As part of the EIA, the following field investigations have been completed or are underway:

- **Vegetation** – vegetation and rare plant surveys, completed in summer 2012.
- **Wildlife** – a breeding bird survey, completed in spring 2012; wildlife movement reconnaissance, winter 2012.
- **Fish** – a fish and fish habitat assessment, completed as part of the earlier planning phase.
- **Geotechnical** – a series of boreholes have been drilled in the river valley, to characterize fills, surficial cements, and bedrock and, where appropriate, assess contaminants.
- **Hydrology** – borehole data is being used to assess groundwater conditions.
- **Historical Resources** – archaeological and paleontological impact assessments, completed in 2011.
- **Noise and vibration assessment** – completed in 2012.
An Environmental Impact Assessment (EIA) document is being prepared to meet the requirements of the City of Edmonton’s North Saskatchewan River Valley Area Redevelopment Plan (Bylaw 7188).

The EIA:

- Describes existing environmental conditions
- Assesses potential impacts
- Describes mitigation measures intended to eliminate or reduce impacts to each Valued Environmental Component (VEC)
- The following VECs are being assessed to identify ways in which the proposed project could affect biophysical and socio-economic resources:

  - geology and geomorphology (including slope stability)
  - soils
  - surface water and groundwater
  - vegetation
  - wildlife
  - habitat connectivity
  - fish and aquatic resources
  - land disposition and zoning
  - residential land use
  - recreational land use
  - utilities
  - worker and public safety
  - visual resources
  - historical resources

- The EIA may also be submitted to Fisheries and Oceans Canada and Transport Canada as supporting information for *Fisheries Act* and *Navigable Waters Protection Act* approvals, respectively.
ENVIRONMENTAL RESOURCES IN WAGNER PARK (NATURAL AREA 402)

GREEN PROJECT INITIATIVES
- Landscaping at Wagner Station will emphasize green space with intent to create a stepping stone linkage between the Natural Area and upstream reaches of Mill Creek.
- Guideway drainage has been designed to provide additional inputs of water to the ravine, enhancing amphibian habitat and riparian community sustainability.

EXAMPLES OF SPECIES OBSERVED IN THE NATURAL AREA
Amphibians
- Boreal chorus frog
- Wood frog

Birds
- Swainson’s hawk
- Tree swallow
- Clay-coloured sparrow
- White-throated sparrow
- Black billed magpie
- Yellow warbler

Mammals
- Porcupine
- Coyote

POTENTIAL IMPACTS AND MITIGATION MEASURES
Loss of vegetation and habitat resulting from clearing
- Restore temporary working space within the Natural Area; restore some manicured lands north of the Natural Area (areas yet to be determined).
- Compensate for tree/shrub loss as required by City’s Corporate Tree Policy.
- Locate access road within Manitoba Maple community to extent possible.

Disturbance to rare plants
- Transplant and monitor rare plants found within the project area.

Habitat fragmentation
- Landscape to close gaps created during construction.
- Ensure that the new access road is wildlife friendly.

Disturbance to nesting Swainson’s hawks
- Undertake required vegetation clearing between 3 September and 15 March.
- If active nest is present in year of construction, avoid significant construction at Wagner Park until young are independent, approximately August - have biologist confirm.