### **APPENDIX D**

### WAIPA DISTRICT PLAN ASSESSMENT CRITERIA

Criterion	Comment
Assessment criteria for all discretionary activities	
21.1.1.3 Visual  (a) The extent to which the development effects the surrounding environment; particularly any identified character precinct areas, prominence of buildings and design elements in the proposal, and public places and roads.  (b) The scale, height, bulk, cross sectional area, colour, glazing reflectivity and texture of any buildings.  (c) The location, scale and nature of earthworks/ excavations/spoil and vegetation removal/soil or spoil heaps.  (d) The extent of any light spill, light intensity and shadowing effects.  (e) The extent to which existing vegetation is retained to screen or soften visual effects.  (f) The extent and nature of landscape planting and rehabilitation proposed and whether this will remedy or mitigate the effects of the activity, including provision for on-going maintenance of planting.	Most of the development is concentrated at the top of the stream terrace, and the height of the furnace hall will be maximum 35m, with chimneys reaching a height of 38m, whereas the maximum height permitted in the Industrial zone is 20m.  Any visual impact is however mitigated by the following.  All buildings are setback generously from adjoining boundaries. Negligible visual impact is anticipated for those sites adjoining that are zoned Industrial. Industrial uses at these sites preclude any impact, including the Fonterra effluent ponds to the west and the dry good store to the north west, where either there is limited human presence that could experience effect, or in the case of the dry goods store there is limited interaction with the subject site.  Some impact may be experienced for the racecourse site, which is zoned Residential. However any impact is mitigated as above by the setback of the proposed buildings from the site boundary, intervening landscaping and setbacks likely to be imposed on any development at the racecourse.
	While the furnace hall is recognised as large, with an area of over 7000sqm and a total height of 35m – this is located on a site zoned Industrial on which exceedances are contemplated through Discretionary status.
	Intervening landscaping will once mature work to partially screen the buildings reducing their bulk and presence. Moreover, it is likely that a significant setback from the common boundary will be imposed on residential development on the racecourse site, to recognise that development adjoins existing and substantial industrial development avoiding adverse proximity and reverse sensitivity impacts.

Therefore it is very likely that the proposed buildings will be viewed at such a distance and at such an angle either at ground and first floor levels that they will not be interpreted at obtrusive and out of scale.

The chimneys will have no additional visual impact. They are not required to extend much beyond the roof for adequate dispersal of emissions – 3m, at which height they would be read from appropriately setback racecourse residential development as part of the furnace building.

#### 21.1.1.4 Amenity Values

- a. The likely effects of the activity and associated land uses on any other activity in the vicinity by emission of noise, fumes, dust, smoke, glare or any other form of pollution.
- b. The degree to which there is a loss of privacy, daylight or sunlight in adjacent sites.
- c. The extent to which harmony of form, colour, texture and materials is present within individual developments.
- d. The extent to which solar potential, innovative aspect and design is optimized in the development.
- e. The scale and bulk of building(s) in relation to the site and adjoining neighbours.
- f. The built characteristics of the locality.
- g. The extent to which the road boundary setback is appropriate in the location.
- h. The extent of modification to the existing landform and the impact this will have on the character and amenity of the surrounding area. i. The ability to avoid, remedy or mitigate potential visual and amenity effects on sites in the vicinity.

The Air Quality report confirms the proposal will not result in any significant impacts in terms of dust and fumes. The Acoustic report concludes the same for noise. Further any residual impacts are mitigated by the isolation of this site from potential receptors, and setbacks likely to be imposed on development at the racecourse.

The proposal will have no impact on privacy and sunlight and daylight access on adjoining sites as buildings will be generously setback from all boundaries and comply with recession planes from all boundaries.

An acoustic screen will be installed along the boundary with the racecourse which will sufficiently mitigate the effects of vehicles on aural amenity within the racecourse site.

Bulk and scale in relation to the racecourse is discussed above. The proposed buildings find easy reference in nearby industrial buildings, including the dry goods store and other buildings in the Fonterra complex, creating an industrial character receptive to larger buildings, consistent with the site's zoning. The site's rear location also significantly aids in minimising the impact on the wider area.

No major modification to the site's landform is proposed, with the terrace character stepping down to the Mangapiko Stream retained.

The road access for the site is zoned Residential and will adjoin two residential properties either side. Those properties will experience a change in effect as a result of vehicle movements for construction and operation of the facility.

That change in effect is however proposed to be mitigated through acoustic screen along the

boundaries with these two properties which as the Acoustic report demonstrates mitigates noise levels to an acceptable level.

#### **21.1.1.5** Earthworks

- a. The extent to which methods are utilised to retain high class soils on site for use in rehabilitation.
- b. The extent to which the proposed earthworks affect the values of identified landscape areas and the ability for effects to be avoided in outstanding landscapes.
- c. Where located within, adjacent or adjoining an area of indigenous vegetation or vegetation that provides habitat for indigenous species, the extent to which the earthworks will affect ecosystem values including effects on such areas due to altered water levels.
- d. Whether the earthworks proposed are to be undertaken in a manner that avoids, remedies or mitigates any adverse effect on the environment including on the natural character of wetlands, lakes, rivers and their margins; with particular regard to the removal of vegetation, contamination of lakes and water bodies, alteration or diversion of surface or ground water flows.
- e. The extent to which earthworks are to be undertaken in a manner that provides sound foundations and avoids any increased risk to persons or property associated with a natural hazard event which may arise from undertaking earthworks.
- f. Whether a slope stability and natural ground suitability assessment for foundations of buildings, road services or other works is required and warrants an evaluation, investigation, control and or certification by a suitably qualified geotechnical soils engineer. g.The timing and extent to which the rehabilitation programme will enable the land to be restored suitable for use by other activities.
- h. The extent to which methods are used to prevent discharge of contaminants into the air.
- i. The extent to which the earthworks will detrimentally affect adjoining or adjacent sites through changes in soil drainage, ground level,

Earthworks are fully assessed in the attached Earthworks and Infrastructure Assessment reports.

Further, the proposed earthworks are not proposed to alter the fundamental underlying stepped terraces form of the site.

There is no indigenous vegetation on that part of the site to be developed.

All earthworks will be undertaken in a manner that avoids adverse effects on the environment.

The Earthworks, Civils and Geotechnical reports confirm that sound foundations can be provided at the site. The Geotechnical report comprises an acceptable assessment of slope stability and ground assessment.

The earthworks will not detrimentally affect adjoining sites, all such effects will be limited to the subject site.

Any potential impacts of the earthworks on the nearby Mangapiko Stream will be mitigated as set out in the Civils and Earthworks reports. Therefore will otherwise be no impact on groundwater.

noise, dust, vibration, traffic movement or effects on sites of significance to Māori where the earthworks are adjoining, or on sites of cultural significance.

j. Where earthworks are proposed in proximity to High Voltage Transmission Lines the extent to which any earthworks and the construction of any subsequent buildings will comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).

k. The extent to which there are any adverse effects on water including groundwater and lake levels. Where areas have high water tables the ground water level shall be identified and defined. Where the work to be undertaken is adjacent to rivers and streams, it shall be established with reference to the average water table of the river or stream at maximum river level. For areas in close proximity to lakes, the ground water table shall b

#### 21.1.1.6 Traffic

- (a) The impacts on the safe, efficient and effective provision of the transportation system including, but not limited to:
- (i) Impacts on the road network and the effective operation of the road hierarchy; and
- (ii) Infrastructure provision, including works needed to maintain the safety, efficiency and effectiveness of the transportation system such as any upgrades necessary to pedestrian and cycle facilities, intersections, pavements and structures on the system affected by the proposed activity; and
- (iii) Timing and staging of development; and
- (iv) Connectivity between adjacent areas of development.
- (b) Whether sufficient provision has been made for alternative modes of transportation where this is available and practicable, including but not limited to:
- (i) Public transport; and
- (ii) Cycle and pedestrian movement; and
- (iii) The establishment of cycleways, walkways and public transport stops; and

The potential traffic effects of the proposal have been fully assessed within the Integrated Transport Assessment that accompanies the application.

- (iv) The establishment of cycle stands; and
- (v) Connectivity to alternative transport modes such as rail and air transport.
- (c) The extent to which the location of the activity on the site has given regard to:
- (i) The need for acceleration and deceleration lanes; and
- (ii) The type, frequency and timing of traffic; and (iii) The safety of road users, cyclists and pedestrians; and
- (iv) The ability for access to roads other than arterial roads or State Highways; and
- (v) The need for forming or upgrading roads and pavements potentially affected by the activity; and
- (vi) The need for additional maintenance, inspection or traffic monitoring; and
- (vii) The need for traffic control, including signs, signals and traffic islands; and
- (viii) The ability for pa arking and manoeuvring to be carried out on site.
- (d) The extent to which the location of the site access way has given regard to:
- (i) Safety for vehicles, and pedestrians with particular regard to the effect on the safety and functioning of the road and/or level crossing.
- (ii) The practicality and adequacy of the proposed access having regard to the location, nature and operation of the proposed activity and/or development.
- (e) The extent to which the location of the land use activity on the site has given regard to:
- (i) Visibility and sight distances particularly the extent to which vehicles entering or exiting the level crossing are able to see trains.
- (ii) The extent to which failure to provide adequate level crossing sig sightlines will give rise to level crossing safety risks

#### 21.1.1.7 Noise and Vibration

Assessed in the Acoustic Impact report. Two properties, 381 and 417 Racecourse Road, those

- a. The extent to which the activity affects the existing ambient noise environment of the locality.
- b. The time and frequency that the activity occurs, duration of noise, and any special characteristics of the noise or vibration and subsequent effects on health and safety, and on the amenity values of the surrounding environment.
- c. The effects on the environment from the maximum noise levels of the proposed activity, particularly at night.
- d. The extent to which the noise adversely affects the amenity of the surrounding environment including cumulative effects.

properties either side of the entranceway, are predicted to experience noise levels greater than permitted.

For both the absence of night time heavy vehicle movements is a mitigating factor, ensuring disturbance is minimised when people are at their most sensitive. The intermittent nature of truck movements also lessens impact somewhat, compared to an ongoing or continuous noise source.

Adverse impacts in the case of 417 Racecourse road are mitigated by the negligible degree of exceedance. 1dB above permitted daytime levels is considered imperceptible with effects no different to fully compliant levels. Adverse impact is also mitigated by the absence of any special characteristics of the heavy traffic movements that might heighten impact.

In the case of 381 Racecourse Road the 3dB exceedance is not negligible. The impact falls however on the first floor level only, as the noise levels at ground level will be reduced down to compliant levels by the acoustic screen running parallel to the boundary of this site.

The first floor comprises bedrooms which are less likely to be occupied during the day. At night the sleep of occupants at first floor will be protected by the restriction on heavy vehicle movements. If the windows of the upstairs rooms are closed during the day noise received would comply with limits. Recognising the impracticality of this during summer months and the necessity of keeping open for ventilation the applicant is prepared to accept conditions around the installation of mechanical ventilation at the upper storey of this property, which will give occupants the option of keeping windows closed and maintaining adequate ventilation.

Importantly, the background noise levels in this area are dominated by the dairy factory and existing vehicle traffic on Racecourse Road, creating potentially a higher threshold for effects and therefore lessening the impact of the additional new noise.

All practical means to reduce noise emissions, and the extent to which these mitigation measures reduce noise are set out, and include as discussed above a restriction on the type of vehicle movements in the evening and at night and acoustic barriers along both

residential boundaries, and sealing and regular maintenance of the access road. These measures result in significant reductions of noise received at adjoining properties.

#### 21.1.1.19 Servicing

- a. Council shall consider the adequacy of the site and potential adverse effects from activities on sites not adequately served by reticulated sewerage, potable water supply, authorised stormwater disposal systems or sealed roads and safe and effective vehicle access.
- b. Whether the site is suitable for any proposed wastewater treatment and disposal methods and whether the site can physically accommodate the volume of wastes generated.
- c. The degree to which the activity will cause demand for the uneconomic or premature upgrading or extension of public services (including roading) that are not in the interests of the District or locality.
- d. In un-reticulated areas, the extent to which the activity is self-contained with regard to stormwater drainage, effluent disposal and water supply within the boundaries of the site on which the activity is located. Note: Effluent disposal proposals will normally require resource consent (discharge permit) from the Regional Council and this should be obtained prior to or simultaneously with consent from the Waipa District Council for land use consent.

The proposal will use the existing water supply. Wastewater will be trucked off site for disposal and treatments at an off-site facility.

As dealt with in the Civils Report stormwater will be managed on site. Stormwater disposal will be managed on site in terms of quantity and quality so downstream adverse effects are mitigated.

#### 21.1.1.10 Additional Height for buildings

- a. The degree to which there may be shading on adjoining or adjacent sites.
- b. Whether the ground level of the adjoining site is elevated from the application site and an exception will not adversely affect the amenity or use of that adjoining site.
- c. Whether consistency has been achieved with respect of the appearance and design of the development with the character of the area, including existing buildings on the site and adjoining sites.

The proposal will not result in any shading for adjoining sites.

The additional height of buildings beyond that permitted in the Industrial zone will not visually impact on the amenity of the racecourse site, for the reasons set out under 21.1.1.3.

The type of buildings proposed are consistent with the character anticipated for the Industrial zone, and find reference in terms of bulk in other buildings in the vicinity.

The proposal will not result in any impacts in terms of shading, daylight access and privacy.

- d. The degree to which shading, loss of daylight, amenity value and privacy affect the adjoining properties
- e. The degree to which the adverse effects of increased height are able to be mitigated, such as through increased separation distances between the building and adjoining sites, innovative building design, site topography, or the provision of screening

Mitigation will be provided through detail to be added to facades, setbacks from affected boundaries, and landscaping.

#### 21.1.1.14 Cultural

- (a) The degree to which the cultural values within the zone are promoted and any cultural requirements for the built character, location and orientation of buildings is taken into account.
- (b) The opinion of the Iwi/hāpu as to the likely effects on Māori ancestral lands, cultural areas, water sites, wāhi tapu and other taonga.
- (c) The extent to which the development or subdivision supports outcomes in recognised iwi management planning documents.

The substantial motivation behind the facility is the advancement of Māori economic well-being. The applicant is a Māori dominated organisation, and intends to target employment at local Māori. The Exhibition Centre will showcase the facility and the role it has in returning mana whenua kaitiakitanga to the area.

#### **Residential Zone Assessment criteria**

#### 21.1.2.8 Maximum building length

- (a) The degree to which there is a loss of privacy, daylight, sunlight or outlook on adjoining sites.
- (b) The extent to which the design of the building is modulated and avoids long lengths of walls adjoining residential zoned or reserve zoned sites. Buildings that are inconsistent with residential building forms should be avoided.
- (c) The effect of the non-compliance on the character and amenity of the streetscape

Acoustic screens are proposed parallel to the boundaries with No.s 381 and 417 Racecourse Road, on land zoned Residential. Residential zoning to this part of the site is anomalous as this part of the site is the only practical way of entering the Industrial site proper. That notwithstanding, the structures will be located at right angles to the road from which they will quickly recede into the site, diminishing their impact, with further mitigation provided by their diminished bulk, ensuring their impact on street scene is marginal.

#### 21.1.2.14 Vibration

(a) The time and frequency that the activity occurs, the duration of vibration continuance, any adverse effects on buildings and structures either on-site or on surrounding properties and any special characteristics of the vibration and subsequent effects on health and safety and on the amenity values of the surrounding environment.

Assessed in the Acoustic Report. Vibration effects from construction will be mitigated by distance of piling from residential properties. Vibration from heavy vehicle movements will be mitigated by flush crossing, smooth and sealed accessway surface, and restricted speeds.

(b) The effects on buildings and structures, either on site or on surrounding buildings, structures and sites

#### 21.1.2.15 Construction Noise

(a) The time and frequency that the activity occurs, the duration of noise continuance, any adverse effects on buildings either on-site or on surrounding properties and any special characteristics of the noise and subsequent effects on health and safety and on the amenity values of surrounding properties.

Assessed in the attached Acoustic report and considered acceptable for the reasons set out.

#### 21.1.2.17 Heavy Motor Vehicles

- (a) The extent to which any associated noise adversely affects the amenity of the surrounding environment including cumulative effects.
- (b) The extent to which the parking of heavy motor vehicles on a site adversely affects the amenity of the surrounding environment including cumulative effects.
- (c) The adequacy of vehicle access.
- (d) Any adverse effects on the road network.

Heavy vehicles are required to cross that part of the site zoned Residential for access to the site proper. Noise and vibration effects of these movements on the two adjoining neighbours are mitigated through the measures set out in the Acoustic Report. As demonstrated in the Traffic Report the additional generation of heavy vehicles numbers by the proposal is not significant when set against the substantial existing numbers of heavy vehicles that use Racecourse Road. Impacts will be mitigated through the acoustic screens that will be constructed either side of the accessway, and no heavy vehicles will be permitted to idle in this area.

The Traffic Report confirms the adequacy of the vehicle access.

#### 21.1.2.33 Non-residential activities

- (a) Whether the development has a functional need to locate in the Residential Zone, and whether the development meets an identified need within the local community.
- (b) The social or community benefit of the proposed activity to the local community.
- (c) Whether alternative locations (including possible locations in urban areas) have been considered.
- (d) Whether the scale of the development is in keeping with the character of the area.
- (e) Whether the site contains an adequate area of land which will enable the effects of the activity to be contained on the site.

As noted throughout this report the Residential zoning of the accessway is anomalous. The site proper is zoned Industrial and the accessway is the only practical means of accessing the rest of the site. It appears as if this is a mapping area that does not recognise the incongruity of according the access a different zoning to the rest of the site. It is general practice in situations such as this where the proposed access is the only practical access to maintain a consistent zoning across the entirety of the site.

In light of that it is demonstrated that the use of the accessway has a functional need to locate in this Residential zone, with no other options for practical access available.

Alternative locations are explored at Section 2.2 of this report, from which the subject location emerges most favourable.

- (f) The avoidance of development fronting onto, and having vehicular access directly from, a strategic road as shown on the Planning Maps.
- (g) The standard of the road network and its ability to service the proposed development.
- (h) The hours and methods of operation of the activity and the effect it may have on the amenity enjoyed by the existing and future residents of the locality.
- (i) Whether the site design, layout and appearance avoids adverse effects on landscape and amenity values of the surrounding area and how they relate to existing features of the site, particularly mature trees and landforms or any other identified environmental features of the locality.
- (j) The avoidance of land use conflicts within the development by means of the orientation of buildings, the use of fences and planting schemes.
- (k) The methods and effectiveness of wastewater, stormwater, and rubbish disposal and the provision of a reliable potable water supply.
- (I) The extent of the potential effects on the amenity of adjacent properties and the effectiveness of any mitigation measures proposed.

There is little built form impact as minimal structures are proposed on the Residential zoned part of the site. The impact of the acoustic screens is mitigated for the reasons set out under 21.1.2.8, and the impact on residential character is substantially mitigated by the confinement of the bulk of the activity to the rear of the site well away from the Residential zone on Racecourse Road.

The Traffic Report confirms the road network can adequately service the development.

Again the rear location of the activity significantly mitigates any impact on residential amenity.

Land use conflicts will be mitigated by acoustic screening and landscaping at the front of the site.

#### **Industrial Zone**

#### 21.1.7.8 Vibration

- (a) The time and frequency that the activity occurs.
- (b) The duration of vibration continuance. (c) Any adverse effects on buildings either on-site or on surrounding properties, any special characteristics of the vibration, and subsequent effects on health and safety and on the amenity values of the surrounding environment

The facility is sufficiently distance from any sensitive receptors ensuring vibration operational effects are less than minor.

#### 21.1.7.9 Construction Noise

(a) The time, frequency and duration that the activity occurs. (b) Any adverse effects on buildings either on-site or on surrounding properties and subsequent effects on health and safety and amenity values of the surrounding environment.

Piling for the main buildings is sufficiently distant from any potential sensitive receptors.

### 21.1.7.14 Activities in the Specialised Dairy Industrial Zone not permitted by rule 7.4.1.1 (t)

(a) In assessing applications for activities which are not permitted activities under the rules within the Special Dairy Industrial Area, Council will have regard to the compatibility of the activities with food processing activities carried out in the Specialised Dairy Industrial Area. Conditions may be imposed to ensure that proposed activities are compatible.

The proposal is not a permitted activity in the Specialised Dairy Industrial zone, within the Industrial zone. Any impacts on the zone are mitigated in the following ways.

It is understood Fonterra will supply confirmation that it is not opposed to the proposal, on the basis that it does not impact its operations. The closest component of that operation is the effluent ponds to the west of the site, which will not be impacted. Similarly the dry goods store to the north-west will not be impacted. Air emissions are well within required limits, dust is contained so that it is not objectionable, and the proposed facility and dry goods store are oriented away from one another. Further compatibility is provided by the electricity generation of the facility which initial indications are could be used by the Fonterra plant and assist them on their path towards use of renewable energy.

The subject site is somewhat anomalous to the Specialised Dairy zone because it is accessed from Racecourse Road and services provided from the same road limiting its potential integration with established dairy facilities across the rest of the zone. Finally there are many other industrial uses in the zone around the Harrison Drive area that are not directly related to Dairy production but have successfully and compatibly established.

#### Infrastructure, Hazards, Development and Subdivision Assessment criteria

- 21.1.15.12 Design and layout of development and subdivision adjoining water bodies and reserves
- (a) The extent to which the overall lot layout provides sufficient opportunities for passive surveillance of the reserve(s); particularly in respect of areas which are identified for active recreation (i.e. walkways or playgrounds).
- (b) Appropriateness of mitigation measures proposed, including whether the design and height of fences or the type and height of landscape planting enables passive surveillance of the reserve(s), particularly in respect of areas which are identified for active recreation (i.e. walkways or playgrounds).

The proposal has been designed to avoid impacting the adjoining Mangapiko Stream through careful restraint of most development to the top of the terraces, and no buildings are proposed within the District Plan threshold of 23m from the edge of the stream. Some earthworks are propose within this area for stormwater management but they will be fully mitigated as set out in the Earthworks and Civils reports.

Finally the proposal will be an opportunity for restoration of the section of the stream that adjoins the site. Currently pasture is taken down almost to the stream edge, but as part of this proposal farming will be stopped at the site and large areas not needed for the facility and adjoining the stream will be given over to stream restoration.

21.1.15.16 Site suitability-general/ flooding /Geotech

- (a) The extent to which the proposal has given consideration to the known effects of climate change.
- (b) The extent to which the proposal provides for the management of stormwater, including detentions and easements.
- (c) The extent to which the site will not be adversely affected by secondary flow paths.
- (d) The extent to which the design and layout of subdivision and development on land subject to the hazard has:
- (i) Avoided hazards; and
- (ii) Avoided the potential for future damage to public or private property or infrastructure or risk to life resulting from any hazard event; and
- (iii) A report, prepared by a qualified and experienced specialist in the hazard anticipated on the site, that supports the design and layout of the subdivision or development; and
- (iv) Given regard to the potential risk and/or vulnerability of lifeline access and infrastructure assets; and
- (v) Accounted for the geotechnical constraints that may exist on the site such as uncontrolled fill, peat soils, other unconsolidated material, past quarrying activity, visible natural springs, ponding areas, natural ground subsidence or sinkholes, evidence of land slip escarpments, wetlands or swamp areas; and
- (vi) Ensures that within the subject site, any point of natural ground level that is below the highest point of the carriageway on the adjacent public road, has full regard to any hazard; and
- (vii) The extent to which the proposal has given regard to the land being physically suited to the proposed development, having considered topography, stability of the land, proximity to water bodies and the possibility of inundation from flooding and the extent to which the proposal

Climate change incorporated into assessment

Stormwater Management is set out in the attached Flooding and Civils report.

There are no secondary stream paths present.

Development has generally been contained to the top of the terraces, and has been designed to limit impact on flood flows and direction as much as possible. The Flooding assessment concludes flood spread resulting from the proposal is minimal, ca. 1-1.5m spread and is contained to local areas only.

Impact on the facility itself will be limited by bunding and imposition of a freeboard of 300mmm above maximum flood levels, which is considered adequate for this industrial activity.

The Site Suitability assessment concludes the ground conditions on site and localised potential for liquefaction can be mitigated through appropriate foundation responses such as deep piling. This will be assessed and developed further through detailed design.

The attached Site Suitability Assessment confirms that the site is suitable for the proposed development subject to appropriate foundation design and further detailed assessment.

Proximity to the Te Awamutu Fonterra plant has been taken into account. There will be minimal impact – air emissions are well within required limits and components of the Fonterra operation adjoining the proposed facility – effluent ponds and dry goods shed, and not sensitive to any effects of the facility. Further it is understood a letter of support from Fonterra will be forthcoming.

includes setbacks from unstable land or water bodies.

(e) The extent to which the proposal has taken sufficient account of proximity to the dairy manufacturing sites.

#### 21.1.15.17 Infrastructure servicing: general

- (a) Where infrastructure services are to be provided, either as a new service or by connection to an existing service, the extent to which the following matters have been given regard:
- (i) Whether infrastructure and network utility services are provided in accordance with the provisions of Section 15 including whether the existing utility services have the capacity to accommodate the proposed development; and (ii) The extent to which the subdivision layout and design provides for the requirements of both the strategic infrastructure network and local infrastructure connections; and
- (iii) The ability of the network utility provider to effectively and efficiently provide the required service to the entire site or future development. Where the service cannot be provided to the entire site or future development the application will be declined; and
- (iv) The location of the infrastructure and network utility services whether within the road reserve or otherwise on the site; and
- (iv) Where infrastructure services are to vest in the ownership of the network services operator regard shall be given to the design life of the service, the whole-of-life cost including operation and maintenance of the service. In general, new connections to infrastructure services shall be undertaken by the service provider or their authorised contractor; and
- (v) The sustainable management of the resource provided by the infrastructure service e.g. through the use of Low Impact Design standards for stormwater, and for water provision the minimum leakage of water from the water network or connections, and any other water conservation measures; and

The attached Civils report the facility can be adequately serviced for water supply, which is currently provided to the site and capacity will be adequate for the activity.

Wastewater will be trucked from the facility off-site for treatment and disposal elsewhere.

All matters are addressed in the Civils report. Additionally, in relation to (v): Low Impact Design (LID) standards are proposed such as rainwater re-use tanks, vegetated swales, and raingardens. In relation to (vi) Stormwater calculations include climate change allowances.

(vi) The extent to which the design of all infrastructure has anticipated the effects of climate change.
21.1.15.18 Infrastructure servicing: water supply and reticulation
(a) The extent to which the provision and location of water for fire fighting will meet the estimated demand.

The attached Civils report confirms the site can be appropriately serviced for water.

(b) The extent to which a water supply is available to service the needs of the development and/or subdivision, being a connection to a reticulated supply within the urban limits and an independent water supply in rural locations. (c) The extent to which the connections are located in the berm adjacent to the development site and free of tree plantings. (d) The extent to which the location of the connection can be easily accessed at the lot boundary for maintenance, including maintenance of water meters.

# 21.1.15.19 Infrastructure servicing: wastewater reticulation and wastewater disposal system

(a) The extent to which the design of the wastewater disposal facility will ensure the service will meet public health standards, eliminate ingress of storm and ground water

and avoids the occurrence of the system surcharging or overflowing.

- (b) The ability of the proposed system to allow the discharge of wastewater in a sustainable and environmentally acceptable manner, including whether the necessary discharge consents have been applied for or granted.
- (c) Where onsite disposal of wastewater effluent is required from existing and potential developments, whether the land is suitable for the on-site disposal without overflowing onto neighbouring properties and that where required consents from the Waikato Regional Council have been granted.

Wastewater will be trucked from the facility off-site for treatment and disposal elsewhere.

# 21.1.15.20 Infrastructure servicing: stormwater and land drainage

The attached Civils report confirms stormwater can be appropriately managed on site.

A private stormwater system is proposed to cater for the required quantity of stormwater over the life of the

- (a) The extent to which the design (including design life) and construction of stormwater reticulation, treatment and disposal facilities will ensure:
- (i) The adequate provision of the service to dispose of the expected quantities of stormwater over the design life of the facilities; and
- (ii) The adequate provision of the service to meet standards for public health; and
- (iii) Avoidance of adverse effects on the environment and the quality of the water bodies; and
- (iv) Provision for the separation of contaminants from stormwater runoff; and
- (v) The protection of property; and
- (vi) The utilisation of low impact design measures; and
- (vii) The extent to which the proposal provides for management of stormwater, including:
- detentions and easements, and avoids creating secondary flow paths that could cause adverse effects; and
- the collection and disposal of stormwater runoff from impermeable surfaces; and
- the location of any earthworks, building or building platforms in relation to the functioning of stormwater over land flow paths and ponding areas.
- (b) The extent to which the design of low impact stormwater devices demonstrates how the devices will be maintained and function over the long term.
- (c) The extent to which development and subdivision layout and design includes stormwater management systems that utilize low impact design solutions for the transmission, storage treatment or disposal of stormwater and how the water will be treated prior to entering the stormwater or land drainage.

project. Rainwater re-use water will be treated when used as a potable water source. Contaminants from stormwater runoff will be separated using LID standards to avoid adverse effects on the water borides. Secondary stormwater system management is covered under the separate flood report.

An operation and maintenance plan will provided to the property owner. This will be a condition of consent and enforced by consent notice. Details will be provided at the building consent stage.

LID methods used for treatment and transmission.

**Transportation Assessment Criteria** 

- 21.1.16.5 Provision of an Integrated Transportation Assessment in accordance with the trigger thresholds
- (a) The scale and location of the activity.
- (b) The extent to which the vehicle generation of the activity effects the functioning of the road, and the road hierarchy.
- (c) The extent to which suitable vehicle access and manoeuvring are provided on site.
- (d) The extent to which the car parking provided on site meets the requirements of the Plan.
- (e) The extent to which the proposal has considered the provision of CPTED principles in the design.
- (f) The extent to the proposal has provided for connectivity, including access to a range of transport modes (Broad ITA only).
- (g) The extent to which the proposal relies on the provision of other infrastructure.
- (h) The extent to which provision has been made for vehicle queuing on site.
- (i) For any development involving access onto and/or off a State Highway, the results of consultation with the New Zealand Transport Agency regarding impacts on the safe and efficient functioning of the roading network.

The impact of the development has been fully assessed in the attached Integrated Transportation Assessment and addresses all of the matters listed under this criterion.

The access to the site has been a particular focus of the assessment. Access is proposed to be realigned in the manner proposed, and noise impacts mitigated through the construction of screens along the lengths of the neighbouring residential boundaries.

The traffic assessment concludes the additional traffic generated along Racecourse road will not be significantly above existing levels of heavy traffic.

There will be no queuing or idling out on the road or on that part of the site zoned Residential, with all vehicle movements proceeding unobstructed directly into the site.

#### 21.1.16.9 Vehicular access to sites in all zones

- (a) Whether works are necessary, are proposed, or have been undertaken to improve the safety and operation of the proposed vehicular access including but not limited to:
- (i) Works to improve sight distances and other safety enhancements; and
- (ii) Closure of an existing entrance; and
- (iii) Relocation of an existing entrance to a complying or less non-complying location; and (iv) The upgrade of existing roads and accesses necessary to serve the building or activity; and (v) Erection of roadside signs; and

The Traffic report assesses the adequacy of the vehicle access. The proposed access is the only practical access to the site, and its zoning as Residential is anomalous. That notwithstanding measures are recommended that will improve the functioning of the access including widening and erection of noise control barriers either side.

(vi) Where the accessway is to be shared by other lots, units, flats or activities, whether the safety of all users of the accessway has been adequately provided for.

#### **Works and Utilities Assessment criteria**

#### 21.1.17.8

Transformers and switching stations (new, upgrading and additions) transforming electricity including ancillary buildings, between 6.5m2 and 30m2, and substations up to a maximum of 100m2 GFA

The proposal does exceed thresholds that trigger further assessment.

#### **Lakes and Waterbodies Assessment criteria**

21.1.26.2 23m setback from lakes and water bodies

- (a) The extent to which the proposed building, earthworks, or vegetation removal would affect the ecological values of the area.
- (b) The extent to which the proposed activity, or buildings would impede the passage of flood flows and the maintenance and enhancement of riparian habitat.
- (c) The extent to which the activity impacts on natural character, cultural and amenity values, including any identified landscape areas of the water bodies.
- (d) The extent to which the activity impacts on public access to the lake or water bodies.
- (e) The extent to which the activity impacts on any heritage features (as listed in Appendix N1), cultural sites, identified natural and cultural landscapes, or archaeological sites.
- (f) The extent to which the activity impacts on the recreational values of the lakes and water bodies. (g) The extent to which the activity adversely affects adjoining land-based activities.
- (h) The extent to which the activity affects the activity on other users of the surface of waters of the lake or river, including recreational and commercial activities.

The development is purposefully kept away from the Mangapiko Stream. The only works contemplated around the stream are that for stormwater management which will result in an improvement to the passage of flood flows and natural qualities of this length of stream margin.

The flood assessment confirms that the proposal will not impact flood flows nor significantly impact on flood spread, with only marginal cumulative additional contribution restricted locally. In this the bridges both upstream and downstream also assist.

With approval that part of the site not proposed for use by the facility will be taken out of pasture, and that part of the siter adjacent the Mangapiko Stream will be retired and restored with native plantings.

There is also the important opportunity to dovetail earthworks within the floodplain for stormwater management with a return of some of the margins around the stream to its former floodplain character, as is evident in the older historical photos from the Site Suitability assessment.

Listed nuisance effects have been confirmed as comfortably within permitted limits, especially around the stream area. All stormwater will be managed within the site, and wastewater trucked off site.

- (i) The extent to which the activity produces smoke, odour, fumes, dust, noise, glare or any other nuisance effects.
- (j) The extent to which the hours of operation of an activity on the surface of water, including any associated activities carried out on adjacent land, causes adverse effects on adjoining sites.
- (k) The extent of the effect of the timing of the event with respect to the water level of the river/lake.
- (I) The extent to which the activity provides for opportunities to enhance and restore the natural character of water bodies, lakes and their margins.