



2 CONTEXT

The motorway extends approximately 18.5km from the Johnstone's Hill tunnels to rejoin the existing SH1 just north of Warkworth. It is parallel to, but west of, the existing SH1. It traverses mainly hilly rural country, and bypasses the western outskirts of Warkworth.

The focus of this ULDSP is the Moir Hill and Hīkauae Creek sector approximately between chainage 52200 and 59500 (the chainage is the location reference applied to the Sector Plans in section 7). NX2 has reviewed the sectors of the Project and refined the boundaries between the three sectors to balance the lengths covered by each plan; while still recognising the overarching landform boundaries that drove divisions in the ULDF. This ULDSP describes the area between Fernbrook Farms to immediately south of the large kauri block at the end of Perry Road. The diagram on Page 2 shows this area broadly, and the Sector Plans in section 7 show this in more specific detail [D33].

The plans in section 7 provide an introduction to the areas on each side of this sector plan. Specifically, to the north is the viaduct though the kauri forest, and to the south are the viaducts over Okahu inlet and Pūhoi river.

The following descriptions of the context draws on the ULDF:

Te Awa Hīkauae

Te Awa Hīkauae (Hīkauae Creek) is similar in most respects to Moir Hill in that it is also steep, mostly in pine plantation, and likewise contains frequent streams. However, it also has the following distinctive features:

A 3km forested gorge, which is traced by the existing SH1 ('Te Awa Hīkauae gorge).

An open farmed valley (Fernbrook Farm) in the shadow of Schedewys Hill.

Higher visibility from the existing SH1 road, especially from Schedewys Hill which overlooks the section of designation traversing open farmland.

The greater number of rural and lifestyle properties scattered along SH1, and the 'Te Awa Hikauae Arts and Crafts School'.

An area of high value bush opposite Mahurangi West Road.

The proximity of Te Araroa (the New Zealand trail) which is adjacent to the west of the designation at the unformed Cook Road.

Moir Hill

Relevant characteristics include:

steep valleys and hills clad in pine plantation

design, stream rehabilitation)

popular Pohuehue Scenic Reserve.



- Moir Hill (to the west of the designation) is 360m high with radiating high ridges and
- Moir Hill Road ridge is approximately 220m high where intercepted by the designation
- The watershed between the Pūhoi and Mahurangi catchments at Moir Hill Road
- The area is sparsely settled and has low visibility
- The steep topography and the high number of streams traversed which necessitate particular attention to stream ecology and water quality (i.e. earthworks and culvert
- The potential for future changes to land use (for example to lifestyle properties)
- The interception of only two local routes, Moir Hill Road which is narrow and winding, follows a sharp skyline ridge, and affords some panoramic views
- Moirs Hill Walkway is a low use track extending through pine plantation from the

Pukapuka Road looking west to the path of the motorway



Kākahi (freshwater mussels) found on site



2.1 NATURAL HISTORY

Moir Hill Road is situated on a ridge-line which splits two significant catchments in the Project to the north and south. North of Moir Hill Road water flows toward the Mahurangi River within the Mahurangi Catchment, while south of Moir Hill Road it flows toward the Pūhoi River within the Pūhoi catchment. The Mahurangi River has two main branches. The 'Right Branch' flows north, is fed by headwaters on Moir Hill, and meanders across a large floodplain. The 'Left Branch' flows south, is fed by headwaters on Dome Hill and meanders through a floodplain dominated by farmland. Te Awa Hīkauae flows to the Pūhoi River, and the designation boundary broadly follows along the lower reaches of this major creek. The creek is confined within a 3 km gorge upstream of the confluence with the Pūhoi River, but the middle reaches above the gorge comprise a more open valley in the shadow of Schedewys Hill.

The Project is within the Rodney Ecological District. Historically, it would have comprised of extensive kauri-podocarp-broadleaf forests, dominated by totara and kauri on ridges, and taraire, kohekohe and puriri in the gullies. The area has been extensively cleared, and is now dominated by pasture on the fertile flood plains and pine plantations on less fertile, broken hill country. Currently there are fragments of kauri-podocarp-broadleaved forests remaining as well as scattered stands of regenerating kānuka/mānuka forest and native broadleaved scrub. There are frequent

small wetlands throughout the Mahurangi and Pūhoi catchments, however most have been degraded by stock and anthropogenic modification. This district provides important habitat for a variety of native fauna, such as birds, invertebrates, lizards and bats. Bird communities are diverse within the area. Birds such as tūī, grey warblers and kererū are common and red-crowned parakeets and bellbirds are present as spillover from nearby pest-free sanctuaries such as Tawharanui. The mature forests and mānuka /kānuka scrub provide habitat for native land snails, geckos and skinks. Large old trees on farms and within the forests are utilised for roosting by New Zealand longtailed bats. Wetlands within the designation provide important habitat for fernbirds and spotless crakes.

2.2 HUMAN HISTORY

The central sector has a long history in human occupation. Hōkai Nuku members identify with the area, either because their tūpuna (ancestors) lived there, or they travelled through. In the past century human activities have included pastoral farming and forestry supported by sparse residential occupation. Evidence of human history can be seen in the natural landscape.

2.3 CIRCULATION

The existing State Highway runs in parallel to the east of the Project designation. Local roads branch off the State Highway and are typically no-exit roads following north west and south east ridges, such as Moir Hill Road.

The Project is well separated from the walking Te Araroa trail (the trail climbs the hill north of Pūhoi and follows the unformed Cook Road along the ridge adjacent to, and west of the designation).

2.4 LAND USE

This sector includes a mix of the two main land use patterns. The first is steep hill country (Moir Hill and the hills beside Te Awa Hīkauae) which is used extensively for pine plantations, and the second are moderate hills and valleys (middle section of Te Awa Hīkauae valley) used for pastoral farming.

Existing pastoral farming land use