



**TASMAN DISTRICT COUNCIL**



**RESOURCE MANAGEMENT ACT 1991**  
**Land Use and Discharge Consent**

Applicant: Tasman Bay Asphalt, C/- Jarrod Du Plessis  
 Valuation: 1939018901  
 Location: 272 Bartlett Road, Appleby  
 Legal Description: Lot 1 DP 368439, being part of RT 493293

**Consent Sought: Land Use Consent (District)**  
 Description of Activity: To construct and operate a MARINI Latin America Carbon T-Box 130 Asphalt Plant up to 10 hours per 24 hours at the old Bartlett Road Crushing Plant Site.  


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To operate the MARINI Latin America Carbon T-Box 130 Asphalt Plant during the TRMP daytime hours.  
~~To operate transport asphalt between the hours of 6.30am and 10pm 5pm weekdays and 6.30am until 1pm weekends and to operate during up to 18 nights (from 5pm until 4am) per year.~~  
~~To build a 3m high acoustic barrier adjacent to the road and side boundaries.~~  
 To build up to 11m in height.  
 To breach access and parking requirements, particularly relating to soakage of stormwater from the gravelled finish.

**Consent Sought: Land Use Consent (Regional)**  
 Description of Activity: To store and use 50,000 litres of bitumen and no more than 5,000 litres of diesel on site.  
 To undertake earthworks to re-align the stop bank and to level and compact the land immediately adjacent to the toe of the stop bank.  
 To maintain the stop bank.

**Consent Sought: Discharge Consent (35 years)**  
 Description of Activity: To discharge contaminants from an Asphalt Plant to air.  
To discharge stormwater to ground from the Asphalt Plant and hardstand areas.

Assessment of Effects: See attached.

Dated this 20<sup>th</sup> day of November 2020  
Amended 9<sup>th</sup> April 2021

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 (Signed by the Applicant's authorised agent)

**Note:**  
 In assessing the application for notification, Council planners identified that the following were permitted activities and while forming part of the proposed activity, they do not need resource consent:  
 - storage and use of bitumen and diesel on-site  
 - discharge of contaminants (stormwater to land)  
 These are highlighted in green above.  
 Annotation by Alastair Jewell, Principal Planner TDC

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## RESOURCE APPLICATION FOR TASMAN BAY ASPHALT

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### 1.0 The Proposal

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#### *Land Use (District)*

- 1.1 The Applicant seeks consent to construct and operate an Asphalt Plant at the old Downer Crushing Plant site at 272 Bartlett Road. Details of the site layout are included in the Site Plan in **Appendix 1**.
- 1.2 The Applicant seeks to use this site as it is close to a ready source of aggregate, and the Applicant is able to utilise the material straight from existing stockpiles, reducing both double up of stockpiles and transportation. Some additional materials will need to be brought to the site depending on the asphalt quality required, as some crusher dust and hard chip are sourced from off site.
- 1.3 The Applicant proposes to install a MARINI Latin America Carbon T-Box 130 Asphalt Plant, with production capacity up to 130 ton/hr. Details of the proposed Asphalt Plant Components are attached in **Appendix 2**. The Asphalt Plant is a continuous counterflow modular system.
- 1.4 The proposed Asphalt Plant consists of prefabricated, relocatable modules as shown on the Site Plan and Plant Components in **Appendices 1 and 2**. The MARINI Latin America Carbon T-Box Asphalt Plants are based on configured ISO 40 Foot HC containers. The system is developed as a 'Plug & Play' system, enabling ease of assembly, maintenance and removal of Plant. This type of system only requires levelling and compaction of the site prior to installation, although foundations will be required for the silo module.
- 1.5 The system, as shown on the Site Plan in **Appendix 1**, contains a 4 bay 'dosing' module (A) which is the chip or filler bins. This unit consists of four 10m<sup>3</sup> bays for aggregate. Adjacent to the filler bins is the control room (E).
- 1.6 Aggregate is funnelled onto a conveyor belt depending on what strength of asphalt is required, and conveyed to the mixing drum (the lower module in B) where the aggregate is dried and mixed with bitumen from the parked up trailers (D). (F) is the diesel tank for the burner within the mixing drum.
- 1.7 The air discharge from the burner is filtered through the Bag House (the upper module in B). The chimney stack is to be at least 2m higher than the Bag House module.
- 1.8 Once mixed, the asphalt is conveyed to the silo (C) for loading trucks to take the material off site to the final construction site. Below in Figure 1 is a depiction of the main MARINI Latin America Carbon T-Box 130 components.

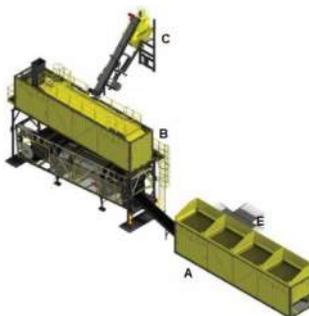


Figure 1 – a depiction of the T-Box 130 layout

1.9 The Applicant seeks that the height of the plant (in particular the silo and stack) be up to 11m above ground levels. The filler bins and mixing drum will be located below the stop bank height, however the Bag House and Silo will protrude above both the stop bank and acoustic sound wall. The top of the Bag House will around 7.8m above the surrounding ground level with the stack height a further 2m higher, while the silo will be around 10m above ground level.

1.10 The Applicant seeks to operate the MARINI Latin America Carbon T-Box 130 Asphalt Plant up to a maximum of 10 hours within a 24-hour period, during TRMP daytime hours. ~~On site operations will occur within Weekdays from 6.30am until 5pm and weekends 6.30am until 1pm.~~

~~4.101.11~~ The Applicant seeks to transport asphalt between the hours of 6.30am and 10pm.

~~1.11~~ ~~The Applicant also seeks consent to operate 5% of nights during the year (being up to 18 nights per calendar year) to provide asphalt for those works which require night time construction. The Applicant seeks that this occurs between 5pm and 4am.~~

~~1.12~~ ~~It is noted in relation to 1.10 and 1.11 above, that although the Applicant is seeking a wide range operating times, the maximum operating period that the Asphalt Plant will operate per 24 hours period is 10 hours.~~

~~4.131.12~~ As the Applicant is seeking to operate during dawn until 9pm with transportation until 10pm, and up to 18 nights per year, lighting of the site will be required. Lighting is to be kept to a minimum and lights are to be directed internally, away from any housing.

~~4.141.13~~ As the Applicant is seeking to operate transport asphalt between the hours of 6.30am and 10pm before 7am weekdays during summer, and over 18 nights per year, the Applicant shall install an acoustic barrier along the boundary of the site. The acoustic barrier will consist of a 1m bund and 2m solid fence, as recommended in the Acoustic Assessment in **Appendix 3**. The barrier is to be located abutting both the road boundary and side boundary with Lot 3 DP 3069749. Dispensation is sought for both a 3m high acoustic barrier and it being located close to the boundary.

4.151.14 The Plant requires 2 permanent staff, the loader operator and the plant operator. When the plant is operating, there will be those employees on site to manage and monitor the batching of the asphalt. Staff will utilise the existing ablutions on site in place for Downer.

4.161.15 The other staff accessing the site will be the truck drivers. These will either be the asphalt trucks which will come from the Applicants off site depot and the project location, or delivery trucks with materials. The site will not be used to store trucks when they are not required.

4.171.16 Materials (different sized gravel and crusher dust) from the stockpiles within the berm will be transferred to the filler bins as required. The loader will drive along the stop bank and load the filler bins, then exit to the north of the Plant.

4.181.17 Truck drivers will come to the site to collect the final product for taking out to work sites, as will delivery trucks of diesel and bitumen. The Site Plan in **Appendix 1**, shows the transportation route through the site. A Transportation Impact Assessment has been obtained, and is attached in **Appendix 4**.

4.191.18 The proposal will result in closing the existing access to the crusher site by extending the acoustic bund to the stop bank fence. A new access will be provided from within the Waimea River Berm area. The access and parking areas are to remain as compacted gravels, and stormwater from these areas are to drain direct to ground.

4.201.19 The Applicant volunteers a Traffic Management Plan, including details of the proposed traffic routes, internal roading routes, and interaction of other users within the Waimea River Park Reserve.

4.211.20 No additional internal fencing is proposed within the berm area.

4.221.21 Whilst operating at the site, a ramp shall be formed to the north of the site enabling access onto the stopbank.

4.231.22 The Applicant volunteers to line up the consent with the Waimea River Park Management Plan, and volunteers that the Asphalt Batching Plant shall only operate whilst there is extraction and crushing operating within the Waimea River Park Reserve, or for a period of 20 years, whichever is the lessor. And that once all extraction and crushing operations cease within the Waimea River Park Reserve, the Applicant shall vacate and remediate the Asphalt Batching Plant site within 6 months.

### *Land Use (Regional)*

4.241.23 As part of the operation, the Applicant seeks to use and store bitumen and diesel and create asphalt.

4.251.24 No more than 5,000 litres of diesel shall be stored and used on site for the heating the mixing drum. The diesel storage shall be a purpose built, double skinned container, which has a reserve area in the outer skin so it can contain the primary storage area. The diesel container will be connected directly into the mixing drum. The provider has advised that a pad is not required for this volume, and that a compacted base is suitable.

4.261.25 Up to 50,000 litres of Bitumen for the mixing drum is to be stored on site, this is two trailer units. Have two units enables different grades of bitumen to be used as required by different asphalt types. The use and storage of the Bitumen is direct from purpose built, double skinned trailer units, which have a reserve area in the outer skin so it can contain the primary storage area. The bitumen will be connected directly into the mixing drum. The trailers need to be constantly heated for the bitumen and shall connect to the existing electricity supply.

4.271.26 The Asphalt Plant is to be located on the outside of the Waimea River stop bank at the end of Bartlett Road. The current stop bank in this location has been compromised by past works, and is currently not trafficable along its length, although an alternative access has been made available for Council.

4.281.27 The Applicant seeks to undertake earthworks to reinstate the stop bank by a slight realignment to remove a right-angle bend. It is also proposed to ensure that the stop bank height is maintained along its length. These works will ensure that the stop bank can be driven along by Council in a flood event. The area of the reinstatement is shown in the Site Plan in **Appendix 1** and Figure 2 below.



*Figure 2 – The portion of compromised stop bank to be realigned*

4.291.28 The Applicant seeks to utilise the stop bank for loading the filler bins, and the Site Plan in **Appendix 1** shows a widening of the stop bank by the bins to enable this occur.

1.29 The Applicant will also level and compact the land outside of the stop bank for their operation, and form a bund along the boundary as part of the acoustic barrier.

1.30 The Applicant volunteers to form a ramp to the north side of the proposed plant site to allow people to walk along the stopbank. Upon removal from the site, access will be available along the stopbank through the application site.

#### *Discharges*

1.31 The Applicant seeks to consent to discharge to air emissions from the Asphalt Plant. The processing gases from the MARINI Latin America Carbon T-Box 130 drying and mixing system are incinerated through the mixing drum, ensuring emission reduction. The T-Box 130 has the capacity to generate 130 tons of asphalt per hour. The chimney stack is to be at least 2m above the Bag House height.

1.32 The Applicant has had an assessment of the air discharges, as attached in **Appendix 5**. The discharge assessment concludes compliance with the National Environmental Standards for air quality. The discharge assessment concludes that such compliance it is not based on the production rate rather the hours of operation. As a result, the Applicant is seeking to operate the Asphalt Plant up to 10 hours per 24-hour period.

1.33 The access and parking areas are to remain as compacted gravels, and the Applicant seeks to drain the stormwater from these areas and the structures to direct to ground.

1.34 The Applicant seeks that the discharge consents have a term of 35 years.

#### *Volunteered Conditions*

1.35 The Applicant volunteers a number of mitigation measures, which are contained in Part 5 of the application.

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## **2.0 The Site and Application Background**

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2.1 The application site is located at the site of Downer's old crushing plant at 272 Bartlett Road, Appleby. Below is a figure of the application site located within the area of Lot 1 DP 368439.

2.2 The crushing plant site is connected to electricity and also has a water connection. The Applicant proposes to utilise Downer's staff facilities.

2.3 The legal description of the application site is Lot 1 DP 368439, and it is part of Record of Title RT 493293. A copy of the Record of Title is attached in

**Appendix 6.** The application site is owned by Tasman District Council. The purpose of RT 493293 is for River Control Purposes.



Figure 3 – the application site in relation to Lot 1 DP 368439

- 2.4 The application site is not a registered HAIL site with Council, and has been used as a Crushing site for preparing gravels for roading and construction purposes.
- 2.5 The application site is not a known historic or cultural site as identified by the Council. It is not registered on either of the NZ Heritage List or on NZ Archaeological Authority’s ArchSite.
- 2.6 Historic aerial photos of the site have shown the wetted river bed position altering course over the years. Since the construction of the stop banks in the 1970s, the meandering of the Waimea River is now contained within the stop banks.
- 2.7 A site inspection by the writer noted that the stop bank around the Crushing Plant has been modified to include two right angle bends, and the height of the stop bank is compromised in this area as well. The topographic map of the site shows the disruption of the stop bank. The Applicant seek to rectify the breach in the stop bank.



Figure 4 – topographic information showing breach in stop bank

2.8 The application site is within the Waimea River Statutory Acknowledgement Area, as identified by the Te Tau Ihu Statutory Acknowledgement documents. The Waimea River is identified as being Statutory Acknowledgement Area and Deed of Recognition as below:

Statutory Acknowledgement Area Deed of Recognition	Ngati Toa Rangatira Ngati Koata Ngati Rarua Te Atiawa o Te Waka-a-Maui Ngati Tama ki Te Tau Ihu
Statutory Acknowledgement Area	Ngati Kuia Rangitane o Wairau Ngati Apa ki te Ra To



Figure 5 – Te Tau Ihu Statutory Acknowledgement Areas

2.9 Lot 1 DP 368439 is part of the Waimea River Park Management Plan 2010 area. The purpose of the Management Plan is to provide for the management and development of river berm land along the Waimea River. The Council is obliged to manage lands within the Waimea River Park for river control and soil conservation while not compromising the primary management objectives. The application includes proposed earthworks to re-align and maintain the stop bank, and the proposed Asphalt Plant is located outside of the river control measures, outside of the berm land. It is noted that application site is not located by a public walkway, as identified by Council.



Figure 6 – The public walkway is shown on the True Left Bank of the Waimea River.

2.10 The proposed site is approximately 3.5 kilometres to the west of the Richmond Airshed.

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### 3.0 Tasman Resource Management Plan (TRMP) Provisions

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#### **Zones and Overlays**

- 3.1 The application area is located within the Rural 2 Zone, adjacent to Rural 1. It is within Land Development Area 1, and the application site is part of a Working Quarry Face, but is not zoned as Quarry Zone.
- 3.2 Access to the site is proposed to be via a number of routes. Bartlett and Ranazu West Roads are local roads, while Pugh and Ranzau Roads are sub-collector roads.
- 3.3 The application site is not a cultural site. The application site highly modified with the built up stop bank, and former crushing plant site.
- 3.4 The site is within the Waimea Deep Moutere Aquifer. It is in the Appleby Gravel Water Management Zone, and is partially within the Upper Confirmed Aquifer Zone.
- 3.5 The application site is not within a wastewater management area.

#### **Rules**

- 3.6 The following assessment of rules is based on the chapter order of the TRMP.

#### *Access / Parking*

- 3.7 A Transportation Impact Assessment (TIA) has been obtained addressing the proposal in relation to the application and impacts upon the roading networks. Mostly this assessed the off-site traffic flow.
- 3.8 Access to the application site is from the Downer access from the Bartlett Road quarry area. It is proposed that the site is accessed via a one-way system, consistent with Rule 16.2.2.1(j), with entry and exit both being from the end of Bartlett Road. No vehicle crossing is proposed to the site direct from the legal road. This therefore does not meet with the typical requirements set out in Rule 16.2.2.1(a), (c) and Figure 16.2A of the NTLDM 2019.
- 3.9 It is noted that the application site is located on well-draining river gravels, therefore all on site stormwater from roading is to be discharged direct to ground through infiltration. This does not comply with Rule 16.2.2.1(f).
- 3.10 The Applicant therefore requires consent for a breach of access provisions which is a *Restricted Discretionary* activity under Rule 16.2.2.6.
- 3.11 A Traffic Management Plan is volunteered, which will advise staff and contractors how to access the site from any given direction, as outlined in the TIA attached in **Appendix 4**. The access routes have been identified following pre-application consultation with Waka Kotahi NZ Transport Agency (NZTA) who advised that a proposed future upgrade to the Bartlett Road / SH 60 would restrict access. The TIA outlines the proposed transportation routes.

- 3.12 Traffic movements are to comply with roading rules and speed limits. Also within the Waimea River Park Reserve, while internal to the site they are to comply with the lease conditions.
- 3.13 The TIA was assessed on the provision of up to four trucks (asphalt trucks being single truck units) to the site per hour for up to 10hrs per day, with the two staff also accessing the site, and occasional movements for diesel refills and replacement of the bitumen trailers. Should traffic movements increase, the Applicant volunteers to review the Traffic Management Plan.
- 3.14 In relation to parking and loading, two car parks will be required for staff, as per Rule 16.2.2.3(a), (e) and (f) and Figure 16.2C, and there is a loading bay under the silo as per (g) and (h).
- 3.15 The Applicant seeks that site be compacted gravels, which is suitable for parking and loading areas under Rule 16.2.2.3(n). It is noted that as the application site is located on river gravels, all on site stormwater from the parking areas is to be discharged direct to ground through infiltration. As a result of the discharge of stormwater to ground, parking is a *Restricted Discretionary* activity under Rule 16.2.2.6.

#### *Financial Contribution on Building Development*

- 3.16 The Applicant seeks to utilise an area which was formerly a crusher site. Downer has replaced this processing with relocatable crushers, and will remove the old Crushing plant and associated bins for the proposed Asphalt Plant.
- 3.17 The proposal consists of a set of relocatable, modular containers. By definition of size and use of containers as an industrial activity the containers are deemed to be buildings.
- 3.18 Rule 16.5.4.1(b) considers that a financial contribution is not required where the *activity is the replacement of a building by another building of similar character, intensity and scale erected on the same site as the replaced building*. It is considered that the proposal is consistent with this and financial contributions are not required.
- 3.19 In relation to additional traffic movements, the proposal is processing on site quarried materials and transporting a finished product. The traffic movements are therefore considered to be similar although will result in two staff arriving on site.
- 3.20 It is considered that the proposal does not trigger a financial contribution.

#### *Hazardous Substances*

- 3.21 The activity uses two types of unrefined petroleum, being bitumen and the final product, asphalt. The activity also uses diesel to power the mixing drum.
- 3.22 Up to 50,000 litres of Bitumen is to be stored on site. The use and storage of the Bitumen is direct from purpose built, double skinned trailers unit, which have a reserve area in the outer skin so it can contain the primary storage area.



The bitumen will be connected directly into the mixing drum. The trailers will be connected to electricity to keep the bitumen in viscous form.

- 3.23 The diesel is to be stored in purpose built, double skinned container, which has a reserve area in the outer skin so it can contain the primary storage area with a volume not exceeding 5,000 litres. The diesel will be connected directly into the mixing drum. The Applicant will erect bollards around the diesel tank to protect it from any traffic movement on site.
- 3.24 Part 16.7 of the TRMP addresses hazardous substances. In particular Rule 16.7.2.1(a) permits a hazardous facility where the activity is (i) in accordance with Schedule 16.7A and (iii) is the bulk storage of less than 5,000 litres of diesel, which the proposed complies with.
- 3.25 Rule 16.7.2.1(c) requires tanks for the storage of petroleum products are designed, constructed and operated to prevent any leakage or spills. In this instance, both the diesel and bitumen tanks are within double skinned containers, which contain a reserve area in the outer skin to prevent any leakage or spills (h) and (l).
- 3.26 Rule 16.7.2.1(f-k) require hazardous facility is designed, constructed and operated in a manner to prevent unintentional release of the hazardous substance. Both the diesel and bitumen tanks are within double skinned containers, which contain a reserve area in the outer skin to contain the primary storage area.
- 3.27 Rule 16.7.2.1(i) requires an Emergency and Spill Contingency Plan and (j) requires a register kept available of the types and quantities of hazardous substances used or stored on the site. Signage is also required (n). These requirements are volunteered, as required by HSNO regulations.
- 3.28 If there is a spill of either bitumen or asphalt on site, it will solidify, and is able to the scraped up by shovel, put into a suitable clearly marked container for disposal or re-use within the Asphalt Plant in accordance with local regulations under Rule 16.7.2.1(o).
- 3.29 Rule 16.7.2.1(p) requires hazardous substance storage to be undertaken in such a manner that the substance cannot be moved, released into or contaminate flowing water. In this instance, the tanks are located outside of the stop bank. It is possible to relocate the bitumen trailers and diesel tank should an extreme event be predicted that is likely to breach the stop banks.
- 3.30 It is considered that the use and storage of hazardous substances is a *Discretionary* activity.
- Flood hazard: Berms and Stop banks*
- 3.31 Part 16.10 deals with land uses in relation to stop banks and berm lands where flood hazards may occur.



- 3.32 In relation to works on the stop bank, Rule 16.10.2.1(b) permits excavation for the reconstruction or maintenance of a stop bank, provided the Riverworks Asset Manager of the Council has been notified. Earthworks are proposed to re-align the stop bank to remove two right angle bends and ensure that the height of the stop bank is consistent. It is considered that this application complies with this rule.
- 3.33 Rule 16.10.2.1(c) permits earthworks within 10m of toe of any stop bank, earthworks are restricted to less than 20m<sup>2</sup> in area provided the area is open for no more than three days and the backfilled with the excavated material and thoroughly compacted and the earthworks do not raise or lower the level of the land. In this instance, the works will be around 1900m<sup>2</sup> to re-align the stop bank, and to level the site upon removal of the crusher plant. As such, the proposal will not meet the permitted rules and is *Discretionary* under Rule 16.10.2.2.
- 3.34 The proposal has been designed so that no materials or buildings are located within the berm area as per Rule 16.10.2.1(e)
- 3.35 Rule 16.10.2.1(f) and Rule 16.10.3.1(c) restricts fences within berm land to be of post and wire construction. The acoustic barrier and perimeter fence are outside of the Berm area and no internal fencing is proposed.
- 3.36 Rule 16.10.3.1 identifies prohibited building activities. The proposed asphalt plant is made up of relocatable modular structures that are able to be removed from the site. In accordance with the clauses in Rule 16.10.3.1, the Applicant has located the plant outside of the prohibited berm land as per (a), and the modules are not habitable as prohibited in (b).
- 3.37 The proposal seeks to reinstate the stop bank, and use it has a means for filling the filler bins. The proposal will not place a structure of the stop bank nor will it impede access along the stop bank, as prohibited by Rule 16.10.3.1(e).
- 3.38 It is considered that the buildings and acoustic barrier are therefore not prohibited as they area outside of berm land.

*Rural 2 Zone rules*

- 3.39 The application site is within the Rural 2 Zone, and adjoins the Rural 1 Zone. Land use activities for the Rural 2 Zone are contained in Part 17.6.
- 3.40 Rule 17.6.2.1(a) identifies activities which are not permitted, and under (a)(i) restricts industrial activities, these being discretionary.
- 3.41 Rule 17.6.2.1(c) identifies the permitted noise standard limits for all activities. In the Rural Zone, noise levels are measures at the notional boundary of a dwelling. The Acoustic Assessment in **Appendix 3** notes that the activity with no mitigation will comply with Day time levels, however will operation of the catching plant will exceed the Night time levels when operating before 7am and in evenings. The amended hours will ensure that the operation of the batching plant is during the Day time hours, with transportation and filling of the trucks

operating until 10pm. As such, the Applicant is volunteering to form a 3m high acoustic barrier along the boundary as per the recommendations in the report and as shown on the Site Plan in **Appendix 1**. The acoustic barrier will ensure compliance with both the Day and Night Time noise standards, such the activity will be permitted for noise emissions.

- 3.42 It is noted that the application is not for quarrying activities which are being undertaken by Downer. As such, Rules 17.6.2.1(i) and 18.5.3.3(d) are not applicable.
- 3.43 Under Part 17.6, the Asphalt Plant is a *discretionary* activity under Rule 17.6.2.9. As the site is accessed via local road, (c) is not relevant.
- 3.44 Rule 17.6.3.1 identifies what construction, alteration, or use of a building is a permitted activity. The structures are considered to be buildings as an industrial use of a container. In addition, the acoustic barrier (consisting of a 1m high bund and 2m high fence) is also considered to be a building under the TRMP.
- 3.45 Rule 17.6.3.1(h) identifies the permitted building height at being 7.5m. The Applicant has advised that the discharge stack height is to be at least 2m above the Bag House, which may be around 7.3m above surrounding ground level, and around 7.8m above immediate ground level. Therefore, the stack height will be around 10m high. The silo is just over 10m in height subject to foundation design. Information from Bomag Marini about building heights are attached in **Appendix 7**. As such, the Applicant seeks that the buildings, including the stack height, shall not exceed 11m. The proposal is within the 12.5m controlled activity height limitation in Rule 17.6.3.2(h).
- 3.46 Buildings are to be setback from road boundaries by 10m and 5m from internal boundaries as per Rule 17.6.3.1(j)(i). In this instance, the main structures comply however the acoustic barrier, which is a 3m high structure of a bund and solid fence, is located on the boundary. This is therefore a restricted discretionary activity.
- 3.47 Rule 17.6.3.1(p) relates to building coverage. The proposal is for a small footprint of less than 120m<sup>2</sup>.
- 3.48 Stormwater from buildings need to comply with Part 36.4 of the TRMP in Rule 17.6.3.1(t). As the “buildings” are containers, there will be no stormwater catchment, and all stormwater will discharge to land.
- 3.49 The buildings are considered to be a *Discretionary* Activity under Rule 17.6.3.5.

#### *Earthworks*

- 3.50 The application site is located within the Land Disturbance Area 1, and earthworks rules are contained in Part 18.5 of the TRMP. The Applicant seeks to undertake some minor earthworks to re-align and repair the stop bank, and to level and compact the site upon removal of the old Crushing Plant. Included



in the earthworks is the formation of a 1m high bund which will form the base of the acoustic barrier.

- 3.51 The proposed earthworks to maintain the stop bank will not cause the diversion of Waimea River, as it is a re-alignment of the existing stop bank to remove two right angle bends which are considered weak points during flood events, and which have been damaged over the years. The proposal therefore seeks to strengthen the existing stop bank. This is consistent with Rules 18.5.2.1(a)(i) and 36.2.2.3(a). The Applicant also proposes a temporary ramp to the stopbank north of the application site, to enable public access whilst they operate on site.
- 3.52 The proposal does not seek to raise the land within the berm, consistent with Rule 18.5.2.1(v). The levelling of the land outside of the stop bank will slightly lower the site around the mixing drum module, however as it is outside of the stop bank, it is not considered to result in the site being subject to flooding as per (w).
- 3.53 The proposed earthworks to re-align and repair the stop bank are setback around 130m from the wetted area of Waimea River, which complies with Rules 18.5.2.1(b) and 36.2.2.3(b). The earthworks will not be undertaken while the river is in flood and are outside the main watercourse, which will avoid a discharge affecting water clarity Rule 36.2.2.3(c).
- 3.54 The Applicant's contractor will provide a Dust, Erosion and Sediment Control Plan prior to undertaking the earthworks.
- 3.55 The recontouring of the plant site will mostly be less than 1m in depth, except for the re-alignment works of the stop bank and less than 1ha in accordance with Rule 18.5.2.1(q).
- 3.56 The Application site is being used by Downer as a quarry, and although not zoned as a Quarry Area, is part of an operational river gravel quarry. It is noted that the Applicant will not be undertaking quarrying activities themselves, and as such an assessment is not considered necessary under Part 28.1 of the TRMP.

### *Discharges*

- 3.57 The proposal includes a burner, and there will be a discharge to air, as per the Air Discharge Assessment in **Appendix 5**. Part 36.3 of the TRMP addresses discharges to air. Rule 36.3.5.1(b)(ix) specifically identifies the discharge to air from an Asphalt Plant as being a *discretionary* activity.
- 3.58 The Air Discharge Assessment considers that the proposal will comply with the permitted standards as set out in the National Environmental Standards for Air Quality Regulations 2004, subject to the stack height being at least 2m above the top of the Bag House, and with the limitation of operation of the MARINI Latin America Carbon T-Box 130 Asphalt Plant up to a maximum of 10 hours within a 24 hour period.
- 3.59 Under Rule 36.4.2.1, the discharge of stormwater to ground within the Rural 2 Zone is a permitted activity subject to a number of conditions. As the site is being used to store bitumen and diesel on site, the application site does not comply with the permitted conditions, and any discharge of stormwater from the modules and hardstand areas for access and parking is a *restricted discretionary* activity under Rule 36.4.2.3.

### *Water diversion*

- 3.60 The construction of a stop bank to divert floodwater is generally to protect land or buildings from damage by flooding. Rule 31.1.3.1 permits the maintenance, repair and extension of any structure lawfully existing in or on the bed of a river. It is considered that the re-alignment to upgrade the stop bank falls under this provision. The earthworks to upgrade the stop bank will not occur during the fish spawning period of 1 April to 31 July as per Rule 31.1.3.1(a). Once completed, all materials used in the re-alignment of the stop bank shall be removed from the berm in accordance with (b).
- 3.61 Considered as a bundle of activities, the activity is therefore considered to be a **Discretionary activity**.



**Objectives and Policies**

3.62 The relevant Objectives and Policies are set out under Chapters.

**Amenity**

Objective 5.1.2	Avoidance, remedying or mitigation of adverse effects from the use of land on the use and enjoyment of other land and on the qualities of natural and physical resources.	The proposal is located outside the stop bank, in an area used currently used for industrial activities. The proposal will not remove any land from public use and enjoyment.
Policy 5.1.3.1	To ensure that any adverse effects of subdivision and development on site amenity, natural and built heritage and landscape values, and contamination and natural hazard risks are avoided, remedied, or mitigated.	The type of system enables the plant to be removed from the site at the end of its life. The modules are also smaller in nature than the traditional processing plant.
Policy 5.1.3.3	To protect areas of specific resource value, such as hard rock aggregate resources, from the adverse effects of encroachment by other activities, particularly residential activities.	The modules are tucked behind the stop bank to reduce visual dominance on the site. This along with the acoustic barrier will screen most of the plant.
Policy 5.2.3.4	To promote amenity through vegetation, landscaping, street and park furniture, and screening.	An acoustic barrier will ensure compliance with permitted Night time noise levels from existing dwellings.
Policy 5.3.3.2	To maintain the open space value of rural areas.	The Applicant seeks to operate up to 18 nights per year to provide asphalt for large sealing projects which have to occur when there is little traffic. The acoustic barrier will be mitigation noise and any external lighting.  The use of the site makes use of the gravels extracted in the area, reducing transportation off site of gravels.  Works have been located outside of the berm area, which is typically used for recreational activities. Improvement to the stop bank to enable transportation along its length will improve connectivity.



Rural Character

Objective 7.1.2.3	Retention of opportunities primarily for plant and animal production or other land-derived production on land that has varying productive value, identified as the Rural 2 Zone.	<p>The proposal is located outside the stop bank, in an area used currently used for industrial activities associated with gravel extraction. The proposal will be similar in nature, using the locally sourced gravels, although the Applicant notes that some external materials will be required depending on the asphalt grade required.</p> <p>The site is setback from residential activities, is outside of Richmond Airshed, is close to materials and traffic routes have been identified to reduce dominance of traffic on roads.</p> <p>The proposal has been constrained to the Council site, and does not extend into the neighbouring property, as currently occurring. This may free up land for productive use.</p> <p>The hours of operation have been restricted to ensure that the emissions from the mixing drum do not breach the National Guidelines.</p> <p>The modular type system enables the plant to be removed from the site at the end of its life. The modules are tucked behind the stop bank to reduce visual dominance on the site. This along with the acoustic barrier will screen most of the plant.</p>
Policy 7.1.3.11	To discourage commercial, industrial and rural industrial activities in the Rural 1 and Rural 2 zones, except where the activity is directly associated with plant and animal production in the District or is required for a business activity having a significant functional need to locate in the rural area.	
Policy 7.2.3.12	To ensure that activities which are not involved or associated with plant and animal production do not locate where they may adversely affect or be adversely affected by such activities.	
Objective 7.4.2	Avoidance, remedying or mitigation of the adverse effects of a wide range of existing and potential future activities, including effects on rural character and amenity values.	
Policy 7.4.3.1	To ensure that there is sufficient flexibility for a wide range of productive rural activities to take place, while avoiding, remedying or mitigating adverse effects.	
Policy 7.4.3.2	To provide for rural activities which may involve levels and types of effects, including noise, dust, smoke and odour, that may be permanent, temporary or seasonal, and that may not meet standards typically expected in urban areas.	
Policy 7.4.3.4	To exclude from rural areas, uses or activities (including rural-residential) which would have adverse effects on rural activities, health or amenity values, where those effects cannot be avoided, remedied or mitigated.	



**Transportation**

Policy 5.2.3.8	To avoid, remedy or mitigate the adverse effects of traffic on the amenity of residential, commercial and rural areas.	<p>The proposal seeks to have four asphalt trucks accessing the site per hour for up to 10 hours per day. The trucks will be replacing the off site movement of crushed gravels to an off site asphalt plant.</p> <p>Additional movements for refilling the diesel tank or replacing bitumen tanks are also anticipated although less frequently. Some additional materials may be required to be brought to the site depending on the grade of asphalt required. This will be infrequent.</p> <p>The Applicant proposes on using a one way system through the site, with trucks taking the low route to the loading area, while loaders will take gravels along the stop bank to the filler bins. The proposal will use internal accesses, rather than direct access off Bartlett Road.</p> <p>The proposed traffic routes have been designed to have least impact upon intersections, enabling a smoother flow of traffic, and to spread traffic flows.</p> <p>The transportation of hazardous substances will be under industry guidelines, in appropriately contained trucks and trailers.</p>
Policy 5.5.3.3	To avoid, remedy or mitigate the likely adverse effects of the transport or use of hazardous substances, arising outside of any facility for their manufacture, storage or use.	
Objective 11.1.2	A safe and efficient transport system, where any adverse effects of the subdivision, use or development of land on the transport system are avoided, remedied or mitigated.	
Policy 11.1.3.7	To ensure that adequate and efficient parking and loading spaces are provided, either on individual sites or collectively, to avoid or mitigate adverse effects on the safety and efficiency of the road network.	
Policy 11.2.3.3	To promote transport routes, and approaches and methods of design, construction, and operation which avoid, remedy, or mitigate adverse effects on: (a) the health and safety of people and communities; in particular, cyclists and pedestrians; (b) amenity values of neighbourhoods and areas of special character; (c) air and water quality; (d) natural habitats and ecosystems; (e) landscapes and natural features; (f) aggregate and energy resources; (g) the productivity of land.	
Objective 15.2.2.1	Efficient, effective and integrated provision of network infrastructure assets to meet environmental objectives and the needs of communities for their health and safety, amenity and social-cultural well-being.	

**River**

Objective 8.1.2	The maintenance and enhancement of public access to and along the margins of lakes, rivers, wetlands and the coast, which are of recreational value to the public.	<p>The proposal is for the Asphalt Plant to be located on the outside of the stop bank, where the old crusher plant is located. The proposal does not stop access along the stop bank or along the Waimea River banks.</p>
Policy 8.1.3.1	To maintain and enhance public access to and along the margins of water bodies and the coast while avoiding, remedying or mitigating adverse effects on other resources or values, including: indigenous vegetation and habitat; public health, safety, security and infrastructure; cultural values; and use of adjoining private land.	



Policy 8.1.3.3	To avoid, remedy, or mitigate the adverse effects on public access caused by structures, buildings, and activities in or adjoining water bodies or the coastal marine area.	<p>Unlike the existing crushing plant, the proposed plant is in the form of relocatable modules. The modules are to be setback behind the stop bank, and screened by an acoustic barrier. Visually only the Bag House module and silo will be seen above the stop bank from the balance of the River Park.</p> <p>Access to the plant site will be from inside the berm, which will change the traffic movements within the site. To reduce conflict, the Applicant is proposing one-way traffic flows.</p> <p>The proposal will reinstate the stop bank, which is used by Council for monitoring flood events. The proposal will remove materials currently stored on the stop bank and provide access along the stop bank for Council's flood monitoring.</p>
Policy 8.1.3.6	To retain the public access resource provided by unformed legal roads where there is a need for public access to or along water bodies or the coast, converting those unformed roads to reserves where vehicle access is inappropriate or cannot meet the standards prescribed in the Plan and where agreement is reached with the adjoining land occupier.	
Objective 8.2.2	Maintenance & enhancement of the natural character of the margins of lakes, rivers, wetland & the coast, and the protection of that character from adverse effects of the subdivision, use, development or maintenance of land or other resources, including effects on landform, vegetation, habitats, ecosystems & natural processes.	
Policy 8.2.3.4	To avoid, remedy or mitigate adverse effects of buildings or land disturbance on the natural character, landscape character and amenity values of the margins of lakes, rivers, wetlands or the coast.	
Policy 8.2.3.7	To ensure that the subdivision, use or development of land is managed in a way that avoids where practicable, and otherwise remedies or mitigates any adverse effects, including cumulative effects, on the natural character, landscape character and amenity values of the coastal environment and the margins of lakes, rivers and wetlands.	
Policy 27.1.3.10	To provide for the use, maintenance and repair of lawfully existing structures in, on or under the beds of rivers and lakes, except where such structures are causing more than minor adverse effects on the environment that cannot be avoided, remedied or mitigated.	
Objective 27.3.2.2	Activities in river beds, including construction of structures, are carried out in a way that avoids, remedies, or mitigates adverse effects on the stability of river beds and efficiency of rivers to carry flood waters and sediment.	
Policy 27.3.3.1	To avoid, remedy, or mitigate adverse effects on riverbed and bank stability and flood-carrying capacity of activities in, on, under, or over river and lake beds and including: (a) effects on existing structures and lawfully authorised activities; (b) reduced effectiveness of structures, particularly flood mitigation works; (c) impacts on groundwater recharge patterns and connected spring and wetland systems; (d) reduced ability of the river system to transport gravel; (e) increased risk of flooding and coastal erosion.	
Objective 27.6.2	The maintenance and, where appropriate, the enhancement of: (a) the natural character, amenity, recreational and cultural values and (b) public access to rivers and lakes; as a result of activities in the beds and on the surface of rivers and lakes.	



**Natural Hazards**

Objective 13.1.2.1	Management of areas subject to natural hazard, particularly flooding, instability, coastal and river erosion, inundation and earthquake hazard, to ensure that development is avoided or mitigated, depending on the degree of risk.	<p>The proposal will improve the existing stop bank which is part of Council's flood mitigation. The works include re-aligning two weak parts of the stop bank and ensuring consistent height.</p> <p>It also ensures that stop bank is trafficable and no longer blocked or broken for future flood monitoring.</p> <p>The plant has been located outside of the berm area to avoid any buildings or hazardous substances in the flood channel.</p> <p>Should an extreme event occur which is predicted to overtop the stop bank, the Applicant could move the bitumen trailers and diesel tank.</p>
Policy 13.1.3.9	To prevent damage or interference with the functioning of the major overland flood flow paths of rivers in the District, except as provided for in Policy 13.1.3.10.	
Policy 13.1.3.10	To maintain or consider the need for protection works to mitigate natural hazard risk where: (a) there are substantial capital works or infrastructure at risk; or (b) it is impracticable to relocate assets; or (c) it is an inefficient use of resources to allow natural processes to take their course; or (d) protection works will be effective and economic; or (e) protection works will not generate further adverse effects on the environment, or transfer effects to another location.	
Policy 13.1.3.14	To avoid damage by land use activities to flood control structures or works for flood or erosion control.	

**Services**

Policy 5.1.3.4	To limit the intensity of development where wastewater reticulation and treatment are not available.	Staff will utilise the existing Downer staff facilities.
Policy 5.1.3.8	Development must ensure that the effects of land use or subdivision activities on stormwater flows and contamination risks are appropriately managed so that the adverse environmental effects are no more than minor.	The site has an existing electricity connection which will be utilised.
Policy 7.4.3.12	To avoid, remedy or mitigate servicing effects of rural subdivision and development, including road access and impacts on the road network, water availability and wastewater disposal.	The site also has access to the water supply within the Downer lease area for firefighting purposes.
Policy 7.4.3.13	To ensure the maintenance or enhancement of natural drainage features within rural catchments, and to avoid, remedy, or mitigate any adverse effects of stormwater run-off.	Due to the high infiltration of the site, stormwater is to be left to discharge to ground, aiding in replenishing of groundwater.



**Reserve**

Objective 14.1.2	Adequate area and distribution of a wide range of reserves and open spaces to maintain and enhance recreation, conservation, access and amenity values.	<p>The application site is zoned Rural 2 but is vested for River Control Purposes. Council have the Waimea River Management Plan which seeks to use the area for increased recreation and improving the ecology of the area while maintaining flood protection measures.</p> <p>The proposal will improve the flood protection measures which have over time been modified to suit land uses that occurred on site. The works will reinstate the stop bank and ensure access along the top for flood monitoring.</p> <p>The Asphalt Plant is to be located outside the berm land, which will not stop access along the stop bank or along the Waimea River banks.</p> <p>The proposed plant is in the form of relocatable modules, reducing permanent fixtures on the site. The plant is to be screened by an acoustic barrier and the stop bank, so visually only the Bag House and silo will be seen from the berm land.</p> <p>Access to the plant site will be from inside the berm, which will change the traffic movements within the site. To reduce conflict, the Applicant is proposing one-way traffic flows.</p>
Policy 14.1.3.9	To encourage effective and efficient design and establishment of parks and reserves that can integrate multiple uses and functions of open space, including for network infrastructure.	
Objective 14.2.2	Efficient and effective use of open space and reserves to meet community needs for recreation and amenity.	
Policy 14.2.3.3	To encourage multiple use of reserves and open space and recreational facilities where practical.	
Objective 14.4.2	The avoidance of significant adverse effects of activities and facilities on open space and recreational areas, and on the amenity values of surrounding areas.	
Policy 14.4.3.1	To control the scale, extent and location of buildings and structures to ensure the open space character of reserves is maintained.	
Policy 14.4.3.2	To ensure that activities associated with open space and reserves do not give rise to adverse environmental effects (such as noise, glare, traffic, pesticide discharge) without adequate mitigation.	



**Discharge to land**

Policy 5.1.3.8	Development must ensure that the effects of land use or subdivision activities on stormwater flows and contamination risks are appropriately managed so that the adverse environmental effects are no more than minor.	<p>Any accidental spillage of either bitumen or asphalt on site will solidify to enable easy scraping of the spilled material for re-use within the Asphalt Plant or disposal to an appropriate facility.</p> <p>Stormwater on site is proposed to be discharged naturally through the gravels, to enhance groundwater recharge.</p>
Policy 5.1.3.11	To avoid, remedy, or mitigate the likelihood and adverse effects of the discharge of any contaminant beyond the property on which it is generated, stored, or used.	
Policy 5.5.3.4	To avoid any escape or discharge to surface water or groundwater, or drift to other property, of any hazardous substance, from within the site where it is used.	
Objective 33.1.2.1	The discharge of contaminants in such a way that avoids, remedies or mitigates adverse effects while: (a) maintaining existing water quality; and (b) enhancing water quality where existing quality is degraded for natural and human uses or values.	
Policy 33.1.3.2	To avoid, remedy or mitigate the adverse effects of discharges of contaminants so that both individually and cumulatively with the effects of other contaminant discharges, they enable the relevant water quality classification standards to be complied with.	
Objective 33.3.2	Stormwater discharges that avoid, remedy or mitigate the actual and potential adverse effects of downstream stormwater inundation, erosion and water contamination.	
Policy 33.3.3.6	To maintain or enhance stormwater infiltration to enhance groundwater recharge.	

**Discharge to air**

Policy 5.1.3.11	To avoid, remedy, or mitigate the likelihood and adverse effects of the discharge of any contaminant beyond the property on which it is generated, stored, or used.	<p>An assessment of the Plant has been undertaken, and a limit of no more than 10 hours of operation within a 24-hour period is volunteered to ensure that the air discharge will not exceed national air emission guidelines.</p> <p>For dispersal of emissions, the stack height is to be at least 2m above the Bag House.</p>
Objective 34.1.2	The discharge of contaminants to air in such a way that avoids, remedies or mitigates adverse effects while: (a) maintaining existing air quality; and (b) enhancing air quality where existing quality is degraded for natural or human uses or values.	
Policy 34.1.3.1	To ensure that any discharges of contaminants to air are undertaken in a way that avoids, remedies or mitigates any adverse effects on the receiving environment or surrounding activities	
Policy 34.1.3.3	To provide for contaminant discharges to air while maintaining or enhancing the ambient air quality.	
Policy 34.1.3.11	To manage air quality to meet National Environment Standards for ambient air quality, especially in relation to concentrations of PM <sub>10</sub> .	
Policy 34.1.3.14	To take into account national guidelines for air quality when considering applications to discharge contaminants into the air.	



### Hazardous Substances

Objective 5.5.2	Reduction of risks to public health and safety, property and the environment, arising from fire and hazardous substances.	<p>A Site Contingency and Stormwater Management Plan and an Emergency and Spill Contingency Plan shall be put in place, and all appropriate signage.</p> <p>Hazardous substances will be stored in double skinned containers.</p> <p>The transportation of hazardous substances will be under industry guidelines, in appropriately contained trucks and trailers.</p>
Policy 5.5.3.2	Avoid, remedy or mitigate the likely adverse effects of facilities for the manufacture, storage, use or disposal of hazardous substances, on human health, other land use activities or the environment, including those effects arising from the location, design, construction or management of such facilities.	
Policy 5.5.3.6	To require the preparation of a contingency plan to avoid, remedy or mitigate any adverse effects of an emergency discharge or accidental spill of hazardous substances.	
Policy 8.2.3.13	To avoid, where practicable, facilities for the storage of hazardous substances within 200 metres of the mean high water springs, or of any lake, river or wetland.	
Objective 33.2.3	The avoidance, remediation or mitigation of the adverse effects resulting from emergency discharges or accidental spills.	
Policy 33.2.3.1	To promote and advocate development of site contingency plans to avoid, remedy or mitigate the likely adverse effects of any emergency discharges or other accidental spills.	
Policy 33.2.3.2	To ensure that land use and discharge activities are carried out, having regard to contingency planning measures appropriate to the nature and scale of any discharge and risk to the environment for any accidental discharge of any contaminant that may result in connection with the activity.	

### Mauri and Wairua

Objective 27.2.2	Retention or enhancement of the traditional values held by Māori under tikanga for rivers and lakes and their margins, including the mauri (or life-supporting capacity) and the wairua (or spiritual value) of rivers and lakes.	<p>The proposal seeks to locate the plant outside of the berm area, away from the river, within a modified site.</p> <p>The plant is modular with limited foundation requirement, which means limited impact on the land.</p> <p>The proposal does not require the use of water for production. It does require the use of gravels and crusher dust, which are extracted from the site.</p>
Policy 27.2.3.1	To avoid, remedy or mitigate adverse effects on the mauri and the wairua of the river or lake arising from the effects of structures and other activities in, on, under or over river and lake beds.	
Policy 27.2.3.2	To ensure activities and structures in, on, under or over the beds of rivers and lakes avoid, remedy or mitigate adverse effects on cultural heritage sites, including wāhi tapu and wāhi taonga.	

3.63 The above assessment overviews the relevant Objectives and Policies under the TRMP. Taken as a whole it is considered that what is proposed asphalt plant is not contrary to the range of relevant objectives and policies within the Zone.

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## 4.0 Resource Management Act

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### *Part 2 of the Act*

- 4.1 The application is for an Asphalt Plant adjacent to a local gravel source. The proposal will provide an alternative local source of asphalt which is currently limited to one local producer or imported from Canterbury.
- 4.2 The proposed plant consists of relocatable modular components, so it is not a fixed activity, and is able to be removed when no longer required. The hazardous substances (diesel and bitumen) are also in double skinned containers, which are able to be removed from the site should a flood event occur which may breach the stop banks.
- 4.3 The proposal includes remedying some breaches along the existing flood mitigation stop bank and will ensure access along the stop bank for Council to use it for flood monitoring.
- 4.4 The proposal includes mitigation in relation to hours of operation to ensure the air discharges comply with the National Guidelines for air quality; noise mitigation for ensuring compliance with the permitted Night-time noise standards; and includes a Traffic Management Plan to avoid adverse effects on transportation to and from the site, as well as an Emergency and Spill Contingency Plan for the storage use of hazardous substances.
- 4.5 It is considered that the proposed Asphalt Plant is a sustainable use of the site under Section 5.
- 4.6 Section 6 of the Resource Management Act provides for *recognising and providing* for matters of National Importance, whilst Section 7 deals with other matters for which *regard* must be had. In the subject case, those matters of potential relevance are:
  - 4.7 In relation to Section 6(a) and (d), the proposal includes mitigation of the existing stop bank, and the proposed Asphalt Plant is located outside of the stop bank, enabling Council access along the stop bank. The location of the Asphalt Plant is outside of the berms. A Traffic Management Plan and a one-way system within the site will reduce the impact of the proposal on other users of the berm land.
  - 4.8 The works include remedying some breaches in the existing flood mitigation stop bank and will ensure access along the stop bank for Council to use it for flood monitoring in accordance with Section 6(h). Furthermore, the Asphalt Plant is located outside of the stop bank. In the eventuality of an extreme flood event where it is possible that the stop banks may be breached, the hazardous substances are able to be removed from the site.



- 4.9 The location of the proposal has been carefully chosen to be in close proximity to the source of the materials, is outside of the Richmond Airshed, and on roads which are not already overloaded with residential traffic. It is considered to be an efficient use and development of the local gravel resource in accordance with Section 7(b).
- 4.10 The location of the plant behind an acoustic barrier and stop bank, along with limited operating hours, will ensure that visually the impact of the plant is kept to the minimum and noise levels and air emissions are kept within permitted standards in accordance with the Sections 7(c) and (d).
- 4.11 The Applicant acknowledges that iwi have a vested interest in the mauri of water. The earthworks to upgrade the stop bank are located within the river extent, and the application site is within the Waimea River Statutory Acknowledgment and Deed of Recognition Area. The application site has been heavily modified in the past. The type of structures are such that deep foundations are not required, therefore any disturbance to the site is kept to a minimum. The Asphalt Plant is to be located outside of the stop bank to avoid any adverse effects of being located within the berm. It will however result in the use of bitumen and diesel within reasonable proximity to the Waimea River, although these are located outside of flood areas. In the eventuality of an extreme flood event where it is possible that the stop banks may be breached, the hazardous substances are able to be removed from the site. The Applicant acknowledges that Te Tau Ihu's relationship with the site and their desire to ensure that water quality is not affected by the proposal in accordance with Section 6(e) and Section 7(a).

*National Environmental Standard*

- 4.12 The relevant National Environmental Standard is the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health. The application site is not known to be a HAIL site under Clause 8.
- 4.13 The National Environmental Standards for Freshwater Regulations 2020 provides Standards for farming activities. Whilst not specifically addressing the land use activity, the NESF gives guidance about ensure structures are not affected by a flood in all or any part of the 1% AEP floodplain. This application complies, locating all structures outside of the stop bank and the 1% AEP floodplain as per Clause 55(4).
- 4.14 The Air Discharge Assessment in **Appendix 5** assessed the effects of the emissions from the proposed plant, and subject to restricting the activity to no more than 10 hours per 24 hours, the proposal complies with the permitted standards as set out in the National Environmental Standards for Air Quality Regulations 2004.
- 4.15 Further, to enable greater dispersion of discharges, the stack height is to be at least 2m above the top of the Bag House.

*National Policy Statement / Other regulations*

- 4.16 The National Policy Statement for Freshwater Management 2020 became effective in September 2020. The objective is to *ensure that natural and physical resources are managed in a way that prioritises: (a) first, the health and well-being of water bodies and freshwater ecosystems; (b) second, the health needs of people (such as drinking water); and (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.*
- 4.17 In particular Policy 7, which seeks that *the loss of river extent and values is avoided to the extent practicable.* The activity is located outside of the stop bank to avoid any loss to the river extent.

*Other Plans*

- 4.18 As the TRMP has been written to be consistent with the Regional Policy Statement, it is considered that the proposal is also consistent with the Regional Policy Statement.
- 4.19 The Te Tau Ihu Statutory Documents 2014 are a type of cultural redress included in the Te Tau Ihu Treaty Settlement, and afford legal recognition of the particular cultural, spiritual, historical and traditional associations of the eight iwi of Te Tau Ihu with an identified area. As consent authority Tasman District Council must have regard to any Statutory Acknowledgement within its area when determining whether the relevant Iwi may be adversely affected by a resource consent proposal. The application site is within the Waimea River Statutory Acknowledgment and Deed of Recognition Area.
- 4.20 The Council have the Waimea River Park Management Plan (WRPMP) which includes the application site. The WRPMP notes that extraction of gravels within the Waimea River Park Management Area has ceased from the riverbed but remains from the river berms. The WRPMP acknowledges that the commercial use of the berm lands, via leasing of the land, a portion of the income of which goes into the Rivers Account, where it is used for works on the berm lands in the District.
- 4.21 The WRPMP acknowledges that in relation to gravel extraction, the opportunities to extract gravel from the berm lands are diminishing and finite. The WRPMP also notes that some commercial activities, such as gravel processing, may conflict with other uses of the park.
- 4.22 The Applicant acknowledges this, and seeks to locate the Asphalt Plant out of the berm land. A Traffic Management Plan and a one-way system within the site will reduce the impact of the proposal on other users of the berm land.
- 4.23 Importantly, the proposal will improve the compromised stop bank, and enable access along the stop bank for flood monitoring.
- 4.24 The Asphalt Plant is a modular container system, which requires little in the way of physical works within the land, with only the silo requiring a foundation. As such, the long-term effects on the Park are limited.

- 4.25 Objective 1 of the WRPMP, seeks to manage the berm lands to protect surrounding land from flood flows. The proposal will improve the existing stop bank by ensuring that the portion of the stop bank around the plant is structural and at height.
- 4.26 To reduce impact on users, traffic through the site has been set to be one-way direction, using existing tracks, in an attempt to manage the use of the site in relation to Objective 5 and limit traffic as per Policy 28. It will also enable Council to traverse the stop bank for flood monitoring.
- 4.27 In relation to exclusive use of the site, the Applicant has been in consultation with Downer who have a lease over the application for gravel extraction. The Applicant has been advised that the Council is able to issue a sub-lease for the application site, in accordance with Policy 19. It is noted that in relation to the site, this exclusive area is outside of the berm land, and does not conflict with other users.
- 4.28 The proposed buildings are relocatable in nature, and do not have a permanent foundation base. They have been located outside of berm land, outside of the stop bank and flood plain. The plant will be mostly screened from the berm by way of the stop bank and acoustic barrier. From the berm, the upper Bag House module and silo will be visible. These will be similar in colour to the machinery used on site. Once the site is no longer required, all buildings shall be removed from the site as per Policy 115.

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## **5.0 Assessment of Effects on the Environment**

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- 5.1 Every resource consent application is required under the Fourth Schedule of the Act to be accompanied by an assessment of effects on the environment appropriate with the nature and scale of the proposed activities. The following sets out the actual and potential effects on the environment:

*Significance of activity*

- 5.2 The application complies with the Discretionary Standards for the Rural 2 Zone. The Asphalt Plant is sought to be sited adjacent to a local gravel source in order to reduce the amount of transport of raw aggregate through the district. The proposal will also provide another option for asphalt in the district which is currently limited to one producer or importation from Canterbury.
- 5.3 The proposed plant consists of relocatable, container module components, so is not a fixed activity, and is able to be removed when no longer required.
- 5.4 The works include remedying some breaches in the existing flood mitigation stop bank and will ensure access along the stop bank for Council to use it for flood monitoring.

- 5.5 The proposal includes volunteered condition in relation to hours of operation to ensure the air discharges comply with the National Guidelines for air quality; it also includes noise mitigation for ensuring compliance with the permitted Night-time noise standards; and includes a Traffic Management Plan to avoid adverse effects on transportation to and from the site, and a Site Contingency and Stormwater Management Plan and an Emergency and Spill Contingency Plan shall be put in place, and appropriate signage .
- 5.6 This is considered to be a sustainable use of the site.

*The location*

- 5.7 The application site is located at the end of Bartlett Road, at one of the entrances into the Waimea River Park. The location has been chosen as it is part of Downer's lease area, being the old Crushing Plant site. It is proposed to remove the Crusher and associated structures and use this site for the development.
- 5.8 Current access to the site is via a crossing through the neighbouring Rural 1 property, Lot 3 DP306979 and from within the Waimea River Park. It is proposed that this crossing will be closed by way of the acoustic barrier, and a linking fence with the stop bank boundary fence on Lot 3 DP306979. It is proposed that access to the site be a one-way system through the site, and access will be through the Waimea River Park, as shown on the Site Plan in **Appendix 1**.
- 5.9 As the crushing plant is located partly on the stop bank, access is not available along the stop bank, and access to the stop bank is also through the crossing through Lot 3 DP306979.
- 5.10 The site is located adjacent to the Rural 1 boundary and the farming and agricultural activities. There are houses dotted throughout the surrounding plains, the closest being between 585m to the south of the site as shown in Figure 7 below.



Figure 7 – Setback from dwellings

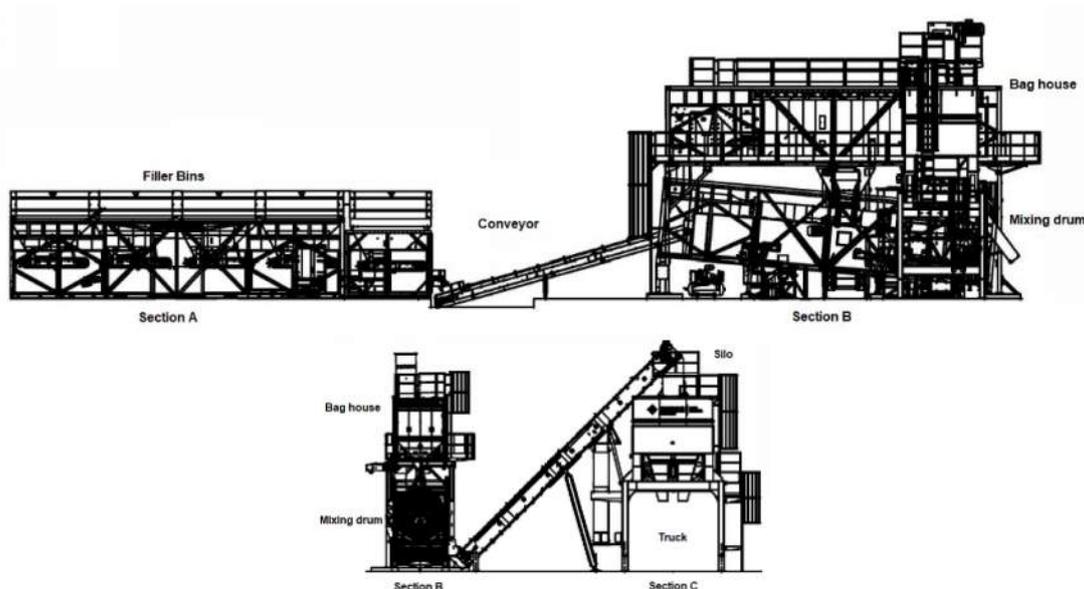
5.11 The application site is located outside of the Richmond Airshed.

*The Plant Layout / Process*

5.12 The Applicants seek to construct and operate a MARINI Latin America Carbon T-Box 130 “relocatable” modular Asphalt Plant, which is defined as a “Plug & Play” system where components can be added.

5.13 The Asphalt Plant components are described in Part 1 above, and shown in **Appendices 1, 2 and 7.**

5.14 In relation to the process, the Applicant seeks to use the existing aggregate stockpiles within the Downer’ operation. As required for processing different grades of asphalt, materials will be delivered to the Filler Bins (section A) adjacent to the stop bank by way of loader. The Filler Bins have four compartments for different type and grade of aggregate, depending on the type of asphalt required.



*Figure 8 - conceptual layout of module plant*

5.15 When required, the operator will draw down materials onto a conveyor belt which will drag the materials up into a mixing drum (the lower module of section B). The Mixing Drum rotates to mix and dry the aggregate prior to the bitumen being added and mixed. The air discharge from the Mixing Drum is filtered through the upper module of section B, known as the Bag House. The Bag House is a large filter unit designed to retain fines that are blown off the aggregate as it goes through the mixing and drying process.

5.16 Once mixed together to create asphalt, the processed material loaded onto a conveyor to be loaded out into the Silo (section C) for dispensing into the asphalt trucks for taking out to the project site.

- 5.17 The Applicants propose to have two trailer tanks of bitumen, which will be brought to the site and connected to the Mixing Drum. The trailers will be connected to the internal electricity supply, in order to keep the temperature up and the bitumen in viscous form.
- 5.18 A diesel tank will also be located to the side of the Mixing Drum, which will power the Mixing Drum. It is proposed to have up to 5,000 litres stored on site within a self-contained boxed unit. Bollards will be located around the diesel tank.
- 5.19 The MARINI Latin America Carbon T-Box 130 Asphalt Plant is designed to process at a rate of 130 ton per hour. Due to limitation of the loading of the trucks (the capacity of which is 10 tonnes per truck, and loaded every 15 minutes), it is expected that the maximum output will be around 45-50 ton per hour, however the Applicant has assessed the maximum capacity rating of the Asphalt Plant.
- 5.20 In accordance with air discharge requirements, the limitation of processing is based on hours of operation, rather than output levels. The Applicant proposes to limit the operation of the Asphalt Plant to 10 hours per 24 hours at full production rate. This production rate is within the permitted standards for air emissions.
- 5.21 It is expected that most of the aggregate used in the asphalt process will be locally sourced, however for some projects, additional material may be required. Such as some crusher dust from the Lee Valley, or a super hard chip which is sourced from the North Island.

#### *The Plant*

- 5.22 The MARINI Latin America Carbon T-Box 130 Asphalt Plant comes in yellow and black modular parts. The modules are 40-foot containers, being ~2.5m wide x 12.2m length and 2.9m high.



*Figure 9 – Plant colours, although the Silo will differ to this depiction.*

- 5.23 Module A is the Filler Bin and it is to be located adjacent to the stop bank, and the stop bank is to be widened to the edge of the bins to enable loading of the bins. Adjacent to the Filler Bin is the Control Office, Module E.
- 5.24 Module B is a double unit. The lower unit is the Mixing Drum. This will be lowered 0.5m below surrounding ground level. The Mixing Drum is slightly angled to aid in the mixing and drying process. The Mixing Drum is the noisy part of the plant, and lowering this so that it below the stop bank will aid in buffering noise levels. Above the Mixing Drum is the Bag House which filters the emissions from the mixing and drying process. The Bag House will be positioned above the stop bank. The stack height will be at least 2m above the Bag House.
- 5.25 Module C is the Silo, which will load the asphalt trucks. The silo is just over 10m in height. This module requires foundations for the pillars of the silo. As it is unknown the final design of foundation at this stage, it is proposed to seek building up to 11m.
- 5.26 Module D will be the bitumen trailers, that will be parked on site, and Module F is the proposed diesel storage tank, around which bollards will be located.
- 5.27 The Applicant is seeking to operate the plant at dawn and up to 18 nights over the year. As such, external lighting will be required. The lighting shall be low key and directed to operational parts of the plant, away from any housing.

*Hours of operation*

- 5.28 The Applicant seeks to operate the Asphalt Batching Plant during Daytime Hours, as defined by the TRMP on-site weekdays 6.30am – 5pm Monday to Friday during winter and 6.30am – 1pm weekends.
- 5.29 However, some sealing projects, such as runways or roundabouts or State highway upgrades, are undertaken throughout the night. The Applicants have ~~included in the application the ability to operate and cater for this type of an event. The Applicants seek to amended the application, removing the request to operate up to 18 nights per year, rather to enable transportation of staff and materials to the hours of 6.30am and 10pm. (being 5%). Evening operations will occur from 5pm until 4am.~~
- 5.30 The Air Discharge Assessment in **Appendix 4**, considered the levels of emissions of the plant operating at full capacity. Based on the potential discharge rate, it is recommended to limit the hours that the Asphalt Plant operates. The Applicant therefore volunteers to limited the operation of the Asphalt Plant to 10 hours per 24-hour period. These hours will occur within the operation periods identified above.

*Level of operation*

- 5.31 The MARINI Latin America Carbon T-Box 130 Asphalt Plant has the capacity of producing up to 130 tons of asphalt per hour. It is noted that the air discharge report has been based on this for the assessment.

- 5.32 The Applicant is not intending to operate at this level, however seeks consent to operate at full capacity.
- 5.33 At present, the Applicant will be limited by the turn-around time of asphalt trucks loading, as they do not have a large asphalt fleet. The Applicant has advised that the turn-around of their fleet is a truck every 15 minutes. The trucks have a 10 tonne capacity, which means a production level of 45-50 tons per hour, substantially less than the operational capacity of the unit.
- 5.34 The TIA in **Appendix 3** has assessed the impacts on the roading network based on the lower traffic volume. Should the Applicant wish to increase production rate above 50 tons per hour, ie averaging around 4 asphalt trucks per hour, they volunteer to review the Traffic Management Plan.

#### Noise

- 5.35 The Applicant has obtained an Acoustic Assessment by Bladon Bronka Acoustics Ltd (BBA), which is attached in **Appendix 3**. The assessment has been undertaken in accordance with NZS 6802:2008 and noise levels have been predicted at the notional boundaries of the nearest dwellings.
- 5.36 BBA have concluded that a 5dBA penalty for special audible characteristics under NZS 6802:2008 is not applicable as the noise is subjectively steady-state, and not impulsive.
- 5.37 The main noise source of the Asphalt Plant is within the lower level of Section B, being the Mixing Drum. The mixing drum module is to be positioned below the level of the stop bank.
- 5.38 The assessment noted that at the notional boundaries of the nearest dwellings, normal daytime operations will comply with the permitted standards. However, the operation would breach night noise standards to the south and east of the application site at two dwellings, being 239 Bartlett Road and 202 Eden Road as circled below.



Figure 10 – dwelling locations, those affected at Night unless mitigation undertaken are circled

- 5.39 As the Applicant seeks to commence operation prior to 7am, and operate in weekends in TRMP day time hours, however seek to transport asphalt until 10pm. -and up to 18 nights, Consideration must be had to night noise levels. It was recommended that an acoustic barrier would be required in order to meet with the permitted night noise levels.

- 5.40 The Applicant has therefore included in the application, a proposed acoustic barrier, which is to consist of a 1m high bund and a 2m solid acoustic wall. The position of the barrier is on the boundary. Any acoustic barrier should have a minimum superficial mass of 10kg/m<sup>2</sup> (e.g. 20mm thickness timber) and there should be no gaps or holes.
- 5.41 It is noted that the stop bank will provide a similar feature to the west of the site.
- 5.42 BBA conclude that the implementation of this acoustic barrier will control noise to a reasonable level as required by Section 16 of the RMA.

#### *Access/Traffic*

- 5.43 The application site is located at the end of Bartlett Road. The road at this point crosses over the stop bank and into the berm land of Waimea River Park. This area is gated as part of Downers lease area.
- 5.44 There is an existing access and locked gate into the crusher site. This is to be closed off by the construction of the acoustic barrier and boundary fence. Access to the application site will therefore be through the end of the road.
- 5.45 The flow of vehicles through the site will be one way as shown on the Site Plan in **Appendix 1** flowing south to north, and then circling around through the Downer lease.
- 5.46 Wheeled loaders will collect materials from the Downer stockpiles and will fill the Filler Bins using the stop bank which is approximately 3m high. The asphalt trucks and staff will enter the southern portion of the site, over the stop bank. Both will exit to the north and circle back around to exit the site onto Bartlett road. Details of the traffic flow area shown on the Site Plan in **Appendix 1**.
- 5.47 The Applicant volunteers traffic within the Waimea River Park Reserve will operate as if the main entrance into the Reserve is a continuation of Bartlett Road in relation to road rules for giving way, turning and speed restrictions. Applicant's traffic within the Waimea River Park Reserve will operate as if the main entrance into the Reserve is a continuation of Bartlett Road in relation to road rules for giving way, turning and speed restrictions
- 5.48 The Applicant has obtained a Transportation Impact Report from Traffic Concepts Ltd, attached in **Appendix 4**. This has addressed off site traffic movements.
- 5.49 Based on an average of 4 asphalt truck collections per hour, it is considered that the number of movements per day will be up to 40 trucks collections per day. It is noted that the plant is able to produce up to 130 ton per hour. Should the production rate increase above 50 ton per hour, a revision of the Transportation Impact Report will be required.

5.50 Due to the type of work that asphalt is required, the trip distribution is mostly towards the regional centres, however there will be projects requiring asphalt to be delivered both south and west towards Golden Bay.

5.51 Traffic Concepts Ltd and the Applicant met with NZTA while considering application sites, to consider the impacts of traffic on various locations and intersections. Of the various options, NZTA were only concerned with connection onto the State Highway Network.

5.52 The TIA, in consultation with NZTA, has identified a traffic flow path to minimise the impact of truck movements on intersections. NZTA noted that the intersection at Bartlett Road / SH 60 had no traffic turning lanes, and as such, could only be used for external traffic to the west. Details of the proposed traffic routes are in **Appendix 4** and shown below.

	In (Empty)	Out (Full)
Western (Motueka and Golden Bay)	Pugh Rd - R turn onto Ranzau West Rd - L turn onto Bartlett Rd	Bartlett Rd - L turn onto SH 60
Northern (Richmond and Nelson)	Pugh Rd - R turn onto Ranzau West Rd - L turn onto Bartlett Rd	Bartlett Rd - R turn onto Ranzau West Rd - Ranzau Rd – L turn onto SH 6
Southern (Wakefield and Murchison)	L turn from SH 6 - Ranzau Rd - Ranzau West Rd - L turn onto Bartlett Rd	Bartlett Rd - R turn onto Ranzau West Rd - Ranzau Rd – R turn onto SH 6

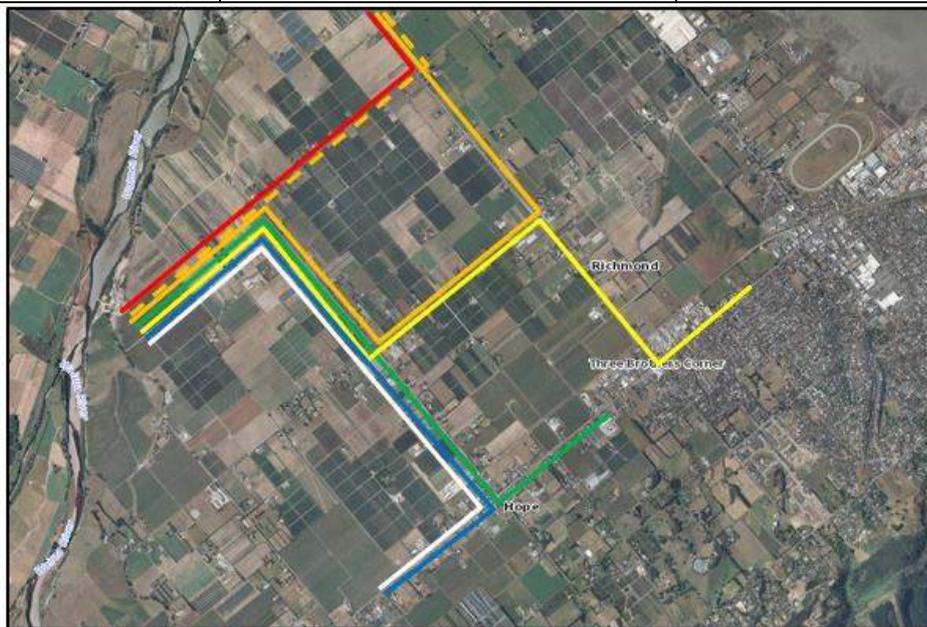


Figure 11 – Transportation routes

5.53 The Applicant, has in consultation with NZTA, noted that the Traffic Management Plan is to identify possible conflict points and identify possible mitigation. Such mitigation includes not using the transport route past Ranzau School during the School drop off and pick up hour periods of 8.30am – 9.15am and 2.45pm-3.30pm. If Asphalt is required to be delivered during these times, then the alternative route of Pugh Road shall be used.

- 5.54 The intersection at Pugh Road / SH 60 is a controlled intersection with turning bays into Pugh Road from both west and east, which enables this to be used for entry points. It however has a limited merging lane to the east, so is not the preferred exit.
- 5.55 The intersection at Ranzau Road / SH 6 is a controlled intersection with a turning bay into Ranzau Road from the north. Although there are no merging bays, this is considered the better intersection to exit onto the highway due to the reduced speed limit.

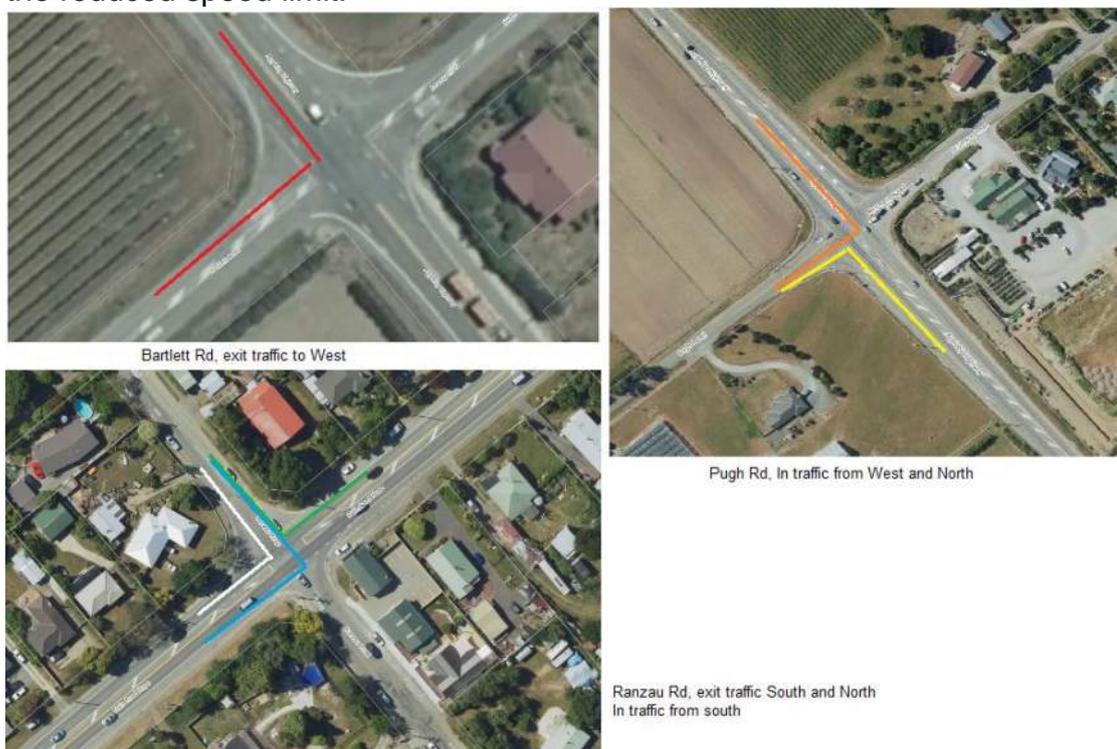


Figure 12 – Intersection routes as per Appendix 4

*Services*

- 5.56 The Applicant will use Downer’s existing ablution facilities, so no additional site office is required. The main office for the site will remain at the Applicants main depot.
- 5.57 The application site has an existing connection to electricity. This is to be used by the Applicant for the operation of the plant and to maintain the static temperature of the bitumen trailers.
- 5.58 There is an existing water connection within the Downer lease area to the side of the exit traffic lane, which will be used if required, and is available for firefighting purposes.

*NES on Contaminants in Soil*

- 5.59 The application site is not known to have been a HAIL site, and it is considered highly unlikely that the site is subject to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health.



- 5.60 The proposal will result in the transportation, storage and use of bitumen and diesel, and the creation of asphalt, all hazardous substances.
- 5.61 Diesel fuel will be standard automotive fuel grade, which currently has a maximum sulphur content of 0.001% by weight. The Diesel storage tanks are double skinned and equipped with internal monitoring to ensure leaks do not occur. Facilities are also designed to ensure that if spills occur, they will be contained to prevent contamination of land and water.
- 5.62 Bitumen is a solid to semi-solid residue resulting from the distillation of heavy crude oils. Bitumen consists of a complex mixture of high boiling point paraffinic, aromatic hydrocarbons, and heterocyclic compounds containing sulphur, nitrogen, and oxygen. Bitumen is stored hot (135°C to 165°C) using electric heating via thermal oil heat exchangers to keep contents sufficiently fluid to pump to the hot mix drum and inject into the aggregate mix. The Bitumen trailer temperature is controlled by thermostat set in fail-safe mode. The storage trailers are fitted with a short breather vent to permit pressure equalisation.
- 5.63 Both substances will be in double skinned tanks that comply with the HSNO regulations.
- 5.64 An Emergency and Spill Contingency Plan will be provided for the site, which will include a register of the types and quantities of hazardous substances used or stored on the site and include safety data sheets. Signage will also be installed.
- 5.65 It is noted that if either bitumen or asphalt is accidentally spilled on site, it is able to be scrapped up and re-used in the process.

#### *Air Discharges*

- 5.66 The Applicant has obtained a report on the air discharges by Pattle Delamore Partners Ltd, attached in **Appendix 5**.
- 5.67 The MARINI Latin America Carbon T-Box 130 system is designed for a production rate of up to 130 ton per hour. The Mixing Drum has a maximum rate of heat release with a required thermal capacity of about 13 MW gross.
- 5.68 Under normal operation, discharges from the hot mix plant consist of:
- A noticeable white steam plume, which dissipates as the steam evaporates;
  - Products of combustion, including carbon dioxide, CO, oxides of nitrogen and SO<sub>2</sub>;
  - Particulate matter (as PM<sub>10</sub> and PM<sub>2.5</sub>);
  - Limited dust from process fugitive emissions, truck and machinery movements during dry weather, and from receipt and handling of aggregate; and,
  - Minimal dust from storage of aggregates.
- 5.69 Pattle Delamore Partners Ltd conclude that the discharges from the proposed Asphalt Plant will be less than minor effect on the surrounding human health

and environment as the highest predicted concentrations of all contaminants have been modelled modelling based on the maximum production rate over a 10-hour operating period, to be well below the ambient air standards and guideline.

- 5.70 In their assessment they referred to the height of the stack at being 7.8m, which is the height of the Bag House. The proposal to have the stack height at least 2m above the Bag House will increase and improve the dispersion of the discharge.

#### *Natural hazards*

- 5.71 The Applicant seeks to undertake earthworks to reinstate the stop bank by a slight realignment of the stop bank to remove a right-angle bend. This will remove a weak point along the stop bank. It is also proposed to ensure that the stop bank height is maintained along its length.
- 5.72 The proposed earthworks include widening the stop bank width to 4m along its top, to enable access along the stop bank not only for the loader to fill the Filler Bins, but also for Council to monitor flood events.
- 5.73 The Asphalt Plant has been located outside of the berm area to avoid any buildings or hazardous substances in the flood channel.
- 5.74 As the system is modular, should an extreme event occur which is predicted to overtop the stop bank, the Applicant is able remove the bitumen and diesel tanks from the site.

#### *Earthworks*

- 5.75 The Applicant seeks to undertake earthworks to reinstate the stop bank by a slight realignment to remove a right-angle bend. It is also proposed to ensure that the stop bank height is maintained along its length.
- 5.76 The stop bank will be at least 3m high and 4m wide along its top. The gradient of the stop bank will be 1V:3H on the berm side, and 1V:2H internally to the Asphalt Plant.
- 5.77 As the Applicant seeks to utilise the stop bank for loading the Filler Bins, the Site Plan in **Appendix 1** shows an apron to the stop bank by the bins to enable this to occur.
- 5.78 The proposed works to maintain the stop bank will not cause the diversion of Waimea River, as it is a re-alignment of the existing stop bank to remove two right angle bends which provide weak points during flood events, and which have been damaged over the years. The proposal therefore seeks to strengthen the existing stop bank.
- 5.79 Along the balance of the application site, the Applicant seeks to level and compact the site for the modules to be positioned, and to form a 1V:1H, 1m high bund on which an acoustic fence is to be located.



5.80 The earthworks are setback around 130m from the wetted area of Waimea River. Earthworks will not be undertaken while the river is in flood.

5.81 The Applicant's contractor will provide a Dust, Erosion and Sediment Control Plan prior to undertaking the earthworks.

*Visual effect*

5.82 The MARINI Latin America Carbon T-Box 130 comes in yellow and black module parts. The modules are to be tucked behind the stop bank to reduce visual dominance on the site. This, along with the acoustic barrier, will screen most of the plant from public places. The Bag House and Silo will be visible above both the stop bank and acoustic wall.

5.83 The site is set back from residential units, and is in a landscape with other large rural buildings, such as packing sheds. The proposal will therefore not be out of keeping with the rural environment.

5.84 The stack height will protrude at least 2m above the Bag House and will emit a noticeable white steam plume, which dissipates as the steam evaporates.

5.85 As the Applicant is seeking to operate at dawn and up to 18 nights, external lighting will be required. Lighting is to be kept to a minimum and lights directed internally, away from any housing.

*Stormwater management effect*

5.86 The application site is rural, and has no formal stormwater system on site. Currently any runoff from buildings or the site is via direct infiltration through the compacted river gravels, and this is intended to be retained as the most suitable means to stormwater disposal.

5.87 The Applicant seeks to have the least impact on the application site, and proposes to level and compact the existing gravels for the construction / placement of the Asphalt Plant. As the system is modular it is not necessary to create concrete pad foundations for the placement of the modules, except of the Silo which will have foundations at its corners.

5.88 It is proposed that the access routes though the site remain in compacted gravels, again to have the least impact on the site. Runoff off from these traffic routes and parking areas will therefore be direct to ground through the gravels.

5.89 It is also proposed that runoff from the modules will be direct to ground, subject to Building Act requirements.

5.90 It is noted that around the perimeter of the site but the road, the acoustic barrier will prevent any runoff from the road onto the site, and vice versa from the application site onto the road. Similarly, the stop bank will prevent runoff of stormwater direct to Waimea River.

*Neighbourhood effect*

5.91 The proposed site is surrounded principally by agricultural land uses, with a few residences which could be considered 'sensitive receptors' in relation to noise and air emissions. Figure 10 above shows the separation of the application site from these dwellings.

*Consultation*

5.92 The Applicant had a pre-application meeting with the Council. At this meeting, a number of alternative location sites were discussed and discounted either due to the Richmond Airshed or existing traffic effects on the roading network.

5.93 Council noted the WRPMP and TRMP controls in relation to berm land. This changed the final location of the Asphalt Plant to the outside of the stop bank, off the berm land.

5.94 Discussions were also had about leases, advising that the current leases' were in the process of being reviewed and renewed where appropriate.

5.95 A pre-application meeting was held with NZTA staff as the issue of transport to the site is a matter of concern to NZTA given their existing intersections and proposed upgrade works.

5.96 It was noted in the meeting that there are some existing truck movements that will be removed from the adjacent road network as a result of some of the aggregate transportation movements ceasing, as the materials would be used by the Asphalt Plant.

5.97 NZTA identified that the intersection of Bartlett Road and SH60 was undesirable as being the main access point due to it being a crossroad with poor geometry and insufficient width to safely accommodate all truck movements.

5.98 The outcome of the discussions with NZTA were included in the TIA in **Appendix 4.**

5.99 Consultation has been undertaken with Downer, in regards to using part of their leased area as well as their aggregate. The Applicant has the support of Downer to seek consent.

5.100 Downer have acknowledged that the Tasman Road Alliance would benefit from this partnership, and an additional Asphalt batching plant being available within the Nelson Tasman District.

*Financial Contribution on Building Development*

3.64 As discussed in Part 3 above, it is considered that the proposal does not register a development contribution.

*Duration of consent*

3.65 To line up with the Waimea River Park Management Plan, the Applicant volunteers that the Asphalt Batching Plant shall only operate whilst there is

extraction and crushing operating within the Waimea River Park Reserve, or for a period of 20 years, whichever is the lessor.

3.653.66 In terms of remediation of the site, the Applicant volunteers that once all extraction and crushing operations cease within the Waimea River Park Reserve, the Applicant shall vacate and remediate the Asphalt Batching Plant site within 6 months

#### *Volunteered Conditions*

5.101 The Applicant volunteers the following mitigation measures:

5.102 Volunteered Conditions Land Use (District)

#### Construction

- 1 The Applicant shall realign the stop bank and level and compact the Plant area prior to construction.
- 2 The Applicant shall erect the MARINI Latin America Carbon T-Box 130, in accordance with manufactures specifications and Building Act requirements.
- 3 Lighting is to be kept to a minimum and lights directed internally, away from any housing.
- 4 The height of the Stack on the Bag House and the Silo shall not exceed 11 metres above surrounding levelled ground level.
- 5 The stack shall be at least 2 metres in height above the roof of the Bag House.

#### Operation

- 6 The MARINI Latin America Carbon T-Box 130 shall operate at a maximum rate of 130 tons per hour.
- 7 The MARINI Latin America Carbon T-Box 130 shall operate to a maximum of 10 hours per 24 hours.
- 8 The Applicant shall operate the MARINI Latin America Carbon T-Box 130 Asphalt Plant during the TRMP daytime hours weekdays from 6.30am – 5pm and weekends from 6.30am – 1pm.
- 9 The Applicant shall transport asphalt between the hours of 6.30am and 10pm, operate up to 5% of nights (18) per year from 5pm until 4am

#### Consent Duration and Lapsing

- The Asphalt Batching Plant shall only operate whilst there is extraction and crushing operating within the Waimea River Park Reserve, or for a period of 20 years, whichever is the lessor.
- Once all extraction and crushing operations cease within the Waimea River Park Reserve, the Applicant shall vacate and remediate the Asphalt Batching Plant site within 6 months.

#### Acoustic Barrier

- 10 The Applicant shall construct a 3m high acoustic barrier prior to operation of the T-Box 130, i the location as shown on the Site Plan included in the Application.

## Traffic Management Plan

- ~~11 The Applicant shall provide a Traffic Management Plan prior to commissioning the Asphalt Plant.~~
- ~~12 The Applicant shall operate and induct all staff under a Traffic Management Plan, in relation to travelling to and from the application site, and traffic flows through the site.~~
- ~~13 Internal access is to be a one-way system as per the Site Plan included in the Application.~~
- ~~14 Should traffic volumes increase greater than average of 4 asphalt delivery trucks per hour, a review of the Traffic Management Plan shall be undertaken, and provided to Council.~~

*[the above conditions are amended following consultation with Waka Kotahi NZTA]*

### Traffic Management Plan

A Prior the commissioning of the asphalt plant, the Consent Holder shall prepare a Traffic Management Plan to operate and induct all staff under. The Traffic Management Plan shall:

- a) Detail the routes as per the Traffic Concepts Ltd report to be used to access the site.

Advice note: As consulted with Waka Kotahi NZ Transport Agency, consideration should be given to reducing the use of the Bartlett Road/State Highway 60 intersection and utilising alternative routes (preferred by Waka Kotahi NZ Transport Agency at the time of issuing this consent) through the Pugh Road/State Highway 60 and Ranzau Road/State Highway 6 intersections where it is practical and appropriate to do so;

- b) Identify for each transport route, where any potential conflicts with any other road users may be, and the appropriate response;

- For instance the Applicant will not use the transport route past Ranzau School during the School drop off and pick up hour periods of 8.30am – 9.15am and 2.45pm-3.30pm. If Asphalt is required to be delivered during these times, then the alternative route of Pugh Road shall be used.

- c) Address internal traffic flows within both the Waimea River Park Reserve and the application site and detail the one-way traffic flow system to the implemented onsite;

- d) Be reviewed and provided to Council for certification and provided to Waka Kotahi NZ Transport Agency for information annually (no later than XXX each year); and,

- e) Be reviewed at any stage when traffic volumes increase to more than 4 asphalt trucks per hour (averaged weekly), provided to Council for certification, and provided to Waka Kotahi NZ Transport Agency for information.

### Traffic Generation

B The activity shall generate a maximum of 80 truck movements per day once averaged.

Advise note: This equates to 40 truck collections per day, where one truck entering and exiting the site is counted as two movements. There may be more than 40 movements per day on occasion, as long as the weekly average does not exceed 40 per day.

C The consent holder shall maintain a record of truck movements to and from and site and submit annually (no later than XXX each year) to Council and provided to Waka Kotahi NZ Transport Agency for information.

#### Flood Hazard

- ~~45~~11 The Applicant shall not block the stop bank, and shall ensure that it is available at all time for flood monitoring.
- ~~46~~12 Should an extreme flood event be predicted where it was expected that the flood waters would overtop the stop bank, the Applicant will remove the bitumen and diesel tanks from the site.

#### 5.103 Volunteered Conditions Land Use (Regional)

##### Earthworks

- 1 The Applicant's contractor will provide a Dust, Erosion and Sediment Control Plan prior to undertaking the earthworks.
- 2 The Applicant shall realign and regrade the stop bank level with the high point of the road and the connecting stop bank, ensuring a 4m wide top to the stop bank.
- 3 Earthworks to upgrade the stop bank will not occur during the fish spawning period of 1 April to 31 July.
- 4 Earthworks are to be undertaken during a forecasted dry period.
- 5 Earthworks are to be undertaken as quickly as possible to avoid a breach in the stop bank.
- 6 Levelling and compacting of the Plant Site is not to impact the functionality of the stop bank.

##### Hazardous substances

- 7 No more than 5,000 litres of diesel shall be stored in a self-bunded tank that is fit for purpose.
- 8 Bollards shall be positioned around the perimeter of the diesel tank.
- 9 50,000 litres of Bitumen shall be stored self-bunded transportation trailers.
- 10 If a surface spillage occurs on a site, the following steps shall be undertaken without delay:
  - (a) stop the release at source;
  - (b) contain the release where possible;
  - (c) respond to any emergencies;
  - (d) report the release to the appropriate authorities and to the owner;
  - (e) assess the degree of contamination; and
  - (f) develop a corrective action plan in conjunction with the appropriate authority and clean up the released product.

**Advice Note:**

Some of these management responses can be taken concurrently.

- 11 Prior to the diesel tank being filled, the Consent Holder shall prepare an Emergency and Spill Contingency Plan for the site. The Plan shall include the following as a minimum:
  - (a) the name, job title and 24-hour telephone number for the person(s) responsible for activating the spill contingency plan;

- (b) a description of the facility including the location, size and storage capacity. The description should include a map and/or diagrams;
  - (c) a site map of the location. This map is intended to illustrate the facility's relationship to other areas that may be affected by a spill. The map should be to scale and be large enough to include the location of your facility, nearby buildings or facilities, roads, culverts, catch basins, drainage patterns and any nearby bodies of water which could be impacted by a spill or topographic features which would affect access and response;
  - (d) the steps to be taken to report, contain, clean up and dispose of contaminants in the case of a spill;
  - (e) the means by which the spill contingency plan is activated;
  - (f) a description of the training provided to employees to respond to a spill;
  - (g) an inventory of and the location of response and clean up equipment available to implement the spill contingency plan;
  - (h) the date the contingency plan was prepared;
  - (i) a listing of local contractors or clean-up specialists;
  - (j) a listing of emergency numbers such as fire, ambulance and police; and
  - (k) Material Safety Data Sheets (MSDS) for the product.
- 12 A spill kit shall be provided on-site in areas where hazardous substances are stored. These kits shall be visible, appropriately labelled and readily accessible by all staff. These kits shall contain absorbent materials, clean-up materials and personal protective equipment.
- 13 The tanks and all associated equipment on-site shall be regularly checked to ensure their integrity.
- 14 Any spillage of hazardous substances on-site shall be dealt with in a manner that minimises risk to human health and the environment. In the event of a spill, the Consent Holder shall take all practicable measures to minimise contaminants' entry to water.
- 15 The Consent Holder shall keep an accurate written record of all accidents or incidents involving the spillage of hazardous substances and shall supply these to the Council's Team Leader Monitoring & Enforcement on request. Any spillage of hazardous substances where the substance is not collected and removed from site shall be reported immediately (within 24 hours) to the Council's Team Leader Monitoring & Enforcement.
- 16 All waste material containing hazardous substances (including any material associated with spill containment and remediation) shall be removed from the site on a regular basis and disposed of at a facility authorised to receive such material.
- 17 Any accidental spill of bitumen or asphalt will cool and solidify, and is able to be scrapped up and discharged to an appropriate facility or re-used within the process.

## 5.104 Volunteered Conditions Discharges

### Stormwater Discharge

- 1 The discharge and diversion of stormwater shall not cause or contribute to erosion, or cause or contribute to any damage caused by flooding.
- 2 The stormwater discharge shall not cause in any receiving waters:
  - (a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
  - (b) any conspicuous change in the colour or visual clarity;
  - (c) any emission of objectionable odour; and
  - (d) any significant adverse effects on aquatic life.
- 3 The maximum levels of contaminants in any stormwater discharge shall not exceed:
  - (a) Total petroleum hydrocarbons 15 g/m<sup>3</sup>; and
  - (b) Total suspended solids 100 g/m<sup>3</sup>.

### Discharge to air

- 1 The Applicant shall ensure that the Mixing Drum burner has reached optimal temperature prior to inputting aggregates.
- 2 The MARINI Latin America Carbon T-Box 130 shall operate to a maximum of 10 hours per 24 hours.
- 3 The chimney stack shall be at least 2 metres above the roof of the Bag House.

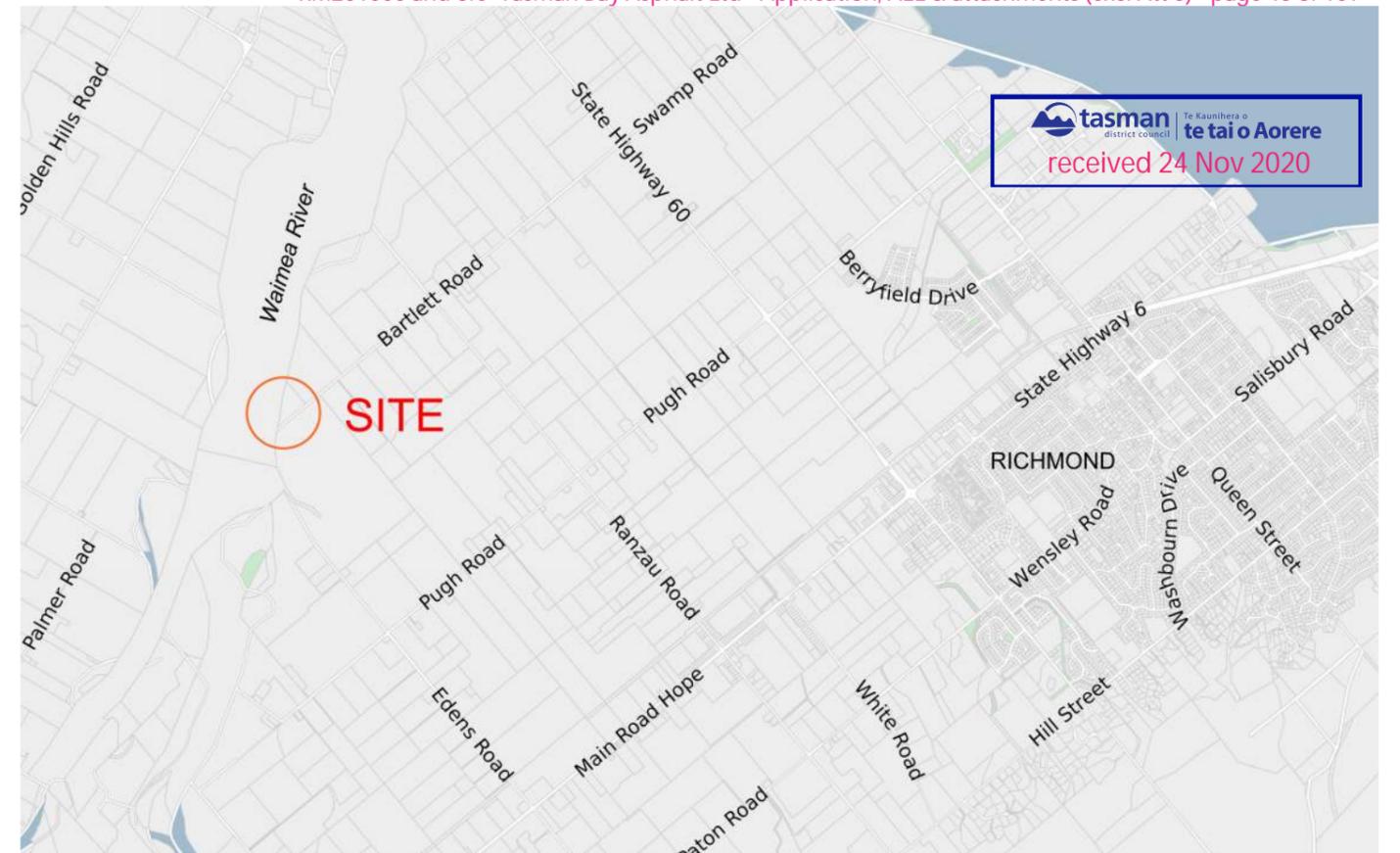
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## 6.0 Conclusion

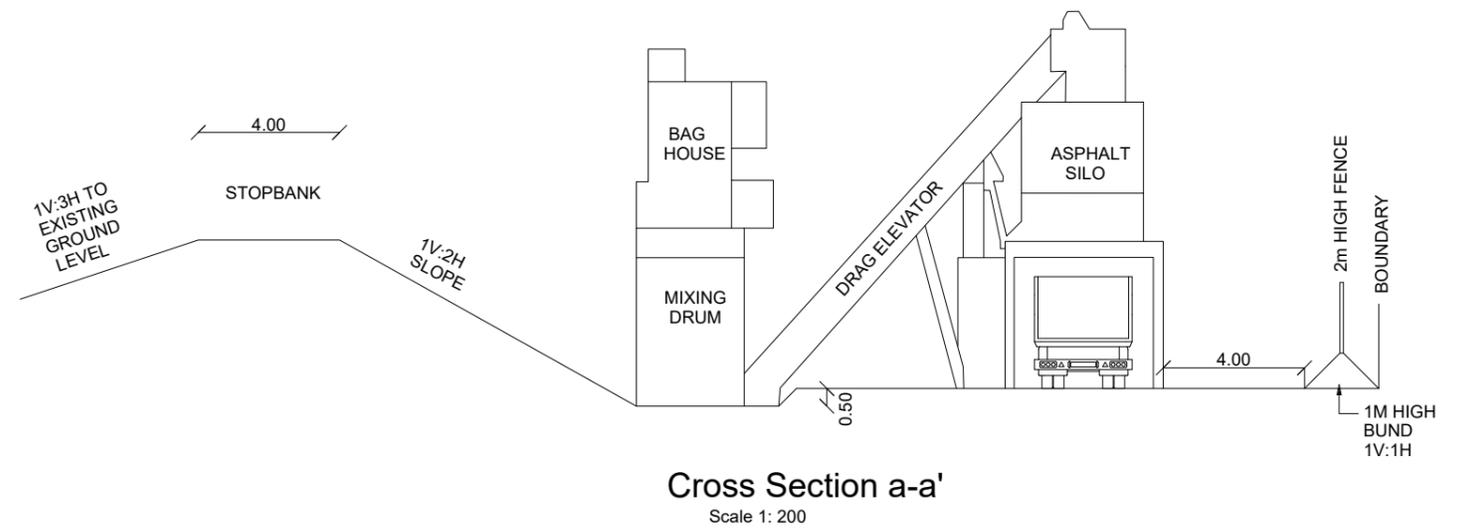
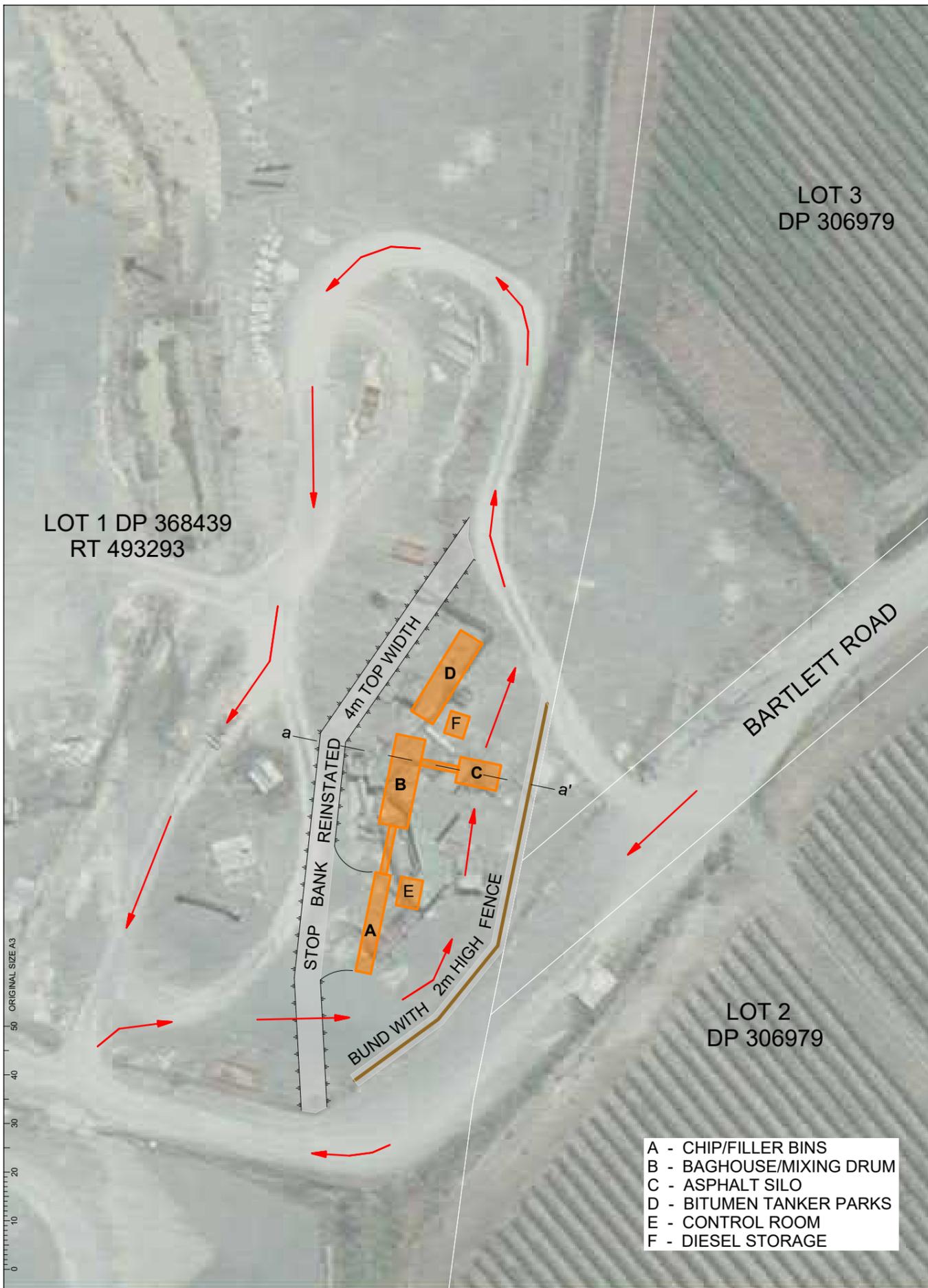
---

- 6.1 A full assessment has been undertaken of the Objective and Policy Framework under the TRMP. It is considered the proposed subdivision and associated land use will meet the Objectives and Policies contained in Chapters 5, 7, 8, 11, 13, 14, 27, 33 and 34.
- 6.2 A full assessment of the potential range of effects that could arise from the Asphalt Plant and associated works has been undertaken, and it is the conclusion of the Applicant that there will be no more than minor effects subject to the proffered conditions.
- 6.3 It is the Applicant's conclusion that the subject proposal represents a sustainable management of land and physical resources at this location, by enabling the construction and operation of an Asphalt Plant, with storage and use of hazardous substances, and associated discharges. The proposal also includes earthworks to realign and maintain an existing stop bank.
- 6.4 Accordingly, the Applicant considers that a grant of consent for land use consent for the Asphalt Plant, with storage and use of hazardous substances and earthworks, and discharge to air and land will promote the Purpose, and the relevant Principles, of the Resource Management Act.

tasman Te Kaitiaki o te tai o Aorere  
received 24 Nov 2020



Location Diagram



Cross Section a-a'  
Scale 1: 200

<p>81 Selwyn Place, Nelson 248 Montreal St, Christchurch Ph: 0800 807 818 www.staigsmith.co.nz enquiries@staigsmith.co.nz</p>	AMENDMENT	DATE	JOB/CLIENT Tasman Bay Asphalt Bartlett Road Hope	DRAWING Proposed Asphalt Plant Site Plan		Survey: SA Drawn: SA Checked: DC Approved: DC	ISSUE 2 DATE 24 Sep 2020	PROJECT NO. 12410 SCALE: A3 A1 Hz 1:750 - Vt - -	SHEET 1 OF 1
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**CARBON  
T-BOX 130**

## Proposal N°: 3101/20

Date: 03/Mar/2020



tasman Te Kaunihera o  
district council te tai o Aorere  
received 24 Nov 2020

Dear General manager

I am glad to send you the quote for supplying the following equipment:

### ***Asphalt Plant, CARBON T-BOX 130 with production capacity up to 130 ton/h***



I am at your disposal for any further information you may require and I take this opportunity to send you my best regards

Norman Melgar

Export Sales Manager

Phone: +55 51.98151.6249

Email: [norman.melgar@bomag.com](mailto:norman.melgar@bomag.com)

<http://www.marinilatinamerica.com.br/en/>



# CARBON T-BOX 130

## Specifications Summary Asphalt Plant CARBON T-BOX 130

### Capacity

Production capacity	t/h	Up to 130
---------------------	-----	-----------

### Chassis

Mobility		3 containers ISO
Dimensions	L x W x H (m)	3 x 40'HC
Weight	tons	45

### Cold feeder

Bins		4
Vibrator		1
Weighing system		Individual loading cell
Loading Width	(m)	3,05
Volume		4 x 10m <sup>3</sup>

### Dryer

System		Counter flow
Dimensions		Length 8,5m x Diameter 1,8 / 2,1 m
RAP		Ring - up to 30 %
Volume		Rock wool and stainless steel

### Burner

Model		CF-04 Dual
Power		11.180.000 Kcal
Compatible Fuels		Diesel, HFO and gas* (Natural and LPG)
Security		Video camera and flame sensor

### Mixer

Type		Rotational External
Differential		Long mixing time (dry + wet). Recommended for working with RAP and special mixtures

### Bag house

Filtering area	m <sup>2</sup>	371
Bags	u	84
Type		Polyester
Maximum temperature	° C	150
Emission	mg/Nm <sup>3</sup>	<20
Efficiency		≥ 99.99%

### Control cabin

Position		Fixed to the chassis
Air conditioning		9.000 BTU
Operation		Automatic and manual

### Unloading and storage system

Silo		1m <sup>3</sup> at the end of elevator
------	--	--



## Project scope

A new concept in asphalt plants with continuous production. The CARBON T-BOX model brings a series of technical differentials and facilities in all subsystems, bringing the Easy concept with it, and together they produce a high-quality asphalt mixture with a production up to 130 tons per hour.

The most visible differentiation is the concept of modularization, in container, called T-BOX (Transportable Box). Designed with the modules set in an ISO 40 'HC standard container, with the aim of reducing transportation costs and bureaucracies, facilitating field assembly and also dismantling when there is a need for transfer between works, in addition to all components being transported in the container, without generating of extra charges.

The project contemplates the concept of easy installation and Plug & Play system in the interconnection between modules, known as Easy Start system. It is characterized by the ease of assembly through the fully screwed gantry and with interconnections of sockets between modules, besides needing a smaller area for assembly and to facilitate facility in the coupling of the basic machine with the optional ones, in cases where the specific paving project needs, such as filler dosing, fines and fiber and modules for use of milled asphalt material (RAP). The modularization facilitates the layout changes of additional tanks and silos, making it possible, on the customer site, to separate the material loading regions (virgin aggregates and RAP) and the tank region well. In order to further facilitate the startup, the machine has support shoes as optional, which can be used to eliminate the need for the construction of base plants, requiring only soil compaction and leveling. These shoes have a transport location inside the container.

The basic machine is divided into three containers: the first is the metering module, the second is the drying and mixing module, and the third module is totally dedicated to filtration, aiming in each of them for ease of maintenance and installation, through the Easy Service system.

## Nominal production conditions

- Production: 80 ~ 130 t/h;
- Sea Level
- Soil Preparation: Compacted and leveled a 300 kN/m<sup>2</sup>
  
- Fuel calorific value 10.200 kcal / kg (diesel similar)
- Aggregates Temperature: 20° C
- Ambient temperature above 15°C;
- Asphalt mixing temperature greater than or equal to 150°C
  
- Weighted average of aggregate moisture 3%;
- Density of aggregates 1,60 t/m<sup>3</sup> (bulk)
- Filler density equal to or greater than 1,00 t/m<sup>3</sup>
- Maximum aggregate size equal to 1" (one inch);
  
- Material in the sieve # 200 of at most 8%;
- Maximum filler added in the mixing ≤ 6%
- Bitumen range: 4,5% ~ 6,5%



(\*) The production of the plant can vary and depends on the following parameters: humidity in the aggregates, installation altitude, amount of fines in the mixture, temperature of the mixture, calorific value of the fuel, besides the specific weight of the aggregates.



# CARBON T-BOX 130

## Language

- English  
(Other language available under request)

## Voltage

- 400V  
(Other voltage available under request)

## Frequency

- 50Hz  
(Other frequency available under request)

## Altitude

- 0 ~ 3000m

## Electrical Standards

- Australian standards, NR12 and Directive 2006/42 / CE

## Containers

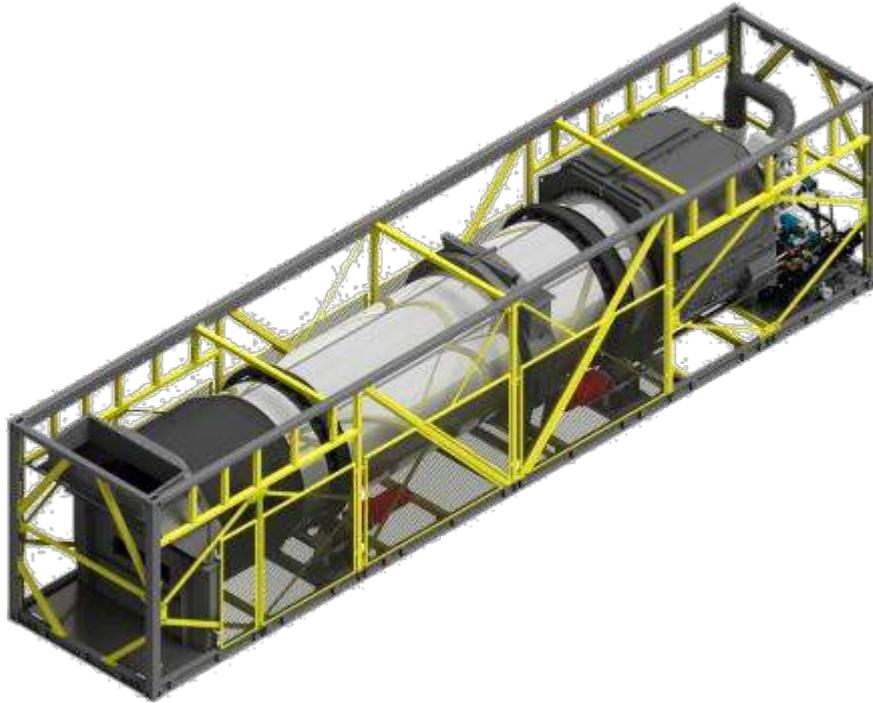
- 3 containers 40ft High Cube
- External dimensions:
  - Length 12,2 m / 40ft
  - Width 2.38 m / 8ft
  - Height 2,9m / 9,6ft





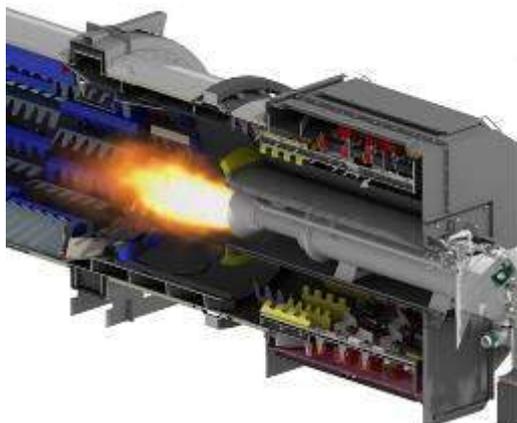
### Aggregate Dosing System

- Set of four (4) bins
- Capacity: 4 x 10m<sup>3</sup>
- Loading width: 3.05 m
- Adjustable gate for aggregate flow
- Ground loading height: 3,1 m
- One (1) Automatic Vibrator
- 560 mm width dosing belt with lateral protections, motor reducer with 1,5 KW motor
- Conveyor belt 600 mm width, powered by 4,5 KW electric motor
- Weighing per individual load cell for each bin
- Protection on moving parts (belts)
- Standard grid to avoid impurities
- Easy maintenance and safety system (NR12 and Directive 2006/42 / CE);



## Dryer

- Counter flow system
- Diameter of 1,8 / 2,1 m (Venturi)
- Length of 7,5 m
- Supported on rings and four rollers with motor reducer and motor of 4,0KW
- Four sections of drying, with specific design of paddles to maximize efficiency of the system
- RAP ring, with the possibility of using up to 30% recycled material.
- Thermal insulation of rock wool with stainless steel cover
- Drying and gradual heating of aggregates (drying time control);
- Multi-paddle with variable positioning
- Dryer flaps and multi-paddles easy-to-change
- Easy maintenance and safety system (NR12 and Directive 2006/42 / CE);

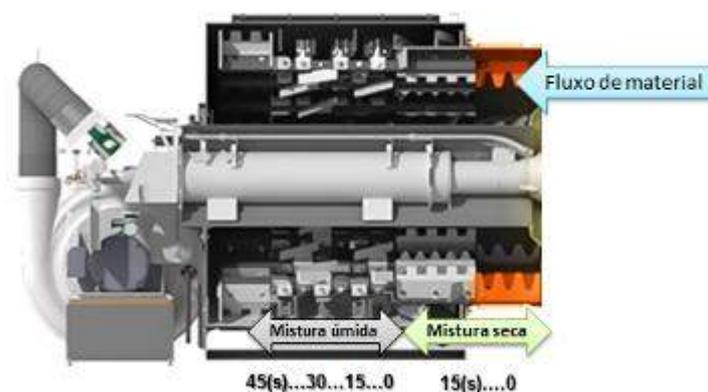


### Burner

- HAUCK brand, Starjet SJ260 model
- Flame activation and regulation can be from the control panel or automatically via Easy Flame system on the control panel.
- Power of 8.000,000 Kcal / h
- 37 KW fan
- Compatible with diesel, heavy fuel and gas (requires cone - optional)
- Infrared flame sensor with alarm
- Video camera to flame control from the cabin
- Fuel Gear pump with 1,5 KW motor
- Pressure gauge controlled fuel
- Electric fuel rectificator
- \*Gas ramp under the gas supplier's responsibility.

Burner Model	Air Flow (nm <sup>3</sup> /min)	Pressure (kPa)	TBA Blower Model	Motor HP	Fan Rating (am <sup>3</sup> /min @ 177°C)	Max. Capacity (kW)
SJ075	32.1	15.5	TBA - 36 - 20	20	230	4,020
SJ150	49.1	15.5	TBA - 36 - 25	25	429	7,380
SJ200	75.0	15.9	TBA - 36 - 40	40	616	10,700
<b>SJ260</b>	<b>93.8</b>	<b>15.5</b>	<b>TBA - 36 - 50</b>	<b>50</b>	<b>750</b>	<b>13,000</b>
SJ360	145	15.9	TBA - 36 - 75	75	1,150	20,000
SJ520	196	15.5	TBA - 36 - 100	100	1,470	25,600
SJ580	212	14.2	TBA - 36 - 100	100	1,820	31,700
SJ750	266	16.4	TBA - 36 - 125	125	2,280	39,700
SJ980	327	15.5	TBA - 36 - 150	150	3,430	52,900

Table 2. StarJet Burner Capacities with High Pressure Direct Drive Blowers



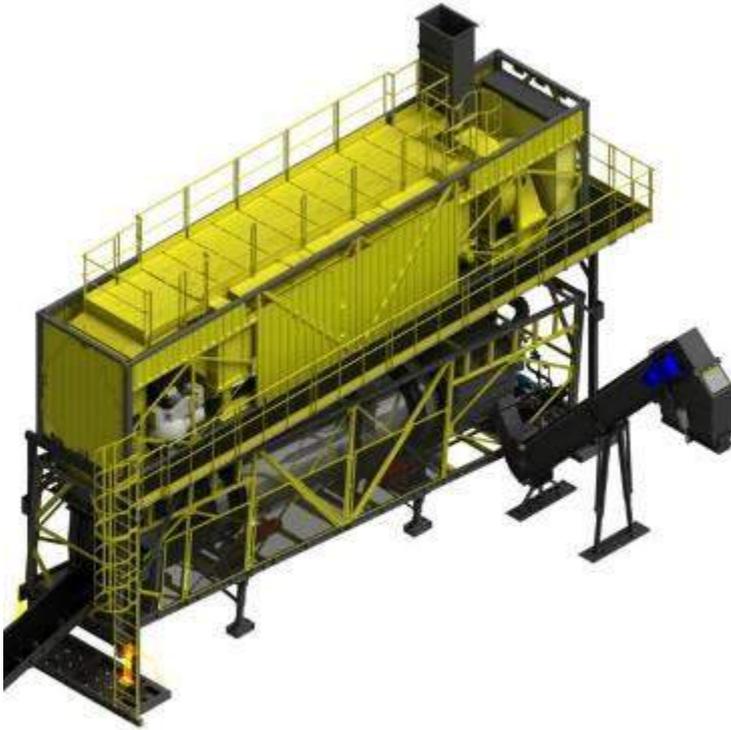
## Mixer

- External rotate mixer with **1.8 m** length;
- High mechanical capacity and length of mixing time;
- Pallets with bolted hive-type cavities of easy exchange and in high strength and durability material;
- Injection of asphalt before fines recovered from the bag filter;
- Mixing chamber with top cleaning gates and lower easy-to-remove gates for exchange of wear plates;
- **2-inch** asphalt dosing pump;
- As the injection of CAP occurs after the flame, in the mixing chamber, there is no contact of the CAP with the radiation of the dryer;
- Thermo sensors of dry aggregates and asphalt;
- High mechanical energy, with the highest energy efficiency



## Elevator

- With easily screwed flat fins;
- Roller system with less maintenance;
- Bottom with high resistance plates, screwed;
- Drive with 11 KW motor;
- Discharge silo of 1m<sup>3</sup>;
- Compatible with pneumatic actuation;
- Height of 3.6 m for truck passing.



### Filtering system

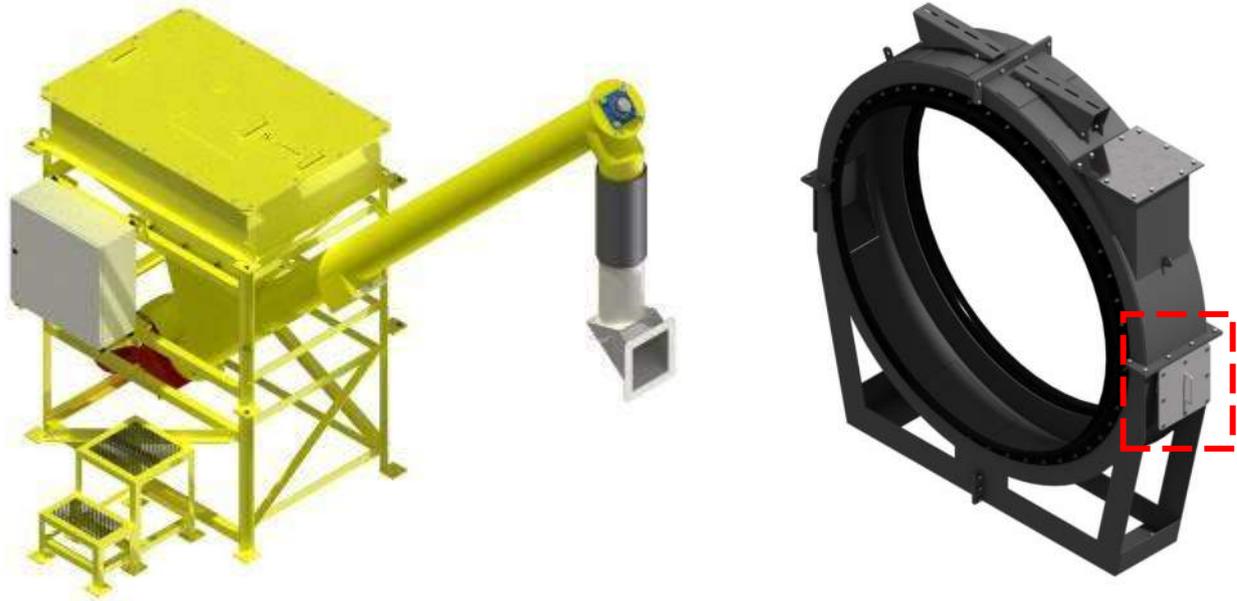
- Dry filtration system with fines collector;
- 84 pleated bag filters;
- Polyester type;
- Maximum temperatures of 150 ° C;
- Filtering area of 371 sqm;
- Static separator
- Rotating valve at the static separator outlet and filter outlet for system sealing;
- Smart cleaning system of the bag filters by air pulse;
- 1 screw air compressor with 59 PCM and 200L reservoir coupled;
- Reintroduction of the fines in the mixer by gravity;
- Double extraction snail without intermediate bearing with motors of 4.5 KW each;
- Indicator of saturation of the bags by electronic pressure differential.



### Cabin control

- Heated metal cabin;
- Air conditioning 9,000 BTU;
- Control panel for manual operation;
- Modular PLC for control of the plant automatically;
- Automatic operation with micro computer;
- Manual operation option;
- Ergonomic cabin with 360 ° viewing;
- User friendly software, easy operation and control;
- Automatic backup to guarantee production histories;
- Facility for the exchange of formulas (traces) of asphalt mixtures and reports;
- Remote access to software from the factory (requires internet connection only) for fault updating and diagnostics;
- Activation of the controls in 24 V, ensuring greater safety during operation, possible maintenance and diagnostics.
- 17" screen monitor system with 3 cameras to check all the operation inside the cabin (option\*)
- control cabin extension up to 20 m.(option\*)

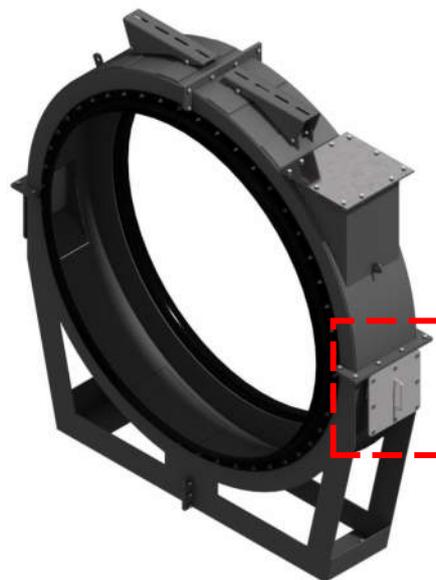
\*price offered separately



## Option

### 01 Filler silo

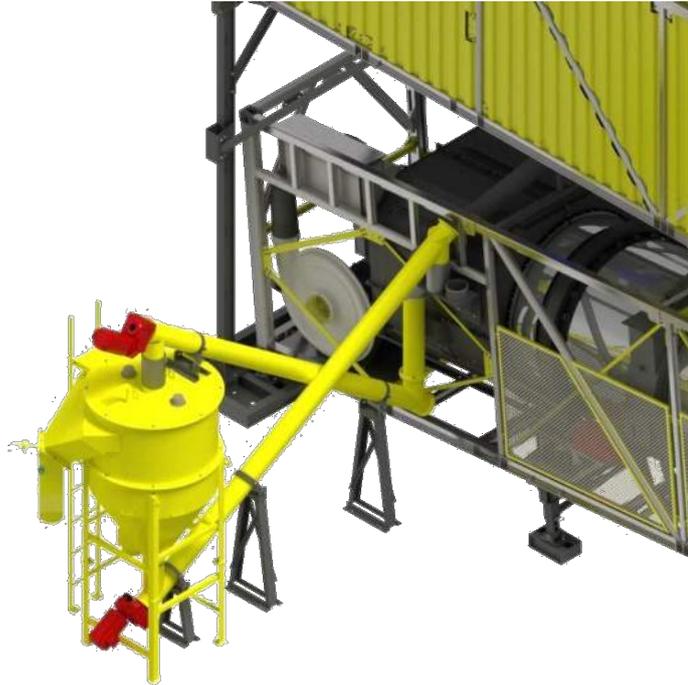
- 2 m<sup>3</sup> capacity;
- Worm screw conveyor to incorporate the filler into the mixer or Rap ring;
- Controlled by frequency inverter that communicates with the plant software;



## Option

### 02 Fiber silo

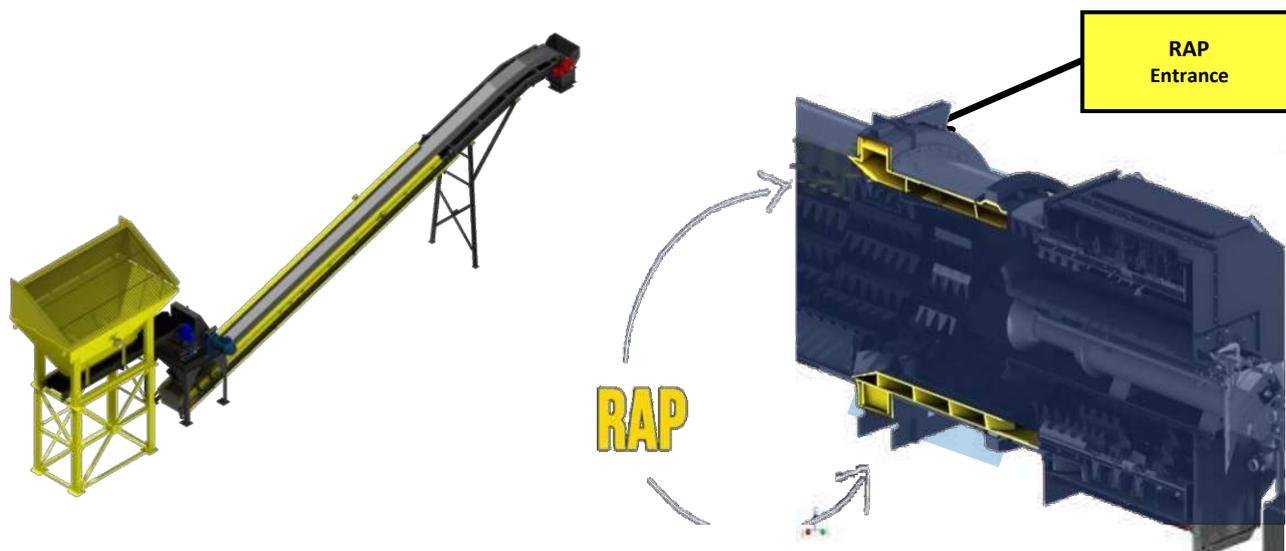
- 2 m<sup>3</sup> capacity;
- Worm screw conveyor to incorporate the filler into the mixer or Rap ring;
- Controlled by frequency inverter that communicates with the plant software;



## Option

### 03 Recovery fines silo

- Storage silo of 2 m<sup>3</sup>
- Screw conveyor for extraction of filter fines
- Screw conveyor for incorporation of fines into the mixer
- Controlled by frequency inverter that communicates with the software of the plant
- Material discharge duct



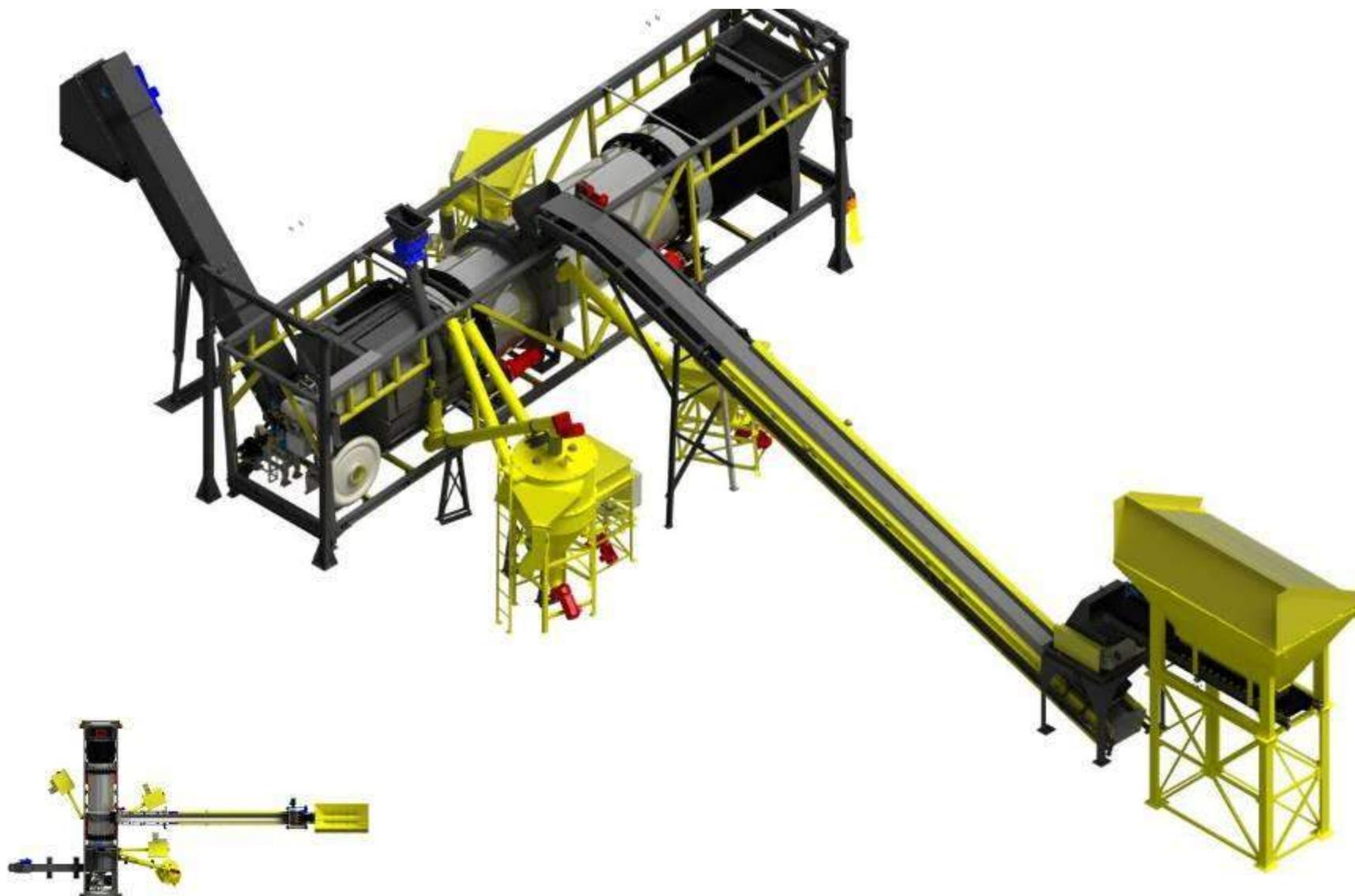
## Option

### 04 RAP Unit

- Capacity: 7 m<sup>3</sup>
- Loading length: 3.2 m
- Adjustable housing for aggregate flow
- Load height in relation to the ground: 3,8 m
- Automatic vibrator
- Dosing belt (with vulcanized sides) of 550mm wide, reducer motor
- Conveyor belt 600 mm wide, driven by electric motor
- Weighing by individual load cell
- Protection system for moving parts (belts)
- Crushing drum with two metal rollers to break larger RAP asphalt blocks



# CARBON T-BOX 130





# CARBON T-BOX 130

**Proposal N°: 3101/20**

**Date: 03/Mar/2020**



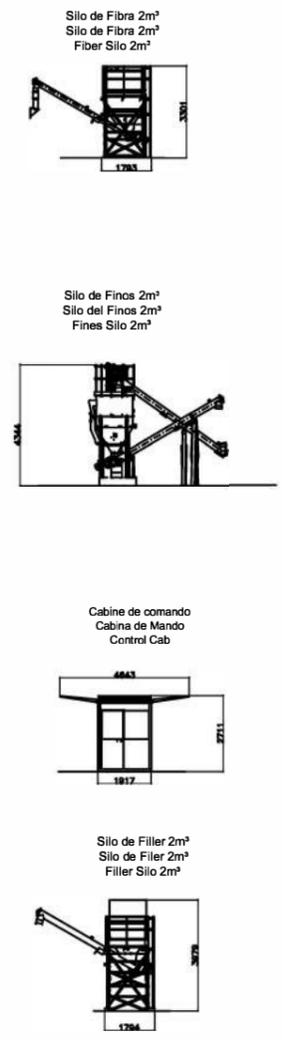
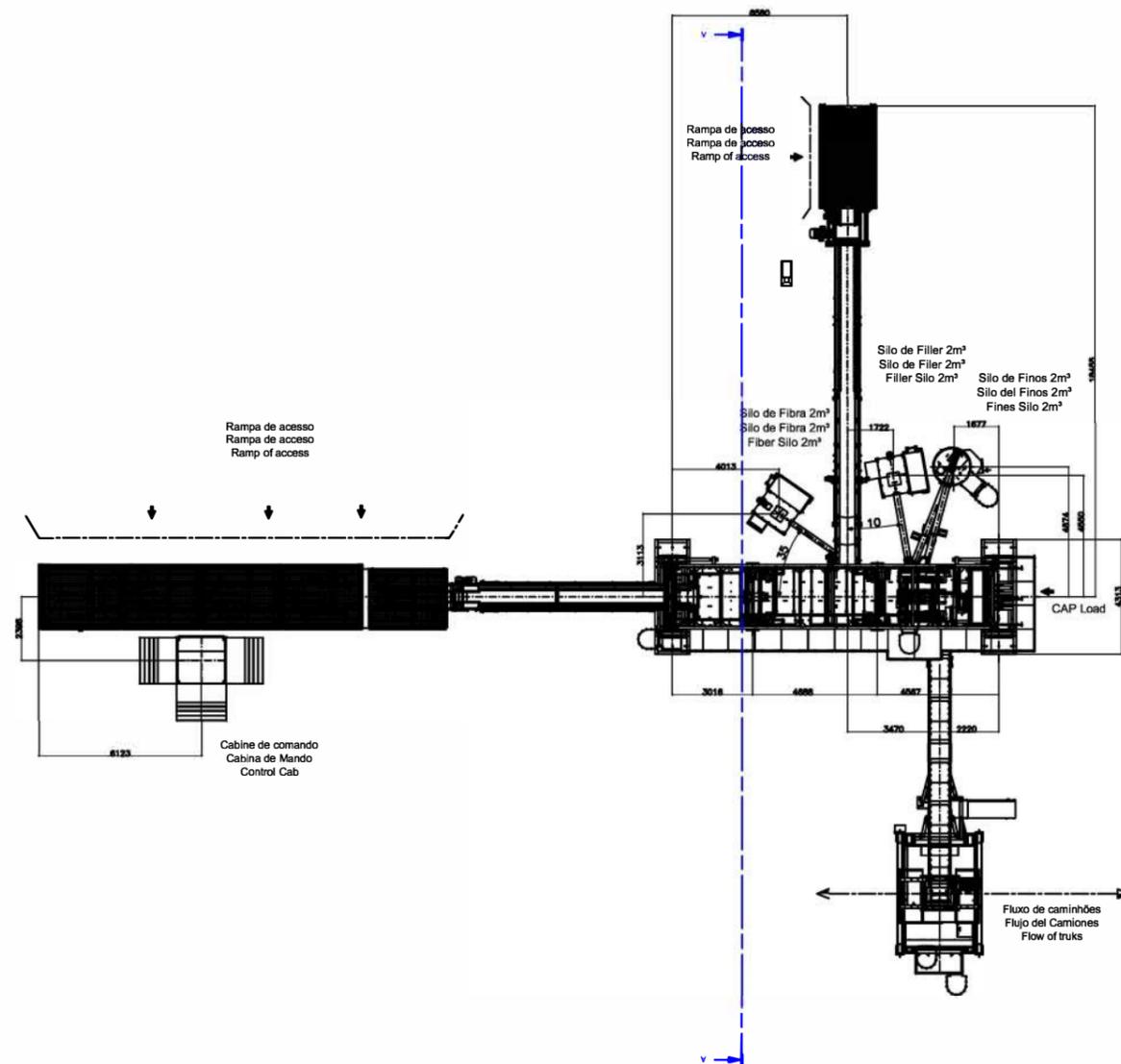
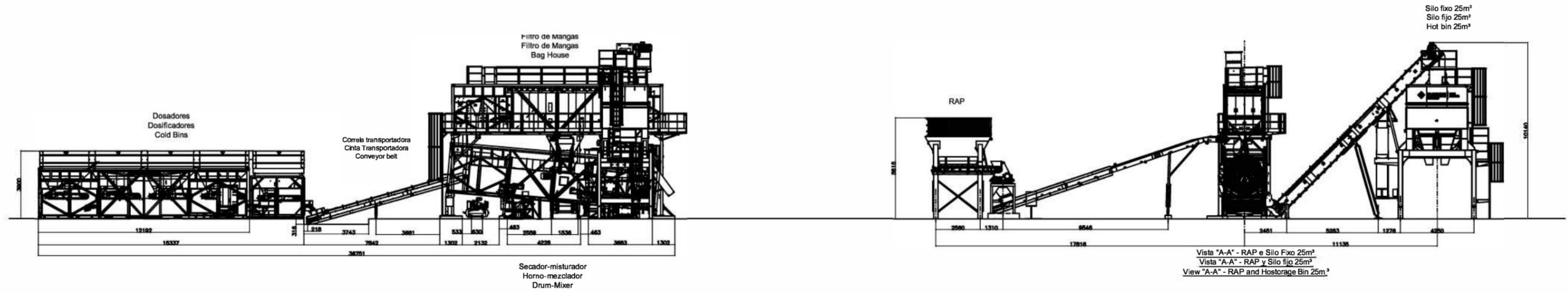
Dear General manager

I am glad to send you the quote for supplying the following equipment:



### **50T/25m<sup>3</sup> Asphalt Storage Silo**

- Capacity of 25m<sup>3</sup> / 50 tons
- Mechanical locking system for working position
- Pneumatic actuated gate
- Rejection gate in the middle of the elevator - pneumatic actuated
- DRAG MIXER type elevator
- Bottom with high resistance plates, bolted.
- Driven by 43 hp / 40 kVA
- 1m<sup>3</sup> pre-silo in the end of the elevator to prevent from segregation
- Sensor to avoid drag slat blockage due to overfilling of the batcher
- Wearing plates on the batcher
- Pneumatic actuated gate
- 3.6 m Height for truck unloading.
- Stair and platform in the head of the elevator, for security and maintenance

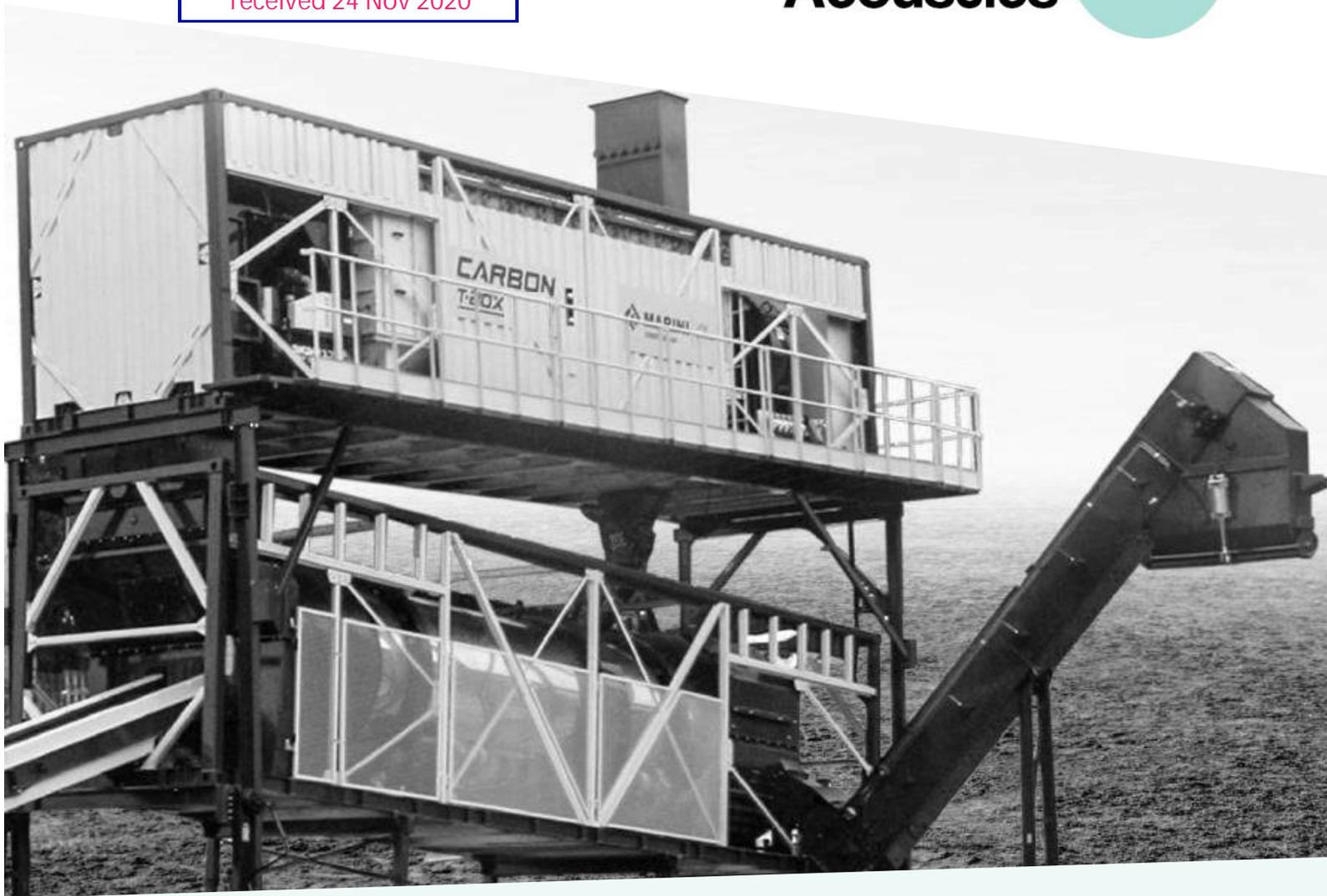


Nota / Nota / Note:  
1 - Todas as dimensões estão em milímetros.  
Todas las dimensiones están en milímetros.  
All dimensions are in millimeters.

Descrição	Carbon T-Box 160 + Silo 25m <sup>3</sup> + RAP + Silo finos 2m <sup>3</sup> + Silo fibra 2m <sup>3</sup> + Silo Filler 2m <sup>3</sup> - Layout		
Cliente	Te Kāunihera o te Tai o Aorere	Projeto	Renann Rosa
Projeto	Renann Rosa	Eng. Projeto	Renann Rosa
Código	XXXXXXXXXX	Página	1/2
Revisão	0	Escala	1:100
		Data	17/06/19

tasman Te Kāunihera o te Tai o Aorere district council  
received 24 Nov 2020

BOMAG MARINI LATIN AMERICA FAYAT GROUP



# 272 BARTLETT ROAD

## ACOUSTIC ASSESSMENT – RESOURCE CONSENT

Project No. 20065

Date: 22/09/2020  
Client: Tasman Bay Asphalts  
Revision: Revision 1

Author:

A handwritten signature in black ink, appearing to read "C. Bladon".

Charlie Bladon MASNZ MIOA

Reviewer

A handwritten signature in black ink, appearing to read "M. Bronka".

Matthew Bronka MASNZ MIOA



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2. Site and Adjacencies .....	3
3. Zoning and Noise Criteria.....	4
4. Asphalt Production Noise Activities.....	6
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# 1. Introduction

Bladon Bronka Acoustics Ltd (BBA) has been appointed by Tasman Bay Asphalts to undertake an assessment of noise emissions from the proposed asphalt production site at 272 Bartlett Road, Hope to demonstrate compliance with the noise rules within the Tasman Resource Management Plan.

This report presents the noise assessment against the permitted noise limits, recommended mitigation measures, assessment of effects and conclusions.

# 2. Site and Adjacencies

The locations of the site and the closest neighbouring dwellings are shown in Figure 4 within Appendix A. The asphalt plant (Carbon T-Box 130) will be the main source of noise at the site and its location has also been superposed (red dot) in Figure 4. The closest dwellings are located at the following addresses:

- 239 Bartlett Road - a dwelling is located at approximately 700m to the south-east of the proposed asphalt plant;
- 89 Ranzau Road West - a dwelling is located at approximately 760m to the east of the proposed asphalt plant;
- 101 Ranzau Road West - a dwelling is located at approximately 1100m to the north-east of the proposed asphalt plant;
- 208 Bartlett Road - a dwelling is located at approximately 760m to the north-east of the proposed asphalt plant;
- 202 Edens Road – a dwelling is located at approximately 620m to the south of the proposed asphalt plant;
- 554 Waimea West Road – a dwelling is located at approximately 1100m to the north-west of the proposed asphalt plant.

The area is of a rural nature. Farming/agricultural activities dictate the noise environment, along with traffic activity along Appleby Highway to the north. A sawmill and crushing site are located at approximately 2km to the north of the site (along Blackbyre Road).

### 3. Zoning and Noise Criteria

The project site and neighbouring sites are located within the Rural 2 and Rural 1 zones respectively of the Tasman Resource Management Plan as shown in Figure 5 within Appendix A.

The noise rule for activities within the Rural 1 zone (Section 17.5.2.1(c) of the Tasman Resource Management Plan) and the noise rule for activities within the Rural 2 zone (Section 17.6.2.1(c)) are identical. This rule is reproduced below:

- (c) *Except in the Richmond West Development Area, noise generated by the activity, when measured at or within the notional boundary of any dwelling in a Rural zone (other than any dwelling on the site from which the noise is being generated), Rural Residential, Papakainga or Tourist Services zone, or at or within any site within a Residential zone, does not exceed:*

	<b>Day</b>	<b>Night</b>
$L_{eq}$	55 dBA	40 dBA
$L_{max}$		70 dBA

*Except as required by condition (e), this condition does not apply to all noise from any intermittent or temporary rural plant and animal production activity, including noise from:*

- (i) *mobile horticultural and agricultural equipment;*
- (ii) *forest and tree harvesting activities;*

**Advice Note:** *Clause (c)(ii) does not apply to plantation forestry noise which is managed by NES-PF regulation 98.*

- (iii) *Animals, except when associated with intensive livestock farming and animal boarding activities;*
- (iv) *Bird scarers and hail cannons.*

**N.B.** Day = 7.00 am to 9.00 pm Monday to Friday inclusive and 7.00 am to 6.00 pm Saturday (but excluding public holidays).

Night = All other times, plus public holidays.

*The measurement and assessment of noise at the notional boundary of a dwelling applies whether the measurement location is within Tasman District or in an adjacent district.*



*Noise must be measured and assessed in accordance with NZS 6801:2008 Acoustics – Measurement of Environmental Sound and NZS 6802:2008 Acoustics – Environmental Noise.*

General asphalt production will occur weekdays 6.30am - 4.00pm (Summer) and 7.30am – 3.00pm (Winter). However, some roading projects are undertaken throughout the night, in which case, for approximately 5% of the year the plant would operate 9.30pm – 4.00am through the night on weekdays/weekends.

Asphalt production during the day period will therefore need to achieve the noise criterion of 55dBA  $L_{eq}$ , whereas the night period work will need to achieve 40dBA  $L_{eq}$  and 70dBA  $L_{max}$  as measured at the notional boundaries of neighbouring dwellings. The notional boundary is a line at 20m from the sides of a dwelling (or the legal boundary if this is closer).

### **Section 16 of the Resource Management Act**

Further to the permitted noise limits of the Tasman Resource Management Plan, Section 16 of the Resource Management Act (RMA) states the New Zealand legislation to control noise effects to a reasonable level as follows:

#### ***16 Duty to avoid unreasonable noise***

*(1) Every occupier of land (including any premises and any coastal marine area), and every person carrying out an activity in, on, or under a water body or the coastal marine area, shall adopt the best practicable option to ensure that the emission of noise from that land or water does not exceed a reasonable level.*

The RMA also defines noise as inclusive of vibration, however, due to the significant separation distances between the asphalt plant and neighbouring receivers, vibration is not considered further in this assessment.

## 4. Asphalt Production Noise Activities

The layout of the proposed asphalt production site is shown in Figure 1 below:



**Figure 1. Site Layout**



The asphalt plant consists of a central baghouse/mixing drum (section B), together with filler bins (section A) and the silo (section C). Section B is “double height” with the main noise sources at low level, comprising a burner and air compressor.

Wheeled loaders will fill the filler bins using the stop bank which is approximately 3m high.

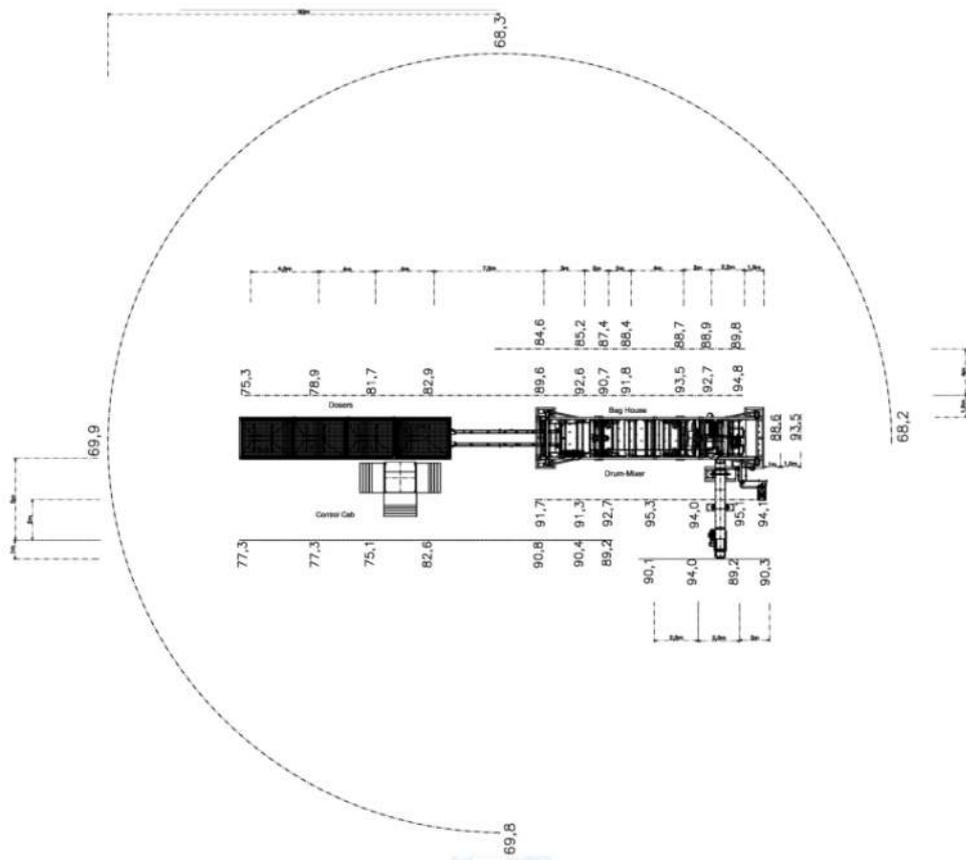
Trucks will enter the site with asphalt loaded at the silo and will then depart the site. The truck route on the site is shown by the red arrows.

## 5. Noise Assessment

An assessment has been undertaken in accordance with NZS 6802:2008 and noise levels have been predicted at the notional boundaries of the nearest dwellings.

### 5.1. Noise Data

Noise levels for the asphalt plant have been obtained from the manufacturer. These are shown in Figure 2 below (noise levels dBA Leq). It can be seen that the noise level at 50m from the plant (at circle perimeter) is approximately 68-70dBA Leq.



**Figure 2. Asphalt Plant Noise Levels**

It is understood that wheeled loaders will be approximately 10T in size and the trucks approximately 25T in size. Noise data for wheeled loader and truck movements has been taken from BS 5228-1:2009 *Code of practice for noise and vibration control on construction and open sites – Part 1:Noise* (Table C.2 Ref no. 27 and Table C.11 Ref no. 5 respectively).

### *Special Audible Characteristics + Averaging*

In accordance with NZS 6802:2008, a 5dBA penalty needs to be applied to arrive at the rating level should the noise be considered to have special audible characteristics (e.g. impulsive or tonal in nature). Liaison with the manufacturer has established that the noise is subjectively steady-state, and not impulsive. The main noise sources of the asphalt plant (burners and air compressors) are also not considered tonal. No penalty has therefore been applied.

For the daytime period, it is understood that the plant will be operational for 40% of the time. An averaging adjustment of -4dBA has therefore been applied in accordance with NZS 6802:2008 Table 2.

For the night-time period, no averaging adjustment has been made in accordance with NZS 6802:2008.

## 5.2. Acoustic Modelling

The operational noise from the site has been calculated using internationally recognised 3D noise modelling software CadnaA (Computer Aided Noise Abatement) Version 2018. The software calculates noise propagation in accordance with *ISO 9613-2: Acoustics — Attenuation of sound during propagation outdoors — Part 2: General method of calculation*. Calculation settings for the software include:

- $C_0 = 0$  for slightly enhanced (positive) meteorological noise propagation,
- $G = 0.7$ , for sound absorbing ground surrounding the site;
- $G = 0$ , for the site and surrounding roads;
- Notional boundary receivers = 1.5m above ground
- Receiver grids = 1.5m above ground

The main noise sources of the asphalt plant are located within the lower level of Section B as shown in Figure 1. As the base of the plant will be positioned 0.5m below ground level, the model assumes an effective source height of 1m above ground level.

Topographical data received from Tasman District Council has been imported into the model.

The noise level predictions have been based on a worst-case 15 minute period (applicable to both the daytime and night-time). This worst-case 15 minute period assumes the asphalt plant running continuously, together with 5 wheeled loader movements and 2 truck movements.



### 5.3. Results

The predicted rating levels at the notional boundaries of neighbouring properties assuming no mitigation measures are shown in Table 1 below:

**Table 1. Predicted Rating Levels at Neighbouring Properties**

Receiver	Daytime Rating Level at Notional Boundary (dBA $L_{eq}$ )	Daytime Criterion (dBA $L_{eq}$ )	Night-time Rating Level at Notional Boundary (dBA $L_{eq}$ )	Night-time Criterion (dBA $L_{eq}$ )
208 Bartlett Road	32.9	55	36.9	40
239 Bartlett Road	37.3	55	41.3	40
89 Ranzau Road West	33.9	55	37.9	40
101 Ranzau Road West	32.2	55	36.2	40
554 Waimea West Road	28.2	55	32.2	40
202 Edens Road	38.6	55	42.6	40

From Table 1, it can be seen that with no mitigation measures noise levels will be within the daytime criterion of 55dBA  $L_{eq}$  by a substantial margin.

With regard to the night-time criterion, with no mitigation measures, levels will achieve the 40dBA  $L_{eq}$  criterion at all notional boundaries apart from 239 Bartlett Road where there is 1.3dBA exceedance and 202 Edens Road where there is 2.6dBA exceedance.

N.B. the maximum noise level criterion of 70dBA  $L_{max}$  will be achieved by a substantial margin at all notional boundaries as the noise sources are steady state in nature.

## 6. Noise mitigation measures

In order to achieve the night-time criterion of 40dBA  $L_{eq}$  an acoustic barrier will be introduced along the southern site boundary as shown in Figure 3 below. The acoustic barrier will be 3m in height. The barrier will be formed from a combination of a 1m high earth bund plus a 2m high acoustic fence. Any acoustic fence should have a minimum superficial mass of 10kg/m<sup>2</sup> (e.g. 20mm thickness timber) and there should be no gaps or holes.



**Figure 3. 3m Acoustic Barrier (red line)**



With the above acoustic barrier in place, the predicted rating levels at the notional boundaries of neighbouring properties are as follows:

**Table 2. Predicted Rating Levels at Neighbouring Properties with Acoustic Barrier**

Receiver	Daytime Rating Level at Notional Boundary (dBA L <sub>eq</sub> )	Daytime Criterion (dBA L <sub>eq</sub> )	Night-time Rating Level at Notional Boundary (dBA L <sub>eq</sub> )	Night-time Criterion (dBA L <sub>eq</sub> )
208 Bartlett Road	32.6	55	36.6	40
239 Bartlett Road	33.4	55	37.4	40
89 Ranzau Road West	32.4	55	36.4	40
101 Ranzau Road West	28.7	55	32.7	40
554 Waimea West Road	27.7	55	31.7	40
202 Edens Road	34.7	55	38.7	40

As can be seen from Table 2, all rating levels now achieve the night-time noise criterion of 40dBA L<sub>eq</sub>.

The night-time noise level predictions from the 3D modelling software are shown as contours within Figure 6 of Appendix B.



## 7. Noise Effects

An assessment of the potential noise effects has been undertaken to determine whether noise levels can be considered reasonable under Section 16 of the RMA.

The assessment assumes the presence of the acoustic barrier as detailed within Section 6 of this report.

### *Daytime*

During the daytime period, the rating levels are below 35dBA  $L_{eq}$  at all notional boundaries. Such noise levels are at least 20dBA lower than the daytime permitted noise limit of 55dBA  $L_{eq}$  and will be comparable to the otherwise prevailing background noise levels in the area. As such, the effects can be considered insignificant.

### *Night-time*

The acoustic design achieves a rating level of 39dBA  $L_{eq}$  or less at the notional boundaries of neighbouring properties during the night-time period. It should be noted that this rating level has been predicted assuming slightly enhanced meteorological conditions for noise propagation – rating levels will be significantly lower during more favourable meteorological conditions.

During the night-time period, the most important effect to consider is potential sleep disturbance to the occupants of the dwellings. AS/NZS 2107:2016 provides recommendations for internal noise levels within sleeping areas. For bedrooms within “*houses in rural areas with negligible transportation*”, the standard recommends an internal noise level of 25 – 30dB  $L_{Aeq,t}$ .

With the acoustic design scheme in place, noise levels as incident on the façades of dwellings will be 39dBA  $L_{eq}$  or less. A façade with an open window for ventilation purposes typically provides an out-to-in sound insulation performance of 15dBA. Therefore, noise levels within bedrooms will be 24dBA  $L_{eq}$  or less. The character of the noise will also be steady-state and continuous, with little to no impulsive or intermittent attributes, significantly reducing the potential for sleep disturbance. The internal noise levels are below the AS/NZS 2107 recommendations for bedrooms in rural areas and should therefore be considered reasonable, with no significant noise effects.

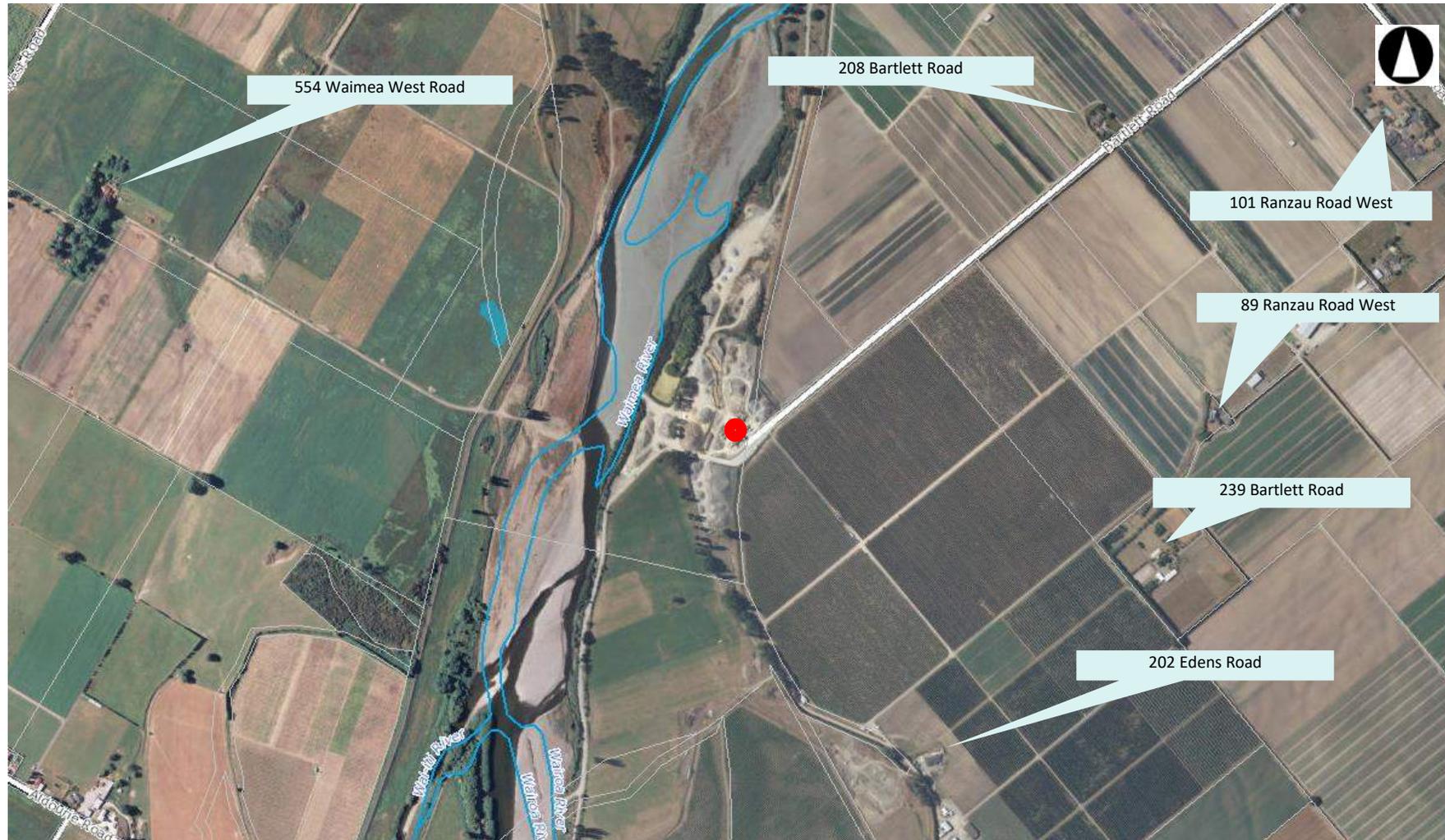


## 8. Conclusions

An acoustic assessment has been undertaken of the proposed asphalt production site at 272 Bartlett Road, Hope.

An acoustic design has been developed to ensure activities achieve the night-time criterion of 40dBA  $L_{eq}$  stipulated within the Tasman Resource Management Plan for activities within the Rural zone. This design involves the incorporation of an acoustic barrier along the southern site boundary as detailed within this report. Implementation of this acoustic barrier will control noise to a reasonable level as required by S16 of the RMA.

## Appendix A – Site, surrounds and zoning

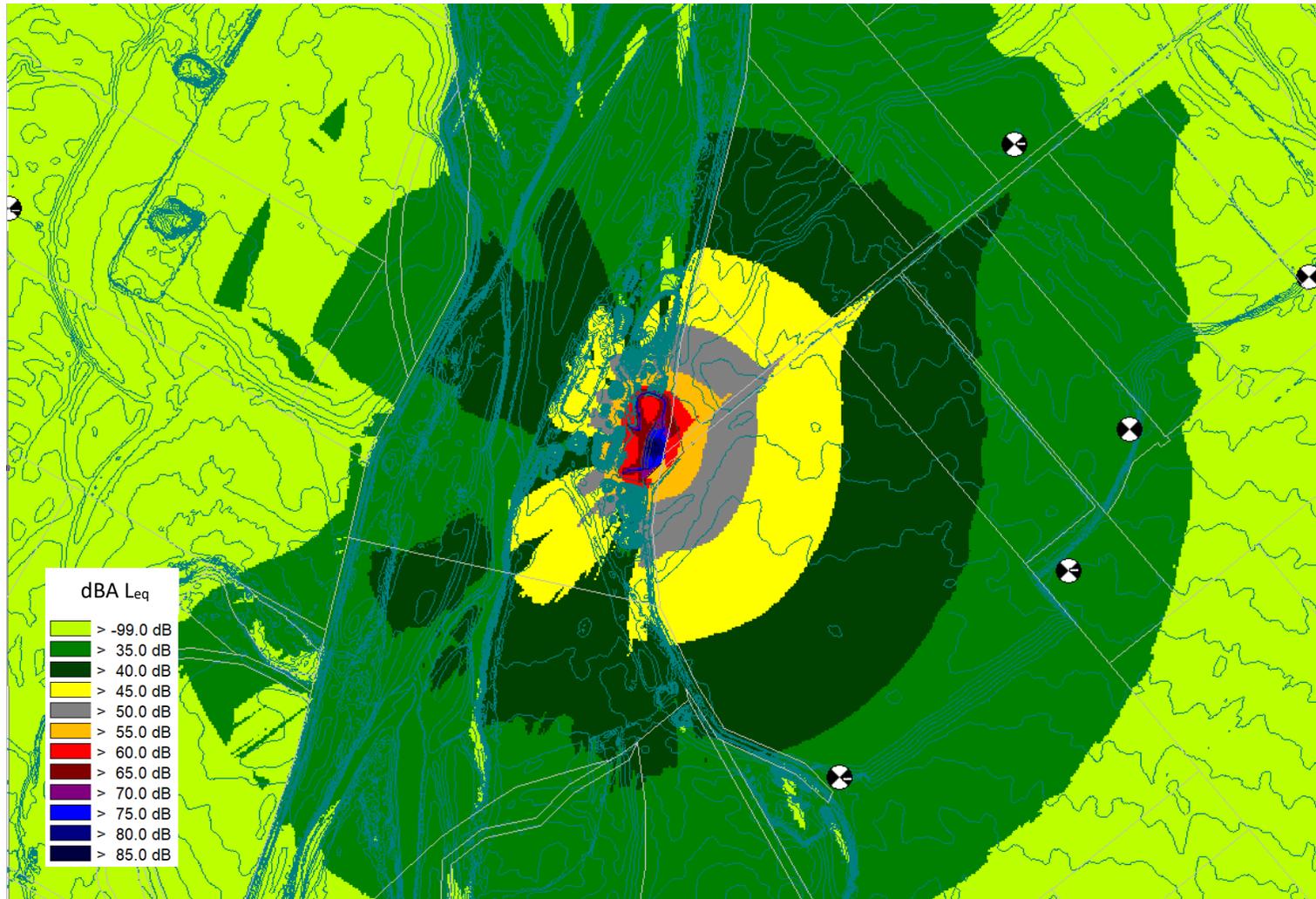


**Figure 4. Site (red dot) and Neighbouring Properties**



**Figure 5. TDC Zoning**

## Appendix B – 3D Noise modelling results



**Figure 6. Night-time Noise Levels following Mitigation Measures**



PO Box 3737  
Richmond 7050  
Tasman District  
M +64 (0) 21 243 1233  
E+gary.clark@traffic-concepts.co.nz

12 October 2020

Ref: o809

Jane Bayley  
Staig and Smith Limited  
81 Selwyn Place  
**Nelson 7010**

Dear Jane

### **Proposed Asphalt Concrete Plant – Bartlett Road – Appleby – Tasman Transportation Impact Report**

Following on from your instructions, project meetings, discussions with NZTA and site inspections, I have completed my analysis of the proposed asphaltic plant at the end of Bartlett Road in Appleby, Tasman District.

My analysis of the site and related traffic matters has included a detailed assessment of the possible different access points to the batching plant and associated intersections.

This Transportation Impact Report (TIA) provides an assessment of the planning framework and an assessment of effects for the proposed expansion. This Transportation Impact Assessment (“TIA”) forms part of the Resource Consent application for the development outlined above. The TIA sets out and describes:

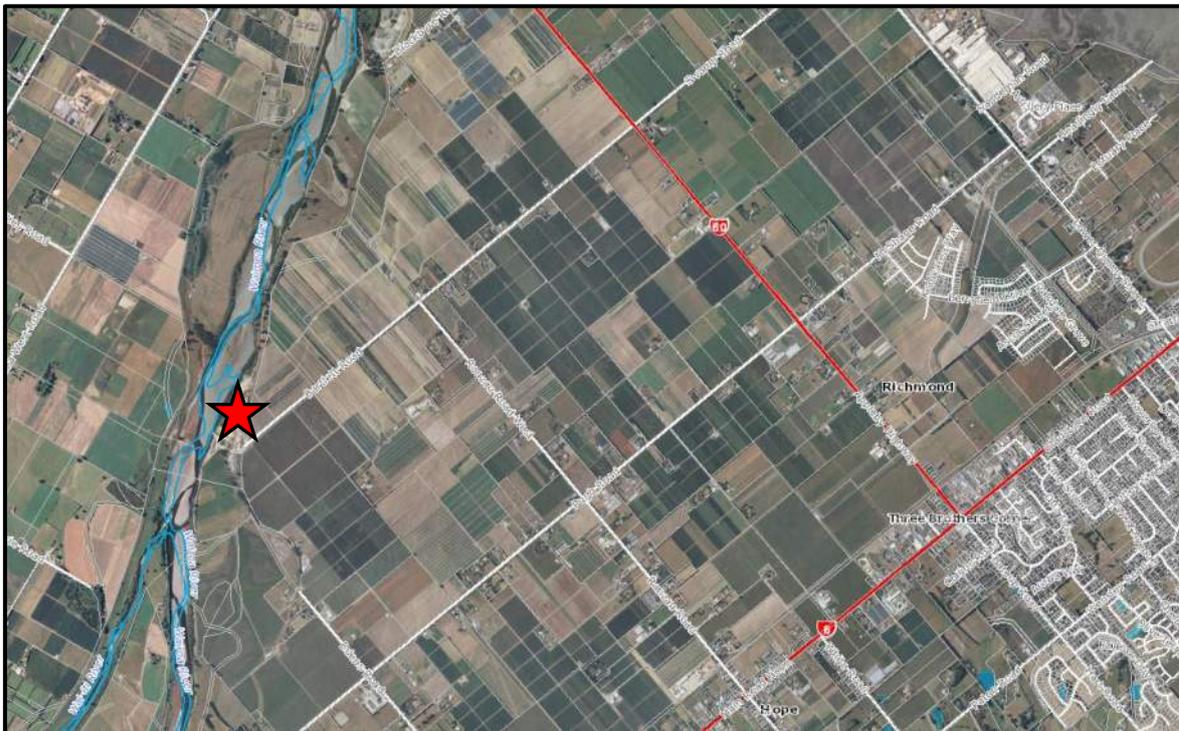
- The existing transport environment in the vicinity of the site;
- Crash history;
- The batching plant proposal;
- Discussions with NZTA;
- Assessment of the development against the provisions of the Tasman Resource Management Plan (NRMP), and
- An assessment of the proposed network effects including trip generation, site access and route assessment.

The assessment provided below provides an analysis of the matters as set out above.

## 1. Site Location and Description

The site is located at the end of Bartlett Road within the Waimea River Reserve in Tasman District.

**Figure 1** shows the site location and the surrounding road network from SH6.



**Figure 1: Site Location** (Source: Top of the South Maps)

As shown, the site is located on Bartlett Road around 2.8 kilometres from the intersection of Bartlett Road and State Highway 60. The surrounding land uses are mostly rural production. Major quarries are located within the river reserve adjacent to the site and further to the north on the banks of the Waimea River.

- Bartlett Road to SH60,
- Bartlett Road, Ranzau Road West, Pugh Road to SH60,
- Bartlett Road, Ranzau Road West, Ranzau Road to SH6, and
- haul road on river reserve, Blackbyre Road to SH60.

The development is well located to make the most of different route choices to access the wider road network.

The site is also directly located next to the gravel resources needed to provide the construction industry products. This will reduce trucks movements on the wider road network with no requirement to have gravel from other sources.

## 2. Site Layout

The development site is located at the end of Bartlett Road and within Waimea River reserve.

**Figure 2** shows the site layout and the adjacent haul road for gravel resources.



*Figure 2: Site Layout (Source: Top of the South Maps)*

The batching plant is located at the entrance to the river reserve with extensive gravel supplies located next to the plant. There are more gravel resources to the north of the site which can be accessed from a haul road that runs along the Waimea riverbanks.

## 3. Proposed Development

The proposed development will see the existing quarry operation on part of the site cease with the new asphaltic concrete batching plant setting up to provide this valuable product to the Nelson Province (Nelson and Tasman).

With changes in the construction industry there is a need to provide alternative sources of asphaltic concrete to meet the demands for development and provide competition in the market.

The batching plant is located adjacent to an excellent gravel source which provides a number of positive outcomes.

The trucks picking up asphalt from the batching plant will be subject to an induction course and can have product upon agreeing to the health and safety requirements which will include truck routes. This will enable excellent control on how the plant and deliveries will operate.

#### **4. NZTA Consultation Meeting**

It was identified early in the process that NZTA will have strong interest in the proposed development due to the need to access the wider road network which can only be done via SH60 and SH6.

A pre-application meeting was held with NZTA staff to present the proposed development and gain their feedback on the proposal. This meeting was held on 2 September 2020 where a number of matters were discussed. Preliminary details for the batching plant were provided along with the key issues that needed to be considered. The main issue related to the trucks that would need to use the adjacent state highways. It was noted in the meeting that there are some existing truck movements that will be removed from the adjacent road network as a result of some of the gravel activities ceasing, as well as on site material being used by the batching plant. There is no information in what the change in the number of trucks will be.

It was quickly identified that the intersection of Bartlett Street and SH60, being the mostly likely route for trucks was undesirable due to it being a crossroad with poor geometry and insufficient width to safely accommodate all truck movements. This had already been identified as an issue with the operator. The operator also had concerns to use this intersection and had started developing staff management plans to control routes to and from the batching plant.

NZTA have usefully provided their views around their preferred truck movements to and from the site. This information along with the assessment below has been used to develop a set of recommendations for the routes that will provide the safe and efficient access to the site for trucks to and from the batching plant.

#### **5. Assessment of Effects**

This section looks at the proposal and the potential effects of the development on the surrounding road network. The key matters that are likely to generate effects will relate to the route choice of the trucks associated with the batching plant. It should be noted that overall, the number of truck movements from the site are expected to be less. This is due to the removal of one of the trucks generating activities and the use of material on the site directly into the batching plant.

It should be noted that due to the construction processes the vehicles are trucks only with no trailers.

### **5.1 Traffic Generation**

The truck movements associated with the batching plant have been carefully considered with the expected number of movements to be less than 40 trips per day at the peak sealing season. The average number of movements per day is less than 20 trucks.

As noted above there is a reduction in the number of truck movements from the existing site due to the removal of an existing activity that is replaced by the batching plant and material remaining on the site instead of being transported to other locations.

The number of movements on a day to day basis will be around two trucks per hour and at peak time four trucks per hour (or one every fifteen minutes).

It should be noted that the batching plant along with requirements around trucks being made ready for road, has a turnaround time of around 15 minutes which will limit the number of movements from the site.

### **5.2 Trip Distribution**

The trip distribution is mostly towards the north to Nelson and Tasman urban areas as this is where the demand is expected to come from. There will be product also heading south and also to the west towards Golden Bay.

The trip distribution will result in trucks using certain routes to access the wider road network.

### **5.3 Trip Routes**

The route choice has the most likely impact on other road users and particularly on SH60. The analysis of the road network has identified a number of constraints on the road network that will restrict trucks to certain routes for safety and efficiency reasons.

It should be noted that as part of the health and safety policies of the applicant's company, truck drivers will be restricted to routes identified below. These restrictions will effectively address any safety and efficiency impacts to less than minor.

The assessment of the routes has involved site inspections of the different roads and more importantly the intersections that trucks may have to use to move to and from the batching plant to the construction site. From these inspections the following recommendations have been made to the applicant which they have accepted for access to and from the batching plant for its drivers.

The recommendations also address matters raised in feedback from NZTA as to their preferences in terms of access to and from the state highway. These routes are shown in the **Figure 3**.

### **Trucks to and from the West (Motueka and Golden Bay)**

Trucks will leave the batching plant and head north on Bartlett Road to the intersection of SH60 and Bartlett Road. Trucks will then turn left towards the west. (Red Route)

Trucks coming from the west will mostly travel along SH60 to the intersection of SH60 and Pugh Road and to turn right using the right turn bay. The trucks will then travel along Pugh Road to the intersection of Ranzau Road West and Pugh Road and make a right turn. This crossroad intersection is controlled by stop signs. The trucks will then travel along Ranzau Road West to the intersection of Ranzau Road West and Bartlett Road. The trucks will make a left turn from the give way control to the batching plant. (Orange Route)

Trucks may turn right at the intersection of SH60 and Blackbyre Road and head along the haul road to the batching plant at off peak times. (Dashed Orange Route)

### **Trucks to and from the North (Richmond and Nelson)**

Trucks will leave the batching plant and head along Bartlett Road to the intersection of Bartlett Road and Ranzau Road West where they will turn right. Trucks will then travel along Ranzau

Road West and Ranzau Road to SH6 and make a left turn. (Green Route)

Trucks returning to the batching plant will come off SH60 with a left turn from the intersection of Pugh Road and SH60. The trucks will then travel along Pugh Road to the intersection of Ranzau Road West and Pugh Road and make a right turn. The trucks will then travel along Ranzau Road West to the intersection of Ranzau Road West and Bartlett Road. The trucks will make a left turn from the give way control to the batching plant. (Yellow Route)

### **Trucks to and from the South (Wakefield and Murchison)**

Trucks will leave the batching plant and head along Bartlett Road to the intersection of Bartlett Road and Ranzau Road West where they will turn right. Trucks will then travel along Ranzau Road West and Ranzau Road and make a right turn onto SH6. (Blue Route)

Trucks returning to the batching plant will make a left turn at the intersection of SH6 and Ranzau Road and then travel along Ranzau Road and Ranzau Road West. At the intersection of Ranzau Road West and Bartlett Road the truck will make a left turn and return to the batching plant. (White Route)

**Figure 3** shows the different routes that trucks will use to move to and from the batching plant.

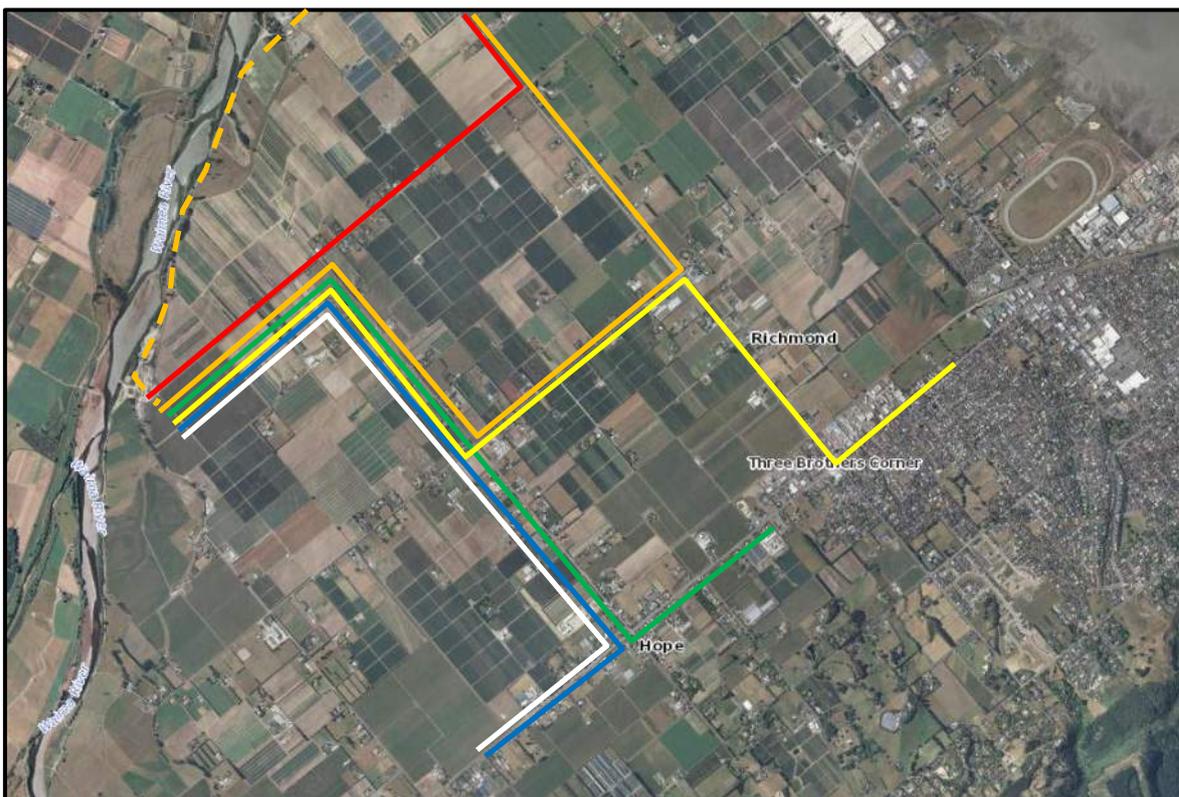


Figure 3: Truck Routes

As shown the routes will use intersections that are designed for turning trucks and will minimise any effects on other road users. Of particular note is the identified truck routes avoid using intersections where there is poor intersection geometry such as for a left turn into Bartlett Road from SH60. Trucks using the intersection of Bartlett Street and SH60 can only turn left out of Bartlett Street. No trucks will cross two lanes of traffic with only left and right turns allowed.

## 6. Conclusion

The proposed batching plant will provide a valuable resource for the construction of roads in the Nelson Province. The plant is located at the end of Bartlett Road and will replace a gravel extraction plant that was operating from the site.

The expected traffic movements are around 20 trips per day or around two per hour. At peak times, the number of truck movements could be up to one truck every fifteen minutes.

The number of trucks can be accommodated on the road network, however there is a need to control the routes these vehicles can use to address some deficiencies at certain intersections.

A carefully developed approach to the truck routes has been adopted by the applicant which will ensure any changes to the safety and efficiency of the road network are less than minor. The restricted routes that trucks can use is shown in Figure 3 of this report. This plan has also used information from the consultation with NZTA.

Overall based on the traffic analysis above, it is concluded the proposed batching plant can be accommodated and accessed appropriately, with less than minor traffic effects on the safety and efficiency of the road network with the recommendations made in this report.

We are happy to provide any further clarification if required.

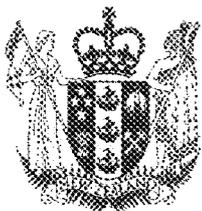
Regards



Gary Clark

Director

NZCE (Civil), REA, MIPENZ, CPEng


 Te Kaunihera o  
**te tai o Aorere**  
 received 24 Nov 2020


**RECORD OF TITLE  
UNDER LAND TRANSFER ACT 2017  
FREEHOLD  
Search Copy**



  
R. W. Muir  
Registrar-General  
of Land

**Identifier** **493293**  
**Land Registration District** **Nelson**  
**Date Issued** 29 June 2010

**Prior References**

281547

<b>Estate</b>	Fee Simple
<b>Area</b>	390.8658 hectares more or less
<b>Legal Description</b>	Lot 3 Deposited Plan 424007 and Lot 5-6 Deposited Plan 363658 and Lot 1 Deposited Plan 368437 and Lot 1 Deposited Plan 368439 and Lot 1-4 Deposited Plan 370973 and Lot 10-13 Deposited Plan 5969 and Section 202 Waimea South District and Section 203 Survey Office Plan 10988
<b>Purpose</b>	River Control Purposes

**Registered Owners**

Tasman District Council

**Interests**

Subject to Part IVA Conservation Act 1987 (affects part formerly in CT346030)

Subject to Section 11 Crown Minerals Act 1991 (affects part formerly in CT346030)

Subject to a right (in gross) to convey electricity, telecommunications and computer media over part marked A on DP 424096 in favour of Network Tasman Limited created by Easement Instrument 8294934.1 - 23.9.2009 at 2:50 pm

Subject to Section 241(2) Resource Management Act 1991 (affects DP 424007)

9113813.1 Notification that a building consent issued pursuant to Section 72 Building Act 2004 identifies inundation as a natural hazard - 3.7.2012 at 7:00 am

Subject to a right (in gross) to convey electricity, telecommunications and computer media over part Lot 1 DP 368439 marked A on DP 518602 in favour of Network Tasman Limited created by Easement Instrument 11013175.1 - 13.2.2018 at 12:44 pm



Identifier 493293

**LAND TRANSFER ACT 1952** L & S Form N. 31

**Land Transfer Office**  
 Received 19/11/1953  
 Title Reference S. 27 & 30 15/1/1953  
 Referred to L. T. Surveyor 25/11/1953

Deposited this 19th day  
 of November 1953  
 District Land Registrar

Note: The boundaries are not fenced except for those portions as shown between Lot 4 & 5 and Pt. Sec. 27 and between Lot 9 and Pt. Sec. 30

**Total Area: 269° 1' 32"**

I, George Robinson, registered owner of Pt. Sec. 30 Waimaea South (C.T. 62/50) hereby agree to the boundaries as shown on this plan

G. Robinson

**Sec. 27, Pt. Secs. 27 & 30 Waimaea South, Accretion Thereto, and Crown Land**

Comprised in C.T. 62/50, 62/51, 62/52, 62/53, 62/54, 62/55, 62/56, 62/57, 62/58, 62/59, 62/60, 62/61, 62/62, 62/63, 62/64, 62/65, 62/66, 62/67, 62/68, 62/69, 62/70, 62/71, 62/72, 62/73, 62/74, 62/75, 62/76, 62/77, 62/78, 62/79, 62/80, 62/81, 62/82, 62/83, 62/84, 62/85, 62/86, 62/87, 62/88, 62/89, 62/90, 62/91, 62/92, 62/93, 62/94, 62/95, 62/96, 62/97, 62/98, 62/99, 62/100

Survey Block & District V, VI, IX Waimaea  
 Land District Nelson Local Body Waimaea County  
 Scale As shown on the plan Surveyed by E. C. Egan Date 18/11/53

I, Charles Egan, Registered Surveyor and holder of an annual practicing certificate, solemnly and sincerely declare that this plan has been made from survey executed by me; that both plan and survey are correct, and have been made in accordance with the regulations under the Surveyors Act 1936. And I make this solemn declaration, conscientiously believing the same to be true and by virtue of the Oaths and Declarations Act 1932.

Declared at Nelson this 18th day of November 1953

E. C. Egan  
Registered Surveyor

Approved

Chairman A. Maden  
 Member M. L. L.  
 Nelson Catchment Board

The Common Seal of the Nelson Catchment Board was affixed on 17th November 1953 in the presence of

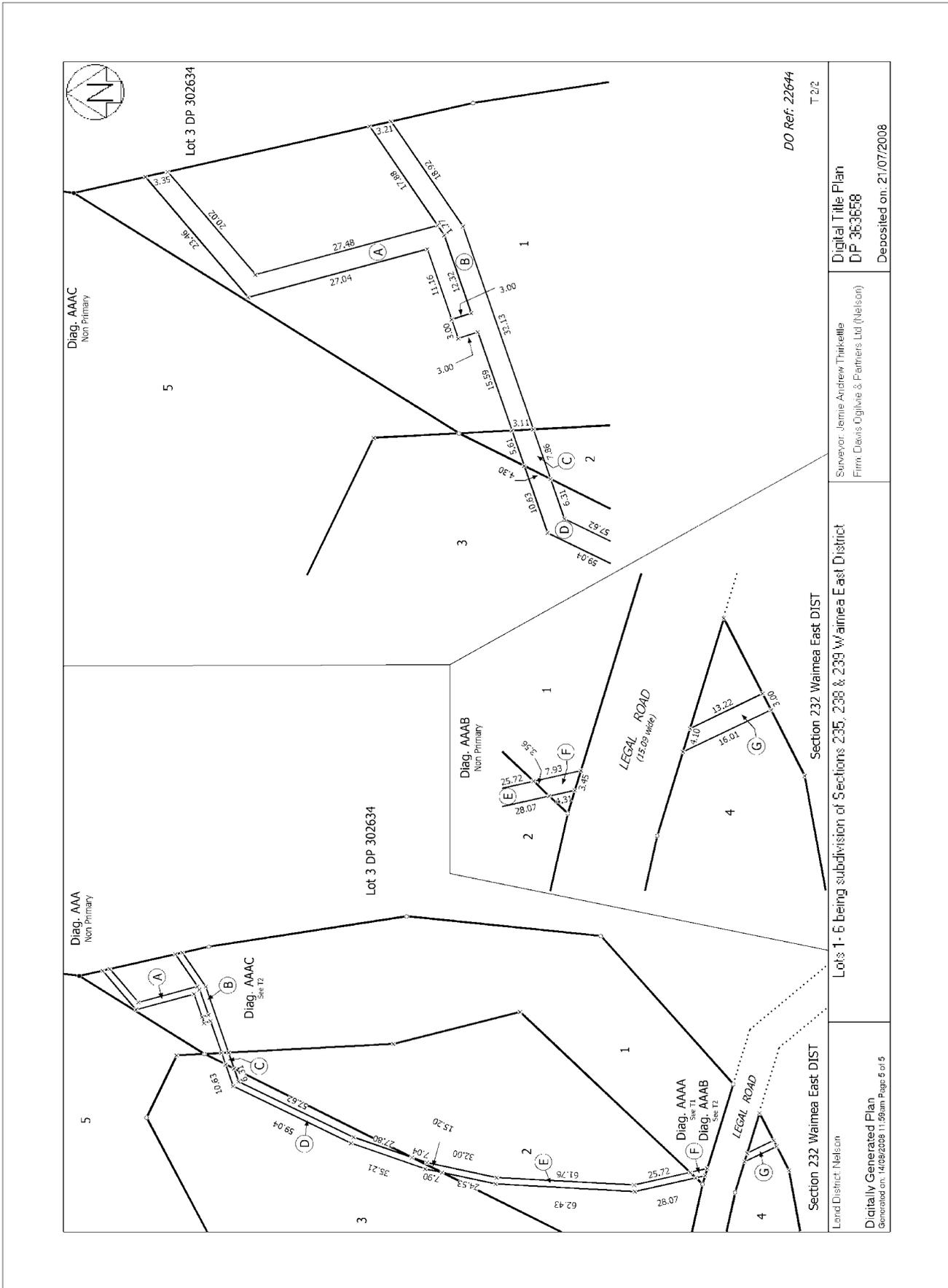
This space reserved for the Registrar

5969

L. E. Dean, Government Printer, Wellington

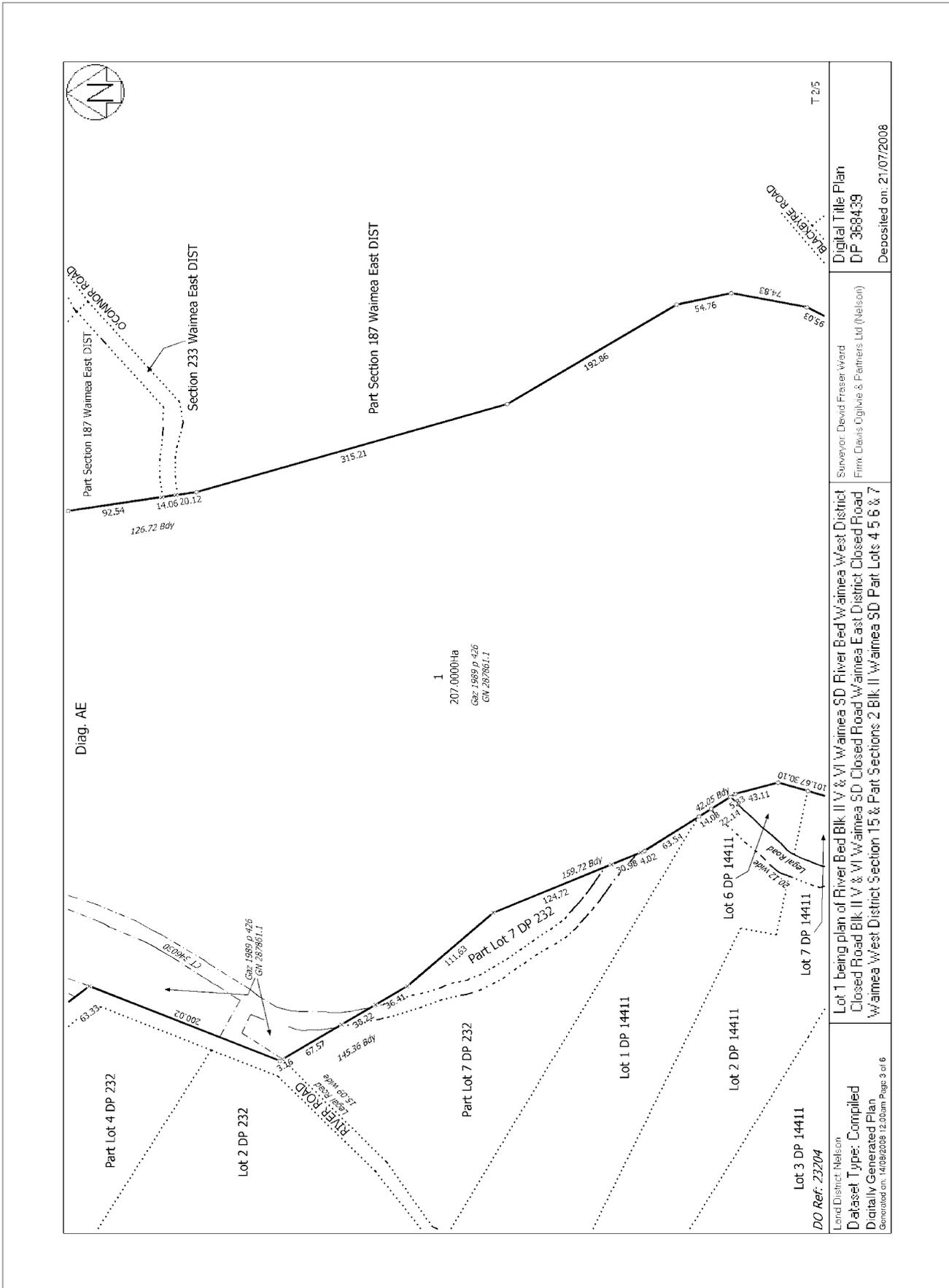


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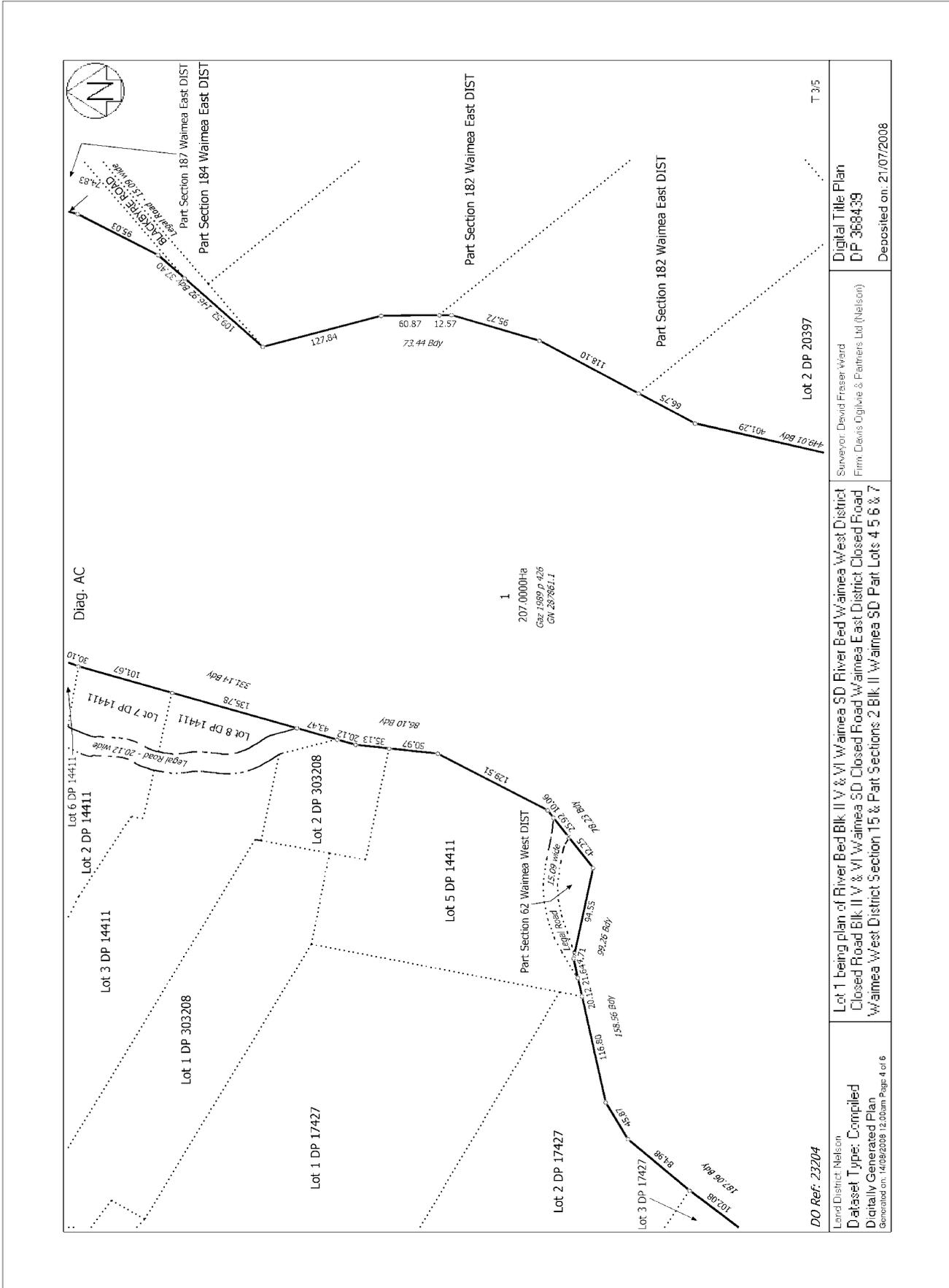




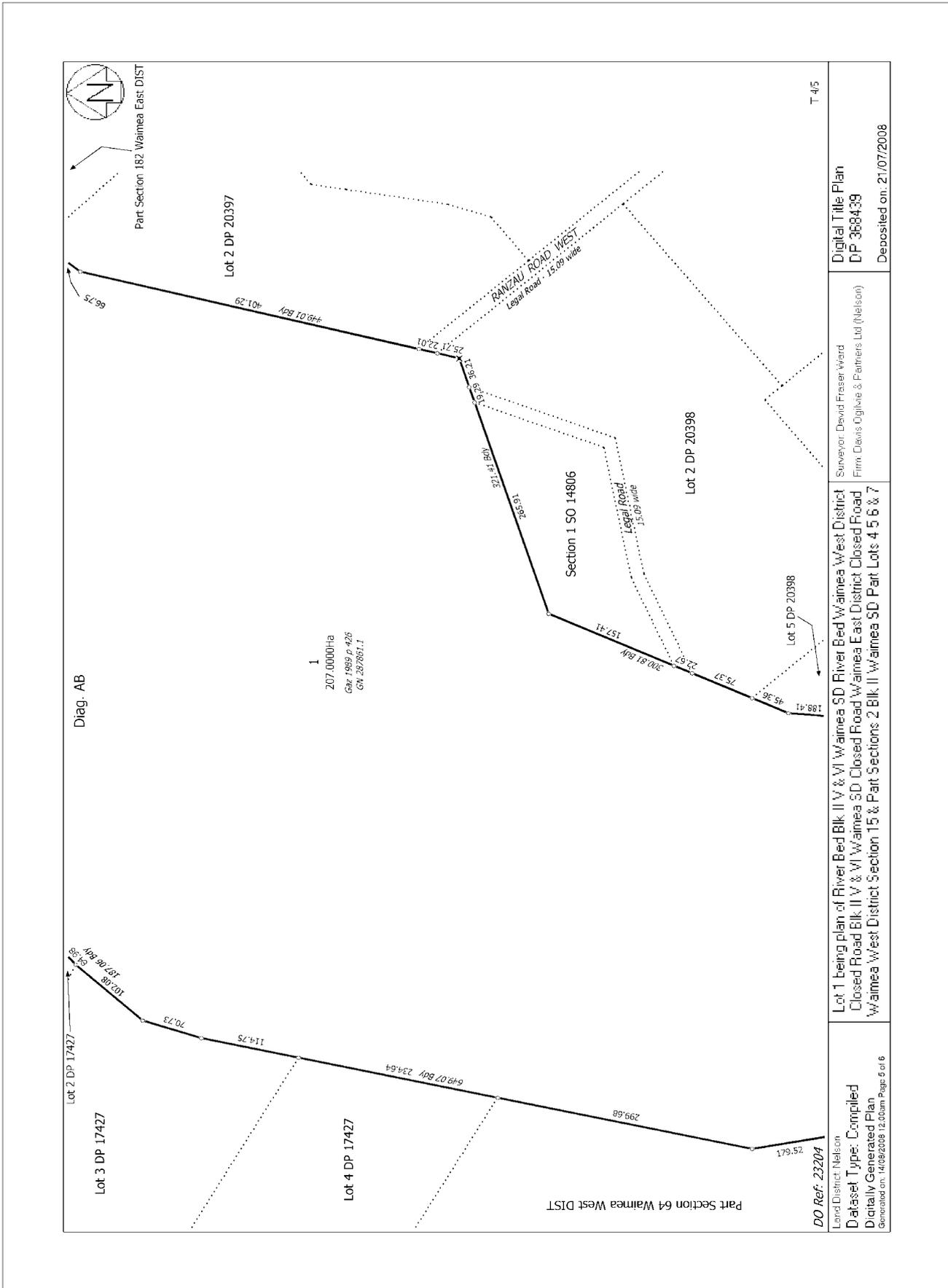
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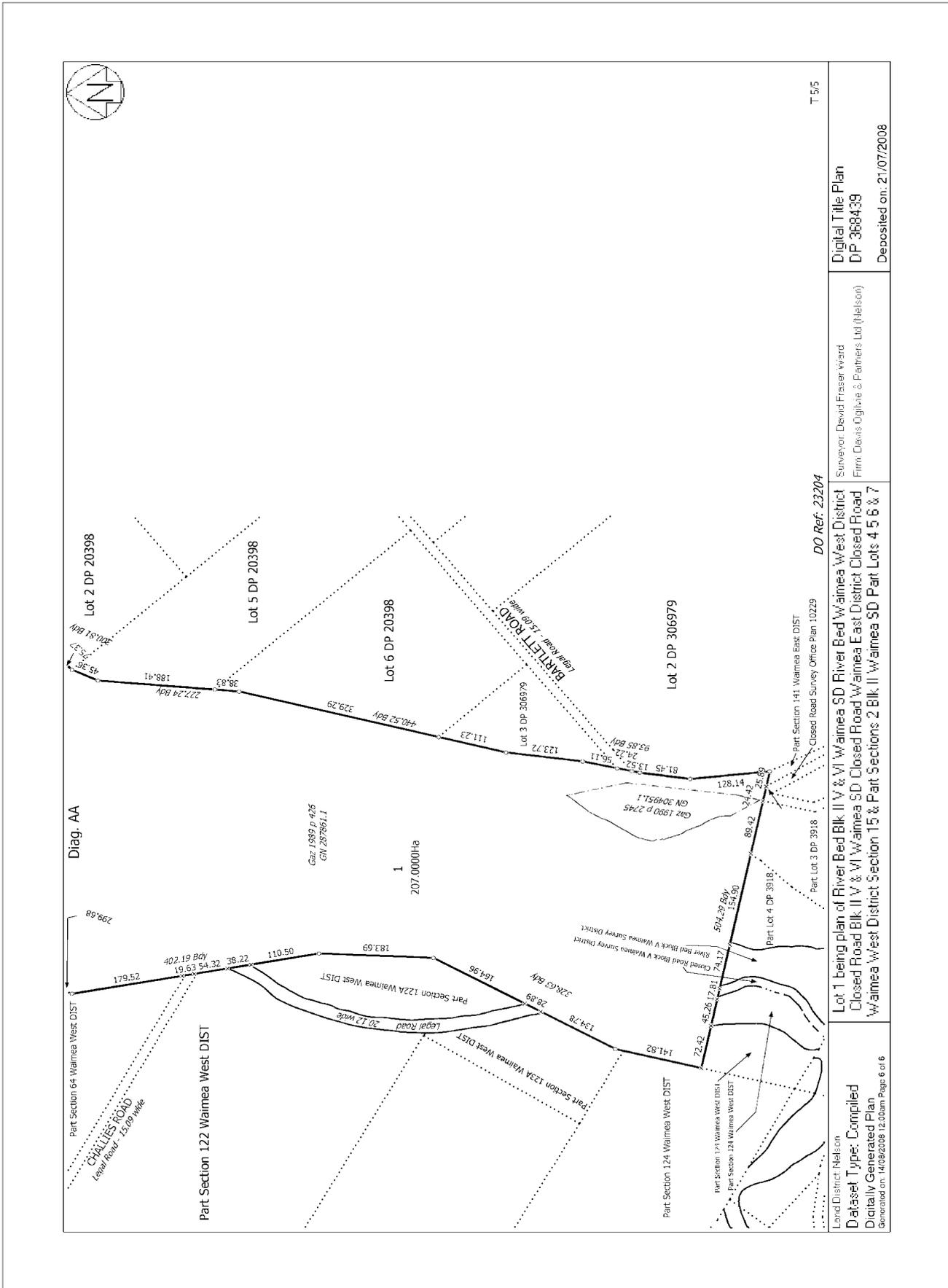
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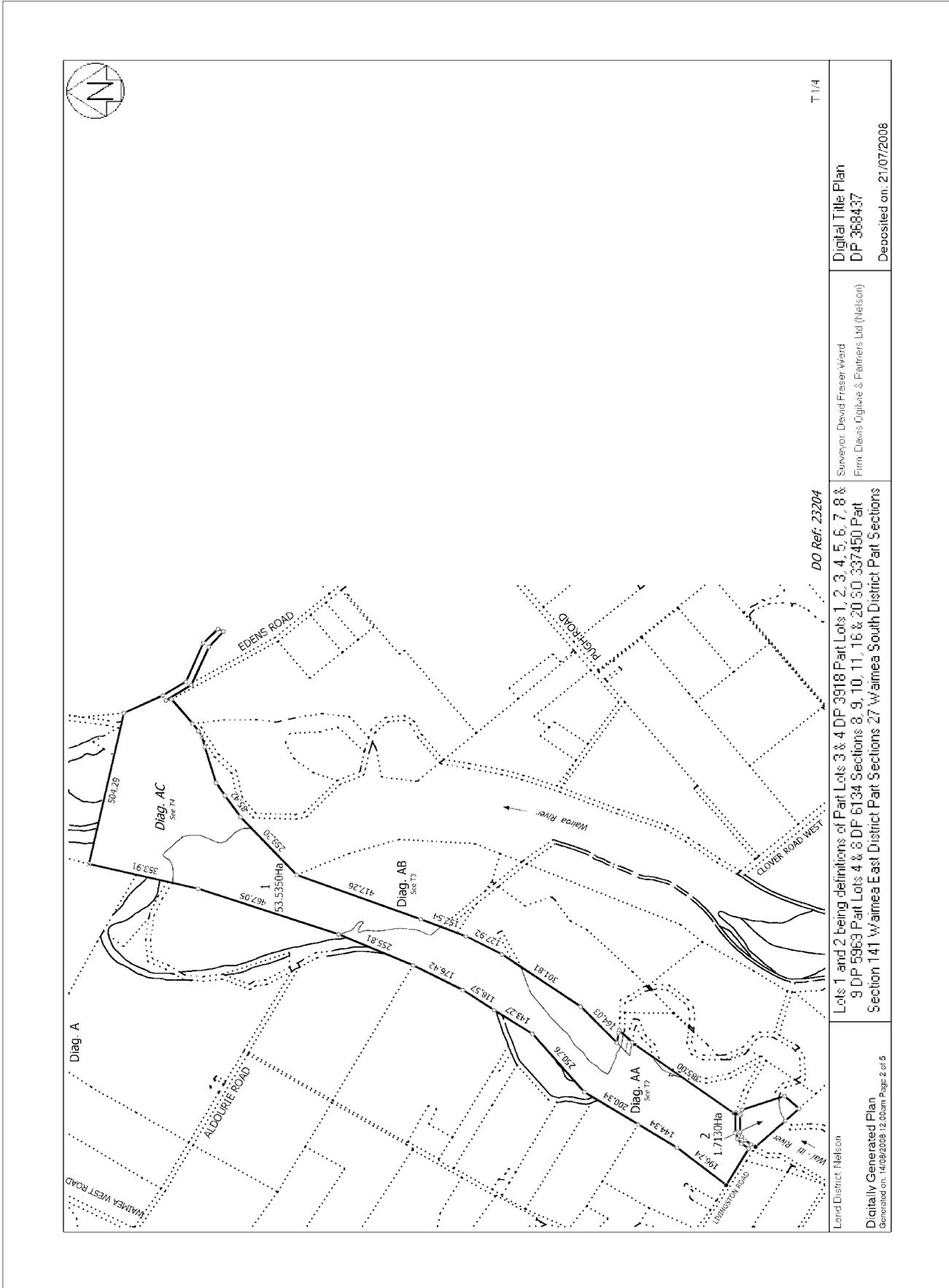
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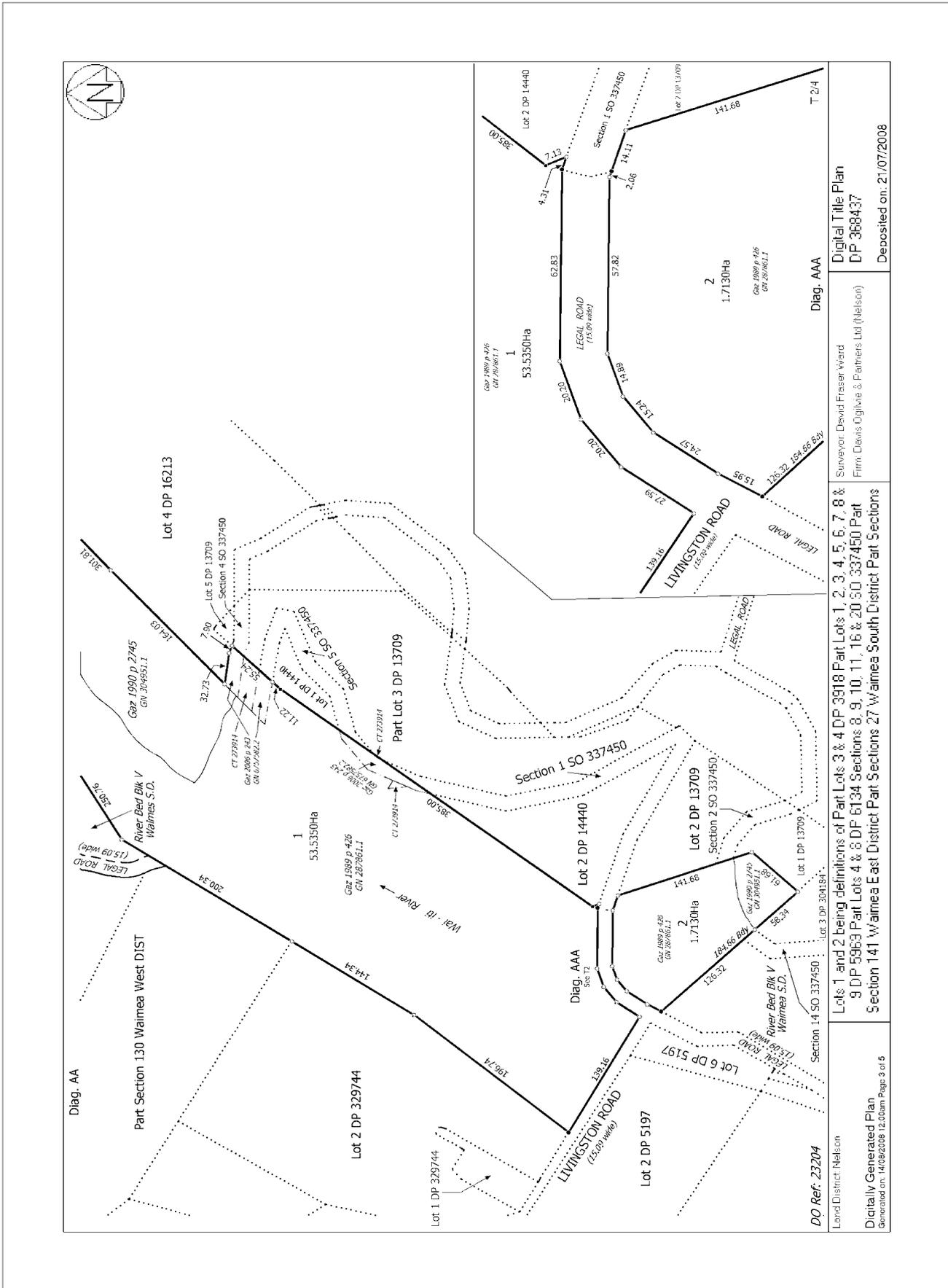


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DO Ref. 23204

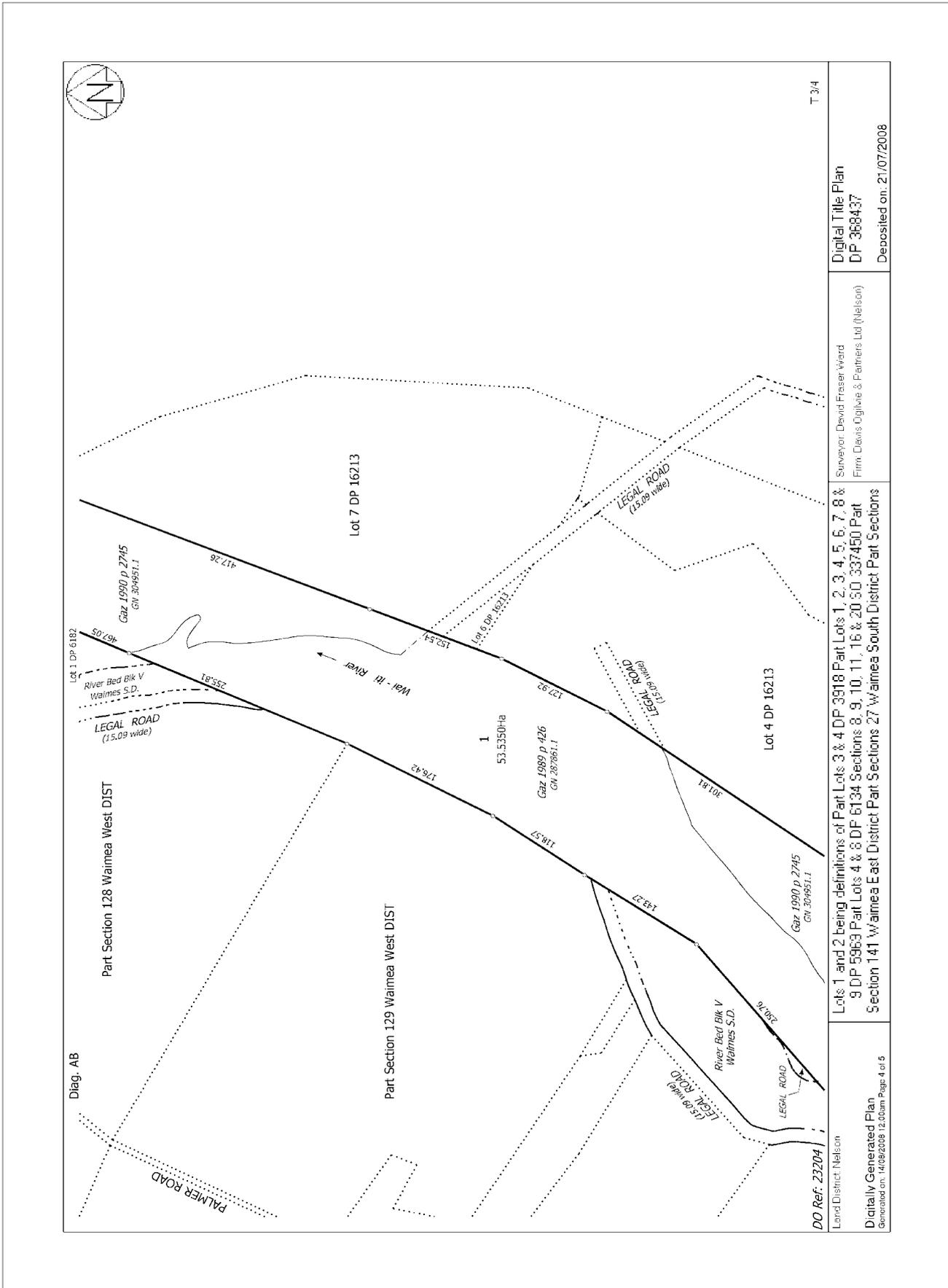
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Identifier 493293

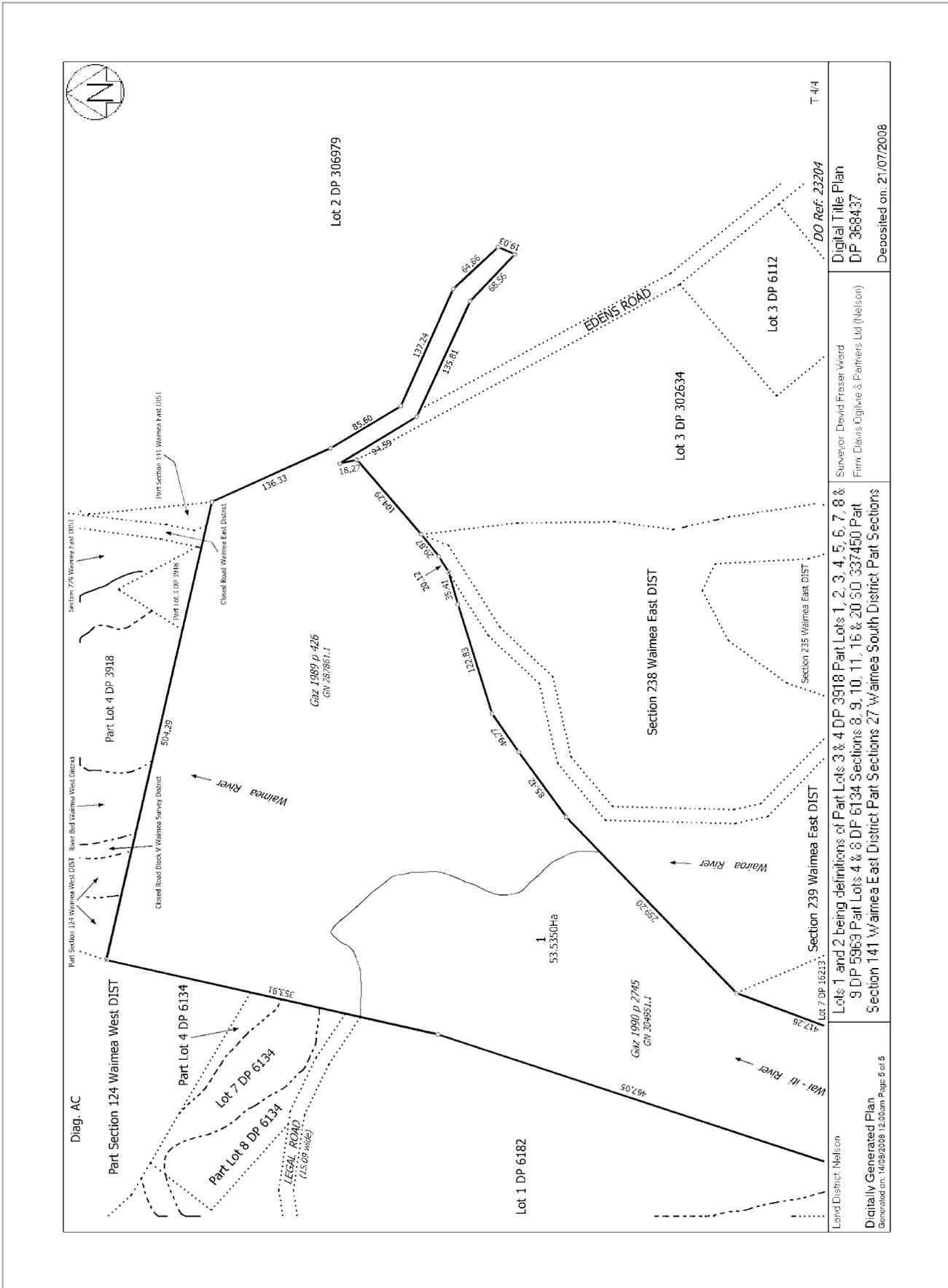


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<p>Lot 2 DP 13709 1.7130Ha</p>			
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Identifier 493293

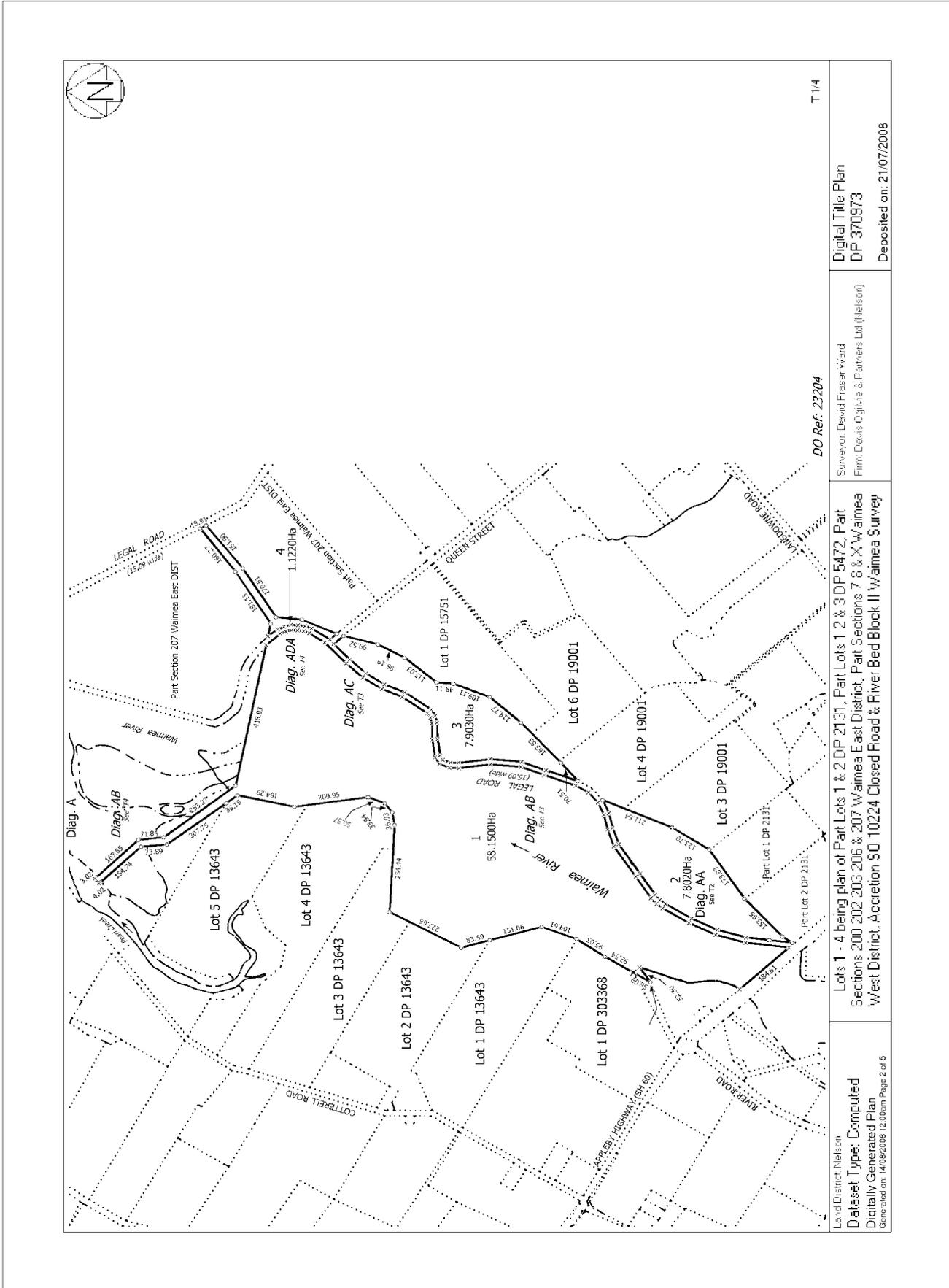


Identifier 493293



Land District Nelson	DC Ref: 23204	T 4/4
Digitally Generated Plan Generated on: 14/09/2008 14:00am Page: 5 of 5	Digital Title Plan DP 368437	Deposited on: 21/07/2008
Lots 1 and 2 being definitions of Part Lots 3 & 4 DP 3918 Part Lots 1, 2, 3, 4, 5, 6, 7, 8 & 9 DP 5969 Part Lots 4 & 8 DP 6134 Sections 8, 9, 10, 11, 16 & 20 SD 337450 Part Section 141 Waimea East District Part Sections 27 Waimea South District Part Sections		
Surveyor: David Fraser Ward Firm: Davis Ogilvie & Partners Ltd (Nelson)		

Identifier 493293

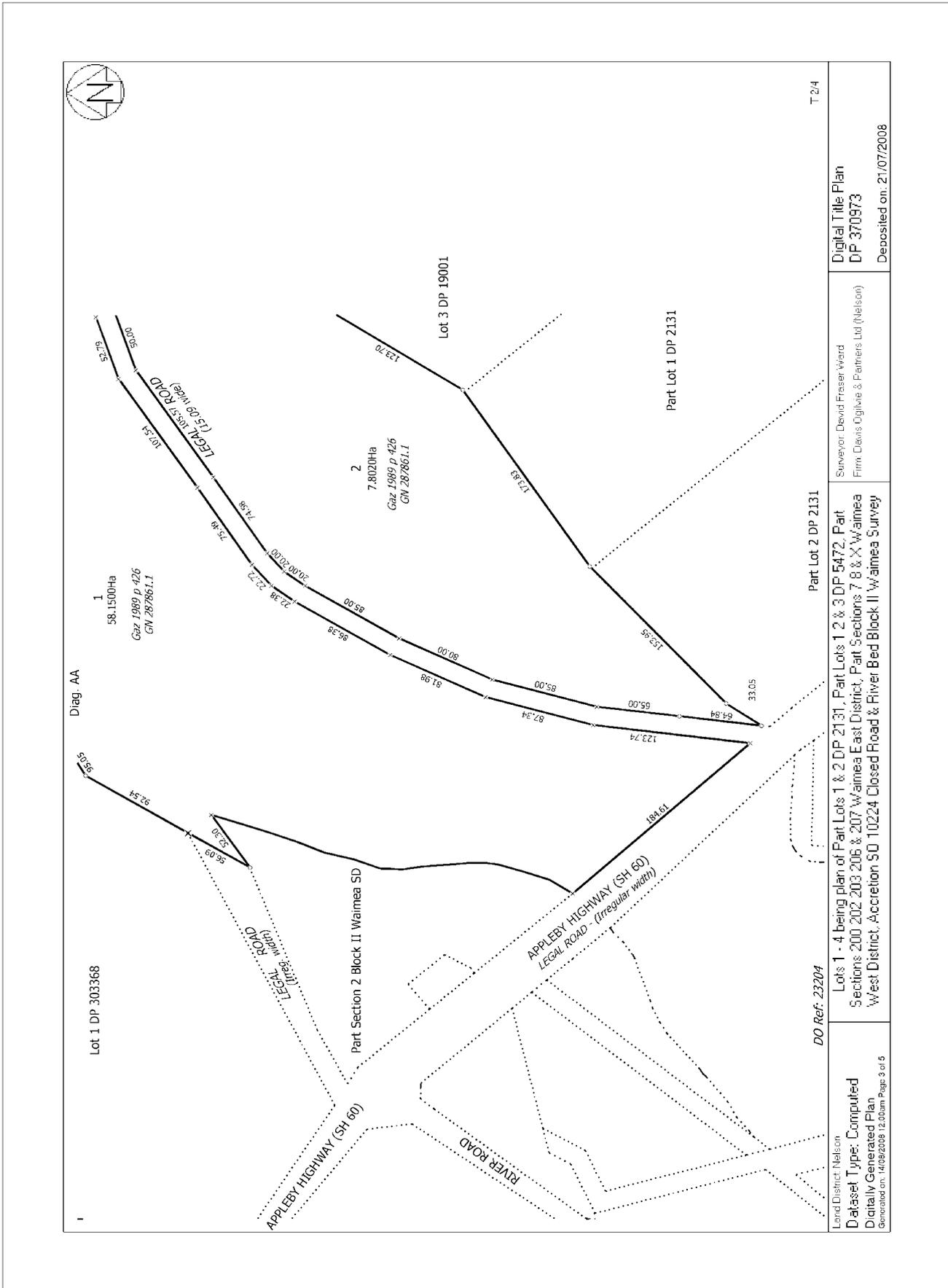


T 1/4

DO Ref: 23204

<p>Land District: Nelson                  Dataset Type: Computed                  Digitally Generated Plan                  Generated on: 14/09/2008 12:00am Page: 2 of 5</p>	<p>Lots 1 - 4 being plan of Part Lots 1 &amp; 2 DP 2131, Part Lots 1, 2 &amp; 3 DP 5472, Part Sections 200 202 203 206 &amp; 207 Waimea East District, Part Sections 7 8 &amp; X Waimea West District, Accretion S0 10224 Closed Road &amp; River Bed Block II Waimea Survey</p>	<p>Surveyor: David Fraser Ward                  Firm: Davis Ogilvie &amp; Partners Ltd (Nelson)</p>	<p>Digital Title Plan                  DP 370973                  Deposited on: 21/07/2008</p>
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Identifier 493293

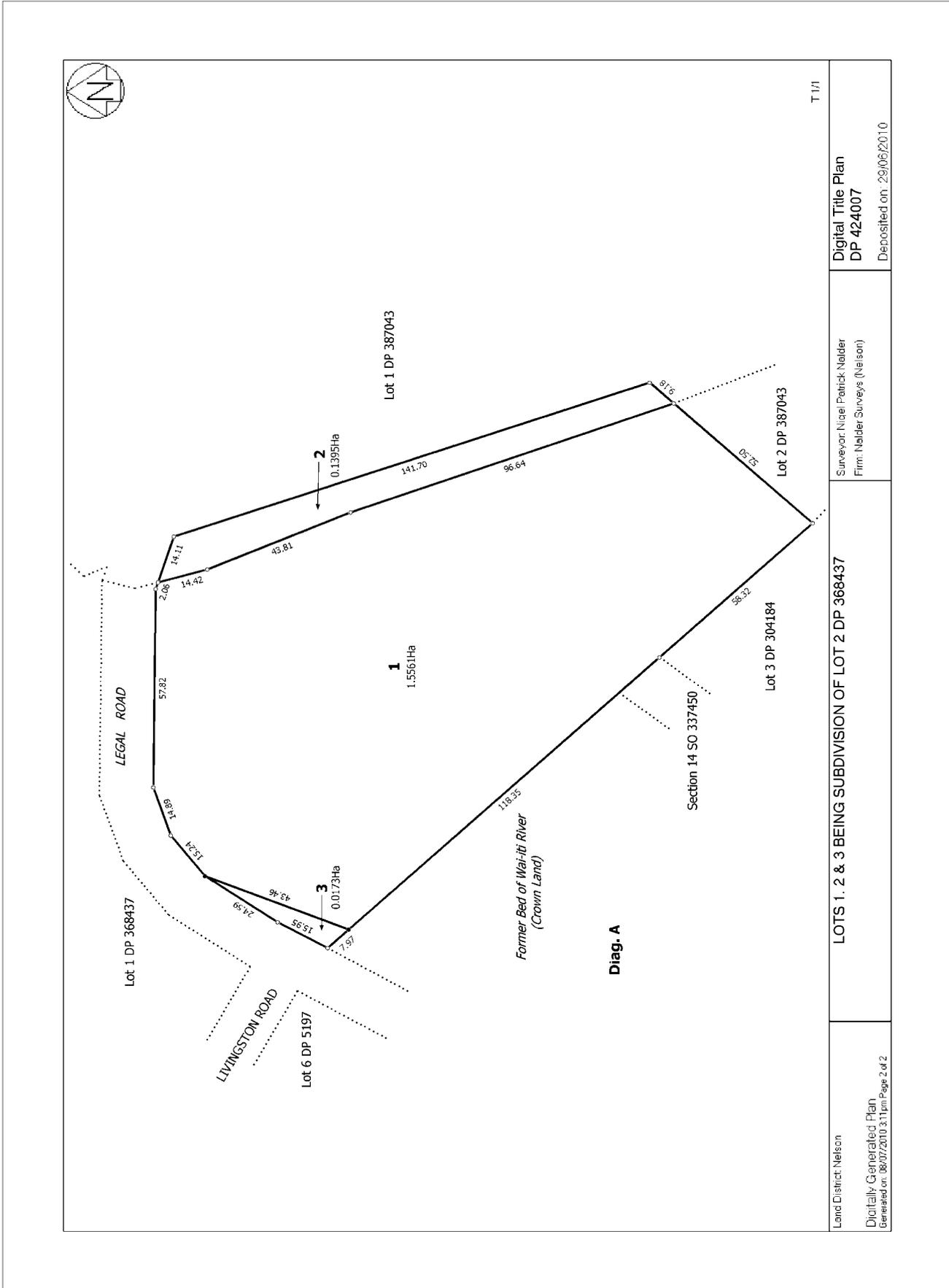


Land District: Nelson	Surveyor: David Fraser Ward Firm: Davis Ogilvie & Partners Ltd (Nelson)	T 2/4
Dataset Type: Computed Digitally Generated Plan Generated on: 14/09/2008 12:00am Page: 3 of 5	Part Lot 2 DP 2131	Digital Title Plan DP 370973 Deposited on: 21/07/2008
DO Ref: 23204	Part Lot 1 DP 2131	
Lots 1 - 4 being plan of Part Lots 1 & 2 DP 2131, Part Lots 1, 2 & 3 DP 5472, Part Sections 200 202, 203 206 & 207 Waimea East District, Part Sections 7 8 & X Waimea West District, Accretion 50 10224 Closed Road & River Bed Block II Waimea Survey		





Identifier 493293



Land District: Nelson	LOTS 1, 2 & 3 BEING SUBDIVISION OF LOT 2 DP 368437	Surveyor: Nigel Patrick Naldler Firm: Naldler Surveys (Nelson)	Digital Title Plan DP 424007 Deposited on: 29/06/2010
Digitally Generated Plan Generated on: 08/07/2010 3:11pm Page 2 of 2		T 1/1	

# Dimensions

