

DAMAGE TO PUBLIC PROPERTY DURING CONSTRUCTION

EXECUTIVE SUMMARY

Administration conducted a survey of concrete assets and trees in Calgary's inner city area in Wards 7, 8 & 9 where there were many permits for new residential construction on existing lots, known as infills. There was an average of \$163 in tree damage and \$1,391 in concrete damage per infill site. Based on this information, it was estimated that The City may have incurred public property losses of up to \$9.3 million due to infill construction projects city-wide for 2011-2015.

After reviewing current processes to document and protect public property around construction sites, Administration will implement 3 key initiatives to reduce the amount of public property damage that occurs, and improve the cost recovery from responsible third-parties:

1. Establish a working group to improve coordination and oversight for complaints regarding public property damage due to residential construction. The representatives from Community Services, Parks, Roads, Water Services, and Calgary Building Services will develop an Infill Construction Strategy and action plan to work with the industry to demonstrably reduce incidents of property damage by builders and developers.
2. Administration will educate and encourage all City employees and citizens to use the 311 Citizen Service System to report damage to City assets. Administration will develop a new 311 service request for infill construction concerns that will offer the ability to track and measure reported damage.
3. Administration will work with Calgary Approvals Coordination and Calgary Building Services to require pre-construction photographs of nearby City assets such as trees, laneways and street signs, as part of the development permit process. During an inspection or when a damage complaint arises, inspectors would access the photos and compare them with conditions found, and then determine what actions are required.

Administration will continue to identify pending development or public works projects that could impact new concrete sidewalk, curb and gutter projects. These City projects would be rescheduled to prevent new concrete from being damaged during construction.

ADMINISTRATION RECOMMENDATION(S)

That the Standing Policy Committee (SPC) on Transportation and Transit recommends that Council receive this report for information.

RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED 2016 NOVEMBER 09:

That Council receive this report for information.

DAMAGE TO PUBLIC PROPERTY DURING CONSTRUCTION

PREVIOUS COUNCIL DIRECTION / POLICY

On 2015 November 9, Council adopted NM2015-26 (Damage To Public Property During Construction) and directed Administration to “explore the following and other options to reduce the amount of public property damage during construction and improve cost recovery, with a report back to the Standing Policy Committee on Transportation and Transit no later than September 2016:

- Improve pre- and post-construction inspections and documentation during the construction of private property in order to measure third-party public property damage to ensure recoveries through a Property Damage Occurrence Report;
- Staff training and cooperative support from City departments and partner agencies including Calgary Parking Authority, Parks, Calgary Community Standards, Calgary Transit, Alberta Road Builders & Heavy Construction Association and other stakeholders to report damage and ensure that best practices are being understood, and applied.”

On 2016 September 21, at Administration’s request, Council deferred report TT2016-0539 to the 2016 November 9 session of the SPC on Transportation and Transit.

BACKGROUND

Contained within the road easement, or right-of-way (ROW), The City of Calgary has assets such as catch basins, curbs, gutters, fences, laneways, manholes, noise attenuation walls, pavement surface, sidewalks, streetlights, traffic control devices and trees. These assets can be damaged due to accidents or other acts by a third party.

The table below shows the current replacement value of these road assets:

Asset Type	Current Replacement Value (\$ Millions)
Boulevards	\$51.0
Bridges, Tunnels and Plus 15s	\$2,118.3
Curbs, Gutters and Sidewalk	\$5,078.1
Engineered Walkways	\$19.4
Fences, Guardrails, Soundwalls and Retaining Walls	\$332.5
Land and Facilities	\$351.2
Roads and Lanes	\$11,038.6
Streetlights	\$1,507.2
Traffic Barriers	\$97.1
Traffic Control Devices	\$301.9
Trees	\$614.0
TOTAL	\$21,509.3

DAMAGE TO PUBLIC PROPERTY DURING CONSTRUCTION

Legislation

The Alberta Building Code states that a property owner can be held accountable for the repair of any damage to public property, or infrastructure, that may occur as a result of undertaking work on their private property that is regulated by the Alberta Building Code. This includes new construction, and the renovation or demolition of existing structures.

The City of Calgary's Street Bylaw (20M88) controls and regulates the use of streets, and activities adjacent to or near streets, within the city. Sections 32 and 33 of the bylaw specifically address public property damage:

- 32. The registered owner of private property adjacent to a Street shall, at the time such property is being developed in any manner:
 - (1) be responsible for and ensure the replacement of any shrubbery or trees located on the Street which have been damaged or removed during the process of development to the satisfaction of the Director, Parks;
 - (2) be responsible for and ensure the rehabilitation of the Boulevard area to the satisfaction of the Director, Roads; and
 - (3) be responsible for and ensure any repairs or replacement of the sidewalk, curb or gutter including the removal and rehabilitation of any existing unused driveway crossings and driveway aprons.
- 33. Any damage or alteration to a Street pursuant to Section 32 that a developer fails to rehabilitate to the satisfaction of the Director, Roads may result in Work Forces performing such work and all costs will be deemed a debt due to the City by the registered owner.

Existing Controls

Residential construction projects may require the excavation or breaking of the surface of the street or sidewalk to make new connections to water, electricity and the sanitary sewer system. Contractors are required to obtain an indemnification agreement and/or excavation permit from The City prior to beginning this planned work. These controls ensure that construction on City property complies with City standards, and requires them to maintain the quality of the repair or re-construction for two years, and protects The City from liability related to the excavation.

Reporting

Damage to public assets adjacent to construction sites is common, caused by activities such as excavation, demolition, crane movement, heavy vehicles crossing sidewalks, and vehicle collisions. The City has an established process for employees to document and report damage that has occurred to City assets. These Property Damage and Occurrence Reports (PDOR) are available online, and should be completed as soon as employees become aware that damage has occurred. The PDOR's are reviewed and investigated by staff in the Risk Management and Claims Division of the Law Department. The review of photographs taken of the damage and site condition, including any pre-construction photos, is an important part of this investigation.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Administration conducted a survey of concrete assets and trees in Calgary's inner city area, where there were many permits for new residential construction on existing lots, known as infills. Approximately 10.2 km of the block face was inspected in Wards 7, 8 and 9. There was an

DAMAGE TO PUBLIC PROPERTY DURING CONSTRUCTION

average of \$163 in tree damage and \$1,391 in concrete damage per infill site. Based on the number of infills completed from 2011 to 2015, it is estimated the City may have incurred \$9.3 Million of losses due to third party damage during infill construction.

The number of accepted property damage claims submitted by Roads and the number of tree damage claims by Parks over the last five years were reviewed. The claims submitted from Roads and Parks are from all type of incidents, including damages from construction.

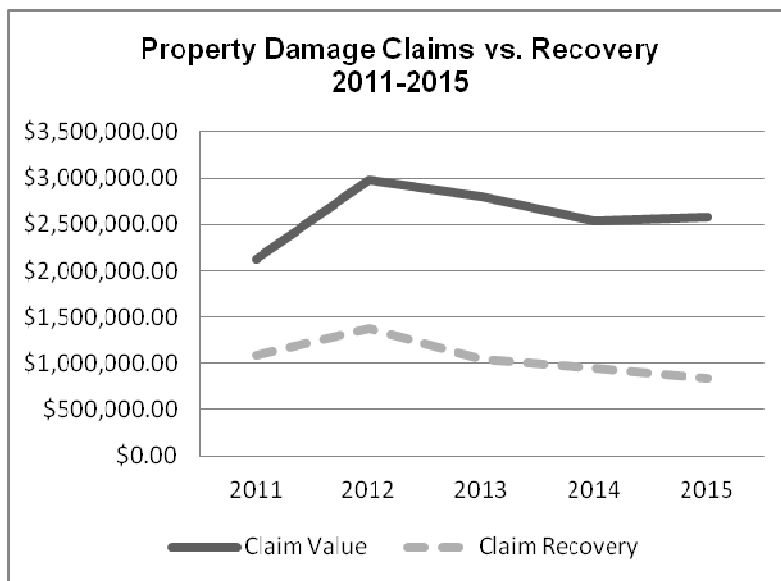
Number of Claims	2011	2012	2013	2014	2015
	761	840	869	943	782

These damage claims are covered by The City's Civic Insurance Program. Amounts recovered from the responsible party are returned to the insurance program. Since 2011, the annual number of claims had been trending upward.

For concrete assets, Roads conducts an annual concrete condition survey. On-going maintenance and replacements of concrete assets are completed based on budget availability. When concrete assets are found to be damaged, but a claim has not been submitted or approved through the PDOR process, the rehabilitation costs would be borne by the business unit. Similarly, Parks would replace damaged trees at the expense of Parks if costs are not recovered through the PDOR process.

The dollar value of these property damage claims was also reviewed, along with the amount of money that had been recovered from a responsible third-party. The dollar value of the property claims and recoveries has declined since 2012. However, the gap between the annual value of claims and the amount recovered has remained consistent.

Successful claims against third-parties rely upon photographic records taken prior to construction to establish whether or not damage was likely due to the actions or activities of that party. The City's Development Permit Application process for low density residential developments requires pre-construction photographs to be submitted. Depending on the type of application, the Complete Application Requirement List (CARL) may include unique features and aspects of significance to the development of the parcel, as well as



DAMAGE TO PUBLIC PROPERTY DURING CONSTRUCTION

details of curbs, driveways, sidewalks, garbage enclosures and overhead poles. This information is uploaded to The City's Livelink library and can be accessed by all City employees.

During an inspection or when a damage complaint arises, inspectors can access the Livelink library to obtain the pre-construction photos and compare them with conditions found, and then determine if damages to public infrastructure occurred. However, documentation of other public assets such as trees, laneways and street signs are not currently part of the application submission. Requiring the addition of pre-construction photographs of these other assets would allow inspectors to better assess the impact to all public property, and may increase the likelihood that a claim for property damage would be successful.

Actions to be undertaken by Administration

1. Administration has established an Infill Construction Collaborative (ICC) comprised of representatives from Community Services, Parks, Roads, Water Services, and Calgary Building Services. This will support better coordination and oversight for infill construction complaints and issues. The most common complaints received by Administration are:
 - Concerns of public safety on construction/building sites and, unsafe and derelict buildings
 - Damaged neighbouring property including sidewalks, fences, landscaping
 - Improper drainage
 - Broken sidewalks
 - Damage to established trees

The ICC will work to develop an Infill Construction Strategy including an Infill Construction Framework and Action Plan to work with the industry to reduce incidents of property damage by builders and developers. They will build upon the site management guidelines established in the Residential Construction Safety Best Practices Guide. This guide addresses common issues regarding residential construction, and was developed by the Canadian Home Builders Association (Calgary Region) in partnership with The City of Calgary.

Administration will look for innovative ways to protect City assets during construction and maintain adequate pedestrian accessibility. Administration will also encourage industry users to trial new products or processes to minimize damage to the concrete curbs and sidewalks.

2. Administration will also educate and encourage all City employees and citizens to use the 311 Citizen Services system to report damage to City assets whenever it occurs. Roads will communicate with other Business Units to request their assistance by reporting these incidents and provide assistance with concrete related concerns and issues. In addition, Administration will develop a new 311 service request for infill construction concerns that will offer the ability to track and measure of citizen complaints.

DAMAGE TO PUBLIC PROPERTY DURING CONSTRUCTION

3. Administration will work with Calgary Approvals Coordination and Calgary Building Services to update the Complete Application Requirement List (CARL) to include City assets such as trees, laneways and street signs. Procedures to assist staff on accessing these photos in CARL to determine if damages occurred during construction will be developed. These pre-construction photos will be submitted along with the post construction photos as part of the PDOR in an effort to improve cost recoveries.

Administration will continue to identify pending development or public works projects that could impact new concrete sidewalk, curb and gutter projects. These City projects would be rescheduled to prevent new concrete from being damaged during construction. Reducing occurrences of property damage and improving the rate of cost recovery is important to properly protect and manage The City's infrastructure investments.

Stakeholder Engagement, Research and Communication

The Canadian Home Builders Association-Urban Development Institute (CHBA-UDI) has been informed of the actions to be taken by Administration. The ICC will continue to engage with stakeholders such as CHBA-UDI through the development of the Infill Construction Strategy.

Strategic Alignment

Reducing occurrences of damage to public property helps support Council's Priorities to be a "Well-Run City" in reducing costs and being as efficient and effective as possible, and "A City that Moves" by ensuring sidewalks are well maintained to support a safe and accessible environment for pedestrians. Administration's recommendations are also aligned with the Calgary Transportation Plan, including the promotion of safety for transportation system users, and ensuring transportation infrastructure is well managed.

Social, Environmental, Economic (External)

Reducing the amount of damage to public property ensures City infrastructure functions properly and is managed to preserve the long-term investment. Protecting the city's urban forest is important to preserve air quality and improve the look and feel of the neighbourhood to encourage walking and cycling.

Financial Capacity

Current and Future Operating Budget:

The recommended process improvements and the resources to support inter-departmental collaboration will be managed within the current and future operating budget.

Current and Future Capital Budget:

No impact on current and future capital budget associated with this report.

Risk Assessment

There are no risks associated with this report.

REASONS FOR RECOMMENDATION(S):

1. To inform Council of the initiatives that Administration will take to reduce occurrences of property damage related to residential development, and improve the rate of cost recovery from responsible third-parties.

DAMAGE TO PUBLIC PROPERTY DURING CONSTRUCTION

ATTACHMENT(S)

None.