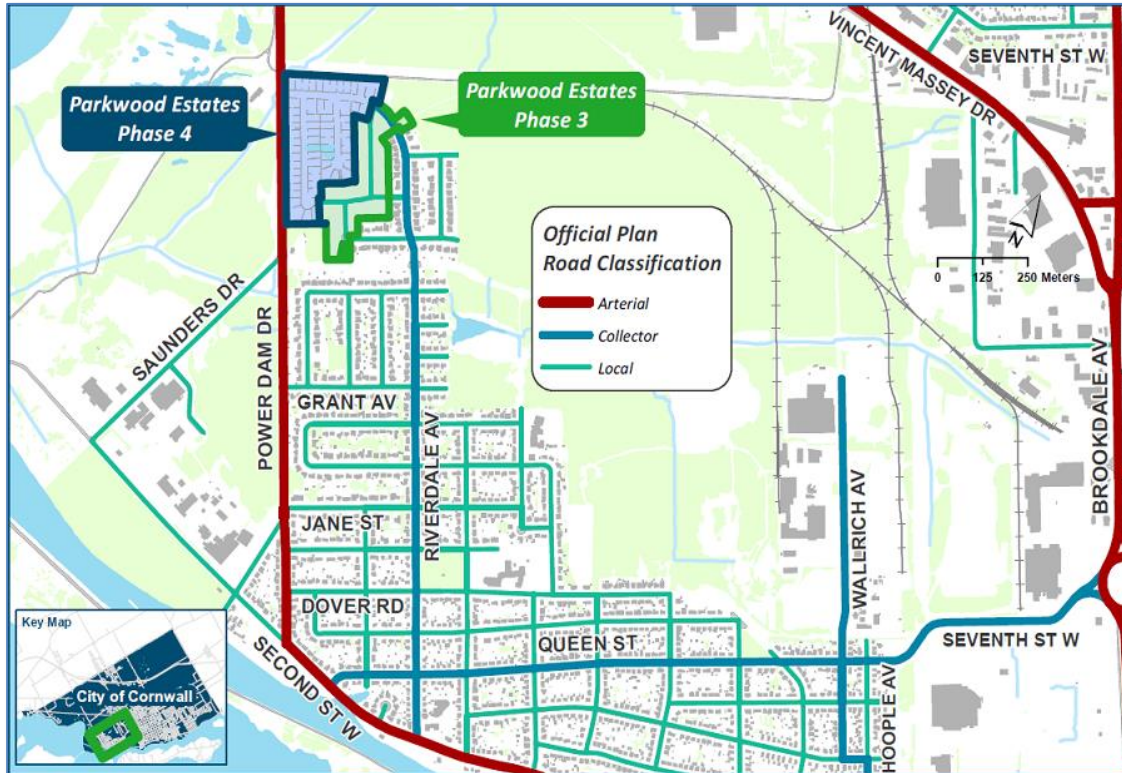
Alternate Access to Riverdale North

Permanent Access



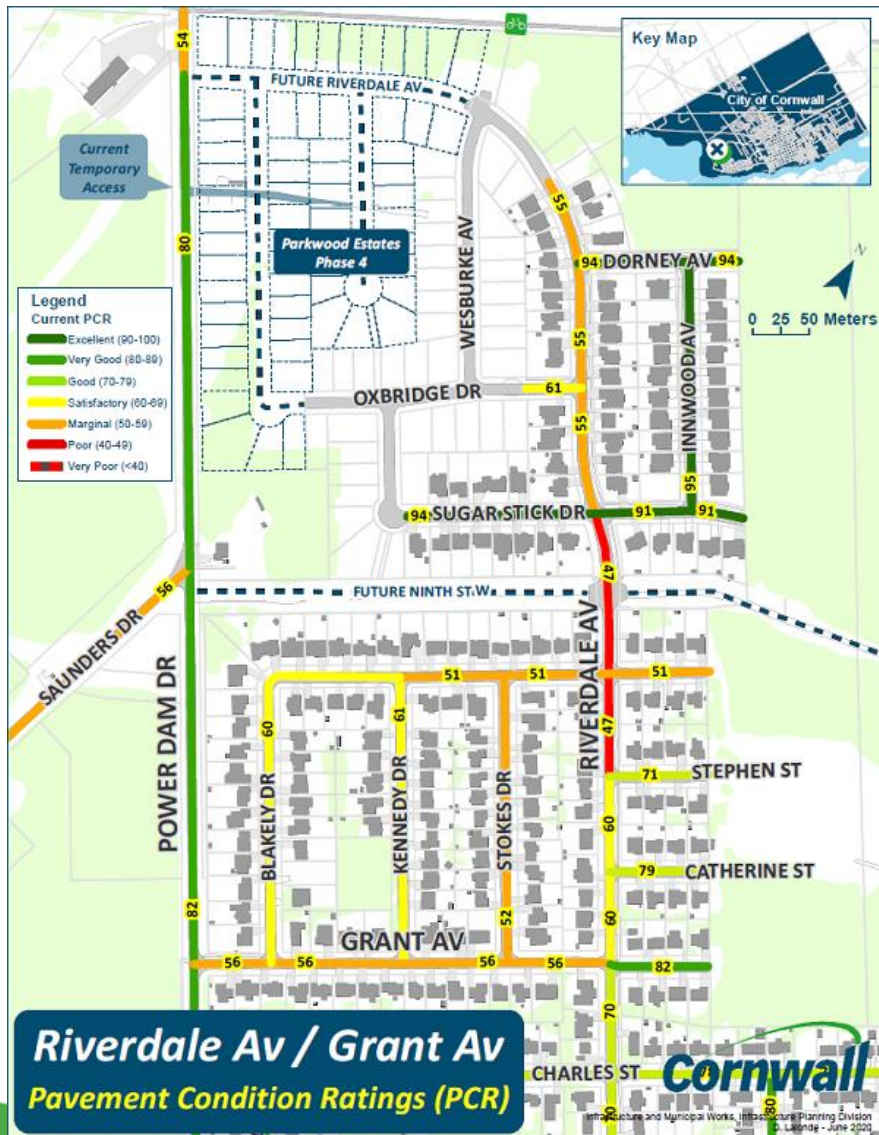
- Riverdale Ave. could not be connected to Power Dam Dr. as part of Phase 3 due to the servicing requirements for Phase 4
- Administration would have preferred that Riverdale Ave. had been extended to Power Dam Dr. as part of Phase 3; however, that was not feasible at this time.
- To do so, the servicing for a significant portion of the remainder of the subdivision would have to be completed which is understandably not financially viable.

Heavy Truck Damage to Grant Ave./Riverdale Ave.



- The City was also receiving complaints that the heavy truck traffic was damaging roadways.
- As part of the subdivision process, various pre-construction inspections are completed as well as inspections prior to accepting the infrastructure.
- The developer is also required to provide a Letter of Credit. If City infrastructure is clearly damaged by the developer, the City can use the Letter of Credit to make repairs, if necessary.
- City staff completed numerous inspections to evaluate these complaints when they were received.
- The City also had a third party opinion inspection completed by a geotechnical engineer.

Heavy Truck Damage Pavement Condition Ratings

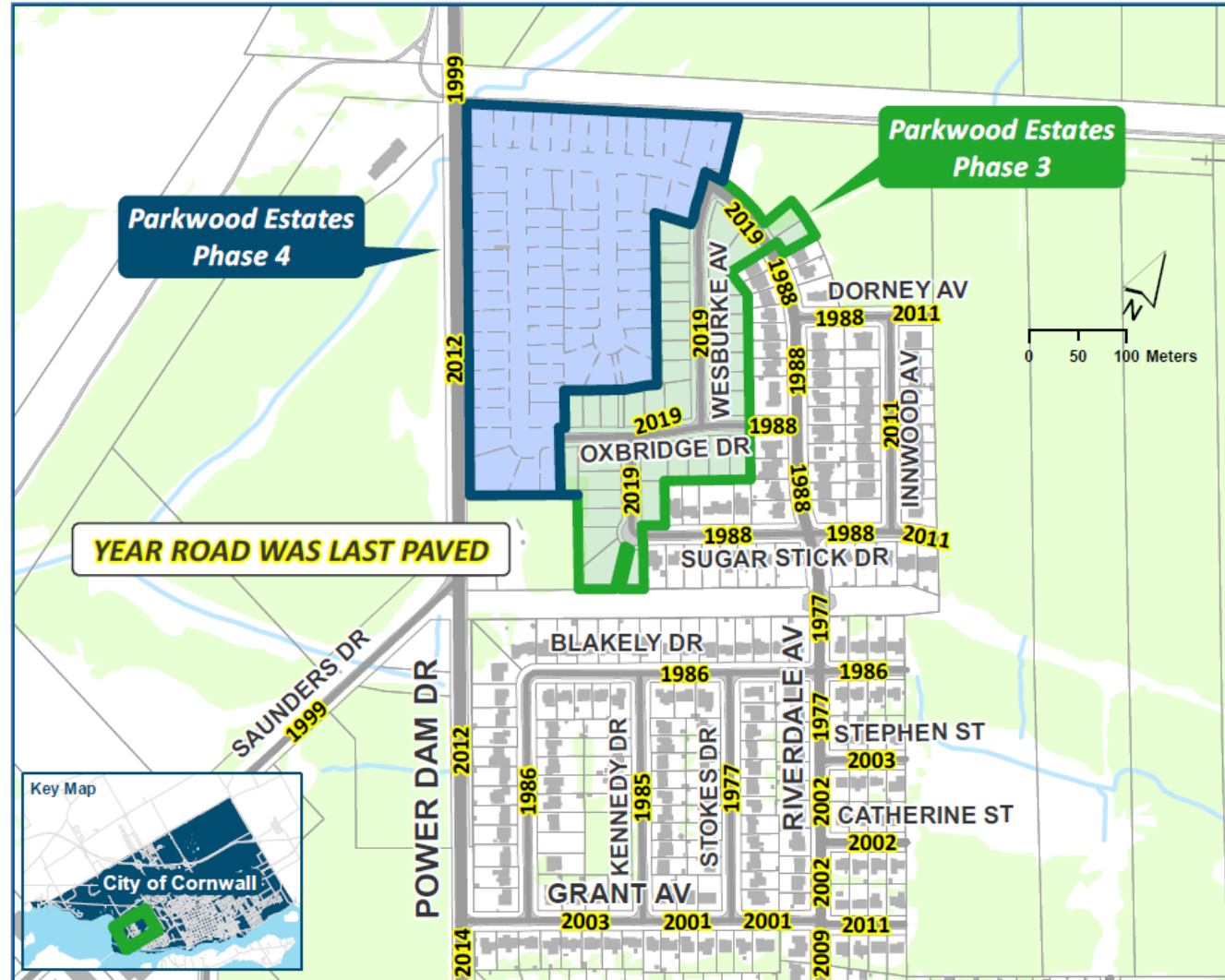


Pavement Condition Ratings

- Excellent (>=90)**
 - excellent rideability
 - minimal or no deflection
 - very minor to no cracking
 - good road structure, ie. new road with appropriate base
- Very Good (80-89)**
 - excellent rideability
 - very minor to no deflection
 - very minor or no longitudinal or transverse cracking (less than 5% of section length)
 - may be recently resurfaced, but having an older structure
- Good (70-79)**
 - generally smooth riding, may have a few minor humps/dips
 - some roadway deflection
 - some longitudinal or transverse cracking (high 70's) (5% to 20% of section length)
 - may be smooth riding with moderate amount of cracking (low to mid 70's)
 - no evidence of base failure
- Satisfactory (60-69)**
 - somewhat uneven, possibly with localized humps/dips
 - or, may be smooth riding with significant cracking
 - may have some asphalt joint unraveling
 - may have minor localized alligator cracking and/or very few pot holes
 - thin resurfacing would be considered for collector/arterial streets in low 60's
- Marginal (50-59)**
 - uneven to somewhat uneven ride or poor ride on structurally adequate concrete streets with slab settlement
 - significant cracking on asphalt streets
 - may have some alligator cracking, a few pot holes or other evidence of base failure.
 - resurfacing required now or within 5 years
- Poor (40-49)**
 - uneven ride
 - surface deformation for majority of section length
 - numerous pavement cracks possibly including alligator, pot holes or other base failure
 - may have potholes or evidence of pothole patching and/or joint unraveling
 - thick resurfacing or reconstruction is warranted now
 - mill or pulverize with thick resurfacing is a viable repair for high 40's
 - if thick resurfacing is not suitable, decrease PCR to low 40's
- Very Poor (30-39)**
 - very uneven or rough ride
 - numerous cracks with broken and/or rocking slabs on concrete streets
 - may include large areas of base failure
 - significant potholes or evidence of pothole patching
 - reconstruction is required now

Heavy Truck Damage

Year of Last Road Resurfacing Work



Heavy Truck Damage

Summary:

- No signs of heavy truck damage (no rutting, etc.)
- Pavement condition is consistent with normal asphalt degradation based on year of last resurfacing work
- Third party opinion also determined that there was no heavy truck damage
- Roads are either due for resurfacing or will be in the near future

Recommendations:

- Watermain relining to occur in 2022 on Riverdale Ave. from Grant Ave. to Stephen St., as well as on Grant Ave. east of Riverdale Ave, Catherine St. and Stephen St.
- Asphalt Resurfacing in 2022/2023 on Riverdale Ave. from Grant Ave. to limits of Phase 3
- Asphalt Resurfacing on Grant St. when it becomes due in the next couple of years (PCR < 50 – Local)

Construction Traffic & Vehicular Speeding Issues

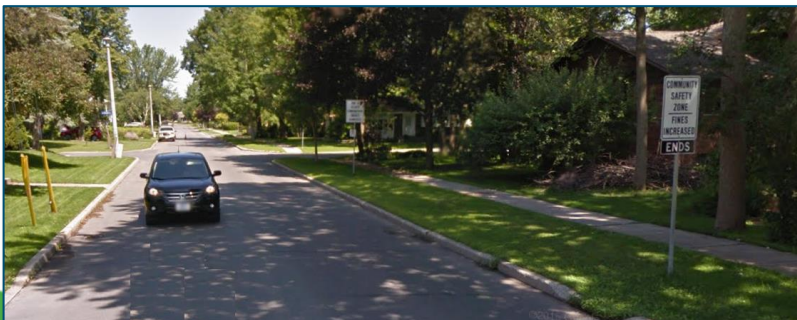
- Upon receiving complaints of speeding, Infrastructure Department contacted City Police and requested surveillance and enforcement. Police immediately deployed under cover surveillance in the area.
- The Infrastructure Department also installed speed boards in order to collect data, conduct a speed survey, and bring awareness to motorists.
- Speed boards were installed in 'Stealth Mode' at the beginning to collect data while avoiding driver bias.
- Data collected at time of complaints was not indicative of a speeding issue. (85th percentile – 48km/h)



Construction Traffic & Vehicular Speeding Issues

Recommendations:

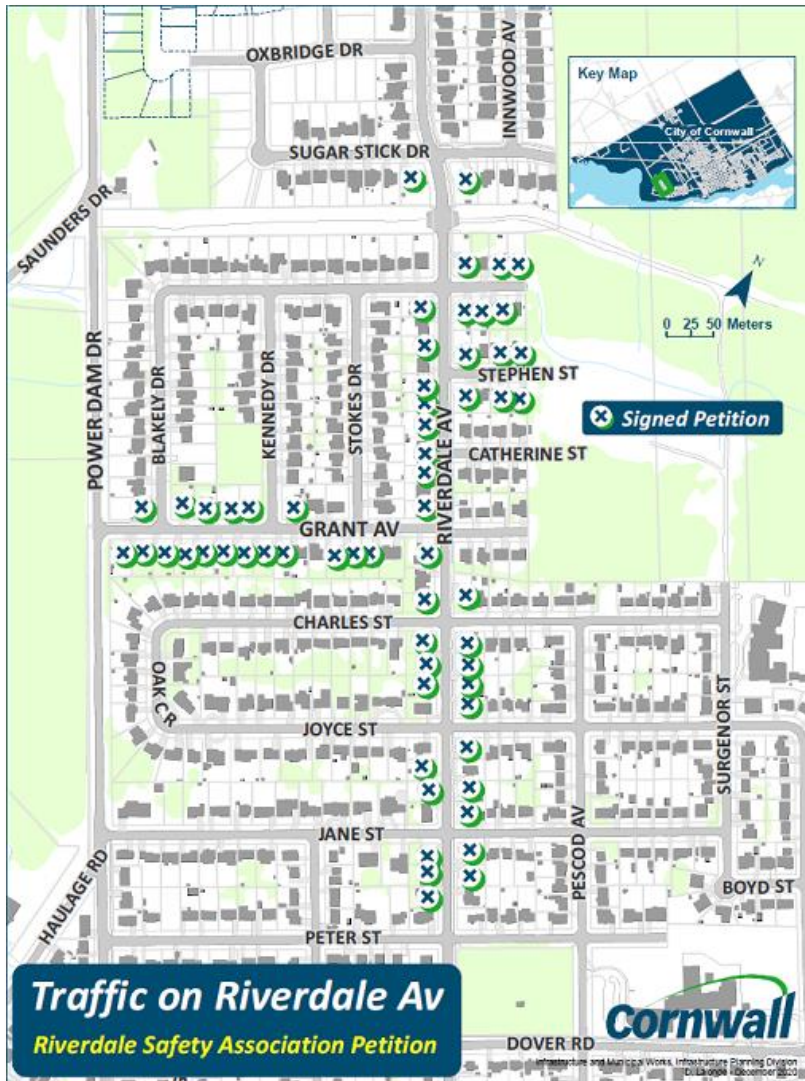
- Continue to install speed boards in this area in order to promote driver awareness, collect data, and conduct speed surveys, etc.
- Speed board data is made available to City Police to be used as a tool to help with enforcement issues
- Encourage residents to continue to report any speeding issues
- Increase Police enforcement/surveillance as required based on speed board data and resident complaints
- Extend existing Community Safety Zone on Riverdale Ave. to Dorney Ave. which doubles fines for any driving infractions.



Construction Traffic – Debris, Mud, Dust, Etc.

- During the construction of a subdivision, a City capital construction project, a private home construction project, some levels of mud, debris, dust, etc., is expected and unavoidable.
- However, we do expect that the contractor attempts to mitigate these issues as much as reasonably possible.
- Upon receiving complaints, the City completed inspections and agreed that the contractor needed to increase street sweeping/cleaning frequency.
- The City also required that Riverdale Ave. and Grant Ave. not be used for hauling fill.
- Complaints regarding this issue subsequently dissipated.

Riverdale Ave. / Grant Ave. Petition #1



- ‘Riverdale Safety Association’ Petition received December 2020 with signees from 60 addresses requesting the following:
 1. Enforce existing heavy vehicle restrictions on Grant Ave. and Riverdale Ave.;
 2. Adopt traffic-calming strategies including but not limited to, a four-way stop at the intersection of Grant Ave. and Riverdale Ave. and infrastructure such as raised crosswalks and centre-islands to protect pedestrians and drivers; and
 3. Develop alternate access routes to Power Dam Dr. from the north end of Riverdale.

Riverdale Ave. / Grant Ave. Petition #1

1) *Enforce existing heavy vehicle restrictions on Grant Ave. and Riverdale Ave.*

- Traffic By-Law provides an exemption to use ‘No-Truck’ routes whenever the site cannot be reached by a ‘Highway’ (‘Truck Route’ - Power Dam Dr.);
- Phase 3 construction is already completed;
- Current heavy truck traffic is related to home building and would be considered low;
- Phase 4 construction (developer and/or home builders) would not be permitted to use Grant Ave. and Riverdale Ave. as per Traffic By-Law and will be enforced accordingly; and
- City Traffic By-Law is consistent with many other municipalities.

Riverdale Ave. / Grant Ave. Petition #1

2) *Adopt Traffic Calming Strategies*

- Traffic Study was completed and the results are detailed in the Council Report
- Speed surveys conducted in the area are not indicative of a speeding issue
- Historical collision records were analyzed which indicate no collision issues (Grant Ave. – 0 Collisions for last 10 years analyzed)
- Warrant analysis for a four-way stop at intersection of Grant Ave. and Riverdale Ave. was completed which determined that a four-way stop is unwarranted
- Alignment of Grant Ave. is not conducive to a four-way stop and would exacerbate issues

Riverdale Ave. / Grant Ave. Petition #1

2) *Adopt Traffic Calming Strategies - Continued*

- OTM Manual states that four-way stops are inappropriate as:
 - Speed control devices;
 - Where protection of pedestrians are of concern; and
 - As a means of deterring through traffic in residential areas.
- Unwarranted four-way stops would likely impact historical collision records
- City traffic studies and other similar North American studies determined that four-way stops are ineffective as speed control devices.

Riverdale Ave. / Grant Ave. Petition #1

2) *Adopt Traffic Calming Strategies - Continued*

- Traffic growth north of Grant Ave. is expected to be modest and a four-way stop at Grant Ave. is likely not to be required in the long term
- Administration will continue to conduct traffic studies over the next several years to determine if any mitigation is required.
- Speed boards will continue to be installed from time to time to bring awareness to drivers and data will be available to police for enforcement purposes.
- If future traffic studies determine traffic calming measures are necessary, they could be incorporated into future resurfacing and reconstruction projects along Riverdale Ave.

Riverdale Ave. / Grant Ave. Petition #1

3) *Develop alternative access routes to Power Dam Dr. from the north end of Riverdale Ave.*

- Phase 3 of subdivision did not include connection to Power Dam Dr.
- Phase 4 of subdivision will include extension to Power Dam Dr. providing an alternate access to the north end of Riverdale
- Phase 4 could begin as early as the beginning of 2022 subject to market conditions
- Current heavy truck traffic is related to home construction and is considered low and unavoidable
- An alternate access will be provided through the subdivision process in the near future

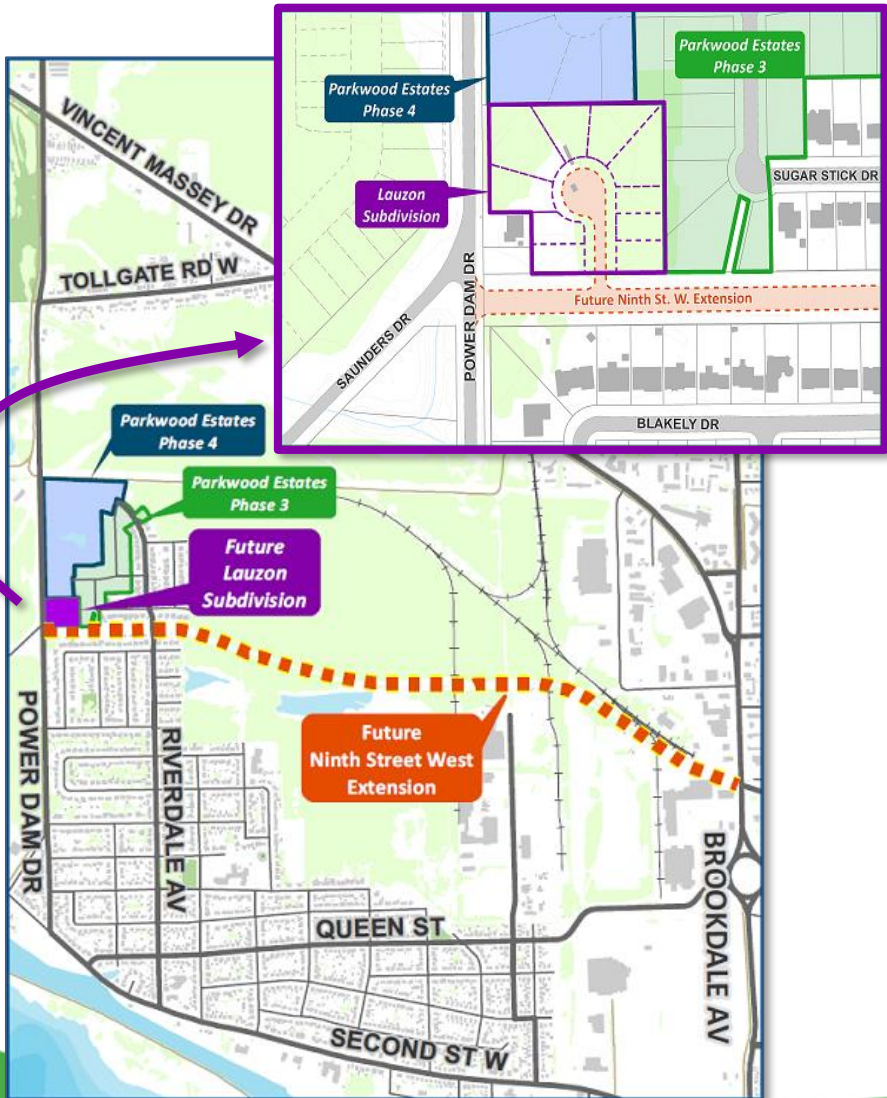
Riverdale Ave. North Petition #2



- ‘Extension of Riverdale Avenue’ Petition received November 2020 – Signees from 19 addresses (North of Sugar Stick Dr.) which requested that the City:
 1. Eliminate the Riverdale Ave. extension to Power Dam Dr.; and
 2. Build Ninth Street Extension from Saunders Dr. to Riverdale Ave.

Riverdale Ave. North Petition #2

Ninth St. W. Extension



- Ninth St. W. Extension was to be built primarily by development as it is directly related to growth
- Ninth St. W. Extension was to be phased as subdivision development occurs
- Lauzon Subdivision will include the extension of Ninth St. W. from Power Dam Dr. to the subdivision entrance as well as include the realignment of the Saunders Dr. intersection
- The developer of the Lauzon Subdivision is responsible for costs related to the Ninth St. W. Extension as it is servicing private development
- The City will be realigning Saunders Dr. intersection at Ninth St. W. as it should not have been built with that intersection alignment.

Riverdale Ave. North Petition #2

Closing Riverdale Ave. at Power Dam Dr.

- Riverdale Ave. is a designated collector street as per the City's Official Plan and was identified to connect to Power Dam Dr. at the north end of Riverdale Ave.
- Local streets serve primarily to provide access to properties
- Collector streets both provide access to properties but also traffic circulation within residential, commercial and industrial areas
- Collector streets serve to collect and distribute traffic between the local roads and arterial roads
- Arterial roads provide the major corridors for traffic movement (increased speeds and volumes) and serve to channel traffic to other areas
- The collector street (Riverdale Ave.) must be connected to the arterial road (Power Dam Dr.) to function correctly

Riverdale Ave. North Petition #2

Closing Riverdale Ave. at Power Dam Dr.

- Not connecting Riverdale Ave. to Power Dam Dr. (the arterial) would be poor transportation planning which would have an adverse effect on the residents of Riverdale Ave. south of Sugar Stick Dr. and on Grant Ave. which is a local roadway. Both of these areas submitted the previous petition.
- The Draft Plan of Subdivision is already approved. Changing the Draft Plan would be a significant undertaking with major costs.
- Not connecting Riverdale Ave. to Power Dam Dr. would cause a health and safety issue, emergency response issue, a future construction issue, etc. as the north end of Riverdale would only have one access point.
- Closing Riverdale Ave. at the north end would change Grant Ave. to a collector which it was not designed to be and contrary to the City's Official Plan.

Riverdale Ave. North Petition #2

- Summary:
 - This petition was submitted primarily due to the concern of a significant amount of cut-through traffic which is not likely to occur. Southern areas of Riverdale have more direct and more convenient accesses via Power Dam Dr. and Second St. W. (arterials)
 - Sugar Stick Dr. and Blakely Dr. residents who back onto Ninth St. W. Extension were not surveyed and would likely be opposed
 - Some residents have already contacted the City to express concerns
 - Recommendations would have adverse effect on the residents who submitted the previous petition (Riverdale Ave. south of Sugar Stick Dr. and Grant Ave.)
 - Transportation studies, planning and analysis should guide these decisions
 - Ultimately, Administration recommends that this petition not be considered

Riverdale Ave. / Grant Ave. Petition #1

Council Report - Recommendations

- 1) That Administration continue to monitor the area, conduct speed surveys, traffic studies, etc., and implement any potential mitigation measures, if necessary, as part of a future capital project ;
- 2) That the existing Community Safety Zone be extended to Dorney Ave. which will double fines for driving infractions;
- 3) That the Traffic Section install speed boards throughout the year at various times to increase driver awareness and to support police enforcement;
- 4) That the report and presentation be sent to the City Police; and
- 5) That the Infrastructure Department continue to implement the Bicycle and Pedestrian Master Plan in the Riverdale area.

An aerial photograph of a residential neighborhood. A large, irregularly shaped area of light-colored sand or dirt is visible in the upper left and center, partially overlapping a road and a residential street. The surrounding area is densely packed with houses, many of which have swimming pools. The houses are arranged in a grid-like pattern with winding streets. The background shows a large, flat, green field, possibly a golf course or a park, with some trees and a road. The overall scene is a mix of developed residential land and undeveloped or partially developed areas.

Thank You.

Questions?