

Memorandum for

Landscape Design

Issue Date: 18/12/2025

Delmore

53A, 53B & 55 Russell Road (Stage 1)
88, 130 & 132 Upper Ōrewa Road (Stage 2)
Wainui, Auckland

Introduction

This memorandum is to summarise the landscape design approach and intent for the Delmore development proposed on approximately 109.2 hectares (ha) of land spread across six existing lots; 88, 130 and 132 Upper Ōrewa Road and 53A, 53B and 55 Russell Road in Wainui, Auckland and consisting of up to 1,213 residential lots across two development stages. The landscape design is depicted on the Fast Track Application Landscape Package 2535 produced by Greenwood Associates produced for Vineway Limited to support their Delmore master-planned residential development fast-track application. Prior to circulation of this memorandum the landscape design has been reviewed and coordinated with the wider consultant team including Ecologist [REDACTED] from Viridis Environmental Consultants and his feedback has been incorporated into the design, vegetation selection and maintenance approach. Recommendations from the Department of Conservation and Auckland Council provided in respect of the first application have also informed the design, vegetation selection, and maintenance approach.

A terrestrial Significant Ecological Area (SEA-T) overlay sits over the northern reaches of 130 Upper Ōrewa Road where the site boundary meets the Nukumea Scenic Reserve (DoC) to the north and west. There are also SEA-T's identified abutting the site to the west and at the south-eastern corner. A notice of requirement (NoR 6) bisects the site and comprises a connection between Grand Drive and Milldale to the south.

The site is currently rural in character, spanning across a scenic rolling landform with pockets of native bush, streams and wetlands. These natural assets give the site a unique natural character. Maintaining and enhancing this character has been a key driver throughout the design process. This approach has been balanced with integrating a new community into the landscape which will have the opportunity to live amongst and enjoy this unique environment that will continue to evolve and establish around them. We believe maintaining and enhancing the site's natural

character has been achieved through considered and appropriate treatments in three main areas which will form the basis of the landscape design approach summary;

- the street tree and public space design of public roads and parks to be vested to Auckland Council. Refer to plans 2535/03–06.
- the design of native revegetation, stormwater ponds and natural riparian margins to be held in perpetuity by a Residential Society. Refer to plans 2535/07–11.
- the design of the residential lots and common access ways to be held in private ownership. Refer to plans 2535/12–45.

Streetscape Design Approach

The street tree and public space design of the proposed public roads and parks is intended to reflect the natural vegetation found on the site historically, prior to its transition to farmland. The proposed tree selection balances the need for tree species that will perform well in an urban environment (i.e have suitable form and scale when planted as street trees), and trees that represent the historical ecosystem. The historical ecosystem type of the majority of the site is WF11, which is described as kauri, podocarp (evergreen trees that don't lose their leaves) and broadleaf (fruit-bearing trees with large flat leaves) forest. We believe some tree species that fit into this ecosystem are appropriate to be used as street trees on the site and some are not.

With these factors considered, we have proposed a range of species for the road network that we believe are appropriate; and also comply with Auckland Council standards. Chapter 7 of the Auckland COP for Land Development and subdivision specifies that all trees installed must comply with 'AS2303:2018 Tree stock for landscape use' which has also been considered with regard to availability at local nurseries. To ensure best chances of survival we have specified all street trees to be eco-sourced from local nurseries (where possible). The Auckland Council urban forest strategy also calls for a diverse range of species to guard against pest and diseases. We believe a diverse range of species has been provided for. These select species will also provide aesthetic beauty and structure, as consistent species are proposed to form avenues of street trees (which aside from the visual amenity and character these trees bring, will enhance wayfinding throughout the neighbourhood and bring a strong sense of place and identity to local streets).

The mature height and width of proposed street trees have been considered, with a hierarchy of mature sizes specified to a correlating hierarchy of road and berm widths. Where possible, broadleaved trees have also been specified in streets that follow gullies, to reflect their natural habitat. A minimum front berm width of 2.2m is provided throughout the site (measured from the road carriageway to the footpath). The proposed berm widths provide sufficient space for medium to large

trees to grow, thereby facilitating 12-15% tree canopy closure within the road corridors, in alignment with Auckland Transport's sustainability requirements and Auckland Councils Urban Ngahere Strategy. The proposed tree spacing to achieve this canopy closure varies between 9m to 20m depending on road type, width and adjacent housing typology whilst ensuring visibility for safety and long-term maintainability of the trees at maturity. A minimum berm width of 2.2m along with the spacing range of 9-20m for street trees on all roads proposed to be vested ensures that each tree has access to at least 10-15m³ of soil to support healthy growth in accordance with the TDM Engineering Design Code for soiling and for planting proposed in road reserves. Where this length is constrained by various infrastructure (predominantly driveways) an alternative detail has been provided which allows for structural soil beneath pathways to allow roots to extend out, thus achieving a 10m³ soil volume.

It is acknowledged that the stormwater network drawings indicate stormwater line locations passing under the front berm in some cases. These service line locations may create conflict points between infrastructure provision and tree growth where there is insufficient separation between the two. In locations where the base of a street tree pit (approx. 600mm below FGL) is within 500mm (vertical separation) of a storm water line (proposed as Rubber Ring Joint Concrete Pipes), a 10-metre length root barrier will be installed directly above the stormwater lines where they pass beneath street trees. The specific locations where the root barrier is used is proposed to be detailed as part of EPA design and approval.

Public parks are proposed to be vested to Auckland Council in both Stage 1 and 2. All parks are fronted by roads on at least two sides, whilst remaining edge interfaces with either native revegetation or residential lots (with low fencing proposed on all dwelling lots along the common boundary with a public park). This is to ensure passive surveillance towards the reserve can be observed by residents. Low planting is proposed alongside these interfaces; both to create a vegetative buffer and to delineate private and public areas. Retaining walls adjacent to public parks are avoided where possible, however where retaining is explicitly required it is proposed to be below 1m in height and will be screened by shrub planting. Retaining walls which exceed 2m in height which front the road reserve will be stepped to reduce the visual impact of the wall.

Revegetation Design Approach

A fundamental aspect of the development proposal is the significant areas of the site that will be put aside and planted out with appropriate native plant species (revegetation) and held and maintained in perpetuity by a private ownership entity such as a Resident's Society. The proposed restoration planting strategy of the areas earmarked for native revegetation across the site (including steeply sloping land, stormwater ponds and natural riparian margins), is to restore these areas to

ecosystem type WF11 within all areas subject to planting. This ecosystem is still existing on some parts of the site, such as the large SEA-T designated area at the northern most boundary, which borders Nukumea Scenic Reserve. Other existing vegetation has been classified as VS2 and VS3 (with a couple of pockets of unclassified vegetation) such as the areas surrounding the streams and wetlands in the lowlands of the site that have been protected by ecological consent notices.

The proposed planting intends to extend these existing vegetation patches and blend seamlessly into them once established. This is proposed to be achieved by the specification of several specific and tailored planting species combinations (mixes); and site specific implementation, establishment and maintenance guidance via a planting implementation plan (to be conditioned). This planting implementation plan has been provided as an attachment to this document. The intent of the implementation, establishment and maintenance guidance is for the consent holder to ensure 80% canopy closure occurs, with a minimum survival rate of the proposed plants being 90% of the original density throughout all revegetation areas (over a minimum 5 year defects liability period). Following the successful defects liability period, the conditioned guidance is for a Resident's Society to ensure the 80% canopy closure is maintained in perpetuity.

There are seven different revegetation planting mixes proposed for the site which include combinations of plants at small grades (1-2 litre) and consistent spacing (1.0-1.5 meters) that are relevant to WF11 (some of which are observed to currently be existing on the site) and suitable for the topography and land type that they will be installed on. For example, different species are proposed for upper slopes and embankments, within or outside of private lots; and different species are proposed in riparian areas in valleys that are fully or partially saturated. Refer to plans 2535/07-11 for detailed information on the proposed planting mixes and species. With regards to the kauri species, kauri have not been included in the revegetation strategy at this time to mitigate the risk of spreading the *Phytophthora agathidicida* pathogen (kauri dieback disease). This does not preclude natural kauri seed dispersal within the revegetation areas which also results in less human generated soil disturbance and is less likely to spread the pathogen if present. It should also be noted that the street tree species selection for the development will also bolster the WF11 vegetation type in the wider ecosystem. Miro, matai and kahikatea are podocarps included in the native bush revegetation planting mix ('BM') which will bolster the restoration of WF11. In addition, karaka, kohekohe, taraire are broadleaves that are included in the 'BM' planting mix which will attract kererū, tūi, pīwakawaka and tauhou among other native birds that enjoy feeding on the fruit from these species. Over the significant area of planting proposed, this will result in thousands of plants from the WF11 ecosystem being installed on the site. The proposed revegetation plant species selection is also intended to establish a

native plant cover as quickly as possible and maximise chances of plant survival with strong diversity. A good proportion of understory and sub-canopy species is key to this strategy to outcompete exotic species during the establishment period. Once native vegetation is established as the dominant vegetation type, it is anticipated that the density of emergent kauri, podocarps and broadleaves will also increase gradually over time through natural seed dispersal as the ideal establishment conditions would have been established for them.

Mānuka is a well-known and effective sub-canopy and pioneer species that establishes well in clay. As a result, it is included in the 'BM' planting mix to provide shelter -- which within other species can establish -- and because much of the revegetation area proposed as 'BM' planting mix will not be earth worked, with new vegetation planted into existing topsoil which may have high proportions of clay. However, in specifying the ratio of manuka to be installed, we have considered climate change impacts such as longer, more intense dry periods and droughts as mānuka is quite flammable and may lead to unnecessary fire risk if over specified. It is considered that the proposed ratio (15%) of mānuka remains appropriate for the riparian mix, as fire is less likely to spread in a riparian environment. With regards to the riparian planting species selection in the face of climate change, a diverse range of appropriate taller growing species has been included in the lower riparian planting mix ('LM') to provide maximum amounts shade to wetlands and water courses. The implementation, establishment and maintenance guidance also provides information in relation to moisture levels to be maintained in the soil of new planting via watering. This will be in place for the entire plant establishment period of the planting until it becomes more resilient to drought (at maturity). With regard to maintaining moisture levels of new planting, irrigation fields consisting of dripper lines discharging from the wastewater treatment plant are proposed as part of the development across 1.1ha total of new revegetation planting area. The proposed irrigation fields are located outside of existing consent notice areas and outside all 15m stream setbacks. New revegetation planting that is provided with irrigation will thrive because of the regular moisture levels that will be maintained, rather than relying on rainfall and watering which can be intermittent. The outflow from water treatment plant will be water, with no toxic or harmful content.

Residential Lots, Common Accessways and Edge Treatment Design Approach

The key outcomes for the design of the comprehensive residential lots is to create visually appealing, aspirational, yet low maintenance properties, provide plenty of variation in aesthetic and treatments, and encourage a sense of community among residents. This has been achieved by providing an optioneering system for purchasers to specify their own planting, hardscape and fencing treatments within

a set of applicable options for each purchaser that will provide a framework to ensure high quality and intentional outcomes are achieved whilst offering a true random variety to the landscape treatments of each home.

For planting, a selection of compact to medium sized feature trees for the street/JOAL frontages, both evergreen and deciduous, provide structure to the landscape and highlight seasonal variations. These feature trees are intended to complement the proposed street trees to be vested and are intentionally proposed at a smaller scale to avoid competition and ensure good solar access. Below the specimen trees, a variety of complementary low-planting species that enhance visual interest and reduce ongoing maintenance will be located along lot frontages. In rear yards, the optioneering system elevates the scale of the landscaping with well-placed specimen trees, ensuring a minimum tree grade of PB95. Larger shrubs and/or hedging are positioned along rear and inter-lot side boundaries to soften the visual impact of external fencing or retaining walls. Generally, plant species options within the rear yards is lush but low maintenance, predominantly using a native palette, to blend into native revegetation planting beyond, when viewed from the ground-floor living areas. Batter slopes 1:3 and steeper are proposed at the rear of private lots, but within the lot boundary, to avoid high, retained interfaces to revegetation planting. Native mass planting is proposed in place of lawn on these batter slopes, promoting easy maintenance while contributing to revegetation efforts. The native revegetation planting on these batter slopes within lot boundaries is proposed to be maintained by the consent holder for the first 5 years of establishment and a residential society beyond that period. These areas are proposed to be contiguous where possible (i.e without fencelines breaking them up) on lot boundaries for ease of maintenance and to maintain as much ecological connectivity as possible. Low, visually permeable aluminium security fencing (1.2m high) is proposed where private amenity gardens, lawns or patios adjoin revegetation areas. This is in order to maintain unobstructed views and foster a strong connection between the community and nature.

With regard to fencing, for outdoor living areas facing the street/JOAL, purchasers can use a range of visually permeable 1.8m high or more solid 1.5m high fences and a hedge to provide privacy to the patios of their respective unit, while maintaining a positive relationship between neighbours and allowing for visual surveillance to the street. For secondary outdoor living areas or windows facing the street/JOAL, a range of low hedging or shrubs can be selected to offer a buffer and sense of privacy while reducing visual dominance from the street. Fencing in the front yard can be omitted where there is no bedroom or living room window visible, instead low planting can be used to define the public/private boundary, with fencing set back behind the dwelling's front façade in the side yard. There is also the option of using a range of low fencing options along frontages, with various paling, picket and

batten sizes to enhance neighbourhood character and delineate each lot for maintenance/ownership purposes when viewed from the public realm. It is proposed that all street-frontage fencing is to be stained or painted in a colour that complements the building façade (or in naturally recessive hues). For rear yard fencing between lots, privacy is prioritised with a range of 1.8m high screening typologies available for use.

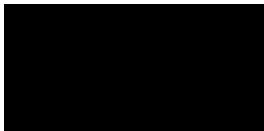
The retaining and cut and fill strategy for the site is sympathetic to the local topography and appropriate to achieve the masterplan design. Tall retaining that would have significant visual impact has been avoided with split retaining walls, split level architecture and planted batter slopes proposed as solutions. Retaining walls that sit within private lots and are above 2.5m, particularly along common rear yard boundaries, will be stepped with a planted 'landscape wall' to reduce their visual dominance. Further, the fence treatment above these walls has been given careful consideration. Typical responses can be viewed on sheet 2535/18 and specific treatments for all situations are covered in plan view across sheets 2535/19-40. An exception to the stepped approach occurs on lots featuring an intentional split-level architectural typology, which incorporates an approximately 2.7m high retaining wall to support first-floor outdoor living areas. These intermediate walls are positioned behind the dwellings, away from the street, and do not obstruct primary views from within the units. Renders of such arrangements are provided with the Terra Studio Architectural Package. Nearly all existing streams, wetlands, riparian margins, and consent notice areas adjoining the proposed development are treated with 1:1 or 1:3 batter slopes. This approach reduces visual dominance on the natural environment and allows for effective planting to screen and buffer the proposed development. As many parts of the site naturally contain slopes around 1:2, the proposed treatments are considered consistent with the existing topography and maintain a respectful transition to ecological areas.

Road frontage retaining walls exceeding 1.5m in height have been approached with a similar strategy to rear-yard retaining walls. Effects have been mitigated through design measures such as stepped walls, or 1:3 planted batter slopes to eliminate the need for high retaining. Where slopes are used—particularly for lots serviced by JOALs above road level—street-facing decks can be constructed to provide elevated and separated outdoor living areas (from the street), allowing the slope to extend uninterrupted to the home's foundation. Low and permeable fencing, as well as screening planting, is also proposed in these instances.

The use of common access ways (JOALs) as primary frontages to homes has been minimised where possible throughout the masterplan. Due to the site's topography, ecological features of the site, and stringent design requirements of the NOR road, some dwelling lots front JOAL areas instead of the street. In these instances, JOALs

have been designed to be as high quality and safe environments as possible. Dwellings address JOALs as if it were a street with all CPTED outcomes of lots that front the public road work achieved through the same design approach and optioneering specification systems. A separated and delineated pedestrian route is always provided with high quality trafficable surface treatments that encourage low vehicle speeds and a sense of community and care. Waste management will be handled by private collection services with solutions tailored to each unique situation prioritising ease and safety for residents. Lighting and night-time safety has also been addressed, with lighting at a human scale appropriate for laneway environments.

Regards,



 BLA
Landscape Architect
 Registered