

ARTERIAL ROADWAY ASSESSMENTS POTENTIAL FUNDING OPTIONS AND IMPLICATIONS - DESIGN, ACQUIRE LAND AND BUILD

RECOMMENDATION

That the April 13, 2022, Urban Planning and Economy report UPE00903, be received for information.

Report Purpose

Information only.

This information report identifies options for the construction of 34 Avenue / Maple Road to 23 Avenue/ Aster Way, including safety considerations and city wide implications.

Previous Council/Committee Action

At the December 7, 2021, City Council Public Hearing, the following motion was passed:

That Administration provide a report with potential funding options to design, acquire land and build, and explore the option of the City recouping the costs through the Arterial Roadway Assessments (Bylaw 14380) for the following roadways, as well as the pros and cons, potential safety implications and any city wide implications:

1. 34 Avenue/Maple Road to 23 Avenue/Aster Way
2. Upgrading and paving Meridian Street, West Railway Street to 23 Avenue.

Executive Summary

- Construction of the 23 Avenue arterial along a new alignment that ties into the 34 Avenue overpass and extension of Maple Road to 34 Avenue will ultimately replace the temporary Meridian Street/West Railway Street access. The construction of realigned 23 Avenue is the responsibility of the area developers, and is dependent on the pace of development of the adjacent neighbourhoods.

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- While there have been concerns raised regarding the delay to emergency vehicles caused by the presence of a train at these crossing locations, data shows that emergency response times are not significantly affected by the frequency, nor extent of trains blocking roadway crossings.
- The completion of the 23 Avenue arterial roadway will improve access to the Maple community through upgraded road infrastructure and a more direct travel route, however, the rail crossings could still both be blocked by a train at the same time.
- The construction of 23 Avenue will not significantly impact emergency response times.
- Developing neighbourhoods experiencing incomplete arterial roadway networks is not a unique issue. Neighbourhood residents throughout Edmonton have requested to advance arterial construction at a faster pace than the development can support.
- Using municipal funds to prioritize 23 Avenue construction could have a net tax levy increase or result in a reprioritization of funds within the existing capital budget and set a precedent that the City will use capital funds to prioritize arterial construction that would typically be completed by area developers. Additionally, it may divert funds that would contribute to other strategic mobility projects as prioritized in the Mobility Network Assessment.

REPORT

Background - Neighbourhood Access

Temporary public and emergency access roadways are used to meet City standards for public and emergency access requirements as a neighbourhood develops, ensuring that as development proceeds, there are safe ways to enter and exit a neighbourhood, though not all roadways are permanently constructed yet. One of the development conditions for the Maple neighbourhood is that two points of access are required at all times.

Neighbourhood Structure Plans set out the future vision for a neighbourhood and help guide land development, including land use, infrastructure and roadway design. The Maple Neighbourhood Structure Plan was adopted by City Council on April 12, 2010, and Section 4.4.8 of the approved plan provides the following direction with regards to access:

The developer will provide for emergency access to Meridian Street with the first stage of development, and will undertake the maintenance of the emergency access as required until the secondary access at 23 Avenue is constructed.” and “The timing of construction of the second crossing at 23 Avenue will be determined as neighbourhood development progresses and traffic demands warrant a permanent secondary access.

As shown in Attachment 1, the first, main access point at Maple Road is on the north end of the neighbourhood. This is an arterial roadway currently constructed with one travel lane in each direction and crosses the CN rail line. The second, temporary access point uses Meridian Street/West Railway Street and is accessible from 23 Avenue (involving crossing the same CN rail line). Access is also available to the east across the 34 Avenue overpass into Strathcona County.

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Emergency access only is also available via northbound Anthony Henday (without crossing the tracks).

Emergency response providers are aware of the secondary access point to/from south of the Maple neighbourhood, however, it is much farther from the closest fire station and in the opposite direction of travel that would normally be taken, so it is not used frequently.

As the communities of Maple, Aster and Tamarack are further developed, upgrades to the second access route to Maple will be completed. Construction of the 23 Avenue arterial roadway along a new alignment that ties into the 34 Avenue overpass and extension of Maple Road to 34 Avenue will ultimately replace the temporary Meridian Street/West Railway Street access. The construction of 23 Avenue is the responsibility of the area developers, and is dependent on the pace of development of the adjacent neighbourhoods (Aster and Tamarack).

Changes to the alignment of 23 Avenue or other changes to access in the area are difficult due to the amount of land already dedicated for the roadway construction, the surrounding land that has already been developed according to the approved Neighbourhood Plans and limitation to the design flexibility of an arterial roadway alignment. Another factor is the fragmented ownership in the area, and any new alignment will require negotiations with the affected landowners.

Arterial Roadway Construction and Upgrades

Maple Road and 23 Avenue are both arterial roads. Arterial roadways are typically required to be constructed in stages to support the subdivision for each phase of development in an area. The City requires developers to enter into a Servicing Agreement as a condition of subdivision approvals and before lots can be sold.

These Servicing Agreements outline the roadway construction and/or upgrades the developer must undertake to support public access and emergency access for that phase of development. Arterial construction costs in developing areas are shared by developers as per the Arterial Roads for Development Bylaw 14380 (ARA Bylaw).

The timing of subdivision applications and the subsequent Servicing Agreements are developer driven and are not prescribed by the City. Once a developer signs a Servicing Agreement for roadway construction, the developer typically has three years to complete construction. There is no servicing agreement in place to require the developers to construct the second permanent connection in Maple, including the extension of 23 Avenue and Maple Road at this time.

The developers have not yet submitted a subdivision application for the development of the Aster or Tamarack neighbourhood adjacent to 23 Avenue and therefore, a condition for constructing 23 Avenue has not yet been applied and the servicing agreement for that arterial roadway has not yet been triggered. It is important to note that traffic volumes on Maple Road are not exceeding capacity for a two lane arterial roadway and secondary access currently exists.

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Widening of 17 Street to 4 lanes from 23 Avenue to Silverberry Road has recently been required as a condition of subdivision as traffic volumes on 17 Street have reached the threshold for additional travel lanes.

The area developers have also been required to complete a transportation infrastructure projections study to review the current and projected traffic operations of the area and to recommend and prioritize the construction of the remaining arterial upgrades. A review to explore potential rebalancing of the ARA Bylaw responsibilities between developers and the City has also been required as part of this study to address a more complete developer-constructed arterial network. upe

34 Avenue/Maple Road to 23 Avenue/Aster Way

The developer has committed to the construction of Maple Road to the 34 Avenue overpass and has begun engineering and design work for this portion of the arterial roadway (this is a condition of a recent subdivision approval). A concept level estimated cost of construction provided by the developer for the completion of Maple Road to 34 Avenue is \$1 million +/- 25 per cent.

The extension of 23 Avenue is an outstanding portion of arterial construction (through privately owned lands) that is not currently required of area developers as a condition of their subdivisions. Design and engineering has continued for 23 Avenue and a Preliminary Design plan was recently approved. A concept level estimated cost of construction provided by an area developer for 23 Avenue construction is \$13 million +/- 25 per cent (two lanes of arterial road construction, including land purchase, creek, rail, and utility crossings).

Land Acquisition

The typical process for obtaining road right-of-way for arterial construction in developing areas is that developers dedicate land through the subdivision process and are compensated at an agreed rate through the ARA Bylaw. Developers often need to purchase some of the land required for road right-of-way from private landowners in the area, in order to acquire all the land as road right-of-way to complete arterial construction. Negotiations between a developer and a land owner for the acquisition of land required for road right-of-way can take time.

The ultimate alignment of 23 Avenue requires land from one private owner that does not wish to participate in development of their lands at this time, in addition to two active participating developers. Even with appropriate funding in place, timing for land acquisition is unknown, particularly for the privately owned land, as the developer cannot compel a private landowner to sell land for road right-of-way for development purposes. Roadway construction cannot occur until the necessary lands have been acquired.

Upgrading and Paving Meridian Street, West Railway Street to 23 Avenue

Costs for upgrading the rural portion of 23 Avenue, West Railway Street and Meridian Street to a paved rural roadway structure is approximately \$3.5 million +/- 25 per cent. This connection is temporary and is not included in the approved neighbourhood plans for the area or the

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Meadows ARA basin. Any temporary upgrades to these roadways are not cost-recoverable under the ARA Bylaw and costs would need to be borne by the City.

In October 2021, Administration was dispatched to complete routine maintenance of Meridian Street, and West Railway Street. The developer also completed maintenance to their portion of the temporary access at 8 Street.

Funding Options

Should Council direct the use of City funds to front-end urban upgrades to the ultimate alignment of 23 Avenue, this would require a capital budget profile with funds to be recovered from the ARA Bylaw as the construction is completed. This will result in a net tax levy increase or reprioritization of funds within the existing capital budget and is not usual business practice, as it may set an unsustainable precedent.

The Meadows catchment basin is currently holding approximately \$10 million in trust with an additional \$4 million in pending Servicing Agreements. This amount will fluctuate as 17 Street, Maple Road and other arterials in the basin are constructed or widened (which would reduce funds to the trust) or development progresses (which would add funds to the trust). Funds might not be available to pay back the construction of 23 Avenue immediately.

The City does not typically construct arterial roadways in developing residential areas that are the responsibility of the developer, unless there is a City-initiated development that requires it. An example would be the construction of a recreation centre that requires arterial access, or if the City is acting as a developer, subdividing and developing City-owned land in growth areas.

Potential Safety Implications

Safety implications and emergency response times were discussed in the August 24, 2021 Urban Planning and Economy report UPE00402 Emergency Response Delays and Options, for the Maple Road and 23 Avenue Extension. While there have been concerns raised regarding the delay to emergency vehicles caused by the presence of a train at these crossing locations, emergency response times are not significantly affected by the frequency, nor extent of trains blocking roadway crossings.

Since the August 24, 2021, report, there was a pedestrian fatality at the Maple Road - CN Rail crossing location, which was attended and investigated by municipal emergency services. The rail crossings at Maple Road and the West Railway Street/Meridian Street were both temporarily blocked by the stopped train while first responders completed critical activities in response. Access to the east via 34 Avenue into Strathcona County remained available for the Maple Community but was not a well known option at that time.

Following this tragedy, the developer, with support from Administration, placed improved signage identifying alternate access routes. The developer's website was also updated with this information. Later in 2022 (aligned to the completion of Maple Road), there will be a direct mail-out construction bulletin released by the developer, with support from Administration, which will provide updated access information.

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The completion of 23 Avenue is not expected to have a significant impact on emergency response times. The completion of the 23 Avenue arterial roadway will improve access to the Maple community through upgraded road infrastructure and a more direct travel route, however, the location of the rail crossings could still both be blocked by a train at the same time. Given the locations of the nearest fire halls, access to the Maple neighbourhood via Maple Road will remain the preferred primary route for emergency vehicles.

City-Wide Implications

Having the City front-end arterial roadways in developing areas has city-wide implications. Developing neighbourhoods experiencing incomplete arterial roadway networks is not a unique issue. Neighbourhoods throughout Edmonton have requested to advance arterial construction at a faster pace than the development can support. Using City funds to prioritize 23 Avenue construction could set a precedent that the City will use capital funds to prioritize other arterial construction that would typically be completed by area developers. This has the potential to set the expectation that the City will step in more frequently to front-end costs that should be borne by the developers. Using capital funds towards a developer-funded roadway may also limit City funds that would contribute to other strategic mobility projects as prioritized in the Mobility Network Assessment process.

At present, Administration is not sufficiently resourced to take on this extensive planning, design, or construction in support of development. There are potentially costs associated with completing this work on behalf of developers that would be borne by taxpayers. The ARA Bylaw allows for cost recovery of expended design and construction costs as well as 15% cost recovery for engineering and testing requirements. Any additional administration costs over and above this would not be recoverable. Funds through the ARA Bylaw might not be available to pay back the construction of 23 Avenue immediately.

Budget/Financial Implications

If the City were to front-end major infrastructure investments through the ARA Bylaw process, it would assume additional financial risk in terms of carrying costs and be faced with uncertain payback amounts and timelines. As a result, future ARA Bylaw recoveries are not a viable funding source for these capital investments.

If the City were to fund these roadway improvements, new capital funding sources would need to be identified through the budget process, which may result in reprioritization of funds within the budget or potentially a tax-levy increase.

Legal Implications

Pursuant to the Servicing Agreements, developers are responsible for acquiring the necessary lands to construct arterial roads for developments. Developers can only acquire lands from private parties by way of voluntary agreements.

The *Municipal Government Act* gives municipalities the power to expropriate land for valid municipal purposes. All takings of privately owned land are governed by the provisions of the

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Expropriation Act, which requires all municipalities to follow the same process and gives all private landowners the same rights and the same entitlements to compensation. Prior to the City commencing any expropriation, the City will attempt to acquire private land voluntarily, and will engage in negotiations and make offers to private landowners in advance of expropriation.

Prior to considering expropriation, a case-by-case legal analysis is conducted to ensure the proposed expropriation of private lands is legally supported. In addition, a legal assessment of damages and other risks is also conducted in order to ensure there is an adequate and approved budget to support the expropriation. The *Expropriation Act* sets out the compensation an owner is entitled to in an expropriation. The *Expropriation Act* provides that the owner will typically receive compensation for market value of its land interest, damages for out-of-pocket expenses and business loss, and legal, appraisal and other expert costs. If the City and the owner cannot come to an agreement on compensation, the land owner can proceed to the Land and Property Rights Tribunal to determine compensation. Except for the value attributed to the lands at the rate determined pursuant to the ARA Bylaw, which may not be the same rate if the acquisition proceeds through the expropriation process, there is no legal mechanism for the City to recover the costs of the expropriation from the developers.

COMMUNITY INSIGHT

As the Maple neighbourhood has grown, and following the pedestrian fatality in October 2021, several members of the Maple community contacted Administration. Concerns were raised over the overall safety of the neighborhood, current neighbourhood access options and timing of further arterial roadway construction, train frequency and operations including how often the train blocks roadways crossing, and the impacts to travel options and related delays. Concerns were also raised about the surface condition of the south access road and winter maintenance. All inquiries were responded to by email or phone call.

GBA+

The mobility needs of marginalized populations such as seniors and families with children may not be addressed by projects that focus on commuting corridors and long-distance travel. Large projects focusing on arterial roadways may not address localized needs for access to healthcare services, education, and other supports. The Mobility Network Assessment identifies the importance of prioritizing composite programs which support more localized improvements supporting a greater diversity of users in accessing local destinations. Completion of the neighbourhood road network provides for opportunities for improved transit accessibility, even if ridership is limited, options like on-demand can be explored.

Administration continues to work with developers to complete the roadway and pedestrian networks. A transportation infrastructure projections study has been requested to be completed by the developer to help prioritize the use of money in trust. Applying GBA+ to roadway upgrades planning will help meet the transportation needs of the Maple residents and ensure that projects do not create inequalities or contribute to the marginalization of diverse individuals. A GBA+ review was not applied at the time of the Neighbourhood Plan approval in 2010.

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ATTACHMENT

1. Maple Area Map