Memo

From: Ian Millner, LandVision Ltd

To: Rachel Wilson

Christchurch City Council (CCC)

Re: RMA/2025/2386. 173 Pound Road Industrial Development. NPS - HPL Review

25/09/2025

NTP Development Holdings Limited seek approval for a 60.4 ha industrial development Road, Christchurch.

Currently the Site is classified within the New Zealand Land Resource Inventory (NZLRI) as class 2 (2s2)(50.35 ha) with a minor area of class 4 (4s6)(9 ha).

The National policy statement for Highly Productive Land 2022 (NPS-HPL) has placed additional restrictions on the development of Land Use Capability (LUC) class 1-3 land for any other use then land based primary production.

This review is to assess the adequacy of the supplied documentation against the NPS-HPL.

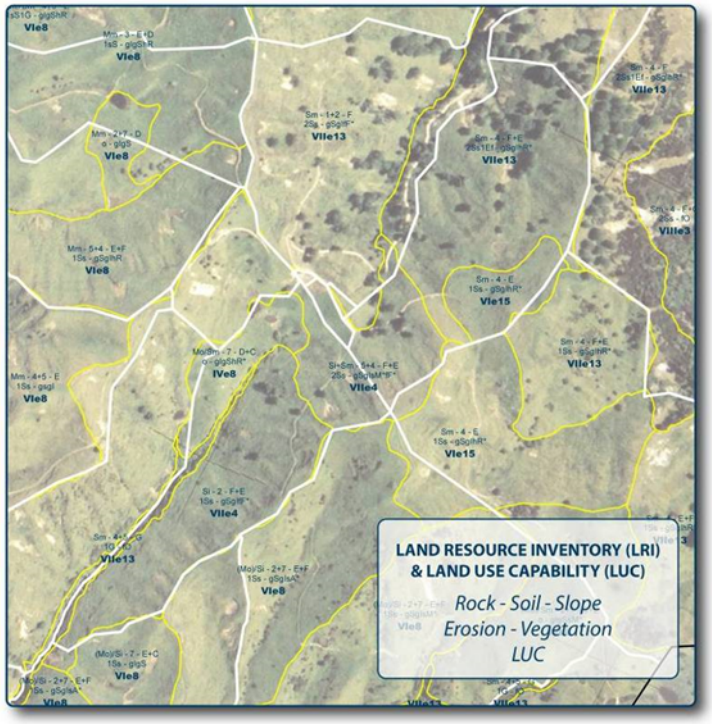
Documents supplied.

- Memo: Pound Road Industrial Development – Assessment of the HPL and NPS-HPL and Land Productivity. Victor Mthamo, Reeftide.

Figure 1: Supplied graphic of proposed development.

1. LUC and Soil

The land resource has been described and evaluated according to the Land Resource Inventory (LRI) and Landuse capability classification system (LUC). The land resources survey was undertaken at a regional 1:50 000 scale.



The LRI system involves mapping landscape units according to five inventory factors (rock type, soil unit, slope class, erosion type and severity, and vegetation).

From the LRI assessment, the area was then classified as LUC, which further groups similar units according to their capacity for sustainable production under arable, pastoral, forestry or conservation uses across the region. The LUC code is broken down into three components, which show the general capability (I-VIII classes), the major limitations (four subclass limitations of wetness, erosion, soil, and climate), and the capability unit to link with regional classifications and known best management practices.

The LUC system is composed of two key attributes. The first is a resource inventory that compiles physical factors in a consistent and methodical manner and secondly an LUC classification where land is categorised into classes based on its capability to sustain one or more productive uses.

LUC classification is based on pastoral, arable and forestry use.

Increasing limitations to use ↓

LUC Class	Arable cropping suitability†	Pastoral grazing suitability	Production forestry suitability	General suitability
1	High ↓ Low	High ↓ Low	High ↓ Low	Multiple use land
2				
3				
4				
5	Unsuitable			Pastoral or forestry land
6				
7				
8		Unsuitable	Unsuitable	Conservation land

↓ *Decreasing versatility of use*

The site is currently mapped within the NZLRI as four polygons of unit 2s2. Being class 2 there are only slight limitations to arable and pastoral use. Variations in soil type are the key differences between different polygons of 2s2. Soils vary between Waimakariri fine sandy loam and silt loam.

No alternative mapping has been provided.

The potential land use is listed as suitable for "intensive cropping, orcharding, forage cropping, intensive grazing, production forestry."[1] There is no recorded difference in average or potential livestock carrying capacity across the Site.

Figure 2: The site and LUC polygons as held by Land Information New Zealand(LINZ). Note only one polygon of 2s2 is highlighted with other polygons identified by orange lines.

2. NPS – HPL

2.1 Definition of Productive capacity

Productive capacity, in relation to land, is defined in Clause 1.3 of the NPS-HPL as:

> *…the ability of the land to support land-based primary production over the long term, based on an assessment of:*
>
> a. physical characteristics (such as soil type, properties, and versatility); and
> b. *legal constraints (such as consent notices, local authority covenants, and easements); and*
> c. *the size and shape of existing and proposed land parcels.*

[1] The South Island Land Use Capability Extended Legend for the New Zealand Land Resource Inventory.

2.2 Clause 3.10 NPS HPL

(1) Territorial authorities may only allow highly productive land to be subdivided, used, or developed for activities not otherwise enabled under clauses 3.7, 3.8, or 3.9 if satisfied that:
a) there are permanent or long-term constraints on the land that mean the use of the highly productive land for land-based primary production is not able to be economically viable for at least 30 years; and
The assessment provided traverses a comprehensive list of attributes and uses of the subject land. These include. • Irrigation requirements: the Reeftide report has identified that irrigation is available (in part) for this site. Water takes are consented for enough water to irrigate 30.9% of the effective Site. This has been assessed using irricalc (nationally used tool to assess irrigation demand) and assumes 415 034m^3 of water is required to irrigate crops and pasture (the consented activity) while only 128 593m^3 is consented to be taken. A modelled deficit of 286 441m^3 pa. • Restrictions on the further availability of groundwater within Christchurch West Melton zone: The zone from which irrigation water is allocate is currently fully allocated. Therefore, no new irrigation water is available for extraction. The ability to transfer irrigation water is technically possible even if complex and expensive. • Limitations of the Canterbury Land and Water Plan (CLWRP): The CWLRP has set out nutrient loss limitations for agriculture in different zones across Canterbury. Where zones have losses above targets for nitrogen and phosphorus, they are labelled red zones, and a baseline nutrient loss limitation is applied which is expected to be maintained or reduced from modelled losses between 2009 and 2013. The Reeftide report states that "the Sites productivity has historically been low" but does not go as far as providing any evidence to support this claim. I note the irrigation consents were to irrigate crops and pasture excluding milking dairy cows. Two generic studies are quoted at 7.3.3. of the Reeftide report. Both these studies indicate that productivity losses have the potential to reduce profitability. • A complicating factor in this analysis is that properties below 10 ha are not required to obtain a land use consent. I have reviewed the irrigation consent conditions that exist on Site and have found none of the existing consents have conditions relating to nutrient management. This is potentially significant in this case as technically the 14 individual lots involved in this proposal could intensify land use activities and not disturb the intent of the CLWRP. I have sought advice from ECAN (and reviewed rules 5.44A-5.48, CLWRP) on this issue and am satisfied that consent to intensify any land use across an amalgamated footprint would be tightly controlled if not declined due to the Christchurch West Melton zone being in the red.

- The proposed development is in an area isolated from other productive land by roads and other infrastructure. I am satisfied that any opportunity to amalgamate this Site (either wholly or in part) is significantly limited and unlikely.

Summary of constraints.

While several potential constraints have been identified in the Reeftide report there is no clear analysis within the Reeftide report that gives effect to clause 3.10 (1)(a) "there are permanent or long term constraints on the land that mean the use of the highly productive land for land based primary production is not able to be economically viable for at least 30 years".
However, when the potential constraints are considered cumulatively the potential for a lack of economic viability is greater. For example, if a constraint on the ability to obtain enough water to irrigate the entire site is considered alongside historical and likely future limitations to land use intensity, I agree that the potential for more intensive and therefore viable land use (for example, horticulture (including market gardening) or arable) to be developed across the Site is constrained to some degree.
While the Reeftide report has correctly identified several potential constraints that may prevent economic viability the report itself has not provided any analysis of on-site economics resulting from the identified constraints.
I agree that the Site is constrained to some degree although it is not clear from the analysis provided if economic viability is prevented. The question of viability for this level of activity (or otherwise) has not been clearly demonstrated.
I will return to this issue in my conclusion.

(b) the subdivision, use, or development: (i) avoids any significant loss (either individually or cumulatively) of productive capacity of highly productive land in the district; and

The report states that the loss of 50.5 ha of HPL from the 836 700 ha in Canterbury and 9 330ha in Christchurch City is not significant. These numbers have been derived from the Canterbury maps Layers.
While I agree with the intent of this statement, I have checked the areas of HPL within the CCC district and found the following.

Class	Area(ha)
1	1 463
2	9 803
3	5 590
Total	16 856

The numbers in the table above are obtained from Landcare Research.
Therefore, the correct statement is 50.5 ha from 16 856 ha of HPL within CCC area - which equates to 0.29%.
I agree that the loss of this piece of HPL land from the area of HPL within CCC district is not significant.

I think it relevant at this point to note the draft region policy statement prepared by ECAN does not include this Site within maps of highly productive land. This draft policy has been paused and is not operative at this stage.	
(ii) avoids the fragmentation of large and geographically cohesive areas of highly productive land; and	
The assessment does not expressly identify any issues relating to fragmentation citing the sites isolation from other areas of highly productive land and therefore not contributing to any additional fragmentation. I agree with this conclusion. In my view given the sites relative isolation from other significant areas of highly productive land and constraints as discussed above I do not think the proposal contributes significantly to fragmentation of highly productive land.	
(iii) avoids if possible, or otherwise mitigates, any potential reverse sensitivity effects on surrounding land-based production.	
The assessment concludes that there is "given the sites isolation and the nature of the proposed development, it is unlikely that any future development in around the site will result in reverse sensitivity issues". As the site is operationally isolated from other HPL I also consider the potential for reverse sensitivity from this proposal to be insignificant. Land based production in this area is predominately lifestyle blocks. I note the existence of a motor racing track and speedway opposite the site on Hasketts Road and a public golf course to the north of the site. Recently developed industrial land is to the east.	
(c) the environmental, social, cultural and economic benefits of the subdivision, use, or development outweigh the long-term environmental, social, cultural and economic costs associated with the loss of highly productive land for land-based primary production, taking into account both tangible and intangible values.	
I agree with the assessment in that social and economic cost benefit is likely to be positive.	
(2) In order to satisfy a territorial authority as required by subclause (1)(a), an applicant must demonstrate that the permanent or long-term constraints on economic viability cannot be addressed through any reasonably practicable options that would retain the productive capacity of the highly productive land, by evaluating options such as (without limitation):	
(a) alternate forms of land-based primary production:	The Reeftide report leans on the overarching limitations on land use imposed by the CLWRP. I effect, any potential future land use is limited by its historical "benchmark". It is the responsibility of the land owner to prove this benchmark. Given benchmarks were

	not required of the individual properties involved with this proposal at the commencement of the CLWRP they face a distinct barrier to future intensification. I am satisfied with the land use analysed and rational used.
(b) improved land-management strategies:	I am satisfied that the appropriate land management strategies have been discussed. I am satisfied that given the limitations of the site the potential benefit of any land management strategy on this site will be limited to the margins and not fundamentally change the sites viability.
(c) alternative production strategies:	As above
(d) water efficiency or storage methods:	I accept the arguments provided that irrigation on this site, even if it were available (which is unlikely in my view) would not be feasible on a site of this size due to the additional financial overhead's irrigation would introduce.
(e) reallocation or transfer of water and nutrient allocations:	I agree that the CLWRP does create limitations for land use on site. I do not consider it likely that transfers (assuming they were possible) would materially change the viability of this site.
(f) boundary adjustments (including amalgamations):	I have considered the potential for boundary adjustments and leasing to improve the long-term viability of this site. Given the sites operational isolation I do not consider that amalgamation is an attractive of viable option for this site.
(g) lease arrangements.	As above.

(3) Any evaluation under subclause (2) of reasonably practicable options: (a) must not take into account the potential economic benefit of using the highly productive land for purposes other than land-based primary production; and

(b) must consider the impact that the loss of the highly productive land would have on the landholding in which the highly productive land occurs; and

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(c) must consider the future productive potential of land-based primary production on the highly productive land, not limited by its past or present uses.

(4) The size of a landholding in which the highly productive land occurs is not of itself a determinant of a permanent or long-term constraint.

(5) In this clause:

landholding has the meaning in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020

long-term constraint means a constraint that is likely to last for at least 30 years.

Conclusion

In my opinion the provided agricultural land use assessment has adequately demonstrated that the site does have long term constraints to primary production. However as mentioned above the assessment does not adequately address the issue of economic viability as a result of these constraints.

It is clear from the analysis provided that the site is potentially constrained and when constraints are considered cumulatively they effectively prevent the site from being developed into a more intensive land use. The clear question is can the site be economically viable as a pasture based operation (with some cropping) with a minor amount of irrigation (the highest and best use).

To test the Sites economic viability within the defined constraints I have compared a proxy for the cost of capital for the site against publicly available survey data from Beef and Lamb NZs economic service and a Canterbury specific arable benchmark (Brophy Knight Report). This shown in the table below.

Total land Value (60.39ha)	$10,750 000	Beef&LambNZ survey EBIT $Ha (10 year average)	Brophy Report. (5 yr average Net income)$ha
Debt proxy (40%)	$4,300 000		
5% interest	$215 000		
Interest ha/pa	$3583	$3583	$3583
Potential EBIT/Net income		$877	$1736
Net Result(deficit)		($2706)	$(1847)

The proxy for the cost of capital assumed above is intended to represent a realistic long term debt structure (long term interest). There is no accounting for the cost of equity within this analysis. This is a very simple analysis that indicates the operation of a pastoral or arable farm on this site is not economically viable.

The analysis I have undertaken is deliberately conservative in that it includes financial returns based on arable land use (partially irrigated) across larger farms and assumes a stocking rate I estimate to be higher than current use. I note that even if this Site achieved a farm profit before tax equal to the industry data for arable ($748 ha) that would equate to a $45 207 pa income (ignoring any tax obligation). The minimum wage in NZ is currently $48 880pa.

This analysis also assumes that all of the 60.39 ha Site is capable of the same production metrics. I note 9 ha of the site is LUC class 4.

Therefore, I am comfortable that the Site is able to be demonstrated to have permanent and long term constraints that prevent the Site from being used for primary production in an economically viable manner for at least 30 years.