Assessment of Landscape and Visual Effects
Hibiscus Coast Busway Station – Park and Ride
Hibiscus Coast Highway – Silverdale

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1.0 Introduction

1.1 LA4 Landscape Architects have been requested by Auckland Transport to undertake a landscape and visual effects assessment of the alterations to the existing Stage 2 consented design of the Hibiscus Coast Busway Station at Hibiscus Coast Highway and Painton Road, Silverdale.

1.2 The assessment process has involved:

- Background review of plans and documentation;
- Desktop assessment utilising aerial photographs;
- Site and surrounding environment investigations;
- Photographic recording of the site and surrounding environment;
- Landscape analysis and visibility assessment;
- Assessment of landscape and visual effects.

1.3 Site investigations, an analysis of the site and surrounding Silverdale environment and a landscape and visual effects assessment of the proposed development were undertaken in November 2016.

1.4 The assessment is structured as follows:

- Description of the proposal (Section 2);
- Description of the site, landscape context and existing visual environment (Section 3);
- Evaluation of the landscape and visual effects (Section 4);
- Conclusions (Section 5).

2.0 The Proposed Alterations

2.1 The first stage of the Busway Station is complete – the Silverdale Park and Ride facility. This consists of four interim bus stops; a car parking area for 104 vehicles; a new road - Painton Road linking the Hibiscus Coast Highway with Small Road; and a new signalised intersection on the highway (adjacent to the parking area at the Silverdale War Memorial Park).

2.2 Auckland Transport is now applying to alter the existing Stage 2 consent as follows:

- Revised busway station building design
- Increased gradient to the consented car parking area
- Reduction in the height of the retaining walls along Painton Road and Small Road boundaries; and
- Amended landscape design across the site, including around the stormwater pond and abovementioned changes.

2.3 A landscape development plan has been prepared for the amended design to integrate the facility into the surrounding area and make a positive contribution to the visual amenity of this location (refer to LA4 Landscape Architects Plans Ref: 16497 MP01, PP01-PP06).

2.4 The landscape development for the site includes the following:
• Specimen tree planting within the car park
• Trees within and around the Busway Station platform and building
• Mixed indigenous wetland and marginal planting around the stormwater attenuation pond
• Groundcover planting within and around the car park and Busway Station
• Specimen tree planting for scale and amenity.

2.5 The landscape development has been designed in a manner that contributes to the ecological, functional and aesthetic values of the site. Species have been selected for their function and amenity, as well as utilising indigenous and eco-sourced plants.

2.6 The landscape development also aims at minimising any potentially adverse landscape and visual effects on surrounding environment including adjoining properties, public areas and the Silverdale War Memorial Park.

3.0 The Visual and Landscape Context

The Site

3.1 The site is located on the southern side of Hibiscus Coast Highway, bounded by Painton Road to the east and Small Road to the south and west. The northern part of the site is currently occupied by the Park and Ride facility with bus stops along Painton Road and a large sealed car parking area.

3.2 The sealed car parking area is extensive with eight rows of car parks accessed by the aisles. There is no planting within the car park. Specimen tree plantings of young pohutukawa extend around the Painton Road and Small Road frontages. A small stormwater attenuation area is within the western part of the site. Rank grass and some small trees surround the grassed area on the western side.

3.3 Small Road is a no exit street and provides the only access to Snow Planet and the commercial activities along the road. The road is utilised for parallel parking for the Busway and a smaller sealed car parking area is located to the east of the roundabout, again at full capacity. A coffee caravan has set up business in this area catering to the bus commuters. Vehicles are also randomly parked on the grassed berms around the area due to the full capacity of the current car park.

Site Context

3.4 Opposite the subject site on Hibiscus Coast Highway is the Silverdale War Memorial Park with car parking area, rugby club, squash club, bowling club and tennis courts. To the west of the park is a large site on Jack Hawkin Lane currently undergoing earthworks with extensive retaining structures for future development. Adjoining this site is the northern motorway (SH1) and the Silverdale interchange.

3.5 To the southwest on Small Road are Snow Planet and an assortment of business activities including a commercial recreational vehicle and caravan sales yard, paintball facility, Indoor Go-Cart Centre (in liquidation), dog day care facility and residential show home yard. The Silverdale Adventure Park is located on East Coast Road immediately.

3.6 The adjacent land on the eastern side of Painton Road has been granted consent to establish and operate a 24-hour service station with associated earthworks and signage and subdivision consent to create 8 lots. Further to the east of this site is the large commercial and retail area off East Coast Road anchored by Kings Plant Barn, Kennards Hire, Oceans Seafood, Resene Colour Shop, Animates and a number of smaller retail units. Further to the east is the Silverdale Industrial Area.
Photograph 1: Looking towards the site from the Silverdale War Memorial entrance

Photograph 2: The undeveloped southern part of the site along Small Road
Opposite the Kings Plant Barn commercial area on the northern side of Hibiscus Coast Highway is the large Bunnings Warehouse with extensive car parking and the ‘Pak n Save’ supermarket similarly with an extensive car parking area.

The landscape context is dominated by transport related activities with the Hibiscus Coast Highway extending along the site frontage, the existing Park and Ride facility and the more distant State Highway 1 which exert a dominant and utilitarian influence over the area. The amenity of the area is therefore low due to these characteristics and the area is in a state of transition at present. The site itself contains no notable landscape features that contribute to the character and amenity of the surrounding area.

Evaluation of the Proposal

The key to assessing the visual and landscape effects of the alterations to the existing Stage 2 consented design on this landscape is first to establish the existing characteristics and values of the landscape and then to assess the effects of the proposal on them.

Landscape Effects

Landscape effects take into consideration physical effects to the land resource. Assessments of landscape effects therefore investigate the likely nature and scale of change to landscape elements and characteristics. Landscape effects are primarily dependent on the landscape sensitivity of a site and its surrounds to accommodate change and development. Landscape sensitivity is influenced by landscape quality and vulnerability, or the extent to which landscape character, elements/features and values are at risk to change.

Landscape character results from a combination of physical elements together with aesthetic and perceptual aspects that combine to make an area distinct. Landscape values relate to peoples aesthetic perception of the biophysical environment,
including considerations such as naturalness, vividness, coherence, memorability and rarity.

**Landscape Effects Assessment**

4.4 The landscape values associated with the site are low due to the extensively modified nature of the site with the existing Park and Ride facility within the site as well as existing and proposed developments within the surrounding area. A large part of the site is currently formed as a sealed car park with little visual relief. The site and surrounding area are in a state of rapid transition and proposed development.

4.5 There is no significant vegetation within the site and no vegetation that requires removal other than some exotic tree species in the western part of the site. Earthworks and retaining walls along part of the eastern and southern boundaries of the site will be required to achieve a suitable grade for the car parking area. The increased gradient to the consented car parking area will result in a reduction in the height of the retaining walls along both the Painton Road and Small Road boundaries. These retaining walls will be up to a maximum height of 2.5m.

4.6 An amended landscape plan has been prepared for the site that will lift the amenity values of the street frontages, site and surrounding area. Extensive plantings of indigenous tree, shrub and riparian species are proposed throughout the site that will contribute positively to the site and surrounding Silverdale area.

4.7 Consequently the alterations to the existing Stage 2 consented design will have very low adverse landscape effects on the site and surrounding urban area. The proposed landscape development will result in positive landscape effects,

**Visual Effects Analysis**

4.8 The proposed alterations raise a number of visual issues, including the potential effects on visual amenity to the following key areas:

- Adjoining properties
- Surrounding road network
- Wider rural/urban area

4.9 The assessment of visual effects analyses the perceptual (visual) response that any of the identified changes to the landscape may evoke, including effects relating to views and visual amenity. Visual sensitivity is influenced by a number of factors including the visibility of a proposal, the nature and extent of the viewing audience, the visual qualities of the proposal, and the ability to integrate any changes within the landscape setting, where applicable.

4.10 The nature and extent of visual effects are determined by a systematic analysis of the visual intrusion and qualitative change that a proposal may bring, specifically in relation to aesthetic considerations and visual character and amenity.

4.11 The methodology used in this assessment is designed to assess whether or not the alterations to the existing Stage 2 consented design for the Busway Station would have adverse visual effects on the nature and quality of the surrounding environment.

4.12 The visual effects assessment has been undertaken in terms of the following criteria:

a). **Sensitivity of the view** – the relative quality of views towards the site, including landscape character and visual amenity values.

b). **Viewpoint / perceptual factors** – the type and size of population exposed to views towards the site, the viewing distance to the site, and other factors
which indicate its sensitivity in terms of both viewing audience and the inherent exposure of the view towards the site due to its physical character.

c). **Peri-urban amenity** – the impact of future development on the wider surrounding peri-urban amenity.

d). **Peri-urban form** – the degree to which future development would fit into the existing peri-urban context of the surrounding environs.

e). **Visual intrusion / contrast** – the intrusion into or obstruction of views to landscape features in the locality and beyond and the impact upon key landscape elements and patterns.

f). **Mitigation potential** – the extent to which any potential adverse effects of the development could be mitigated through integration into its surrounds by specific measures.

**The Visual Catchment and Viewing Audience**

4.13 The visual catchment is the physical area that would be exposed to the visual changes associated with the alterations. In relation to the proposal, the visibility is determined by the topography and vegetation within the surrounding area and the scale of the development.

4.14 The site lies in a discrete area at the end and at the bottom of a broad valley. The valley is generally steeply inclined towards the northwest with local spurs and knolls that obstruct most views of the site. Vegetation and shelterbelts throughout the valley also restrict views towards the site.

4.15 The topography of the area means that the site will be largely screened from view from areas other than those within the immediate vicinity of the site. Views into the site from Hibiscus Coast Highway travelling in a southerly direction are screened from view by the landform and spur to the west of the East Coast Road commercial area. Views from East Coast Road are similarly screened by the intervening landform.

4.16 Views will be gained from parts of the Silverdale War Memorial Park, across the foreground of Hibiscus Coast Highway. These views are currently gained towards the existing car parking area (as illustrated in Photograph 1). Property owners on the more elevated land accessed off East Coast Road to the southeast of the site will be exposed to views.

4.17 Views will be gained from elevated viewpoints from the Silverdale interchange to the southwest of the site. These views are transient and only gained by those travelling in vehicles, at speed, negotiating the traffic lanes. They will therefore be of short duration and limited impact within the transport corridor.

4.18 The viewing audience that will be exposed to views towards the development will therefore comprise:

- Recreational users of the Silverdale War Memorial Park;
- Motorists travelling in both directions along Hibiscus Coast Highway;
- Motorists travelling in a north easterly direction on the Silverdale interchange;
- Motorists travelling along Painton Road and Small Road in the vicinity of the site;
- Future users of the currently vacant sites to the east and south of the site; and
- Property owners on the more elevated land accessed off East Coast Road to the southeast of the site.
Visual Effects Assessment

4.19 The visual effects of the alterations to the existing Stage 2 consented design have been assessed from areas within the visual catchment area, which have potential for visual effects. These areas have been identified and the potential visual effects assessed. This is achieved by using both descriptive and analytical means.

4.20 The assessment is from each of the following areas:

- Adjoining properties
- Surrounding road network
- Wider area

4.21 A detailed assessment and analysis of potential effects have been carried out using a Visual Effects Matrix (score sheet), which ensures that each view and potential changes within each view are evaluated thoroughly and consistently. The key factors contained in the matrix are outlined in Appendix A. It covers aspects such as the sensitivity of the view to change, the size of the viewing audience that would be affected, the legibility of the proposal, how well the proposal integrates with its surroundings and whether or not the proposal intrudes into any existing views.

4.22 The total scores given in the descriptions denote the overall visual effects rating, which has the following range of potential ratings and effects from each viewpoint. In general terms, visual effects in the no effect to moderate effect range are acceptable in landscape and visual terms, provided mitigation is carried out for close-up viewers, or for particularly intrusive elements.

4.23 For those units where high effects result, significant mitigation is required, and/or a redesign of parts of the proposal. Where a very high or extreme effect is created, the effects would be unacceptable in visual and landscape terms.

4.24 The following seven-point scale has been used to rate effects, based on the guidelines contained within the NZILA Best Practice Guide:\footnote{NZILA Best Practice Guide – Landscape Assessment and Sustainable Management 2010}

<table>
<thead>
<tr>
<th>Negligible</th>
<th>Very Low</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
<th>Extreme</th>
</tr>
</thead>
</table>

Negligible Effect

*The proposal would have no effect on the receiving environment.*

Very Low Effect

*The proposal has discernible effects but too small to adversely affect other persons.*

Low Effect

*The proposal constitutes only a minor component of the wider view. Awareness of the proposal would not have a marked effect on the overall quality of the scene or create any significant adverse effects.*

Moderate Effect

*The proposal may form a visible and recognisable new element within the overall scene and may be readily noticed by the viewer. The proposal may cause an adverse impact but could potentially be mitigated or remedied.*

High Effect
The proposal forms a significant and immediately apparent part of the scene that affects and changes its overall character. The proposal may cause a serious adverse impact on the environment but could potentially be mitigated or remedied.

Very High Effect
The proposal becomes the dominant feature of the scene to which other elements become subordinate and it significantly affects and changes its character. The proposal causes extensive adverse effects that cannot be avoided, remedied or mitigated.

Extreme Effect
The proposal is completely at odds with the surrounding area and dominates the scene to an extreme degree. The proposal very significantly affects and entirely changes the character of the surrounding area. The proposal causes extreme adverse effects that cannot be avoided, remedied or mitigated.

Analysis of Results

4.25 The following summaries describe the implications that the alterations to the existing Stage 2 consented design have for each area within the visual catchment. In so doing they touch on key findings in the matrix analysis and the implications that these might have for areas and audiences in close proximity to any given viewpoint.

Surrounding properties

4.26 Surrounding properties to the north, east and south will gain views towards the site. The adjacent land on the eastern side of Painton Road has been granted consent to establish and operate a 24-hour service station with associated earthworks and signage and subdivision consent to create 8 Lots. This development includes extensive landscape plantings in accordance with the Special 35 (Hibiscus Coast Gateway Zone) landscape objectives and policies.

4.27 Land to the south and east is zoned General Business and therefore anticipated to be developed for business activities. Beyond this zone to the southeast is an area accessed off East Coast Road zoned Residential – Mixed Housing Urban zone. Views from here are likely to be highly variable and screened by structures within the General Business zone.

4.28 Views from the Silverdale War Memorial Park to the north currently encompass the existing Park and Ride facility with car parking area and bus stops along Painton Road. Photograph 1 illustrates the view. The existing facility and car park comprises a sealed hardstand area with no landscape treatment. The proposed development incorporates an architecturally designed Busway Station along the Hibiscus Coast Highway frontage to the site. This will screen views towards the car parking area behind.

4.29 The landscape development for the site will significantly enhance the current amenity values of the site and surrounding area through the extensive specimen tree planting of evergreen Pohutukawa (Metrosideros ‘Maori Princess’) along the road frontage and large-scale tree planting of Tulip tree (Liriodendron tulipifera) within the car park. The median islands within the car park are to be mass planted with shrubs and grasses and in combination with the tree plantings, will effectively break up the expanse of hard seal, visually soften and reduce the scale of the area.

4.30 Berm plantings along the Painton Road and Small Road frontages will also add to the vegetated framework of the site and the extensive indigenous plantings surrounding
the proposed stormwater attenuation pond will enhance the visual and ecological amenity values of the area.

4.31 From the surrounding properties there will be noticeable visual changes due to the alterations to the car parking area and revised Busway Station design. The overall site has been comprehensively designed to accommodate the Busway Station and associated parking with a well designed station building, extensively designed car parking area and stormwater attenuation pond. The existing car park and surrounding land adds little to the amenity of the area, being devoid of landscape treatment and the subsequent overflowing of parked cars into the surrounding grassed berms. The lower height of the retaining walls along the Painton Road and Small Road boundaries will result in reduced visual effects.

4.32 Overall the visual effects of the alterations to the existing Stage 2 consented design on the surrounding properties will be very low. The proposed landscape development will add positively to the amenity values of the site and surrounding Silverdale environs.

**Surrounding road network**

4.33 Views into the site from the surrounding road network are highly variable due to the intervening landform and vegetation patterns. Views currently encompass the existing Park and Ride facility. Views from the Hibiscus Coast Highway travelling in a southerly direction are screened from view by the landform and spur to the west of the East Coast Road commercial area. Views from East Coast Road are similarly screened by the intervening landform.

4.34 Views will be gained from elevated viewpoints from the Silverdale interchange to the southwest of the site. As outlined previously, these views are transient and only gained by those travelling in vehicles, at speed, negotiating the traffic lanes. They will be of short duration and limited impact within the transport corridor.

4.35 Views from Small Road to the west of the site will largely be screened by the plantings surrounding the stormwater attenuation pond and specimen tree plantings along the road frontage and within the car park. Viewed from Painton Road the development will be seen in the context of the transport corridor surrounding the site.

4.36 A high standard of visual quality will be achieved from the surrounding roads through the revised Busway Station building design and proposed landscape treatment. Overall, the visual effects from the surrounding road network will very low and entirely in keeping with the prevailing characteristics of the area. Again from here there will be positive visual effects through the extensive landscape development throughout the site and within the street berms.

**Wider peri-urban area**

4.37 Views from the wider peri-urban area will be highly variable due to the surrounding landform and vegetation characteristics. The site lies in a discrete area at the bottom of a broad valley. The valley is steeply inclined towards the northwest with local spurs and knolls that obstruct most views of the site.

4.38 The topography of the area means that the site will be largely screened from view from areas other than those within the immediate vicinity of the site. Viewed from the wider area, where visible, the alterations to the existing Stage 2 consented design will have very negligible effects.
5.0 Conclusions

5.1 The Busway Station site is located in an area where the existing and proposed development is anticipated and planned as part of the Hibiscus Coast Gateway. The surrounding area is undergoing considerable change and transformation as part of the initiatives enabled by the Proposed Auckland Unitary Plan and legacy statutory documents.

5.2 The site and surrounding area is not high in landscape character, landscape quality or landscape amenity. It is surrounded on all side by roads including the Hibiscus Coast Highway in very close proximity to SH1 and the Silverdale interchange. The site is currently occupied by the existing Park and Ride facility.

5.3 In terms of the visual and landscape effects of the alterations to the existing Stage 2 consented design from outside of the site, there will be positive effects resulting from the revised Busway Station building design and the reduction in height of the retaining walls along the Painton Road and Small Road boundaries.

5.4 There will be positive landscape and visual amenity effects resultant from the proposed landscape development throughout the site. The stormwater attenuation pond and surrounding wetland plantings will enhance the visual and ecological values of the site.

5.5 Overall, I consider that the visual amenity and landscape effects of the alterations to the existing Stage 2 consented design would be less than minor. The Busway Station development could be visually accommodated within the landscape without adversely affecting the character, aesthetic value and integrity of the surrounding environment. The proposed landscape development will add positively to the site and surrounding environs.

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NZILA Registered Landscape Architect
December 2016
APPENDIX A: VISUAL EFFECTS MATRIX

Use of a matrix offers one way in which the various facets of visual change - qualitative change, visual contrast etc. - can be pulled together and evaluated in a way which gives due weight to each. This matrix was designed to measure the scale of no or low visual effects through to high visual effects.

The assessment matrix is broken into two stages. The first involves looking at the existing situation and assessing the visual quality and sensitivity of the present view to change. This is followed by an evaluation of the changes associated with the proposed development. Key issues or variables are addressed within each stage and ratings for these are eventually combined to provide a composite visual effects rating. Set out below is the basic structure, showing what these key variables are and how they are arranged:

PART A - SENSITIVITY OF THE VIEW AND SITE TO CHANGE

A1. Analysis of the view's Visual Quality is carried out on the basis that higher quality views are more sensitive to potential disruption and degradation than poorer quality views.

A2. Analysis of the view's Visual Absorption Capability is an evaluation of the degree to which a view is predisposed, or otherwise, to change by virtue of its land uses and/or screening elements and will either accommodate change or make it stand out from its setting.

A3. Analysis of Perceptual Factors. In this section the type and size of population represented by the viewpoint, the viewing distance to the development site and other factors which indicate its sensitivity in terms of both viewing audience and the inherent exposure of the viewpoint to the site because of its physical character is assessed.

PART B - INTRUSION AND QUALITATIVE CHANGE

B1. Analysis of Intrusion / Contrast: the degree to which a proposal's location and specific structural content and appearance make it either blend into its surroundings or be made to stand out from them in terms of form, linearity, mass, colour and physical factors. Whether or not the proposal would intrude into existing views.

B2. Analysis of the proposal's Aesthetic Characteristics: exploring the degree to which it would relate aesthetically and in terms of general character to its surroundings.

Ratings are combined for each viewpoint via a system of averaging and multiplying of ratings to progressively indicate each viewpoint's sensitivity, followed by levels of intrusion and qualitative change, and culminate in an overall visual effects rating.