

### Keith Hay Park Site (proposed location)

#### Land Owner:

- Auckland Council, 1 private residential property

#### Construction site location

- Connection to Branch 9B Sewer
- Construction access via Arundel Street across 49 and 51 Arundel Street and Rainford Street (for micro-tunnelling works)

#### Maintenance & Operations

- Permanent structures finished generally at ground surface level
- Permanent access via Gregory Place



#### Land use effects

- Landscape – Low level adverse effects on open space and landscape character for passersby and residents at the northern end of Keith Hay Park. More than minor adverse effects on visual amenity for closest neighbours on Arundel Street and Gregory Place.
- Neighbours & amenity – Limited separation from residential neighbours (approx. 15 m between 19 Gregory Place and closest shaft location shown on drawing). Loss of amenity due to construction traffic and noise.
- Recreation - Limited effect on recreation values as only microtunnel connection sites on part of reserve currently used for recreation. Design minimises conflict with Keith Hay Park Concept Plan.

#### Cultural heritage effects

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

#### Environmental effects

- Traffic – Additional traffic within the capacity of surrounding roads. Access to works site and to micro-tunnelling sites will require traffic management. Alternative pedestrian/cycle facilities to be provided.
- Trees – Limited vegetation removal. Some vegetation removal being undertaken by Auckland Council as part of their park development works. Recently planted buffer along eastern boundary to be retained.
- Ecology – Low overall ecological value and effects less than minor.
- Noise – Noise levels are expected to exceed Construction Noise Standard at 18 and 19 Gregory Place and 47 Arundel Street at times.
- Vibration – Given the ground conditions, vibration levels are not expected to cause damage or disturbance.
- Groundwater & settlement – Not expected to cause adverse effects on adjacent buildings or structures.

### Keith Hay Park Sports Fields Site

#### Land Owner:

- Auckland Council

#### Construction site location

- Connection to Branch 9B Sewer
- Construction access via Rainford Street

#### Maintenance & Operations

- Permanent structures finished generally at ground surface level
- Permanent access via Arundel Street



#### Land use effects

- Landscape – Temporary effects on reserve due to construction traffic and noise within the reserve and removal of some trees and shrubs.
- Neighbours & amenity – Greater separation from residential neighbours (approx. 50 m between house at 19 Gregory Place and the shaft as shown on drawing).
- Recreation – Located away from main sports fields, but Auckland Council Parks and Puketepapa Local Board opposed to site due to impact on recreation in this well used reserve and conflict with Keith Hay Park Concept Plan. Site access via Rainford Street impacts on park users and alternative pedestrian pathway would need to be provided.

#### Cultural heritage effects

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

#### Environmental effects

- Traffic – Additional traffic within the capacity of surrounding roads. Access to works site and to micro-tunnelling sites will require traffic management. Alternative pedestrian/cycle facilities to be provided.
- Trees – Some limited vegetation removal required in the vicinity of the construction area.
- Ecology – Low overall ecological value and effects less than minor.
- Noise – Noise levels at nearest residential receivers expected to meet Construction Noise Standard. Potential exceedence at recreational complex within the Park.
- Vibration – Given the ground conditions, vibration levels are not expected to cause damage or disturbance.
- Groundwater & settlement – not expected to cause adverse effects on adjacent buildings or structures.

### Keith Hay Park Site (49 and 51 Arundel Street)

**Land Owner:**

- Auckland Council
- Construction site location**

- Connection to Branch 9B Sewer
- Construction access via Arundel Street and Rainford Street (for micro-tunnelling works)
- Site area and internal circulation constrained

**Maintenance & Operations**

- Permanent structures finished generally at ground surface level
- Permanent access via Arundel Street



**Land use effects**

- Landscape – Low level adverse effects on open space and landscape character for passersby and residents at the northern end of Keith Hay Park. More than minor adverse effects on visual amenity for closest neighbours on Arundel Street and Gregory Place.
- Neighbours & amenity – Limited separation from residential neighbours (approx. 10 m between 47A Arundel Street and shaft location shown on drawing). Loss of amenity due to construction traffic and noise.
- Recreation - Limited effect on recreation values as only microtunnel connection sites on part of reserve used for recreation. Design minimises conflict with Keith Hay Park Concept Plan.

**Cultural heritage effects**

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

**Environmental effects**

- Traffic – Additional traffic within the capacity of surrounding roads. Access to works site and to micro-tunnelling sites will require traffic management. Alternative pedestrian/cycle facilities to be provided.
- Trees – Vegetation removal undertaken by Auckland Council. Not possible to retain recently planted buffer along eastern boundary due to space constraints.
- Ecology – Low overall ecological value and effects less than minor.
- Noise – Noise levels would likely exceed Construction Noise Standard at times at the closest residential properties.
- Vibration – Vibration levels not expected to cause damage to structures but could disturb residents.
- Groundwater & settlement – Not expected to cause adverse effects on adjacent buildings or structures.

### Keith Hay Park (20 and 22 Gregory Place)

**Land Owner:**

- Auckland Council, 1 private residential property
- Construction site location**

- Connection to Branch 9B Sewer
- Construction access via Gregory Place and Rainford Street (for micro-tunnelling works)

**Maintenance & Operations**

- Permanent structures finished generally at ground surface level
- Permanent access via Gregory Place



**Land use effects**

- Landscape – Low level adverse effects on open space and landscape character for passersby and residents at the northern end of Keith Hay Park. More than minor adverse effects on visual amenity for closest neighbours on Arundel Street and Gregory Place.
- Neighbours & amenity – Limited separation from residential neighbours (approx. 6 m between 19 Gregory Place and closest shaft location shown on drawing). Loss of amenity due to construction traffic and noise.
- Recreation - Limited effect on recreation values as only microtunnel connection sites on part of reserve used for recreation. Design minimises conflict with Keith Hay Park Concept Plan.

**Cultural heritage effects**

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

**Environmental effects**

- Traffic – Site access limited and requires construction access down narrow residential cul-de-sac (Gregory Place).
- Trees – Limited vegetation removal. Some vegetation removal being undertaken by Auckland Council. Recently planted buffer along eastern boundary to be retained.
- Ecology – Low overall ecological value and effects less than minor.
- Noise – Noise levels are expected to exceed Construction Noise Standard at 18 and 19 Gregory Place and 47 Arundel Street at times.
- Vibration – Vibration levels not expected to cause damage to structures but could disturb residents.
- Groundwater & settlement – Not expected to cause adverse effects on adjacent buildings or structures.