CITY OF LANGFORD

TRANSPORTATION AND PUBLIC WORKS COMMITTEE

Tuesday, June 8th, 2021 @ 5:30 pm

Due to COVID-19 Council Chambers is Closed
Dial In: 1-855-703-8985 (Canada Toll Free) or 1-778-907-2071 **or join via Zoom using Zoom.us or Zoom app on your mobile device.**
Meeting ID: 834 8653 8946
To Participate: During the public participation period, press **Star (*) 9** or use the icon in Zoom to "raise your hand". Participants will be unmuted one by one when it is their turn to speak.
When called upon, you will have to press *6 to unmute the phone from your side as well.
We may experience a delay in opening the meeting due to technical difficulties. In the event that the meeting does not start as scheduled please be patient and stay on the line, we will get started as quickly as possible. **Public Dial-In Details are also posted at www.langford.ca**

AGENDA

CITY OF LANGFORD

MINUTES OF THE TRANSPORTATION AND PUBLIC WORKS COMMITTEE

Tuesday, February 9th, 2021 @ 5:30 pm

Due to COVID-19 Council Chambers is Closed
Meeting by Teleconference

_____

PRESENT

Councillors: R. Wade (Chair), and N Stewart (Vice-Chair).

By Telephone: Members L. Bjola, C. Lervold, and N. Johal.

ATTENDING

Director of Engineering, M. Mahovlich; Director of Finance, M. Dillabaugh; Manager of Information Technology, K. Dube; and IT Support Specialist, C. Lowe.

By Telephone: George Henshall, Deputy Director of Engineering and Public Works.

ABSENT

Member: B. Sifert.

1. CALL TO ORDER

The Chair called the meeting to order at 5:55 p.m.

2. APPROVAL OF THE AGENDA

MOVED BY: COUNCILLOR STEWART
SECONDED: N. JOHAL

That the Transportation and Public Works Committee approve the Agenda as presented.

CARRIED.

3. ADOPTION OF THE MINUTES

a) Transportation and Public Works Committee Meeting – October 13th, 2020

MOVED BY: COUNCILLOR STEWART
SECONDED: C. LERVOLD

That the Transportation and Public Works Committee approve the Minutes of the meeting held on October 13, 2020.

CARRIED.

4. REPORTS

a) Engineering Department Five Year Financial Plan for 2021 – 2025

- **Staff Report (Engineering)**

MOVED BY: COUNCILLOR STEWART
SECONDED: C. LERVOLD

That Transportation and Public Works Committee recommend to Council:
That Council:

1. Approve in principle the Engineering Department Five Year Financial Plan for 2021-2025 as presented in the staff report dated February 9, 2021 and refer it to the Director of Finance for consideration and inclusion in the consolidated 2021 – 2025 Five Year Financial Plan.

CARRIED.

5. CORRESPONDENCE

a) Victoria Regional Transit Commission
RE: Regional Transit Year End Summary

That the Transportation and Public Works Committee received this letter from the Victoria Regional Transit Commission regarding the Regional Transit Year End Summary as information only.

6. ADJOURNMENT

The Chair adjourned the meeting at 6:20 p.m.

CHAIR

CERTIFIED CORRECT
(Corporate Officer)

City of Langford
www.cityoflangford.ca

Staff Report

to

Transportation and Public Works Committee

Date: **June 8, 2021**

Department: **Engineering**

Subject: **Crosswalk Request for Dunford Avenue**

Background

The Engineering Department has received a request to install several crosswalks on Dunford Avenue. They cite safety concerns such as speed and large trucks along this road and the lack of crossing opportunities throughout the length of Dunford Avenue.

Commentary

Dunford Ave is an approx. 800m long road that connects Jacklin Road to the east with Leigh Road to the west (see Appendix 1). The area surrounding Dunford Avenue differs significantly in designated land-use: the north side is entirely residential housing with a north-south access of Carlow Road, and; the south side is entirely commercial/ light industrial including an intersection with Henry Eng Place that accesses the Henry Eng Business Park. The road is believed to be used by drivers looking to 'cut-through' rather than use Langford Parkway to the south or Goldstream Avenue to the north.

The businesses along the south side include: an ICBC salvage depot; several automotive repair shops; and, recycling facilities. Such uses do not normally create a high demand for people to walk to or from them and staff so not see that being any different at this location. Instead the potential for a crosswalk may fall under another design parameter.

Another element in reviewing crosswalk requests is pedestrian connectivity: the need to create connections between existing infrastructure so the 'system' is complete. Such a task is used when considering the more holistic context of the infrastructure's needs regardless of area use. Pedestrians may want to access other areas simply for the want to connect to another location: i.e. perhaps walk from Dunford Ave to Leigh Road (or vice-versa) via Henry Eng as there is less traffic and a concrete sidewalk for the entire route. This is referred to as "pedestrian desire lines" and is something to consider when balancing crosswalk requests versus the existing infrastructure.

In the case of Dunford Avenue the area infrastructure includes (see Appendix 1): a sidewalk on the north side of Dunford connecting Jacklin Road with Carlow Road; a sidewalk on the east side of Carlow to Bray

Avenue; a sidewalk on the south side of Dunford from Henry Eng Place to 937 Dunford, where it then transitions into a bike lane through to Jacklin Road. In 2017 the City used Gas Tax funds to create separated bike lanes along both side of Dunford from Henry Eng/ Carlow west to Leigh Road. Although only marked as bike lanes these are frequently used by pedestrians moving through the area. Lastly, Henry Eng Place features a concrete sidewalk connecting Dunford through to Leigh Road.

As well it is common practice to ensure mid-block crossings are minimized to increase road safety. As there is minimal reasoning for pedestrians to consider crossing the road staff are not recommending that multiple crossings be installed along Dunford Avenue.

Staff conducted a survey of Dunford Avenue's traffic use between May 12 and 18; this survey was conducted on Dunford Ave just to the east of Henry Eng Place. The results are as follows:

- Vehicle Speed (km/h): 47.7
- Traffic Volumes (vehicles/ day): 4977
- % Truck Traffic: 6.1%

The truck traffic is not as high as staff were expecting given the large industrial land use to the south and the cut-through nature of the roads' design and believed use.

When installing mid-block crosswalks, the City defers to the standards created by the Transportation Association of Canada's *Pedestrian Crossing Control Guide.* In this case should a crosswalk be installed at this location the *Guide* recommends the following (two-lane road, average daily traffic 4500 < 9000): crosswalk signs on each side and 'zebra'-style crosswalk markings on the road. In this location there would also be a need to install extensions of existing concrete and asphalt sidewalks and curb let downs to accommodate these pedestrians. Although neither the pedestrian crossing volumes or the vehicle volumes are significant enough to warrant pedestrian activated crosswalk flashers this may be an option the placement of such devices in other areas of the City.

Legal Implication

None.

Financial Implications

A new crosswalk at this location would cost approximately $28,000 and would be funded through the Engineering Departments' annual Operations Traffic Signs budget (approx. $2000 for the signs and pavement markings) and the Small Road Improvements budget (approx. $26,000 for the curb and sidewalk adjustments). Should it be approved a pedestrian crosswalk flasher would cost approx. $17,000 to be funded through the Departments' Capital Traffic Signal Upgrades currently budgeted at $200,000.

Options

That the Transportation and Public Works Committee recommend that Council:

1. Direct staff to install a crosswalk at the intersection of Dunford Avenue and Henry Eng Place, complete with: pedestrian crossing signs; 'zebra'-style pavement markings, and; curb letdowns on each side, at an approx. cost of $28,000 and to be funded through the Traffic Signs operating budget for signs and pavement markings and Small Road Improvements operating budget for the curb and sidewalk adjustments;

   OR

2. Direct staff to install a crosswalk at the intersection of Dunford Avenue and Henry Eng Place, complete with: pedestrian crossing signs; 'zebra'-style pavement markings; pedestrian-activated crosswalk flashers, and; curb letdowns on each side, at an approx. cost of $45,000 and to be funded through the Traffic Signs operating budget for signs and pavement markings; the Traffic Signal Upgrades capital budget for the pedestrian-activated crosswalk flashers, and; the Small Road Improvements operating budget for the curb and sidewalk adjustments;

   OR

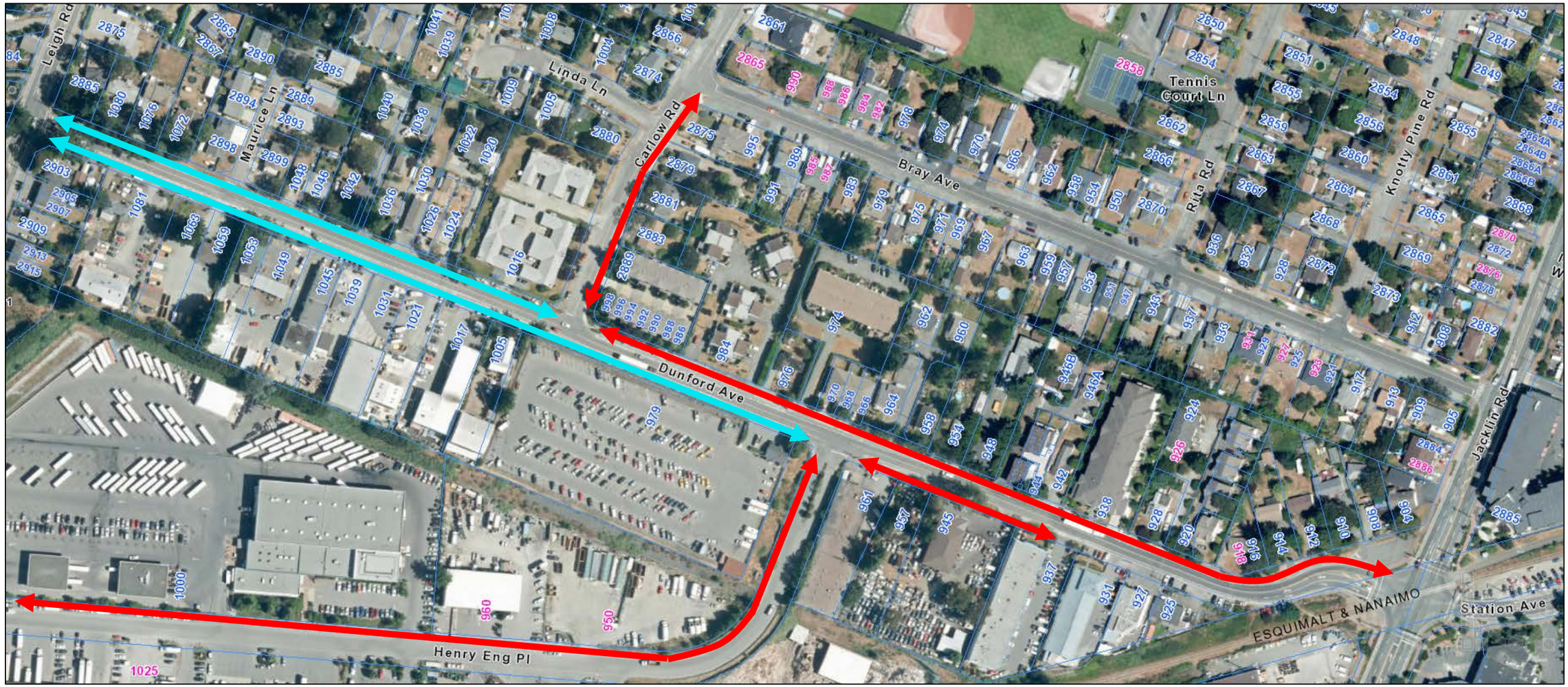
3. Do nothing at this time with respect to the installation of a crosswalk at the intersection of Dunford Avenue and Henry Eng Place.

Respectfully submitted,

Submitted by:	David Lenton, AScT, Senior Engineering Technologist
Concurrence:	Michelle Mahovlich, P.Eng, P.Geo, Director of Engineering
Concurrence:	George Henshall, ASCT, Deputy Director of Engineering & Public Works
Concurrence:	Matthew Baldwin, MCIP, RPP Director of Planning
Concurrence:	Marie Watmough, Manager of Legislative Services
Concurrence:	Lorne Fletcher, Manager of Community Safety and Municipal Enforcement
Concurrence:	Michael Dillabaugh, CPA, CA, Director of Finance
Concurrence:	Braden Hutchins, Director of Corporate Services
Concurrence:	Darren Kiedyk, Chief Administrative Officer

:dl

Appendix 1 – Dunford Avenue Location Map



Legend

Concrete Sidewalk

Separated Bike Lane

City of Langford
www.cityoflangford.ca

Staff Report

to

Transportation and Public Works Committee

Date: **June 8, 2021**

Department: **Engineering**

Subject: **Streetlight Review of Glen Lake Road from Sooke Road to City Centre Park**

Background

This report summarizes the staff review of existing streetlight installations on Glen Lake Road, between Sooke Road and City Centre Park, and whether the City should proceed with the installation of additional streetlights per the City's Street Lighting Policy.

Commentary

Along this section of Glen Lake Road there has been little land development, however, there has been plenty around it, including: further expansion around Westhills; multi-family residences by Sooke Road, and; the new Belmont Secondary School. This has led to an increase in road use by new pedestrians, cyclists and vehicle traffic. In turn this has led to concerns from area residents about the challenges of walking and cycling through this route in what they feel is an unsafe environment due to what they feel is a lack of streetlighting.

Staff refer to the City's Street Lighting Policy, revised in 2016 and attached as Appendix 1, when reviewing requests for new streetlights. The policy states that Collector roads, such as Glen Lake Road, should have BC Hydro streetlights at no more than 100m spacing, depending on the location of existing power poles. Maps of the existing streetlight locations is attached as Appendix 2: the first is Glen Lake Road from Sooke Road to Parkdale Drive, and the second is from Parkdale Drive to City Centre Park.

For the first map staff identified three locations where additional streetlights would be required per the policy: 3183 and 3127 Glen Lake Road would evenly divide the between the two existing streetlights that are over the 100m spacing. An additional light at the intersection with Kathlynn Lane, a private road with three lots, would not only meet the spacing requirement but also another requiring streetlights installed at all intersections.

On the second map the spacing and intersection requirements are met save for one location: the map shows a light at 3047 Glen Lake Road per mapping data provided by BC Hydro. However, a field check by staff confirmed this light is not actually installed. As a result, staff would prefer a streetlight to be installed outside 3044 Glen Lake Road that would better evenly space out the lighting along this section. Although the distance between the last two lights nearest City Centre Park is over the 100m policy requirement, staff are not proposing another light to be installed between them due to the lack of traffic conflicts along this route. The road is straight with plenty of sight distance for drivers and pedestrians are using a concrete sidewalk on the north side.

Legal Implication

None.

Financial Implications

The installation of new BC Hydro streetlights can cost up to $2500 per light plus an additional $19 per light per month for each streetlight. This would be funded through the Engineering Departments' annual BC Hydro Rentals operations currently budgeted at $200,000.

Options

That the Transportation and Public Works Committee recommend that Council:

1. Direct staff to order new BC Hydro streetlights at the following locations: 3183 Glen Lake Road; 3127 Glen Lake Road; across from 3108 Glen Lake Road, and; 3044 Glen Lake Road, and at an approximate cost of $10,000 plus an additional $76 per month, to be funded through the Engineering Departments' annual BC Hydro streetlight budget;

   OR

2. Do nothing at this time with respect to the installation of additional streetlights on Glen Lake Road from Sooke Road to City Centre Park.

Respectfully submitted,

Submitted by:	David Lenton, AScT, Senior Engineering Technologist
Concurrence:	Michelle Mahovlich, P.Eng, P.Geo, Director of Engineering
Concurrence:	George Henshall, ASCT, Deputy Director of Engineering & Public Works
Concurrence:	Matthew Baldwin, MCIP, RPP Director of Planning
Concurrence:	Marie Watmough, Manager of Legislative Services
Concurrence:	Lorne Fletcher, Manager of Community Safety and Municipal Enforcement
Concurrence:	Michael Dillabaugh, CPA, CA, Director of Finance
Concurrence:	Braden Hutchins, Director of Corporate Services
Concurrence:	Darren Kiedyk, Chief Administrative Officer

:dl

Attachments:
Appendix 1 – Streetlight Policy
Appendix 2 – Area Map

City of Langford
www.cityoflangford.ca

Policy Name: Street Lighting Policy ☐ New ☒ Amendment	DEPARTMENT: Engineering SP Governance/Corporate Policy and Planning/Policies and Procedures POLICY NO: POL-0104-ENG

Amendment No. 1, 2016

PURPOSE

The purpose of this policy is to guide staff and inform the public of the reasons for, and the location of, BC Hydro streetlights that are to be installed in existing neighbourhoods in the City of Langford that have not yet seen recent development.

POLICY

Street Lighting Policy for Existing Neighbourhoods

That it be Council policy that BC Hydro streetlights be installed in the City of Langford in the following locations:

a) At no more than 100 meter spacing along collector roads. Spacing may be restricted based on the location(s) of existing BC Hydro pole(s);

b) At each municipal road intersection, crosswalks and major accesses;

c) At the end of each no through road wherever more than 50% of the affected people on the cul-de-sac sign a petition asking for the streetlight;

d) A second streetlight shall be added at intersections, sharp corners and locations where road curvature reduces visibility and the existing streetlight does not give adequate coverage.

Amends: POL-0104-ENG, 1999

Adopted by Council Meeting Date: April 18th, 2016	CERTIFIED CORRECT Administrator Date:

Scale: 1:2,000

0 25 50 100 150 200 250 m

Street Light Policy Assessment
Glen Lake Rd

Page 1

- Cobra
- Hydro Davit
- Proposed Hydro Davit Location

*Centreline split perpendicular to street light.

City of Langford
Engineering Department

Scale: 1:1,200

0 25 50 100 150 m

Street Light Policy Assessment
Glen Lake Rd

Page 2

- Cobra
- Hydro Davit
- Proposed Hydro Davit Location

*Centreline split perpendicular to street light.

City of Langford
Engineering Department

City of Langford
www.cityoflangford.ca

Staff Report

to

Transportation and Public Works Committee

Date: **June 8, 2021**

Department: **Engineering**

Subject: **Peatt Road 3-D Crosswalk**

Background

New ways of dealing with traffic and pedestrian safety is an evolving industry including LED flashers, speed signs and now street art. 3D street art has been around for awhile as a part of arts and culture in many parts of the world, but in recent years it has now been used as enhancing public safety. Staff are proposing a trial model of a 3D crosswalk at the mid block of the 2700blk of Peatt Road between Goldstream and Brock Avenue.

Commentary

3D crosswalks originated in Great Britain and have now been implemented throughout Europe, India, New Zealand and most recently in Montreal and Edmonton. Studies vary on their effectiveness from very little to as much as a 40% change in drivers' behavior, dropping speeds to up to 15kmh[1]. We would continue to use the thermoplastic for the crosswalk as it contains the glass beads for reflectivity and use a dark grey Methyl Methcrylate (MMA) paint for the shadowing effect. It is the same product we have used for the green bike lanes and has withstood years of traffic with little failure. This crosswalk will be warrantied for a minimum of 5 years specifying these two products. The Fire Department has endorsed this trial as it meets their concerns for response times given they do not have to slow down for a speed hump.

An example of the propose is shown in Figure 1.

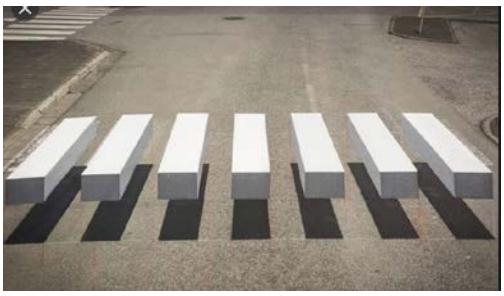


Figure 1

Legal Implication

The crosswalk does meet the requirements of the motor vehicle act as the white 'zebra' bars are the standard. We are merely enhancing this crosswalk with shadow effects to create the illusion. Additional signage may be considered.

Financial Implications

The cost of upgrading this crosswalk has been estimated at $4500 and would be funded through the Neighbourhood Improvement budget. If the trial period is successful, it would then be maintained through our operations budget.

Options

That the Transportation and Public Works Committee recommend that Council:

1. To install the 3D crosswalk at the 2700 block of Peatt Road as a trial and funded through our Neighbourhood Improvement budget and bring the results back to Council within a year of the installation

   OR;

2. To not install the 3D crosswalk and continue with the standard crosswalk design.

Respectfully submitted,

Submitted by:	George Henshall, ASCT, Deputy Director of Engineering & Public Works
Concurrence:	Michelle Mahovlich, P.Eng, P.Geo, Director of Engineering
Concurrence:	Leah Strohman, Planning
Concurrence:	Chris Aubrey, Fire Chief
Concurrence:	Lorne Fletcher, Manager of Community Safety and Municipal Enforcement
Concurrence:	Michael Dillabaugh, CPA, CA, Director of Finance
Concurrence:	Braden Hutchins, Director of Corporate Services
Concurrence:	Darren Kiedyk, Chief Administrative Officer

:gh

[1] **Successfully implemented in New Delhi**

Although this is the first time a 3D zebra crossing has been trialled in Britain, a number of similar road crossings have been tested in Iceland, India, New Zealand and the US.

According to the council, optical illusion crossings have "been proven" to improve road safety.

"Trials of a similar scheme in New Delhi, India, are reported to show that average speeds where it was employed had dropped by as much as 40 per cent, from 30mph to 20mph," reported Westminster Council.

City of Langford
www.cityoflangford.ca

Staff Report

to

Transportation and Public Works Committee

Date: **June 8, 2021**

Department: **Engineering**

Subject: **Nicklaus Drive Traffic Concerns**

Background

Staff have received concerns from residents of Nicklaus Drive about speeding through the playground zone fronting the local tot lot park (Appendix 1). Located in the Bear Mountain neighbourhood Nicklaus Drive is a two-lane residential road that connects Bear Mountain Parkway in the north to the Spirit Ridge Drive/ Players Drive intersection in the south with several residential cul-de-sac roads in between. This design of road allows it to function as a local collector for this immediate area and, as such, is meant to accept higher traffic volumes.

Commentary

As part of this neighbourhood design the developer was required to provide a 'tot-lot' park on Nicklaus Drive (Seen in Appendix 2 as 2139 Nicklaus Dr.); this playground's placement then required a crosswalk to the north side of the road as the sidewalk is on that side. This crosswalk also features a median traffic island that splits the two directions of traffic, provides an element of traffic calming and allows for pedestrian refuge. The Bear Mountain standard provides for crosswalks throughout the neighbourhood that are constructed of patterned concrete providing both a visual difference to the crossing location and also a textural difference when driving over them.

In 2020 staff installed: a) pedestrian-activated crosswalk flashers at this location to aid in warning drivers of families crossing due to the limited sight distance of eastbound traffic and the on-street parking on that side of the road, and; b) white reflective pavement markings to assist in delineating the crosswalk location.

In response to resident concerns staff conducted a speed watch survey of this playground zone in January/ February 2021 and the results can be found below:

	Morning	Noon	Afternoon
EB (Downhill)	45	45	44
WB (Uphill)	44	43	43

There was no significant difference in these averages over the surveys' various hours despite being carried out over five different days including two times each for the morning and afternoon commutes. Although these results were passed along to residents they were not believed to be accurate and considered their perception to be more reliable.

As we can see these numbers are over the 30 km/h speed limit inherit with a playground zone. Staff believe there are valid reasons for this lack of compliance:

1. Eastbound/ downhill traffic are travelling along a section of road that has minimal conflicts as there are no homes on this side and there is considerable sight distance to the parallel parking stalls and the crosswalk/ park;
2. Westbound/ uphill traffic are travelling along a road that becomes steeper after the playground and drivers look to accelerate to get up the hill.

To address this matter staff are suggesting the installation of vertical delineators that have been used successfully elsewhere in the City. Examples include the Bear Mountain Parkway east of Echo Valley Drive and Walfred Road between Mesa Place and Normark Place. These have shown to change driver behavior by providing an obvious physical division between the travel lanes, as well narrowing the drivers field of vision, thereby creating the notion that the vehicle is entering a narrower lane. Appendix 2 also shows the proposed locations of these delineators. Staff propose to install these at 2m intervals, as has been previously installed elsewhere, and also in a manner that tapers from outside to inside to increase the visual narrowing effect. As well there may be an option to change the height of the delineators so as they may be increasing in height as the driver proceeds along their alignment; in doing so this would again enhance the 'tunnel-effect' of their installation and, therefore, enhance the narrowing of the driver field of view.

Speed Reduction Devices

City staff frequently receive requests from residents to install speed humps on their road to combat the perceived speeding on their road; however, it has long been the City's standard to not implement speed humps. There are several reasons for this position:

1. They are not supported by emergency services as they increase their response time to emergencies in areas beyond the speed hump location;
2. They make more difficult winter maintenance procedures such as plowing;
3. They create noise pollution in the area immediately surrounding the speed hump location, and;
4. ICBC has actually been recommending their removal as drivers end up speeding to and from the speed hump location, therefore, reducing their effectiveness.

Many Municipalities throughout the region have installed such devices, in one form or another, to address similar concerns: speed humps, cushions and tables are all variations of the same concept whereby additional paving is used to create a raised portion of road that forces drivers to pass at a reduced speed (see Appendix 3 for examples).

Staff are requesting Council provide direction for whether speed tables should be implemented in Langford at all and, if so, how. Staff propose to research policies used to warrant the installation of such speed reduction devices, what devices are available, and in what situations there are used. Staff would then report back to Council with a policy that is has been reviewed by all stakeholders including emergency service providers.

Legal Implication

None.

Financial Implications

To purchase and install the proposed vertical delineators would cost approximately $7500 (25 units at approx. $300 per unit installed) and be funded through the Engineering Departments' annual Small Road Improvements budget.

Options

That the Transportation and Public Works Committee recommend that Council:

1. Direct staff to install vertical delineators along the Nicklaus Drive gore area at an approx. cost of $7500 and to be funded through the Engineering Departments' annual Small Road Improvements budget;

   AND/ OR

2. Direct staff to research the use of speed reduction devices and bring forward to Council a policy that would warrant their implementation in Langford;

   OR

3. Do nothing at this time with respect to the traffic concerns on Nicklaus Drive and with respect to researching and preparing a policy for the implementation of speed reduction devices in Langford.

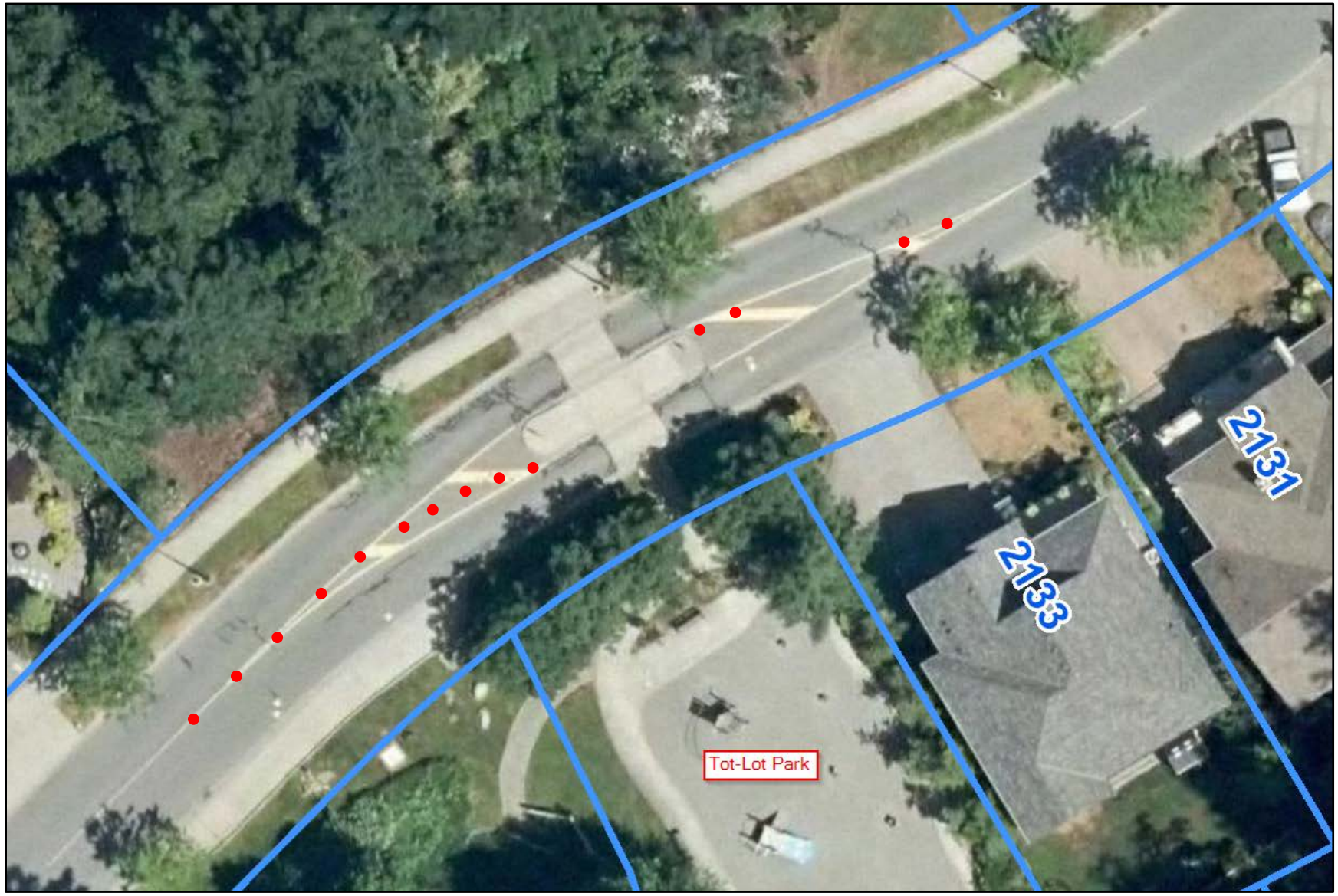
Respectfully submitted,

Submitted by:	David Lenton, AScT, Senior Engineering Technologist
Concurrence:	Michelle Mahovlich, P.Eng, P.Geo, Director of Engineering
Concurrence:	George Henshall, AScT, Deputy Director of Engineering & Public Works
Concurrence:	Mathew Baldwin, WCIP, RPP, Director of Planning
Concurrence:	Chris Aubrey, Fire Chief
Concurrence:	Marie Watmough, Manager of Legal Services
Concurrence:	Lorne Fletcher, Manager of Community Safety and Municipal Enforcement
Concurrence:	Michael Dillabaugh, CPA, CA, Director of Finance
Concurrence:	Braden Hutchins, Director of Corporate Services
Concurrence:	Darren Kiedyk, Chief Administrative Officer

:dl

Appendix 1 – Area Map

Appendix 2 – Location Map with Delineator Option – Locations shown schematically



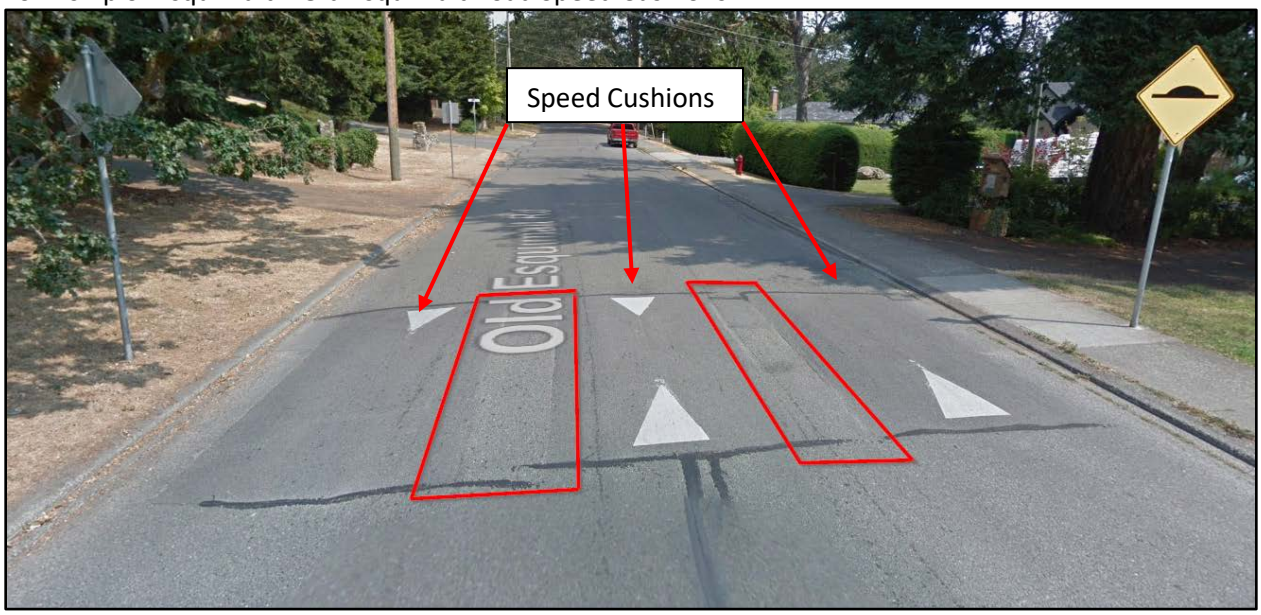
Appendix 3 – Types of Speed Reduction Devices

City of Colwood – Wishart Road Speed Hump

View Royal – Atkins Avenue Speed Table

*Note: similar to the speed hump except with increased length over the top

Township of Esquimalt – Old Esquimalt Road Speed Cushions



*Note: the areas outlined in red are the non-raised portions effectively creating ‘cushions’ for the majority of traffic to drive over.