

Part VII: Adverse effects (Full Summary)

In considering whether a project will help to achieve the purpose of the Act, the Minister may have regard to, under Section 19E of the Act, whether there is potential for the project to have significant adverse environmental effects. Please provide details on both the nature and scale of the anticipated and known adverse effects, noting that Section 20(2)(b) of the Act specifies that the application need only provide a general level of detail. Description of the anticipated and known adverse effects of the project on the environment, including greenhouse gas emissions

The scale and nature of the proposal means that it has the potential to give rise to some environmental effects. The assessment below considers the extent of the range of potential effects, together with the methods that are proposed to avoid, remedy or mitigate any such effects.

Overall, it is concluded that the proposed development will not give rise to any significant adverse effects subject to appropriate mitigation and imposition of conditions of consent. Indeed, the assessments undertaken to date have confirmed that the actual or potential adverse effects will be less than minor and that the development will produce significant positive effects and benefits in the form of:

- a. Major additional residential accommodation to contribute to the supply of housing in Auckland;
- b. Significant additional employment to the region, including specific apprenticeship and internship programmes;
- c. Energy efficiency;
- d. Water conservation and re-use through proven measures;
- e. Enhanced biodiversity through large scale planting, landscaping and overall resource management;
- f. Creation and enhancement of the environment overall, including the provision of what will be a large park;
- g. Genuine environmental sustainability based on a track record of innovative and practical measures that preserve or conserve natural and physical resources.

Traffic/transport

The proposed development has been designed to connect with the existing surrounding road network. The two accesses off Great South Road and Omaha Road will be retained and re-configured to provide for the development. The Great South Road access will provide grade-level disability parking, service deliveries and temporary parking. The Omaha Road access will provide the access to the basement carpark, which is a single level carpark with riser podium section that creates and supports the Central Park.

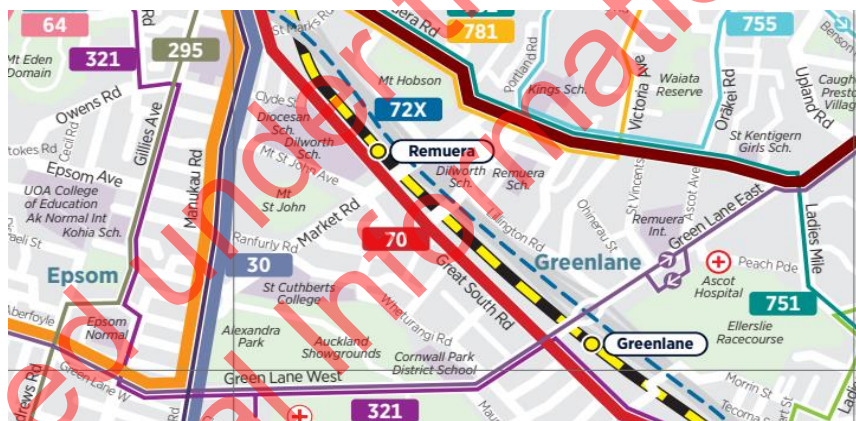
Commute has undertaken an assessment of the proposed residential development and associated traffic effects. As part of ongoing consultation with the Council Development Engineering and transport teams and Auckland Transport, the assessment will be updated and refined as detailed transport planning is completed for the resource consent application to address all transport related matters.

Great South Road connects the suburb of Newmarket in the north to Otahuhu in the south. The cross section of Great South Road is comprised of two vehicle lanes in each direction, with the kerbside northbound lane marked as a bus lane during the morning peak hour and the southbound kerbside lane used for on street parking. Great South Road is classified as an Arterial Road under the Unitary Plan and has a posted speed limit of 50 km/hr.

Omahu Road is classified as a 'Primary Collector' under the Waka Kotahi One Network Road Classification. It is approximately 800 m long and connects Great South Road in the south to Remuera Road in the north. The cross section of Omahu Road is comprised of one vehicle lane in each direction with on street parking on both sides. The posted speed limit of Great South Road is 50 km/hr. The commute report notes that the site is within close proximity to Remuera Train Station (3-5-minute walking distance, 180 m) which operates on the Southern Line. The Southern Line connects Britomart to Pukekohe and has a 10 minutes frequency during peak travel times.

The nearest pair of bus stops are located on Great North Road approximately 100 m south of the site, a 1-minute walking distance. A signalised pedestrian crossing is located directly in front of the site on Great South Road, which provides a safe crossing location for residents and visitors accessing the northbound bus stop.

The nearest bus stops provide service to bus routes 70 which is a frequent service and connects Botany, Pakuranga, Panmure, Ellerslie, Newmarket, and the City.



Commute has concluded, in its draft report, the following:

"From a preliminary review of the proposal to develop a mixed use development at 224 Great South Road, Remuera, the following can be concluded:

- *The site is well connected from a public transport perspective;*
- *The crash history does not indicate an issue with vehicle movements to and from private properties on Great South Road and Omahu Road;*
- *The proposal meets the parking requirement for the site with sufficient commercial parking spaces required given significant number of parking spaces proposed;*
- *Bicycle parking and loading provisions are required and should be shown on the site plan;*
- *A Vehicle Access Restriction applies to the site given the Great South Road access fronts an arterial road. In the short term both accesses are anticipated to operated unrestricted,*

however in the long term the Great South Road is recommended to operate as left in and left out in the event that the central median be repurposed.

- *The design should reflect that the Omaha Road access is the main access.*

A full Transportation Impact Assessment (TIA) as well as a Construction Traffic Management Plan (CTMP) will be provided as part of the full resource consent application.:

Urban design and neighbourhood character

Importantly, the land is identified for high-density residential development under the applicable AUP zone. The development is consistent with and advances the objectives and policies of the zone by integrating a large-scale residential apartment development on one of the largest sites within the AUP Terrace House and Apartment zone.

It is considered that there will be no adverse effects arising in relation to these matters, for several reasons. The site has been designed to comply with the alternative HIRB control. Infringements to height have been internalised to avoid adverse shading, dominance, privacy or other potential effects to neighbouring or nearby properties. The proposal will comply with the coverage requirements of the Plan

The proposed residential development has been carefully designed to 'internalise' the density so that housing adjacent to existing parts of the neighbourhood is identical or similar in nature to that which already exists.

The proposal has benefited from significant urban design input from Warren and Mahoney, one of New Zealand's premier architects, in consultation with Auckland Council's Urban Design team seeking to ensure that the housing, streets and lanes, and open space layout provides a quality urban design response. Buildings have been designed to engage with the street, minimise vehicle crossings, and ensure privacy for residents. Substantial landscape treatment and planting is to be provided.

Overall, it is considered that the proposed development is fully in keeping with the planned outcomes anticipated by the zone which provides for high density residential activities. The proposed non-residential activities are modest and form a minor supportive function for the proposed residential activities.

Stormwater disposal

The site is included within the scope of an existing network discharge consent that covers the wider Remuera area. GWE Engineers have prepared a stormwater assessment for the proposed development to inform the stormwater approach.

Overall, the proposed stormwater management plan will meet the required water quality treatment standards of Auckland Council's GD01 technical document. By implementing a water sensitive design for the development including rainwater tanks, raingardens and/or permeable paving areas, the total run-off from the site will likely be less than that occurring from the existing development and could reduce capacity issues on the downstream public stormwater network. It is also noted that there are no designated open, above ground car parking areas proposed for the development and stormwater

run-off water quality will not be compromised by a contaminant load for vehicles visiting the development.

Auckland Council GeoMaps indicates that there are residential sites downstream of the subject site that are at risk of flooding, however the existing development within the site has a reasonably high percentage of impervious area, and the proposed development also has a similar percentage of impervious area. Therefore, peak flow attenuation is not required to limit flows to predevelopment levels as these are expected to be similar to existing conditions.

Construction stormwater take and discharge (including any dewatering) will use the Council stormwater network. In terms of the underlying commitment to genuine environmental sustainability, Urban Resort and Icon will build on previous projects water conservation and re-use systems (based on Element, Ellerslie's world first design) to include facilities and practical measures to reduce water consumption while increasing water re-use, including for irrigation and grey-water (toilets, laundry, external uses and landscaping and managed rain gardens).

Earthworks

The proposed earthworks will occur across the entire development site in order to create the building platforms, roads, driveways, basements and the installation of infrastructure. The majority of the earthworks across the site is proposed to occur during a single earthworks season, associated with the proposed development.

The proposed earthworks are considered to be appropriate and consistent with the scale of the proposed residential development and subdivision. With appropriate site management and monitoring, the proposed earthworks will be undertaken in a way that ensures that any potential adverse effects from the physical earthworks will be less than minor.

The proposed earthworks will enable the residential development of the site, as anticipated by the AUP residential zoning. The proposed earthworks will not significantly change the topography of the site, and in that respect the location of the main entrance and exit to the basement carpark takes advantage of natural gradient to reduce or avoid earthworks where possible. The general slope of the land will be retained and the area around the streams is to be retained within the drainage reserve. Overall, any effects of the proposed earthworks on the landscape character of the site would be less than minor.

Infrastructure servicing

The proposed residential development will provide all the required infrastructure to serve the development, including roading, water supply, wastewater and stormwater, and other private utility services.

The proposed access points have been designed in compliance with Auckland Transport standards to connect seamlessly with the existing surrounding road network.

The proposed stormwater network has been designed to ensure flows are contained within the capacity of the existing network and maintain post development discharge flow in line with the pre-development flow. As a consequence, any effects on the downstream network would be minimal.

The subdivision will connect to the existing public wastewater reticulation network which has been assessed to have sufficient capacity to accommodate the proposed additional residential demand.

Power and telecommunication services exist around the site and are available for use. Vector Limited and Chorus Limited will provide detailed designs to service the site at the time of Engineering Plan Approval.

Geotechnical/Stability

In January 2019, Engeo undertook a geotechnical assessment of the site for the purpose of due diligence, broadly characterise the subsurface conditions and to identify geotechnical constraints that may affect future developments on the site. The applicant has had a preliminary geotechnical investigation completed, by Engeo (**attached**).

The Engeo ground investigation comprised:

- Ten hand auger boreholes with regular in-situ field vane testing to a maximum depth of 5.0 m below ground level (bgl).
- Two machine boreholes with regular Standard Penetration Testing (SPT) to a maximum depth of 21.5 m bgl, and;
- Six scala penetrometer tests to 1.0 m bgl.

The investigation has concluded that the site is considered suitable for the proposed residential development, and the soils are suitable for normal bulk earthworks operations. Liquefaction is not considered to be a significant hazard on the site. A number of recommendations have been provided and the applicant has incorporated these matters into the design and the site investigations.

On the basis of the geotechnical investigation, there are not expected to be any stability issues that might curtail or impede development of the land as proposed.

Importantly, the design of the carpark and buildings and staging of the overall development takes into account the overall construction programme and methodology to ensure that there are only 1 or 2 where construction might be undertaken at any one time. The design also ensures, for example, that major piling is not required along the western boundary to avoid effects on the western neighbouring property.

Soil contamination

Please refer to the professional peer review of an existing Preliminary Site Investigation and Detailed Site Investigation (PSI/ DSI) report prepared by Engeo Ltd (Engeo) with preliminary recommendations to determine a scope of works to achieve Resource Consent and possible remediation solutions. The Engeo PSI/ DSI report, (Ref. 15627.000.000_04, dated 7 February 2019). Engeo determined that 'activities listed on the HAIL may have been historically and/ or are currently present at the site'. The possible.

HAIL activities and associated potential contaminants were summarised as:

- HAIL A10: Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds. Organochlorine pesticides and metals.
- HAIL E1: Asbestos product manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition. Assigned due to the age of site buildings as 'likely' including Asbestos Containing Materials (ACMs) in adjacent soils.
- HAIL I: Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment. This was assigned to the potential for leadbased paint on the existing buildings which has the potential to leach/ flake and contaminate surrounding soils.

Engeo has determined that a DSI is required to quantify the level of contamination in surface soils at the site. It is considered that the Engeo desktop study includes a satisfactory level of investigation to provide preliminary recommendations as to the applicability of the NES:CS and HAIL to the site. Any identified contamination associated with the use of the site for HAIL activities can be readily identified, contained and removed from site for appropriate disposal in accordance with a Remediation Action Plan. The DSI will be lodged at the same time as the resource consent application to confirm any actions relating to any contamination identification and removal, including to meet NES requirements.

Intertenancy and Construction Noise effects

A preliminary Acoustic Assessment has been prepared by Earcon and is **attached**.

The site is adjacent two high noise routes; being State Highway 1 and Great South Road, in addition to a high noise and vibrations source being the railway track.

To achieve compliance with the regulatory and guideline requirements pertaining to acoustics, a number of considerations and mitigation measures will be provided in Omahu's design. Based on an initial preliminary assessment of the development plans, the applicant acoustic engineers (Earcon) have provided a number of recommendations to ensure that future residents are afforded a high level of on-site amenity.

There will inevitably be some aspects of the construction process that create a level of noise in and around the site. These effects might include construction noise, dust, heavy vehicle traffic, and contractors' parking.

These matters are typically addressed through management plans and practices, and by adherence to standards. In respect of noise, all activities will need to comply with the relevant AUP noise provisions and the New Zealand Standard for construction noise. It is also expected that a construction noise and vibration management plan would be required to put in place operational techniques that will mitigate nuisance and disturbance from construction.

A construction traffic management plan will be prepared, post-consent, for certification by the Council. That management plan will detail measures to be implemented to manage access and queueing of heavy vehicles and associated deliveries of building materials, together with the parking of contractors' vehicles.

The combination of carefully prepared construction management plans and adherence to regulatory standards will ensure that any construction-related effects of the project can be appropriately managed.

Notably, Icon NZ is one of New Zealand's leading construction companies with significant experience in large scale and complex developments to deliver developments on time and on budget. Icon has been directly involved in the planning and design of Omahu from its inception in early 2020 and will contribute directly to the overall construction methodology and suite of management plans that will be necessary under conditions of consent.

Archaeological

There are no recorded archaeological sites within or in close proximity to the site, and a field survey did not identify any archaeological sites within the property.

For these reasons, it is considered that the proposed development will have no adverse effects on archaeological values or remains.