ADDENDUM to "Burnham 2020 Limited, Burnham Quarry, Application and Assessment of Environmental Effects, Prepared for Fletcher Concrete and Infrastructure Limited (Trading as Winstone Aggregates). Dated 7 September 2023".

Dated 11<sup>th</sup> October 2023

Earthworks within 50m of a water race

## **Executive Summary**

### Activity status

The Proposal requires resource consent as follows:

- Under the CLWRP as overall a **Discretionary Activity** for:
  - the discharge of liquid waste and sludge waste that will exceed 10m<sup>3</sup> per day and the rate of discharge may exceed 5mm per day,
  - The discharge of any wastewater from an industrial or trade process, into or onto land, within the Selwyn Te Waihora sub-region;
  - the discharge of stormwater from buildings, car parks, internal roads, quarried areas, processing areas and stockpiles into or onto contaminated land that will be partly associated with rural activities and partly an industrial activity;
  - the uncontrolled discharge of water through cleanfill, and
  - the deposition of more than 50m<sup>3</sup> of material in any consecutive 12-month period onto land which will have been excavated to a depth in excess of 5m below the natural land surface.
  - o earthworks within 50 metres of a water race.

# 3.0 The Proposal

## 3.4 Proposed activities

#### 3.4.13 Earthworks within 50m of a water race

Burnham 2020 proposes to develop an aggregate quarry within a Site located at the junction of Aylesbury Road and Grange Road, Burnham. As part of this proposal, it is proposed to undertake earthworks within 50m of a water race to the south of Grange Road. The water race is owned by Selwyn District Council. The earthworks include:

- stockpiling within the 17.5 metre setback from the site boundary and approximately 30-35 metres from the water race and,
- extractive activities (quarrying) and stockpiling within the setback 42 metres from the water race.

The water race is identified on Figure 1 below.

Figure 1 – Indicative location of water race along Grange Road.



# 5.0 Statutory Matters

## 5.1 Canterbury Land and Water Regional Plan (CLWRP)

#### 5.1.1 Definitions

Earthworks are defined in the Canterbury Land and Water Regional Plan (CLWRP) as 'the excavation of, and/or filling with topsoil, subsoil, sediments, rock and/or other underlying materials on which the soil is formed. Earthworks include, but are not limited to, the construction and maintenance of roads, tracks, firebreaks and landings, and ground shaping (recontouring), root raking and blading.'

#### 5.1.2 Rules

The rules in the CLWRP manage these activities as extraction and deposition as set out below.

#### Earthworks over Aquifers

- 5.175 The use of land to excavate material is a permitted activity, provided the following conditions are met: ...
  - 2. Over an unconfined or semi-confined aquifer:
    - a. the volume of material excavated is less than 100m<sup>3</sup>; or
    - b. the volume of material excavated is more than 100m<sup>3</sup> and:
      - (i) there is more than 1m of undisturbed material between the deepest part of the excavation and the highest groundwater level; and
      - (ii) the excavation does not occur within 50m of any surface waterbody.

5.176 The use of land to excavate material that does not comply with one or more of the conditions of Rule 5.175 is a restricted discretionary activity.

#### The exercise of discretion is restricted to the following matters:

1. The actual and potential adverse environmental effects on the quality of water in aquifers, rivers, lakes, wetlands; and

- 2. Any need for remediation or long-term treatment of the excavation; and
- 3. The protection of the confining layer and maintaining levels and groundwater pressures in any confined aquifer, including any alternative methods or locations for the excavation; and
- 4. The management of any exposed groundwater; and
- 5. Any adverse effects on Ngāi Tahu values or on sites of significance to Ngāi Tahu, including wāhi tapu and wāhi taonga.

#### Assessment

'Surface waterbody' is defined in the CLAWRP to include 'water above the ground surface and within a lake, river, artificial watercourse or wetland, but does not include water in the sea, snow or rain or water vapour in the air.'

An 'Artificial watercourse' is defined in the CLAWRP as including water supply races.

It is proposed to undertake aggregate extraction and stockpiling of overburden that will be setback approximately 42 metres from the water race that runs along part of Grange Road as identified in Figure 1 above. Therefore, the Proposal requires consent as a **Restricted Discretionary Activity** under Rule 5.176 of the CLWRP.

Matter (1) over which discretion is restricted does not address actual or potential adverse environmental effects on the quality of water in water supply races. Matter 1 specifically refers to 'aquifers, rivers, lakes, wetlands' only.

Matter (2) regarding remediation has been addressed in the 'substantive AEE' <sup>1</sup> in particular in Section 3.4.10.1 - Rehabilitation Management Plans.

Matter (3) refers to the protection of the confining layer and maintaining levels and groundwater pressures in a confined aquifer<sup>2</sup>. The Site is identified in the CLAWRP as being within a semi-confined or unconfined aquifer. Therefore Matter 3 is not relevant.

Matter (4) refers to the management of any exposed groundwater. It is proposed that there is more than 1 metre of undisturbed material between the deepest part of the excavation and the highest groundwater level recorded for the Site at any time. Therefore Matter 4 regarding the management of exposed groundwater is not relevant.

Matter (5) regarding adverse effects on Ngāi Tahu values, is addressed in Section 6.2.11 – Effects on Cultural Values in the substantive AEE.

<sup>&</sup>lt;sup>1</sup> **Substantive AEE** refers to the Document – "Burnham 2020 Limited, Burnham Quarry, Application and Assessment of Environmental Effects, Prepared for Fletcher Concrete and Infrastructure Limited (Trading as Winstone Aggregates). Dated 7 September 2023."

<sup>&</sup>lt;sup>2</sup> **Confined aquifer** means an aquifer overlain by a low permeability or impermeable layer where the water in the aquifer is under pressure, in the CLWRP.

# 6.0 Assessment of Environmental Effects

## 6.2 Effects Assessment

#### 6.2.14 Earthworks within 50 metres of a water race

The substantive AEE has described proposed extractive activities and assessed the effects of these activities, in particular in the following sections:

Section 3: The Proposal

3.4.3 Ex	ktraction Phases.
3.4.6.2.4 Ste	ockpiles and Exposed Areas, Truck Loading and Transportation.
3.4.6.2.6 Mo	onitoring.
3.4.10.1 Re	ehabilitation

Section 6: Assessment of Effects

6.2.6 Soils.

Management Plans:

- Draft Quarry Management Plan.
- Draft Soil Management Plan.

Furthermore, the land within the 50 metre setback will be excavated from within the quarry. The Site is separated from the water race by Grange Road and there is a well-established pine shelterbelt along boundary the road boundary, separating the water race from Grange Road and the Site. There is also at least 42 metres between the water race and the closest proposed extraction activity, and approximately 34 metres between the water race and the stockpiles. It is considered that given these separation distances, there is minimal, if any, risk to the on-going effective functioning of the water race.

# 5.0 Objectives and Policies

The extraction activity including earthworks has been addressed in Section 5.0 of the substantive AEE particularly in the following sections:

- 1.2.2 Mineral Extraction and Cleanfilling, and
- 7.2.9 Freshwater Quality (recognising Matter 1 Matters of discretion for Rule 5.176 specifically excludes reference to any effect on the quality of water in water races).

It is not considered that any additional assessment of the relevant objectives and policies is required to address the resource consent sought under Rule 5.176 : setback of earthworks from a surface waterbody (water race) in accordance with the CLWRP.