Lyon Ave Site (Proposed Location)

Land Owner:

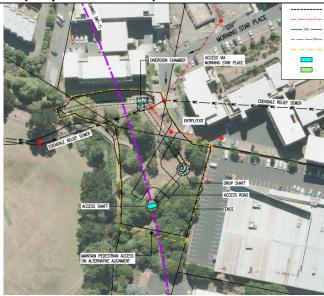
- Crown (Ministry of Education / MAGS)
- Multiple unit owners (St Lukes Garden Apartments (SLGA)), St Lukes Holdings

Construction site location

- Proposed shaft location in optimal location for connection to Edendale Branch Sewer
- Construction access via Morning Star

Maintenance & Operations

- Permanent structures finished generally at ground surface level
- Permanent access via Morning Star Place for occasional inspection and maintenance activities



Land use effects

- Landscape Removal of mature vegetation, construction site screening and construction activities will have more than minor effects on visual amenity and landscape character of Roy Clements Treeway. Mitigation of effects on-site will be required through design and landscape plantings, but this will take time to achieve.
- Neighbours & amenity Limited separation from residential neighbours (approx. 15m to closest).
 Temporary loss of amenity for users of Roy Clements Treeway and for SLGA residents due to construction activities.
- Recreation Local effect on recreation values during construction due to need for diversions of the public walkway around the site to maintain access through Roy Clements Treeway.

Cultural heritage effects

• Cultural heritage - Site in modified area with no archaeological evidence.

Environmental effects

- Traffic Morning Star Place represents good option for traffic and pedestrian safety during
 construction, and additional traffic well within capacity of Morning Star Place and St Lukes Road.
 The temporary loss of visitor parking during construction work at Morning Star Place is anticipated
 in existing resource consents for apartments. Access via Morning Star Place is provided for in an
 existing agreement with SLGA.
- Ecology Wider Roy Clements Treeway area is identified as of ecological significance in draft
 Unitary Plan, and construction site is assessed as being of moderate ecological value by ecologist.
 Reduction in value associated with vegetation removal, but noting reinstatement landscaping and
 ecological mitigation plantings proposed to offset effect.
- Noise Works will generally comply with construction noise standards at adjacent apartments, except for period during excavations through basalt and during shaft construction, and will require management measures.
- Vibration Excavation in basalt, either by mechanical rockbreaker or blasting, will result in some short term disturbance at adjacent apartments
- Groundwater & settlement Not expected to cause adverse effects on adjacent buildings or structures

MAGS Sports Fields Site

Land Owner:

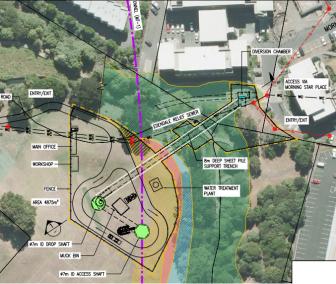
- Crown (Ministry of Education / MAGS)
- Multiple unit owners (SLGA), St Lukes Holdings Ltd

Cost comparison relative to Lyon Ave site

 Additional \$400,000 (main tunnel 12 m shorter but additional cost for construction access, temporary stream diversions for connections and for reinstatement of playing fields to a raised ground level)

Construction site location

- Connection between Edendale Branch Sewer via diversion chamber and drop structure requires either trenching across Meola Creek via deep excavation (approx. 8 m deep) and associated temporary stream diversion; or dropshaft (approx. 8.5m in diameter) adjacent to diversion chamber and tunnelling across to access chamber in school playing field
- Construction access via new road across MAGS sports fields, either from Alberton Ave or from Fergusson Road and Fergusson Reserve (reserve land owned by Auckland Council), with access to works on right bank for connections either by bridging of Meola Creek and / or via Morning Star Place



Maintenance & Operations

- Permanent shaft structures partially above ground to avoid inundation in flood, or fill will be needed to raise ground level around lids to ensure fields remain usable.
- All weather trafficable access road required across MAGS playing fields for occasional inspection and maintenance activities

Land use effects

- Landscape Works required for connection to Edendale Branch sewer and overflow (either trenching or drop shaft on right bank of stream) will require removal of mature vegetation. These works, along with construction site screening will have more than minor effects on existing visual amenity and landscape character. Mitigation of effects will be required through design and landscape plantings on both sides of Meola Creek, but this will take time to achieve. The overall area of vegetation affected is less than for the Lyon Ave site.
- Neighbours & amenity Limited separation is available from residential neighbours (approx. 15m to closest) at the diversion chamber and for trenching or drop shaft options, but separation is increased for construction of the access shaft and drop shaft. There will be some loss of amenity for users of Roy Clements Treeway and SLGA residents as for the Lyon Ave site option. With construction activities in the MAGS grounds, these effects will also be extended to school users.
- Recreation Local effect on recreation values during construction due to need for diversions of the public walkway around the site to maintain access
 through Roy Clements Treeway. Trenching works may require some temporary closures of the walkway if trenching across Meola Creek is required.
 Works will remove at least one playing field from service during construction, impacting on school users. Permanent works (lids and all weather
 access track) will also impact on use and value of playing field.

Cultural heritage effects

• Cultural heritage - Site in modified area with no archaeological evidence.

Environmental effects

- Traffic Operating restrictions to avoid peak school hours and associated traffic management measures will be required to minimise adverse traffic and pedestrian safety effects of construction traffic on Alberton Ave or Fergusson Ave and MAGS fields. Additional construction traffic is well within capacity of local roads. Works will result in temporary loss of visitor parking at Morning Star Place, but this is anticipated in existing resource consents for apartments. Morning Star Place represents good option for traffic and pedestrian safety if this option is utilised for access during construction works on right bank. Access via Morning Star Place is provided for in an existing agreement with SLGA.
- Ecology Wider Roy Clements Treeway area is identified as of ecological significance in draft Unitary Plan, and construction site is assessed as being of moderate ecological value by ecology specialist. Reduction in value associated with vegetation removal, but noting reinstatement landscaping and ecological mitigation plantings proposed to offset effect. Potential for effect on Meola Creek during trenching works with temporary stream diversion required, and associated risks with flood events.
- Noise Works will generally comply with construction noise standards at adjacent apartments, except for period during excavations through basalt for trench or shaft construction. Will not be significantly different to effects of Lyon Ave option, due to works required to make connections. Access road from Alberton Ave would pass adjacent to MAGS boarding hostel.
- Vibration Excavation in basalt, either by mechanical rockbreaker or blasting, will result in some short term disturbance at adjacent apartments. Will not be significantly different to effects of Lyon Ave option, due to works required to make connections.
- Groundwater & settlement Not expected to cause adverse effects on adjacent buildings or structures.