

John Paterson Drive Schedule 2 Application

Clause 14(3)(e) Adverse Effects Assessment

The following is a description of the anticipated and known adverse effects of the residential development of the John Paterson Drive site on the environment, in accordance with Clause 14(3)(e) of the Fast-Track Approvals Bill.

The potential adverse effects of the development of the John Paterson Drive site on the environment fall into two categories. The first relates to the effects that may rise during the construction of the development, and the second relates to the effects that may arise from the completed development.

Effects from Construction

The construction related effects generally revolve around the earthworks necessary to construct the residential lots, roads and reserves and the installation of the reticulated infrastructure necessary to service the development, and the potential for noise, dust and sediment-laden discharges during these works. These matters are briefly considered below.

Construction noise is generated by the heavy machinery used to undertake the necessary earthworks and infrastructure installation. Construction noise generated during the site works will be managed in accordance with NZS 6803:1999 Acoustics – Construction Noise which sets limits on the level of noise generated by the site at various time of the day. The utilisation of this standard to manage construction noise will ensure that this matter is appropriately managed during the site works.

The generation of dust during site works can occur from the disturbance of large tracts of land. This potential effect will be managed in accordance with a Dust Management Plan prepared in accordance with Schedule 2 of the Canterbury Air Regional Plan. This management plan will set out how dust management occurs and the mitigation measures that will be employed to ensure that any dust generated does not adversely affect surrounding properties.

The site adjoins the headwaters of Knight Stream. As such it is important for the works on the site to be appropriately managed to ensure that the discharge of sediment-laden water does not result in adverse effects on this waterway or discharge onto adjoining properties. This aspect of the development is addressed through the implementation of appropriate erosion and sediment controls measures. Such measures include the minimum sizing requirements for sediment retention ponds, treatment requirements to ensure minimum suspended sediment loadings, location of discharge points, cut-off drains and clean water flows through the site. These measures will be contained within an Erosion and Sediment Control Management Plan prepared. With the implementation of these measures, it is expected that any adverse effects arising from the discharge of sediment-laden water will be appropriately addressed.

In addition, to the above the construction of the subdivision will result in the movement of heavy vehicles to and from the site. This aspect of the development will be addressed through the implementation of a Traffic Management Plan, which will identify the entry points for the development and the appropriate speed and signage requirements to ensure the safety of all road users during the construction works. With the site-specific traffic management measures in place, it is anticipated that the effects associated with construction traffic will be appropriately managed.

Effects from Completed Development

The anticipated and known adverse effects of the completed development are expected to be in relation to traffic effects, amenity impacts, reduction in productive land, loss of potential wildlife habitat, reverse sensitivity effects and discharge of stormwater. These matters are briefly considered below.

Potential traffic effects arising from the completed development revolve around the number of additional traffic movements that the development would generate and the impact that those movements would have on the capacity of the local road network. The location's primary access is John Paterson Drive onto Richmond Avenue. This is due to the construction of a bridge over the Christchurch Southern Motorway. This limits the number of access points to the wider roading network. The proximity of site to the Christchurch Southern Motorway and the proximity of a public transport route with a 10-15 minute timetable will assist in distributing traffic and providing alternative methods of transport to future residents.

The development of rural zoned land for residential purposes results in a change to the landscape and the views that the afforded over the land from nearby locations. The views across the site are limited as result of existing plantings and shelterbelts. This change in the landscape can result in a perceived loss of rural amenity for surrounding neighbours.

The subject land is zoned for rural purposes and its development for residential purposes removes the potential for the land to be used for productive purposes. Whilst this application is seeking the ability to subdivide 35.6ha, the underlying properties are fragmented and are currently held in different ownership. Further this block of rural land is surrounded by industrial, residential and rural-residential development.

The vegetation contained within the site may contain habitat for terrestrial fauna, such as lizards. The loss of this habitat is considered to be an adverse effect but is able to mitigated through the creation of new habitat is a more appropriate location.

The proximity of the site to the Christchurch Southern Motorway could give rise to reserve sensitivity and amenity effects from the completed development. These effects relate to the noise generated by the vehicles using the motorway. This noise could impact on the enjoyment of the property for future owners and could give rise to complaints from future residents. Sufficient complaints could result in an impact on the operation of the motorway, such as requirement to reduce speed. This matter would be able to be addressed through the installation of structures in the appropriate locations to reduce the noise levels received and by adherence to the existing Christchurch District Plan rules around acoustic attenuation of dwellings within 100m of the motorway.

The stormwater generated from a completed residential development can contain contaminants which can adversely affect the waterways into which the stormwater is discharged. In addition, the volume of water being discharged could also cause downstream flooding issues. This matter is addressed through the establishment of stormwater treatment basins.