

Road Construction Sites

(K. Diotte)

Recommendation:

That the March 13, 2013, Transportation Services report 2013TS2636, be received for information.

Report Summary

This report provides a response to an inquiry regarding civic road construction sites, lane closures, and time to complete construction projects.

Previous Council/Committee Action

At the August 29, 2012, City Council meeting, Councillor K. Diotte made the following inquiry:

There have been frequent questions from many constituents about this summer's civic road construction - specifically regarding empty construction sites, the large number of lane closures (some of which seem unnecessary) and a perception construction projects are taking too long this year. I ask Administration to bring back a report to answer these questions:

1) Is the City responsible for monitoring construction sites in order to ensure:

- a. road construction crews are consistently working on the project (weather permitting) to get the job completed in a timely manner
- b. lane closures are necessary and accurate

c. sites are not left empty for consecutive days?

2) Are deadlines given for each project to be completed? Are these deadlines tending to be longer this year than previous years?

3) How many civic construction sites are not being worked on, on a daily basis? Is that number up or down from previous years?

4) Are many projects being fast-tracked? If so, how many?

5) What policy does Edmonton have regarding timely road construction completion?

6) How is Administration attempting to improve traffic flow in the city at a time when we have so many construction sites in evidence?

7) When construction sites are vacant for a day or two, does the City insist crews remove unnecessary detour signs and lane closures?

8) Before possible construction sites are planned, do officials try to ensure natural detour streets are not also placed under construction?

9) Please also offer possible suggestions for policy changes that might be made so vital road construction continues but is done in a way to better minimize disruption to motorists.

Report

Background:

There are many groups that undertake construction activities on road right-of-

way including; Utilities (e.g. EPCOR, ATCO, TELUS, Shaw), Private Development (e.g. arterial roads, new subdivisions, building developments), Province (e.g. Anthony Henday Drive), City Departments (e.g. Transportation Services, Drainage Services, and Corporate Properties).

In 2012, approximately 7,000 On Street Construction and Maintenance permits were issued for construction work on road right-of-way. Approximately 50% of these were on arterial roads, where impacts to goods movement, Transit, businesses and pedestrians are most significant.

Bridge Projects (approximately five per year) and Arterial Road Projects (approximately 25 per year) have involved closures of arterial roads/lanes for extended periods of time, involving multiple work activities that impact the work schedule with contract start dates and completion dates.

Responses:

The following is a response to the nine questions regarding road construction sites:

- 1) Yes, Transportation Services is accountable for monitoring construction sites. This authority is granted through Traffic Bylaw 5590. The responsibility is shared between Transportation Operations, Transportation Planning and Roads Design & Construction Branches.

Transportation Operations Branch manages On Street Construction and Maintenance permits associated with lane restrictions and road

closures.

The activities of contractors on City tendered roadway projects are monitored by Roads Design & Construction on a daily basis throughout the construction season and the necessary steps are taken to help ensure that work is completed safely (for workers and public), on time and on budget. Work zone requirements are established in the contract documents where traffic restrictions are identified. They identify what lanes can be closed, what activities they can be closed for and during what time of day (e.g. off-peak hour, at night).

Transportation Planning Branch manages Private Development through Subdivision Approvals, Development Permit conditions and Servicing Agreements.

Barricades on-site are for the protection of workers and the public against hazards as well as guiding roadway users safely through a construction site. Any removals need to be related to the risk and liabilities associated with the construction site.

Stability of traffic flow through construction sites is important when considering opportunities to remove barricades. Repeated changes in traffic flow patterns over a short time can cause significant confusion for drivers. The changes need to have overall value to the driver for a reasonable amount of time, and be cost effective.

- 2) Yes, completion dates are included in every City tendered roadway construction contract. Completion dates are based on scope of work, traffic accommodations, safety and quality. Late completion can be managed through bonus/penalty clauses, additional project management costs (incurred by the City) charged to the Contractor due to late completion.

Making the Contractor responsible for all potential delays (e.g. unknown site conditions) would significantly impact tender costs. Risk needs to be placed on the party best able to manage it, to ensure value for money to the City.

Private Development Servicing Agreements are typically structured for completion within three years of signing the agreement. As these developments are market driven, the agreements have on occasion been revised to add additional years for completion.

Timely utility locates are critical to ensure construction projects are started on time for the best opportunity to complete the work on time.

- 3) Over the past five years, the percentage of inactive sites has not changed, as most sites are active most of the time.

The perceived lack of activity on a construction site can be caused by curing time of concrete, equipment breakdowns, weather (pumping/drying of site), peak-hour traffic restrictions, non-visible safety

hazards requiring temporary traffic control and delays in location/re-location/installation of utilities.

Transportation Services and the Alberta Roadbuilders and Heavy Construction Association sent a joint signed letter (in January 2013) to the construction industry, communicating the commitment to improvement of managing and coordinating closures, detours and barricading.

Communications have also taken place with Utility Agencies and the Urban Development Institute (representing Private Development), reinforcing the commitment to improvement of managing disruptions within road right-of-way.

On-site messaging will be included at locations to inform roadway users of events/activities associated with construction work on-site.

- 4) Only a select number of City tendered roadway projects are fast-tracked. Schedule, quality and cost are key considerations on all projects. Advancing a schedule needs to be balanced against cost, and quality must be maintained. Fast-tracking opportunities (e.g. bonus/penalty clauses, roadway closures) are considered on a case-by-case basis. Transit, goods movement, business access and other know work in the area need to be considered as well. The Scona Road project is an example where a bonus/penalty clause and road closure were effective ways to fast-track the project and complete the work in one construction season instead of taking two seasons to

complete. Road closure opportunities are only possible if effective alternate routes (detours) are available.

Projects funded by Private Development are market driven and completed in coordination with subdivision activity.

- 5) There is no policy in place regarding timelines for construction. The timelines are controlled through the issuance of an On Street Construction and Maintenance Permit for contractors and Utilities who impact City road right-of-way.
- 6) Through the use of planning tools such as Envista, Transportation Operations Branch is identifying construction conflicts earlier and work through solutions to mitigate or allow work to co-exist in the same area so that the impact is a single event rather than multiple events.

Rapidly developing areas associated with Private Development present additional challenges, and make coordination difficult. New homes bring additional traffic, new roads are connected to unimproved roadways and downstream impacts put pressure on existing roadways and push the need for further upgrades.

Transportation Operations Branch is re-allocating existing staff for increased monitoring of Utility work on City road right-of-way.

- 7) On-site messaging will be included at locations to inform roadway users of events/activities associated with little construction work on-site.

Adjustments to barricading is discussed in response no. 1.

When Transportation Services becomes aware of construction sites or traffic control situations that do not fulfill a need, measures are taken to address the situation as quickly and safely as possible.

- 8) Major projects are evaluated for traffic impacts and work on adjacent arterials is avoided as much as possible. Additions of last minute major projects, unplanned emergencies (e.g. utility breaks), and commitments to complete projects (e.g. Anthony Henday Drive, Tower Developments, etc) can result in work on adjacent arterials. When work must occur, further traffic strategies are developed to mitigate the impact.
- 9) Other options that could be considered include:
 - Lane rental rates for construction on road right-of-way.
 - Establishment of a Council Policy that defines the role of a Road Authority to better manage construction planning/activity.

Policy

The Way We Move.

Corporate Outcomes

A well maintained and managed infrastructure.