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Sun Properties LTD

HPL Assessment: 147-151 Napier Road. Havelock North.

A decorative graphic on the left side of the page consists of a thick, dark blue vertical bar. From the bottom of this bar, several thin, curved lines in shades of blue, grey, and green extend upwards and to the right, resembling stylized grass or reeds.

Ian Millner
LANDVISION

LandVision

LandVision Ltd is an independent technical agricultural/land and resource management consultancy company with offices in Hawkes Bay, Nelson, Wanganui, and Tauranga. It has a team of multi-skilled staff with extensive experience across farm planning and management, soil and LUC mapping, nutrient budgeting, environmental management, compliance, and policy.

LandVision is New Zealand's most experienced private soil /LUC mapping specialist with over 1million hectares mapped for various clients, including councils, farmers, and Iwi.

LandVision Ltd provide technical and strategic advice to clients throughout Aotearoa across multiple scales from small farms to large councils, industry groups, Iwi farming trusts and corporates. Its advice ranges from comprehensive farm plans and nutrient budgets, advice on development options and due diligence to full effects assessments to support resource consent applications.

1. Introduction

Sun Properties own the property at 147-151 Napier Road. A proposal has been developed to change the land use on site from packhouse/storage to residential.

The NPS-HPL now requires assessment of productive capacity on land deemed to be LUC 1-3 where it has the potential to be affected by development.

The land on this site is currently mapped as 1c1 within the New Zealand Land Resource Inventory (NZLRI).

This report provides an assessment of productive potential of the site and the potential for the proposed development to affect that potential.

2. Site Description

2.1. Current condition

The site is currently covered in concrete, compacted gravel and a range of sheds and ancillary buildings. A small area of grass and garden surrounds a small house being used as an office/amenity block. Site area is approximately 0.73ha.



FIGURE 1: APPROXIMATE SITE. (HDC INTRAMAPS)



FIGURE 2: EXAMPLES OF SITE CONDITIONS.



FIGURE 3: SITE POSITION RELATIVE TO NZLRI UNIT 1C1. BLUE =1C1

2.2. NZLRI

Currently the site is classified as 1c1. Attributes of this unit of 1c1 are described as below.

Unit	1c1
Rock type	Alluvium
Soil	Manawatu silt loam, Twyford, Hastings
Slope	A
Vegetation	Permanent cropland
Erosion	negligible
Average farmer stocking capacity(potential)	15(32)
Suitable uses	Horticulture, market gardening, arable.

2.3. Soils

Soils on site are shown to be Twyford in their natural state. Helpfully, there is a National Soil Data Repository(NSDR) reference site situated nearby that describes a Twyford soil on this location(below).



FIGURE 4: FROM: SOIL MAP OF HERETAUNGA PLAINS, 1938(1:23760).

SOIL 6 =TWYFORD

Soil Profile Morphology

Designation	Depth	Matrix colour	Mottles	Texture	Structure	Cementation	Penetration Resistance	Coatings	Pan	Boundary
Ap (Taylor and Pohlen)	0 - 13	very dark greyish brown 10YR 3/2	-	silt loam	weakly developed medium nut	strength: moderately firm	-	-	-	distinct irregular
A (Taylor and Pohlen)	13 - 26	dark greyish brown 2.5Y 4/2	-	very fine sandy loam	weakly developed medium nut	strength: moderately weak	-	-	-	indistinct wavy
2Bw (Taylor and Pohlen)	26 - 37	olive brown 2.5Y 4/4	-	fine sandy loam	weakly developed fine nut	strength: very weak	-	-	-	indistinct wavy
3C (Taylor and Pohlen)	37 - 56	olive brown 2.5Y 4/4	-	fine sand	single grain	strength: loose	-	-	-	distinct wavy
4C (Taylor and Pohlen)	56 - 85	olive 5Y 5/3	-	sand	single grain	strength: loose	-	-	-	indistinct wavy
5Cg1 (Taylor and Pohlen)	85 - 117	olive 5Y 5/4	-	fine sand	single grain	strength: loose	-	-	-	indistinct wavy
6Cg2 (Taylor and Pohlen)	117 - 140	olive grey 5Y 4/2	-	fine sandy loam	massive	strength: moderately weak	-	-	-	indistinct wavy

FIGURE 5: TWYFORD SOIL PROFILE AS PER NSDR

3. Site Inspection

The site was visited on 15/9/2023 to assess to soil characteristics of the site.

As the site is primarily covered in concrete and compressed gravel assessing the soil properties on site was difficult. Helpfully, previous technical assessments had removed several small areas of concrete, and these areas were still available to inspect. Obviously, these inspection points had previously been disturbed by augers removing deep soil profiles. Closer inspection showed that the auger operated in the middle of the hole and left the outside edge undisturbed. This provided an opportunity to investigate the sites residual soil profile.

4. Results

Onsite inspection of residual soil profiles confirmed the soils on site are highly modified. Where the surface has been covered in concrete the profile is.

Concrete	Gravel
100-120mm concrete 50-100mm fine tightly packed gravel 20-30mm dark greyish brown fine sandy loam Fine sand, loose to weak. Olive brown.	100- 150mm gravel (top course) Weak, compacted, fine sandy loam. Olive brown



Clearly, as the site has been developed significant changes have occurred to the soil profiles on site. Typically, when sites are developed into concrete hardstand or gravelled utility areas the existing topsoil is either removed completely or partially. In this case, onsite observation has confirmed that the topsoil on site is either completely absent or reduced to a layer of approximately 30-50mm. Significantly, the thin layer of topsoil

remaining is not the true silt loam topsoil but a dark sandy loam consistent with an A horizon as described in figure 5. This would indicate that approximately 200mm or more of topsoil has been removed from site.

5. NPS – HPL

The intent of the NES for HPL is to protect highly productive and highly versatile land for food production. It includes LUC classes I to III.

5.1. Definition of Productive capacity in the NPS-HPL

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*
- legal constraints (such as consent notices, local authority covenants, and easements); and*
- the size and shape of existing and proposed land parcels.*

5.2. Productive potential on this site

The productive potential on this site is negligible. In effect the site ceased to be a productive unit suitable for primary production when the site was converted into a cold store site. The conversion from orchard to cold store resulted in the removal of the sites natural capital (soil). The natural capital of this site as it is with most soil types is inextricably associated with its topsoil. Where a topsoil has been removed the natural capital of any soil is correspondingly reduced.

On this site the LUC classification should no longer be used, and the site should simply be considered nonproductive. The site as it is, has no land based productive potential. Should the infrastructure, concrete and gravel on site be removed the site will struggle to maintain viable pasture and have severe limitations for arable use.

5.3. Analysis of Site Under 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

As described above – despite the site being classified as class 1 under the NZLRI classification, physical evidence gathered onsite shows that the site does not have the same primary production potential as class 1. This is because the site has previously been heavily

<p>modified as part of a packhouse development. The result of this development is that the soil on site has been replaced with gravel and concrete. Therefore, the site has both permanent and long-term constraints to primary productivity that cannot be feasibly overcome rendering the site unviable in a primary productivity context.</p>	
<p>(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</p>	
<p>This site is very small. The amount of class 1 land (in its original state) is an insignificant 0.0078% of the Hastings districts 9350ha class 1 land or 0.001% of the Hastings Districts 68 497 ha of HPL (class 1-3). When considering the state of the site has prevented primary production on site for decades the loss of this site is insignificant.</p>	
<p>(ii) avoids the fragmentation of large and geographically cohesive areas of highly productive land; and</p>	
<p>This site is highly modified, small and on the margins of the Heretaunga plains adjacent to Havelock North. The development of this site will not cause further fragmentation of the HPL in the Hastings district.</p>	
<p>(iii) avoids if possible, or otherwise mitigates, any potential reverse sensitivity effects on surrounding land-</p>	
<p>As the proposed development is for residential housing I see no reasons for reverse sensitivity effects.</p>	
<p>(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.</p>	
<p>The provision of housing on the edge of Havelock North (with its existing services) is a gain for the local community and economy. The development of the site will involve significant local investment over the short and long terms. The site is currently underutilized.</p>	
<p>(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):</p>	
<p>As the site is highly modified to the point of being nonproductive there are no viable or reasonably practicable options to retain the site's productive capacity.</p>	
<p>(a) alternate forms of land-based primary production:</p>	<p>N/A</p>
<p>(b) improved land-</p>	<p>N/A</p>

management strategies:	
(c) alternative production strategies:	N/A
(d) water efficiency or storage methods:	N/A
(e) reallocation or transfer of water and nutrient allocations:	N/A
(f) boundary adjustments (including amalgamations):	N/A
(g) lease arrangements.	N/A
<p>(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</p> <p>(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</p> <p>14 National Policy Statement for Highly Productive land 2022</p> <p>(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.</p> <p>(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.</p> <p>(5) In this clause:</p> <p>landholding has the meaning in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020</p> <p>long-term constraint means a constraint that is likely to last for at least 30 years.</p>	

6. Conclusion

The site at 147-151 Napier Road is highly modified. This has resulted in the productive potential of the site to also be highly modified. Currently the site has no land based productive potential as the topsoil has been removed and replaced with concrete and gravel. Should, at some point in the future the concrete and gravel be removed the site will still have severe limitation to arable and pastoral use.

The site should no longer be considered 1c1 and simply be classified as nonproductive, therefore the development of the site meets the requirements of 3.10 of the NPS-HPL.

Therefore, any future development of the site from commercial to residential will have no effect on the productive potential of the site nor will it influence the total area of HPL at a regional or sub regional level.