#### 12.0 CONCLUSIONS

## 12.1 Summary of Public Engagement Response

Approximately 108 participants took part in the 03 February 2015 drop-in open house. The open house was also covered by several media outlets. In total, 22 comment forms were completed and submitted at the open house, followed by three online submissions. The majority of comments received extended beyond the focus of the EISA Update and its proposed project component changes, focusing instead on previously-established design elements (i.e. LRT alignment, replacement of Cloverdale Bridge). Overall, those responding were almost evenly divided in their views on the value of the changes, with nine of 21 responses to a specific question on this matter indicating that the changes were positive and nine indicating they would not help address concerns. Three others were unsure. No new issues related to the project components were identified in written responses. Conversation with attendees indicated that the location of the river valley facilities, the desire to limit the number of facilities in the river valley and the ability to provide for wildlife movement through the valley particularly during construction remains of interest to attendees.

As the Valley Line project proceeds through procurement and preliminary design to construction, public involvement will continue to be a high priority. Methods of engagement will include five new community-based Citizen Working Groups, which will provide a platform for ongoing information-sharing and dialogue.

# 12.2 New Potential Impacts and Mitigation Commitments

Few new mitigation measures, over and above those specified in the 2013 EISA, are required in response to the proposed project components and associated Project Area adjustments. This is partly because many of the assessed project components are themselves mitigation measures committed to in the 2013 EISA and most affected lands are small areas. Moreover, the Valley Line contract (Project Agreement) already contains clauses that ensure application of standard mitigation measures and all commitments made in the 2013 EISA. This pre-emptively covered many potential impacts associated with the new components. Project components identified in this update to be undertaken by Project Co will be governed by the Valley Line LRT Project Agreement. Project components identified the responsibility of the City of Edmonton will be administered through separate contracts tendered by Community Services. All new mitigation measures committed to in this EISA Update will be incorporated into the relevant contracts or implemented directly by the City, as appropriate. Following is a brief summary list of key new mitigation measures committed to for the two larger component projects - the north valley access road and the MCSB Replacement.

#### **Primary North Valley Access**

• The Project Agreement will incorporate all of Thurber Engineering's recommendations with respect to site preparation, road design, drainage and monitoring during construction and operation of the portion of the access route situated along the existing SUP.

- LRT D and C will undertake and submit a geotechnical report specific to the portion of the access route located at the existing maintenance vehicle road to Transportation Services for review and sign-off.
- Project Co will implement all recommendations from that geotechnical assessment and abide by the limitations; should the City report recommend no clearing or grading, Project Co will be required to use the road in its current horizontal and vertical alignment.
- LRT D and C will ensure that all trees and shrubs located in the project area are accounted for in the Valley Line Corporate Tree Management Policy inventory. The City will discuss their approach to contaminated soils and groundwater with the Province.
- Project Co will be required to undertake the following:
  - Justify clearing of native vegetation along the maintenance vehicle access road.
  - o Restore any disturbed native or naturalized forest communities.
  - o Implement specified vehicle and pedestrian access and safety measures.
  - o Continuously manage dust and safety measures.
  - Implement specified measures to accommodate the Red Bull Crashed Ice and Dragon Boat Festival, respecting all periods where use of the road must cease.
  - Have a qualified archaeologist monitor all excavation activities within the Grierson Landfill.

#### Muttart Conservatory Storage Building

- LRT D and C will commission a desktop study of the potential for this component to affect global slope stability.
- Community Services will continue with a site-specific geotechnical study and implement recommendations.
- The City will discuss their approach to contaminated soils with the Province.
- The Contractor will develop a plan to control runoff during construction.
- The City will develop a plan to control runoff during major events prior to commissioning of new receiving stormwater management facility.
- The City will implement an SUP detour and appropriate notifications.
- The City will inform EFMF of the impact on the festivals temporary bike compound.

With the above measures implemented, the proposed project components and associated Project Area adjustments should result in few residual impacts.

# 12.3 Summary of Changed Project Components

The following sections provide concise summaries of the main points and conclusions reached for each assessed component.

# 12.3.1 North Valley Primary Construction Access Road

Recent planning has designated west LMRP as the new north valley primary construction access. As a consequence, the original primary access through the east park is now identified as the secondary construction access route. The proposed primary construction access road will be temporary, but present for the duration of construction in the north valley, a period lasting approximately four years. The proposed access road will support high volumes of traffic. Project Co will be required to design and construct the access road to the standard needed to carry out the work safely and without adversely affecting slope stability in the park. The route will follow a mainly paved corridor in LMRP, but will require upgrading and, possibly, some realignment. As this project component involves a significant boundary adjustment, VECs selected for this assessment were comprehensive and very similar to those included in the 2013 EISA. The assessment determined that during construction, even with mitigation, there will be adverse minor impacts to native vegetation, habitat connectivity during construction, the recreational pathway network, general park use and visual resources. In addition, impacts associated with any removal of woody vegetation will be evident until restoration efforts realize mature vegetation leading to a long-term, but not permanent, vegetation impact.

## 12.3.2 West Project Boundary Modifications at HMEP

This component redresses the need to include enough lands around the picnic shelter to allow for demolition and restoration to a native forest. It also reduces the 2013 Project Area to avoid disturbance of the bed and shore of abandoned Mill Creek associated impacts to native balsam poplar forest. This project component represents a net gain in environmental protection. Overall, the HMEP west project boundary modification represent a reduction of approximately 877 m² in land disturbed by construction activities. There are no identified residual adverse impacts or outstanding issues. The long-term establishment of a native balsam poplar forest in an area previously dominated by manicured vegetation was considered a minor positive impact for vegetation and visual resources.

## 12.3.3 HMEP Entrance – Project Co Component

Inclusion of a parcel of land at the 96A Street entrance to HMEP, covering approximately 763 m<sup>2</sup>, is proposed to afford flexibility to Project Co when providing the required continuous access to the 98 Avenue pedestrian bridge during LRT construction activities. This parcel represents a minimal addition to the overall river valley project area for the Valley Line and consists of manicured vegetation, including planted trees and the HMEP entrance sign. These lands will be available to Project Co for general construction activities and may be used as part of the access and egress to the south riverbank. Post-construction, any areas disturbed within this project component will be reclaimed through landscaping, and this will be specified in the Project Agreement. This will include replacement of the planted bed and trees. No residual impacts were identified.

# 12.3.4 Retaining Wall Ground Anchors – Project Co Component

Project Co is expected to propose use of retaining walls in the vicinity of the Muttart Stop and along the portal access road, to retain cut slopes. At these two locations, ground anchors are among the options available to Project Co for retaining wall stabilization. Final design of the retaining walls and their stabilizing methods will be the responsibility of Project Co. At these two locations, ground anchors, should Project Co choose to use them, would likely extend beyond the previously identified Project Area, underground and at depth. The installation of retaining wall anchors does not require surface disturbance. To assure no impact to residents, the contract will not permit the anchors to extend past the limits of City-owned land (avoiding privately-held lands) and will not allow installation by pounding. Prior to the installation of the retaining walls a detailed site-specific geotechnical investigation and assessment will be undertaken in support of retaining wall construction. This will include investigation of the use of ground anchors. No residual impacts were identified.

## 12.3.5 Ski Club Infrastructure Relocation – Project Co Component

Near the intersection of Connors Road and Cloverdale Hill Road, the project will adversely affect the Edmonton Ski Club T-Bar run. As a result of ski club infrastructure relocation, there also is a need to re-grade lands to provide a safe and appropriately graded and -sized landing area downslope of the return terminal bullwheel This regrading falls slightly outside the 2013 boundary and requires an extension of the Project Area by approximately 362 m². It is also possible that additional infrastructure will be required to meet new safety standards. These lands are covered entirely with manicured lawn. The Project Agreement includes detailed specifications for final elevations and gradients at the new landing area, which have been defined through extensive consultation with the ski club executive. All construction activities will be undertaken during months when the Edmonton Ski Club is non-operational and the timing will allow the club to re-install equipment before the ski season begins. Any re-grading work will be subject to site-specific geotechnical investigations and measures must be implemented to ensure that the slope stability called for in the Project Agreement is attained.

Funded by the City, the Edmonton Ski Club will be responsible for (re-) installation of all structures within this area, including required subsurface foundations or pilings. For this, the club must also ensure that all geotechnical concerns have been addressed; therefore, site-specific geotechnical investigation(s) and assessment(s) will be undertaken in support of installation of relocated ski club infrastructure. Drilling for this would require an IPR pursuant to *Bylaw 7188*. Should any equipment require installation outside of these assessed lands, a more comprehensive IPR may be required. Required studies will be funded by LRT D and C. No other residual impacts or outstanding issues were identified.

#### 12.3.6 Muttart Access Road Partial Removal – Project Co Component

The 2013 EISA identified the need to realign Muttart Access Road, which connects Connors Road and 98 Avenue and provides access to the conservatory grounds. The 2013 EISA did not, however, capture the need to permanently close and remove a one-

lane, one-way,  $\sim$  200m long connector road which handles northbound Connors Road traffic connecting to the Muttart Conservatory just west of the existing Muttart storage building. The planned road removal is fully situated with the 2013 Project Area, thus no extension of Lands is required. Once removed, this section of roadway will be subject to landscaping and naturalization efforts. Overall, the removal of the connector road is rated as a positive impact on park greenspace, while potential impacts to transportation are considered to be negligible. There are no required mitigation measures associated with this project component.

## 12.3.7 Muttart Storage Building Replacement – City Component

The 2013 Project Area included lands to accommodate the new MCSB, but at that time it was only conceptually conceived and located. During subsequent planning, the City decided to undertake construction of the replacement building prior to LRT construction; detailed design identified the space required for a new building of the same dimensions as the existing building. To accommodate this, the footprint of the new building shifted by approximately 40 m to the southeast and the eastern portion of the proposed facility is now situated outside the 2013 Project Area. Lands within the affected area consist entirely of manicured vegetation and one SUP and may support some unprogrammed recreation. After the application of mitigation measures, one positive residual impact was identified which related to the removal of known contaminated soils during excavations. No other residual impacts or outstanding issues were identified; however, additional geotechnical investigations are underway and all recommendations must be implemented.

## 12.3.8 LMRP Temporary Trail Connector - City Component

As a mitigation measure for Valley Line impacts on LMRP recreation and prior to commencement of Valley Line construction, the City will construct a short (approximately 15 m), temporary connector trail just west of the 2013 Project Area in the Chinese Gardens of LMRP. The temporary trail will connect the western portion of a primary north-south SUP to an established trail in the Chinese Garden, allowing pedestrians and cyclists to circulate through the broader network of west park trails during the up to four years of construction in LMRP. Mitigation measures for physical disturbance have been incorporated into the trail plans. The contractor will be required to comply with all City policies and guidelines, ensuring no residual impacts.