THE WAY WE MOVE



TRANSFORMING EDMONTON

METRO LINE FACT SHEET - CONSTRUCTION ISSUES

Construction of the Metro Line was completed on time to accommodate a spring 2014 opening of the new LRT line. Construction issues did not prevent the Metro Line from opening on time. The Metro Line has been delayed for more than a year because the signalling contractor has not delivered the system on time. The City's goal is to open the Metro Line as soon as possible. The City has a responsibility to make sure that we have a high-quality LRT system that is safe and reliable.

During and after construction of the Metro Line, the City and its contractors found some construction deficiencies, or issues. Some of these issues were related to design while others were related to construction. These sorts of issues are a normal part of construction; the City expects to encounter some issues and has quality control processes in place to deal with them to make sure that we build safe, high-quality LRT infrastructure.

Most of the construction issues on the Metro Line have been addressed. However, the City is still working with its contractor to deal with a few minor construction issues. This is typical of construction projects. These issues aren't preventing the Metro Line from opening to public service.

Fixing these issues does not mean extra costs for taxpayers. Contractors are responsible for paying to fix deficiencies in their work or to correct them at no cost to the City. The City also keeps a holdback—a percentage of what is owed to the contractor—in case the City ends up having to cover the cost of repairs itself.

2010	Right-of-way preparations begin (roadworks, building removals, utility relocations, etc.).
2011	Right-of-way preparations continue (Kingsway road reconstruction, track slab
	construction, etc.).
2012	Roadworks, track slab, tunnel & LRT stations under construction.
2013	Tunnel and LRT stations complete.
	Track and electrical installation complete.
2014	Construction complete.
	Testing and commissioning of infrastructure complete.
2015-2017	Warranty period.

CONSTRUCTION TIMELINE



THE WAY WE MOVE



TRANSFORMING EDMONTON

BRINGING OUR CITY VISION TO LIFE

QUALITY MANAGEMENT

The City had quality management processes in place to make sure that design and construction of the Metro Line was safe and of high quality. The three pillars of this process are:

1. Requiring a quality management program of the contractor.

The City's Construction Manager for the Metro Line project is the North Link Partnership (NLP). NLP had a team that was responsible for checking and documenting the work. The team was also responsible for raising, tracking and addressing any issues that came up during construction.

2. Providing City oversight on the project.

As the owner, the City had a team of staff that was regularly on site to oversee the work and perform spot checks.

3. Having an independent third party to support the City's oversight.

The City's Owner's Engineer, Team North LRT, prepared the design and supported the City in making sure that the contractors were doing what they were hired to do. The Owner's Engineer checked and audited NLP's quality management records. They also did regular spot checks in the field.

This quality management process takes place both during and after construction. Issues are managed and tracked in the following ways:

- 1. A list of non-conformances. For example, parts of a station platform were poured at the wrong height. The solution to this problem was for NLP to fix it at their cost. The majority of non-conformances were addressed during construction or prior to handover. To date, a few non-conformances are in the process of being resolved.
- 2. A list of deficiencies. This is a to-do list of issues that NLP still needs to address and includes trees that couldn't be replaced in the middle of winter, station walls needing paint touch-ups and fixing cracks in concrete sidewalks.
- 3. A list of warranty-related issues. Some work was completed satisfactorily but a problem emerged later that needs to be repaired. The warranty period generally lasts two years after the infrastructure is complete. This list includes items like station doors that stopped closing properly or air-conditioning units that don't work.

FIND OUT MORE ABOUT THE METRO LINE

- Visit edmonton.ca/metroline
- Call the LRT Projects Information Centre at 780.496.4874
- E-mail <u>LRTprojects@edmonton.ca</u>
- Join our e-mail update list! E-mail us with the subject "subscribe to Metro Line."

