

PROPERTY **E**CONOMICS



FPH KARAKA RD STRUCTURE

PLAN AND PLAN CHANGE

ECONOMIC ASSESSMENT

Project No: 52266

Date: January 2025

Client: Fisher & Paykel Healthcare
Properties Limited



SCHEDULE

Code	Date	Information / Comments	Project Leader
52266.19	January 2025	Report	Tim Heath / Phil Osborne

DISCLAIMER

This document has been completed, and services rendered at the request of, and for the purposes of Fisher & Paykel Healthcare Properties Limited only.

Property Economics has taken every care to ensure the correctness and reliability of all the information, forecasts and opinions contained in this report. All data utilised in this report has been obtained by what Property Economics consider to be credible sources, and Property Economics has no reason to doubt its accuracy.

Property Economics shall not be liable for any adverse consequences of the client's decisions made in reliance of any report by Property Economics. It is the responsibility of all parties acting on information contained in this report to make their own enquiries to verify correctness.

Cover image credit: NZ Herald

COPYRIGHT

© 2025 Property Economics Limited. All rights reserved.

CONTACT DETAILS

Tim Heath

Mob: 021 557713

Email: tim@propertyeconomics.co.nz

Web: www.propertyeconomics.co.nz

TABLE OF CONTENTS

1. INTRODUCTION.....	5
1.1. RESEARCH OBJECTIVES	6
1.2. INFORMATION SOURCES	7
2. EXECUTIVE SUMMARY	8
3. PROPOSED PLAN CHANGE	10
4. ECONOMIC MARKET GROWTH	12
5. INDUSTRIAL LAND PROVISION.....	14
5.1. AUCKLAND REGION	14
5.2. LOCALISED CONTEXT.....	16
6. AUCKLAND INDUSTRIAL EMPLOYMENT TRENDS	19
7. AUCKLAND INDUSTRIAL CAPACITY SUFFICIENCY	21
8. FRANKLIN & PAKAPURA RESIDENTIAL CAPACITY SUFFICIENCY	24
9. ALTERNATIVE SITES OVERVIEW	28
10. LIGHT INDUSTRIAL ACTIVITY LOCATIONAL ATTRIBUTES.....	31
11. APPROPRIATE ACTIVITIES	34
12. ECONOMIC IMPACT ASSESSMENT.....	38
13. ECONOMIC COSTS AND BENEFITS.....	43
APPENDIX 1. INDUSTRIAL BUSINESS CLASSIFICATIONS	47
APPENDIX 2: LUC STATUS OF THE SITE	48
APPENDIX 3. AVERAGE FTES REQUIRED FOR PHASE 1 OF THE DEVELOPMENT	49

LIST OF TABLES

TABLE 1: AUCKLAND REGION INDUSTRIAL ZONED LAND SUPPLY AND CAPACITY (2023)...	15
TABLE 2: LOCALISED INDUSTRIAL LAND PROVISION AND CAPACITY	18
TABLE 3: AUCKLAND REGION INDUSTRIAL SECTOR EMPLOYMENT TRENDS.....	19
TABLE 4: AUCKLAND REGION INDUSTRIAL FLOORSPEACE CAPACITY SUFFICIENCY (2023) .	21
TABLE 5: FRANKLIN AND PAPAURA LOCAL BOARDS RESIDENTIAL CAPACITY SUFFICIENCY	24
TABLE 6: LOCALISED AREA EMPLOYMENT INTERNALISATION RATES (2023)	36
TABLE 7: PHASE 1 REGIONAL ECONOMIC IMPACT	41
TABLE 8: TOTAL DEVELOPMENT ECONOMIC INJECTION AS A RESULT OF THE FULL FPH DEVELOPMENT (\$NPV).....	42

LIST OF FIGURES

FIGURE 1: LOCATION AND EXTENT OF THE SITE	10
FIGURE 2: FDS DEVELOPMENT SEQUENCING FOR THE DRURY-OPĀHEKE FUA CLUSTER.....	11
FIGURE 3: AUCKLAND REGION POPULATION ESTIMATES AND PROJECTIONS COUNCIL VS STATS NZ.....	12
FIGURE 4: EXISTING INDUSTRIAL ZONED LAND WITHIN THE WIDER AUCKLAND REGION .	14
FIGURE 5: EXISTING INDUSTRIAL ZONED LAND WITHIN THE LOCALISED CONTEXT	17
FIGURE 6: EXAMPLE RESIDENTIAL AREA (OUTLINED IN BLUE) IN THE DRURY-OPAHEKE LOCAL MARKET	26
FIGURE 7: AUCKLAND REGION VACANT INDUSTRIAL SITES BY SIZE (HA)	28
FIGURE 8: LARGEST THREE VACANT INDUSTRIAL SITES IN AUCKLAND	29



1. INTRODUCTION

Property Economics has been engaged by Fisher & Paykel Healthcare Properties Limited (**FPH**) to undertake an assessment of the economic impacts and provide inputs into the preparation of the Structure Plan and Private Plan Change (**PPC**) application to urbanise FPH's land¹ at 300, 328, 350, 370, & 458 Karaka Road, Drury (**Site**) for a new hi-tech campus style business park including research & development, manufacturing, distribution and office activities to catalyse FPH's future growth.

FPH is a worldwide brand that establishes an international profile for Auckland and New Zealand in a significant growth sector. Given FPH's worldwide market and long-term aspirations the concept plan for their new hi-tech campus involves one of New Zealand's largest industrial land developments for a single company at around 105ha.

FPH's ultimate parent company, Fisher & Paykel Healthcare Corporation Limited, is one of New Zealand's largest publicly listed companies and has a strong presence in the international market in medical / healthcare equipment research and manufacturing. This Structure Plan and PPC is focused on securing FPH's operations long term in Auckland with this assessment outlining some of the broad economic benefits of this to the Auckland economy.

While FPH's economic market is worldwide, the focus of this assessment is on Auckland given this represents the geographic area of Auckland Council's jurisdiction and where most economic benefits will be generated. As such this report focuses on the Auckland region as the core catchment in terms of its employment base, support business activity and the market's

¹ The site is owned by Fisher & Paykel Healthcare Properties Limited. References in this report to 'FPH' extend to the business owned and operated by the Fisher & Paykel Healthcare group of companies. Note that the PPC site encompasses around 87.5ha and the Structure Plan site spans around 105ha.

industrial land provision. The report also assesses the merits of the Site in terms of whether the Site provides a competitive location for such activity.

This assessment will then provide a high-level overview of the economic costs and benefits of the Structure Plan and PPC and the economic impact the proposed FPH development will have on the Auckland economy.

The findings from this economic assessment will inform the appropriateness of the Structure Plan and PPC rezoning, and the light industrial zone sought from an economic perspective in the context of the RMA.

1.1. RESEARCH OBJECTIVES

The core research objectives of this economic assessment include:

- Geospatially map the PPC in the context of its localised environment and its surrounding planning zones.
- Determine the size of the wider Auckland market's current population base and project this to 2053 based on the latest Stats NZ High and Medium growth scenarios.
- Geospatially map and quantify the current zoned industrial land provision (ha) within the wider Auckland market.
- Break down and quantify the amount (ha) of vacant industrial land / capacity within the localised context and the wider Auckland market based on the latest geospatial data.
- Break down and assess the industrial activity within the wider Auckland market by sector and identify industrial employment trends in the industrial market over the property cycles during the last 23 years (i.e., 2000 – 2023).
- Determine the amount of industrial zoned land (ha) required to accommodate the projected industrial employment and activity growth over the next 30 years.
- Identify potential growth opportunities available within the localised market to internalise a higher level of employment and economic activity to create more efficiencies in the market.
- Review the suite of industrial activities enabled in the industrial zones under the Auckland Unitary Plan Operative in Part (AUP(OIP)) and identify whether the Business - Light Industrial Zone (LIZ) encompasses the business activities sought by FPH to operate the proposed manufacturing and design campus, and the appropriateness of the LIZ for the Site.
- Identify the locational attributes of the Site against the key industrial locational criteria to assess the appropriateness and efficiency of the Site and PPC for the breadth of industrial activities to be accommodated in the hi-tech campus.

- Provide a high-level economic cost-benefit analysis for the Site being rezoned for FPH Campus.
- Quantify the economic impact of the economic activity generated by the construction of the Campus in terms of its distribution to the regional economy based on direct, indirect and induced benefits to the regional economy and employment.

1.2. INFORMATION SOURCES

Information and data have been obtained from a variety of credible sources and publications available to Property Economics to inform this Economic Assessment and report, including:

- Auckland Future Development Strategy 2023 – 2053 – Auckland Council
- Auckland Unitary Plan (Operative in Part) – Auckland Council
- Australia New Zealand Standard Industrial Classifications (ANZSIC) – Stats NZ
- Business Demography Statistics – Stats NZ
- Auckland Future Development Strategy 2023 – 2053 – Auckland Council
- Future Urban Land Supply Strategy (FULSS) – Auckland Council
- Housing and Business Development Capacity Assessment for the Auckland Region September 2023 (HBA 2023) – Auckland Council
- Industrial Business Classifications – Property Economics
- Industrial Land Capacity Estimates – Property Economics
- Land Use Capability Classification – NZLRIS
- Market Maps – Google Maps, ESRI, LINZ
- NPS – HPL 2022 – Ministry for the Environment
- NPS – UD 2020 – Ministry for the Environment
- NZ Census Data (2006, 2013 & 2018) – Stats NZ
- Population and Household Projections – Stats NZ
- Site Area – FPH
- Statistical Areas 1 & 2 – Stats NZ

2. EXECUTIVE SUMMARY

FPH's ultimate parent company, Fisher & Paykel Healthcare Corporation Limited, stands as one of New Zealand's largest publicly listed entities and boasts global leadership in the manufacturing and promotion of medical devices, with a particular emphasis on groundbreaking respiratory care, acute care, surgical, and obstructive sleep apnoea treatment products.

The Fisher & Paykel Healthcare group manufactures its products in facilities located in New Zealand, Mexico, and a small facility starting up in China, primarily distributing them to hospitals and healthcare institutions spanning over 120 countries through an extensive distribution network.

Our economic impact assessment forecasts that the establishment of a new FPH Campus in Karaka would yield a total Net Present Value (NPV) exceeding \$1.36 billion to the wider Auckland regional economy and create over 16,200 Full-Time Equivalent (FTE) job years in the long term, extending through to 2070.

In terms of the nominal expenditure from FPH, it is expected that over the life of the development there would be in excess of \$2b (excluding any increase in construction costs) into the FPH campus. This large-scale development would hold a significant place in the Auckland economy and play a pivotal role in driving local market expansion.

Over the past four decades, the Auckland Region has witnessed a doubling of its population, and this strong growth trend will likely persist over the next three decades. This population surge is expected to result in heightened demand for employment opportunities and increased industrial output across the region, including the field of medical devices.

It is considered that the proposed LIZ zoning for the Site aligns well with the intended mix of activities within the new FPH Campus. This proposed zoning would allow the Site to adapt more readily to market demands and accommodate FPH's land requirements and future growth.

Of particular significance, none of the presently zoned industrial sites throughout the wider region possess the necessary capacity to accommodate the wide array of R&D laboratories, administrative offices, manufacturing facilities, and distribution centres essential for the new FPH Campus. Meanwhile, from an economic perspective, single site single site is needed for engineering R&D collaboration across team, providing easy access to specialist laboratories, workshops and resources. This would enable greater development efficiencies compared to a fragmented or 'piecemeal' development approach.

Importantly, the Auckland Council's Future Development Strategy and HBA 2023 both acknowledge the shortfall in capacity for land intensive activities to accommodate large-scale industrial enterprises in the near to medium term. This implies that the current capacity is likely to fall short of efficiently accommodating the operation and growth needs of FPH.

The Site is deemed appropriate for the envisioned high-tech campus, both in terms of land area and strategic locational attributes, such as its proximity to SH1, the designated Drury West train station, and the readily available and growing pool of skilled labour.

In summary, the economic benefits of the PPC, enabled through the Business - Light Industry Zone being applied to the Site providing for urbanisation and development of the site, would substantially outweigh its economic costs, enriching the profile and economic activity of the wider region. The primary high-level economic benefits encompass:

- Economies of scale
- Improved economic profile
- Job creation
- Increased investment and regional GDP
- Economic diversification
- Reduced peak motorway traffic
- Increased industrial land provision
- Innovation

Considering all relevant economic factors, Property Economics supports the proposed PPC to rezone the Site for light industrial purposes. This proposed rezoning is appropriate from an economic perspective within the framework of the RMA, particularly in facilitating the establishment of the FPH Campus.

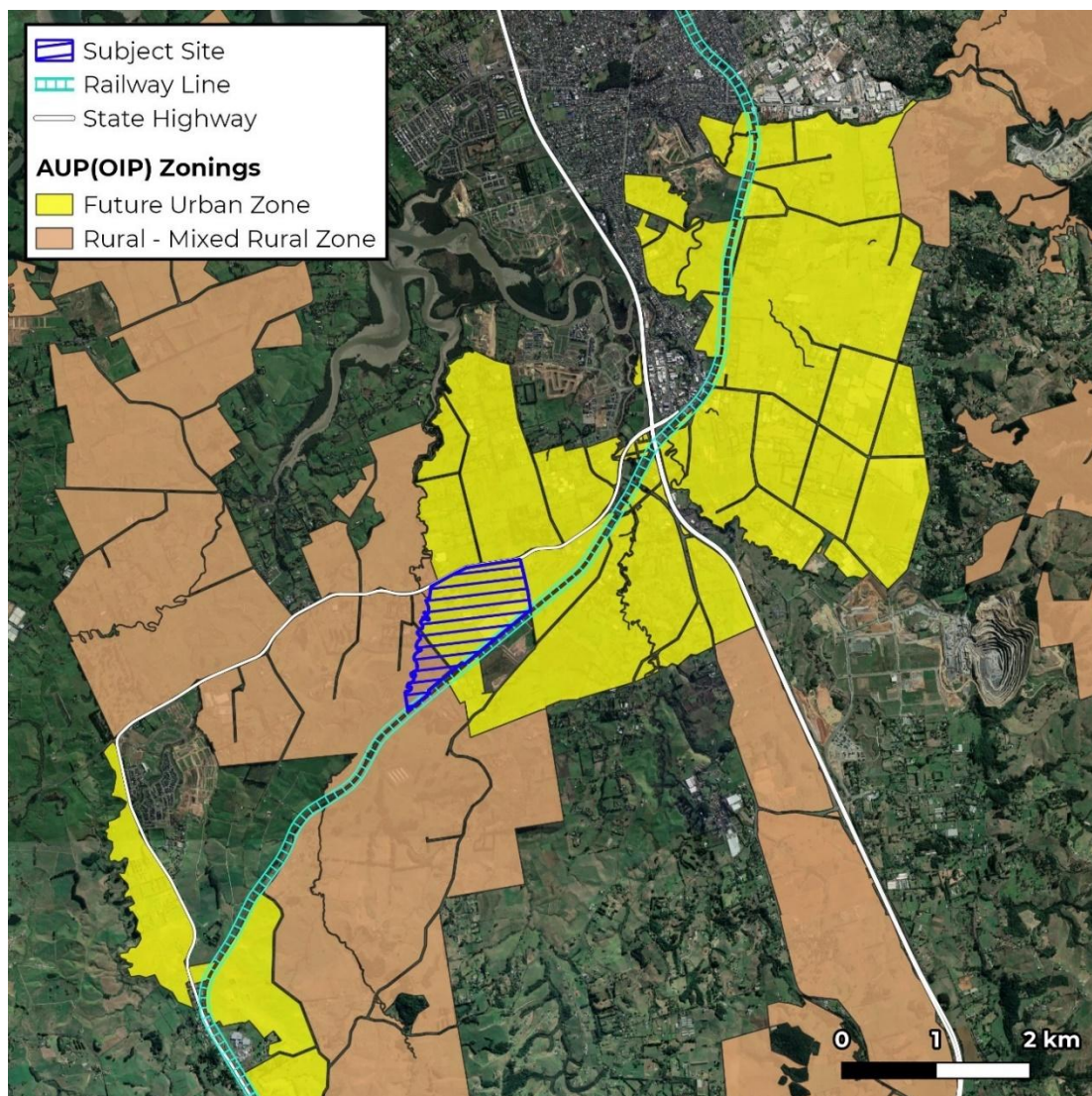
3. PROPOSED PLAN CHANGE

FPH is seeking to live-zone around 87ha of Future Urban Zone (FUZ) land in Drury West to LIZ, under the AUP(OIP). The FUZ is a transitional zone applied to greenfield land that has been identified as suitable for urbanisation. Under the AUP(OIP), land within the FUZ can be used for a range of general rural activities but cannot be used for urban activities until the site is rezoned for urban purposes (H18.2.4 Objectives, AUP(OIP)).

Note that besides the FUZ land, the Structure Plan for the FP development will encompass the entire FPH Site (i.e., 105ha), incorporating a small portion (around 18ha) of land currently zoned as Rural – Mixed Rural Zone.

The following map shows the geospatial extent of the Site in the context of the surrounding localised FUZ environment.

FIGURE 1: LOCATION AND EXTENT OF THE SITE



Source: Auckland Council, LINZ, Google Maps, Property Economics

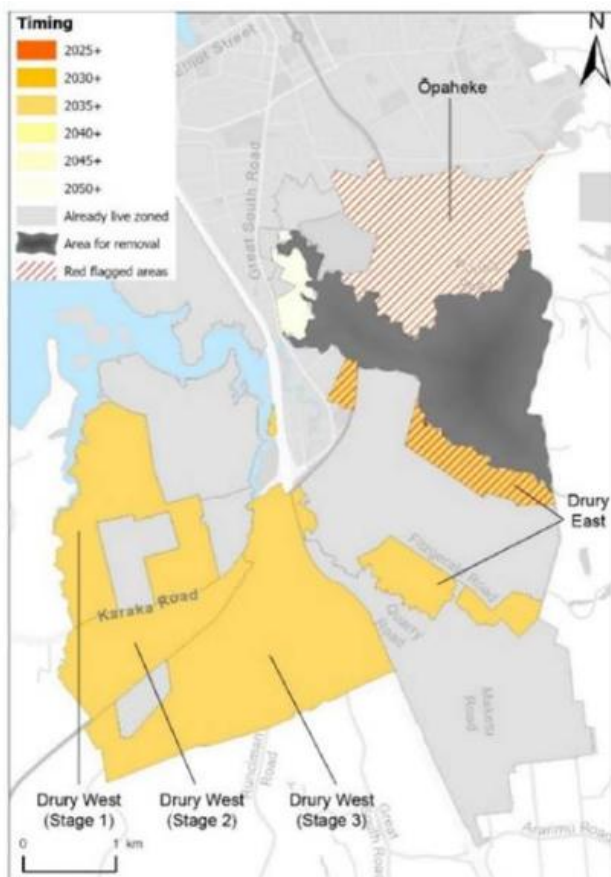
The Site is located in between State Highway 22 (SH22) and the North Island Main Trunk Railway Line and is within a couple of minutes' drive to State Highway 1 (SH1) and the future Drury Metropolitan Centre to the northeast. The Site is located either on or in very close proximity to some of Auckland's major transport links.

Under the Drury-Opāheke Structure Plan the Site is identified to enable a range of Terrace Housing and Apartment Buildings (THAB) and Mixed Housing Urban development to accommodate growing residential demand in the local community.

In terms of the development timing, the recently adopted Auckland Future Development Strategy (FDS) identifies the Drury West Stage 2 land with an anticipated timeframe no earlier than 2035 (refer to the figure below).

As per the adopted FDS, essential infrastructure prerequisites for facilitating this Future Urban Area (FUA) development includes the establishment of Drury Arterials, the upgrade of SH22, the Ngākōroa Railway Station, the Hingaia Rising Main and the Southern Auckland Wastewater Service Scheme (Appendix Page 36).

FIGURE 2: FDS DEVELOPMENT SEQUENCING FOR THE DRURY-OPĀHEKE FUA CLUSTER



Source: Auckland Council

4. ECONOMIC MARKET GROWTH

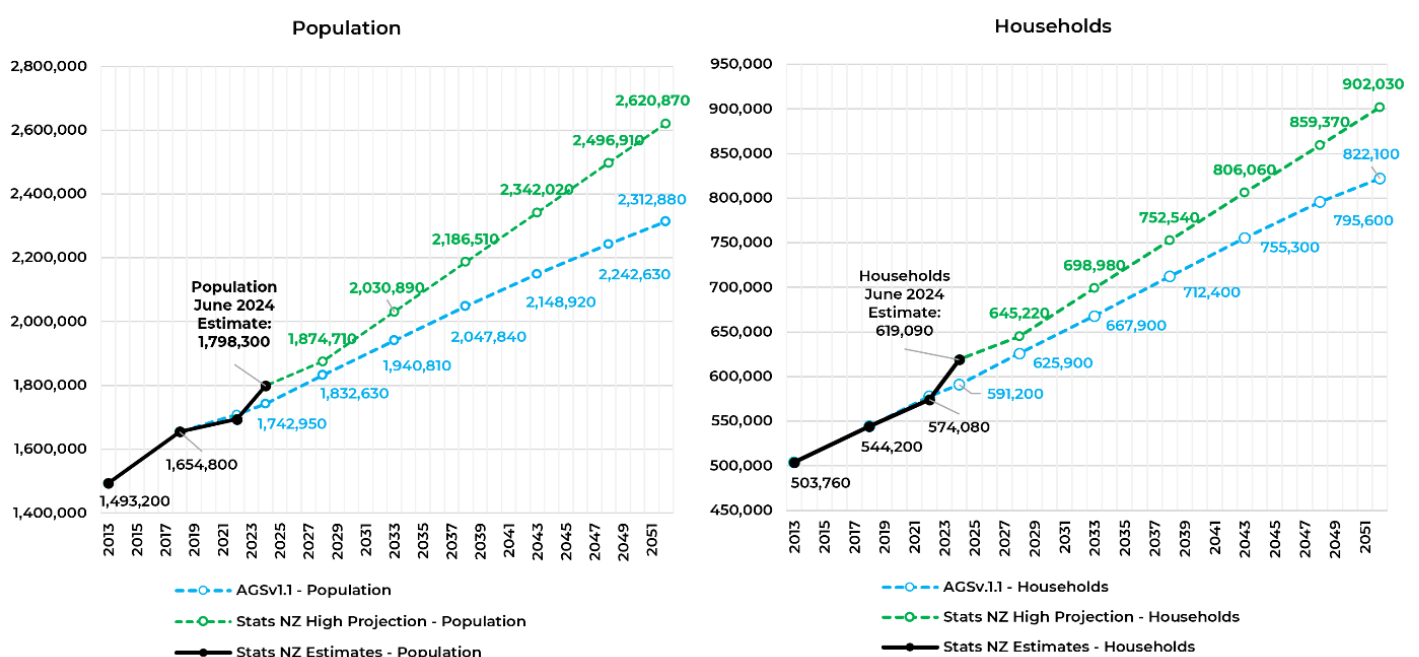
This section assesses the projected growth of the wider Auckland Region based on Council's Auckland Growth Scenario 2023 Version 1.1 (AGSv1.1) projections and the latest Stats NZ population and household estimates. This assesses at a high level the anticipated growth profile for Auckland over the long term which is a base input into determining industrial land demand requirements for the region over the next 30 years.

The figure following shows that the estimated current population base for the wider Auckland Region is tracking noticeably higher than Council's growth projection scenario.

According to the Stats NZ estimate, the wider Auckland Region currently (in 2024) has a population of just under 1.8 million people, reflecting a material +8.7%, or additional +143,500 people, over the past six years. This recent growth has already surpassed Council's projection of around 1.743 million people by about +3.2%, or 55,350 people, indicating that the core catchment is growing at a significantly faster rate than Council's projection.

If strong growth continues the wider region can be expected to reach around 2.4 million people by 2052 which is positioned in between Stats NZ Medium and High Projection. This will be around 87,000 people more than Council's growth scenario long term. The key point being if the higher growth projection is not provided for, there is potential for Auckland's growth to be constrained.

FIGURE 3: AUCKLAND REGION POPULATION ESTIMATES AND PROJECTIONS COUNCIL VS STATS NZ



Source: Auckland Council, Stats NZ

It should also be noted that the population of the Auckland Region has increased two-fold in the past 40 years. Although fluctuations in population may occur in the future due to factors such as immigration policies, national border status, housing supply, and economic cycles, it is even possible to achieve a population of 2.68 million in the next 30 years under the Stats NZ High growth scenario.

It can be expected that the anticipated continuous growth in Auckland population and households would generate additional demand for industrial activity, employment and output across the Auckland Region to support the growing economy.

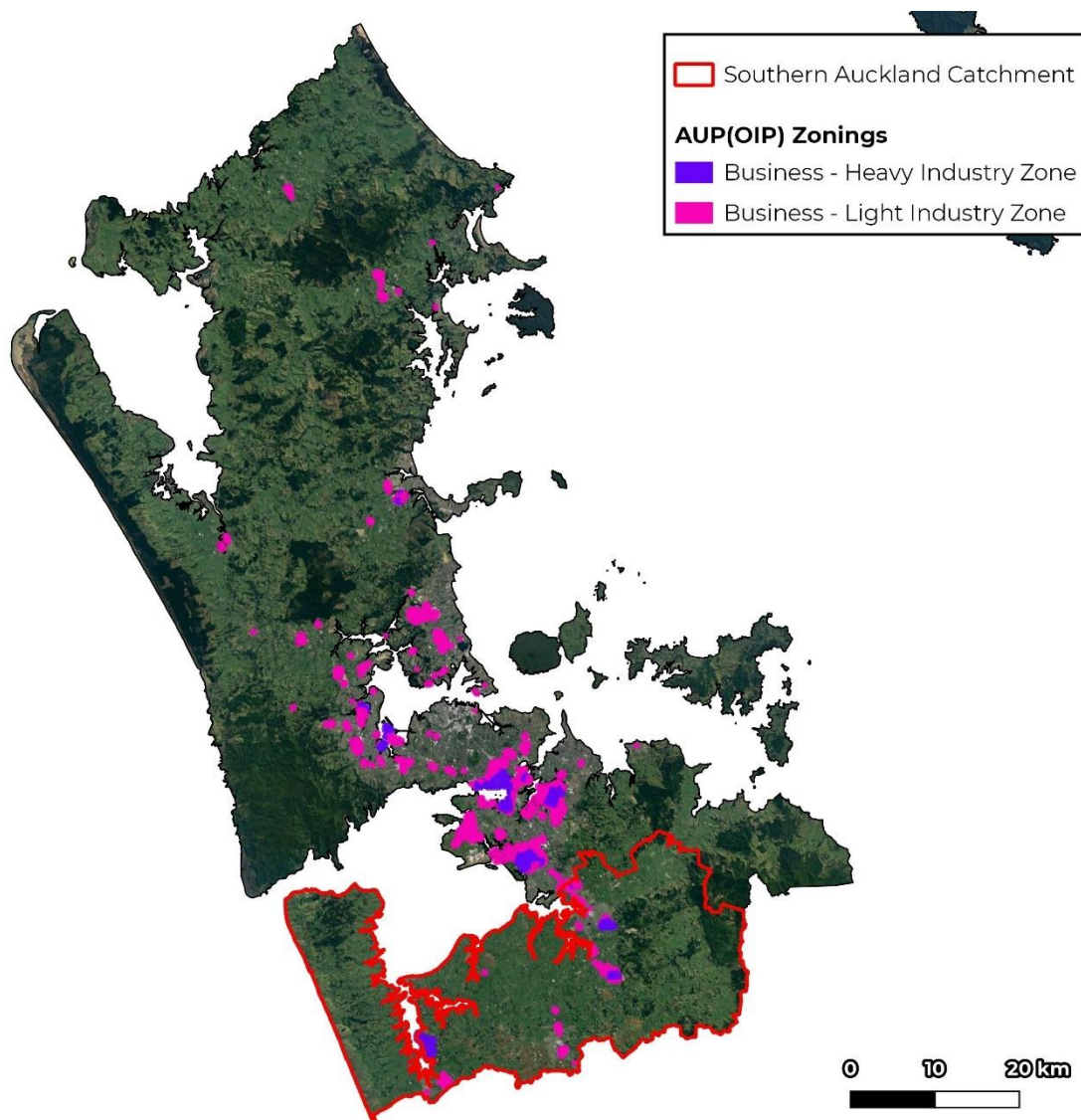
5. INDUSTRIAL LAND PROVISION

This section assesses the industrial land provision across the Auckland region based on the AUP(OIP) zoning and Housing and Business Development Capacity Assessment for the Auckland Region: September 2023 (HBA 2023). This will assist in understanding the existing supply of the industrial land provision in Auckland and the likely impact of the PPC on the industrial land capacity and sufficiency across the broader region.

5.1. AUCKLAND REGION

The figure below geospatially maps the distribution of the industrial zoned land (Light Industry Zone (LIZ) and Heavy Industry Zones (HIZ)). It shows that most industrial zoned land is located within the region's main urban areas.

FIGURE 4: EXISTING INDUSTRIAL ZONED LAND WITHIN THE WIDER AUCKLAND REGION



Source: Auckland Council, Google Maps, Property Economics

As summarised in the following table, the Auckland region has around 6,320ha of land currently zoned / live zoned for industrial purposes. Of the 6,320ha zoned industrial land provision, 552ha has been identified as vacant, or approximately 8.7% of the total zoned land. In addition, there is a further 1,729ha of land that has been identified as vacant potential² which, if included, brings the total vacant development potential to just over 2,281ha.

Light industrial land dominates the total vacant industrial land provision with around 1,736ha of vacant and vacant potential land to the region. In percentage terms, this equates to 76% of the total industrial land capacity. In contrast, heavy industry has 85ha vacant land, increasing to 545ha when vacant potential land is considered.

TABLE 1: AUCKLAND REGION INDUSTRIAL ZONED LAND SUPPLY AND CAPACITY (2023)

	HEAVY		LIGHT		TOTAL	
	Area (ha)	Capacity (ha)	Area (ha)	Capacity (ha)	Area (ha)	Capacity (ha)
AUP(OIP) Provisions	1,846	545	4,472	1,736	6,319	2,281
Vacant Land		85		467		552
Vacant Potential Land		460		1,269		1,729
Structure Plan	191	107	1,419	834	1,610	941
Drury-Opāheke	56	24	276	126	332	150
Pukekohe-Paerata	0	0	224	95	224	95
Silverdale West Dairy Flat	98	56	502	293	600	349
Warkworth	37	27	27	20	64	47
Whenuapai	0	0	390	300	390	300
TOTAL (excl. Vacant Potential Land)	2,037	192	5,891	1,301	7,929	1,493
TOTAL (incl. Vacant Potential Land)	2,037	652	5,891	2,570	7,929	3,222

Source: Auckland Council, Property Economics

Note that the total capacity shown in the table does not include "General Business" (131ha) and "Mixed Use" (270ha) capacities, which also partly accommodate light industrial land demand across the wider region. Industrial zoned land areas are estimated by Property Economics using QGIS with AUP(OIP) zoning GIS layers. Capacity numbers under the AUP(OIP) provisions are based on Table 40 of the HBA 2023 on Page 143.

Greenfield industrial land areas are measured by Property Economics in QGIS based on the future industrial zones identified in the corresponding Structure Plans, including:

² 'Vacant Potential Land' is defined in the HBA 2023 as business zoned land that has a usually large 'vacant area' or 'present vacant area' when compared to other parcels of similar generalised zoning within a similar location. The vacant potential land (on these parcels) is equal to a proportion of the parcel that does not have an existing structure, i.e. excludes land in the parcel that has an existing building.

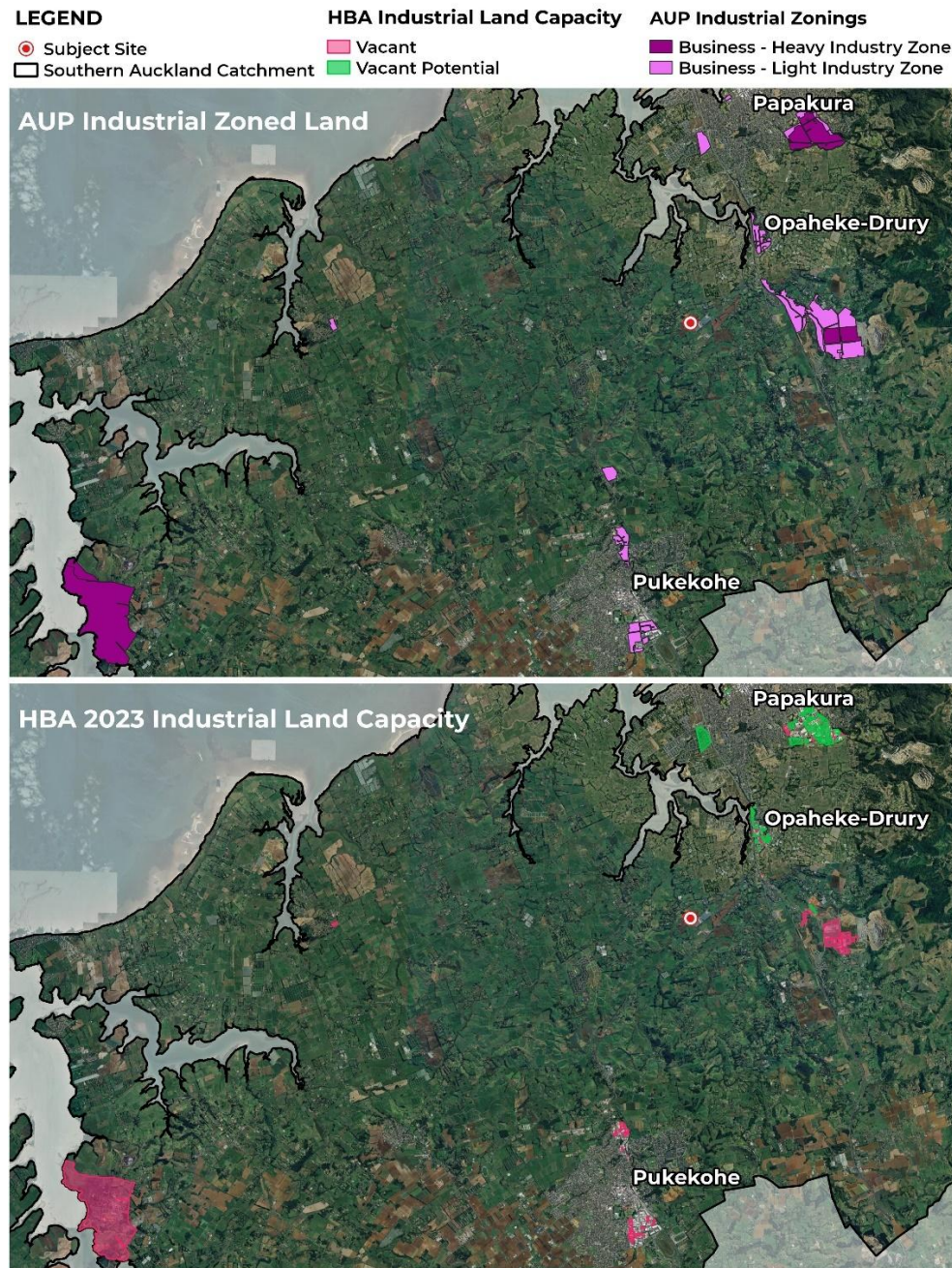
- *Drury-Opāheke Structure Plan (August 2019): Table 1 identifies 150ha of net developable industrial/business land.*
- *Pukekohe-Paerata Structure Plan (August 2019): Section 3.3.2 identifies 95ha of land to be zoned for Light Industry.*
- *Silverdale West Dairy Flat Industrial Area Structure Plan (April 2020): Section 4.2 identifies 293ha for Light Industry and 56 hectares for Heavy Industry.*
- *Warkworth Structure Plan (June 2019): Section 3.5.1 anticipates a yield of around 65ha of industrial land (gross). This has been translated into net developable land areas based on a 35% - 40% infrastructure assumption.*
- *Whenuapai Structure Plan (September 2016): Section 7.4.1 identifies a future supply of over 300ha of business land to meet future industrial demand.*

In addition to the zoned capacity, Auckland Council has allocated 1,610 ha of land within the identified Structure Plans of the Future Urban Zone for future industrial purposes. Of this 1,610ha, 941ha is estimated to be net developable industrial land. This means that Auckland has the capacity to support an additional 1,493ha of industrial land uses within the identified existing and future vacant industrial land supply. Including the Vacant Potential Land, however, raises this capacity estimate to a total of 3,222ha, albeit it is uncertain the proportion of this amount of land that would become available over the short-, medium -, and long terms.

Cumulatively, these Structure Plans mathematically provide increased long-term surety of the future provision and efficient operation of Auckland's industrial market. However, the timing and capacity to fund the necessary infrastructure to unlock the indicated industrial capacity in the new Structure Plan areas remains undetermined at this point. This means 'on the market', or serviced, development ready and available vacant industrial land would be significant less than indicated in Table 1.

5.2. LOCALISED CONTEXT

The figure below geospatially maps the distribution of the industrial zoned land and its capacity within the area proximate / localised area to the Site. This is based on the industrial zoning provisions of the AUP(OIP) and the industrial land capacity geospatial data from the HBA 2023.

FIGURE 5: EXISTING INDUSTRIAL ZONED LAND WITHIN THE LOCALISED CONTEXT


Source: Auckland Council, Google Maps

The existing industrial zoned land within the localised area is primarily located in Papakura, Drury, Pukekohe and Waiuku. These industrial areas encompass a total of around 1,130ha of land cumulatively. More specifically, around 592ha (52%) is identified as LIZ and 537ha is identified as HIZ, which is situated in Papakura, Drury, and Glenbrook (to the north of Waiuku).

Based on the industrial land capacity data from the HBA 2023, the localised area contains approximately 461ha of vacant industrial zoned land, representing about 40% of the total

industrially zoned land in the area. Additionally, the localised area includes around 140ha of land classified as 'vacant potential'³.

According to the HBA 2023, 'vacant potential' land is considered statistically underdeveloped, meaning it has less existing floorspace relative to its land area compared to similar properties, and could potentially be further developed with additional floorspace⁴. However, Property Economics notes that much of the 'vacant potential' land identified in this location is already in use for industrial purposes and has very limited potential to accommodate further activities.

With a conservative assumption that 30% of the identified vacant land would be used for infrastructure on average (accounting for roads, easements, paths, landscaping, etc.), the net developable 'practical' vacant industrial land within the catchment would decrease from 461ha to around 323ha.

Note that although there is estimated vacant capacity to accommodate more industrial activities in the localised market, the practical options for establishing the proposed FPH Campus are highly limited due to the significant land area required. Further analysis is conducted to identify vacant sites in Section 9 of this report that are of the size suitable for the FPH Campus.

TABLE 2: LOCALISED INDUSTRIAL LAND PROVISION AND CAPACITY

	LIZ	HIZ	Total
Zoned Land Area (ha)	592	537	1,129
HBA 2023 Industrial Land Capacity (ha)	198	402	600
Vacant Capacity (ha)	114	347	461
Vacant Potential Capacity (ha)	84	55	139

Source: Auckland Council, Property Economics

³ 'Vacant Potential Land' is defined in the 2023 HBA as sites where building coverage is low. This means sites where there is significant development potential for additional industrial activity/GFA to occur

⁴ HBA 2023 Part 2, Page 143, 3rd Paragraph.

6. AUCKLAND INDUSTRIAL EMPLOYMENT TRENDS

This section assesses the industrial employment trends for Auckland based on the latest Stats NZ Business Demography Statistics for the last 23 years (2000 – 2023) and Property Economics industrial business classifications. The latter is presented in Appendix 1.

The table below shows that Auckland has a current (2023) industrial employment base of around 269,000 employees, equating to net growth of +43% above the 2000 industrial employment baseline of about 188,500 people.

Manufacturing is the largest industrial sector within the Auckland economy with around 81,000 employees in 2023. However, this sector has represented a diminishing proportion of Auckland's employment base over the last two decades from 43% in 2000 to 30% in 2023.

This represents a steady proportional decline but is a trend that has been observed across the country. This flatlining of employment growth is attributed in part to the adoption of new technologies and increased capital investment in automation by businesses, resulting in enhanced productivity and outputs, i.e., higher Manufacturing GDP with fewer employees. Such measures are crucial for maintaining competitiveness on both national and international scales. It also highlights an economy in transition from a more productive base shifting to a more service-based economy.

TABLE 3: AUCKLAND REGION INDUSTRIAL SECTOR EMPLOYMENT TRENDS

ANZSIC Sector	2000	2005	2010	2015	2020	2023	2000-23 Growth (#)	2000-23 Growth (%)
 A - Agriculture, Forestry and Fishing	643	669	552	576	584	542	-101	-16%
 B - Mining	30	40	31	36	44	44	13	44%
 C - Manufacturing	81,279	85,442	73,193	73,280	80,417	80,994	-285	0%
 D - Electricity, Gas, Water and Waste	839	1,002	998	1,259	1,681	1,781	942	112%
 E - Construction	24,311	33,352	32,603	40,552	62,688	74,551	50,240	207%
 F - Wholesale Trade	47,044	53,082	51,311	55,180	59,678	63,154	16,110	34%
 I - Transport, Postal and Warehousing	31,365	31,594	31,650	33,977	39,873	41,256	9,891	32%
 L - Rental, Hiring and Real Estate Services	2,975	4,176	3,859	4,565	5,755	6,626	3,651	123%
Total Industrial Employment	188,490	209,360	194,200	209,420	250,720	268,950	+80,460	+43%

Source: Stats NZ, Property Economics

The automation of many components of the manufacturing process is putting downward pressure on employment growth in this sector. This has seen improved production efficiencies and growth in the value of outputs based on this automation rather than increased

employment. This trend is likely to continue for manufacturing businesses to remain competitive, but places increased importance on maintaining and facilitating large employment manufacturing businesses.

Contrastingly, Construction has grown over the 23 years to now be Auckland's second largest industrial employment sector and has experienced the most significant nominal (+50,240 employees) and proportional (+207%) growth over the period. This partly reflects the increasing demand in Auckland for property and infrastructure development over the period and confirms the high level of construction activity and development required to accommodate the fast-growing population base of the region.

Wholesale Trade, with a current employment base of nearly 63,150 employees, has the third largest industrial employment base within Auckland contributing 28% of the total industrial employment base.

In terms of industrial employment growth over the assessed period, a significant 62% was within the construction sector. With supply side constraints and a significant pipeline of construction projects required to better service and accommodate Auckland's future population and business base, this industrial sector is anticipated to continue its strong growth performance over the next few decades.

The automation of many components of the manufacturing process is putting downward pressure on employment growth in this sector. So, while productive manufacturing sector outputs and value has increased, the growth in these metrics has predominantly been driven by improved production efficiencies through the investment in automation rather than increased employment. This trend is likely to continue for manufacturing businesses to remain competitive.

Consequently, there is a growing emphasis on sustaining and fostering large-scale hi-tech manufacturing enterprises like FPH. Such enterprises are expected to drive advancements in manufacturing technology and productivity, thereby contributing increased economic value to the overall growth of the sector and regional economy.

7. AUCKLAND INDUSTRIAL CAPACITY SUFFICIENCY

According to the HBA 2023, the wider Auckland Region is anticipated to experience a growth of approximately 46,130 employees in the industrial sectors over the next 30 years (by 2052), necessitating a total of around 2,445,000sqm of industrial floorspace within the broader region, with the NPS-UD margin⁵ included.

In terms of supply, based on the estimates and assumptions outlined in the HBA 2023, there would be a substantial unconstrained and suitable industrial floorspace capacity of around 65,836,000sqm over the long term. As a result, it is anticipated that the wider Region will have a significant surplus in industrial floorspace capacity of around 63,391,000sqm over the next 30 years.

TABLE 4: AUCKLAND REGION INDUSTRIAL FLOORSPEACE CAPACITY SUFFICIENCY (2023)

	Short Term	Medium Term	Long Term
Additional industrial employment growth (MECs)	8,330	17,910	46,130
Additional industrial floorspace demand (000sqm)+ NPS-UD margin	570	1,103	2,445
Plan-enabled industrial floorspace capacity under AUP(OIP) (000sqm)*	79,657		
Estimated infrastructure constraints ratio	70%	32%	13%
Land suitability ratio	95%		
Unconstrained & suitable industrial floorspace capacity (000sqm)	22,702	51,458	65,836
Estimated Industrial floorspace sufficiency (000sqm)	+22,132	+50,355	+63,391

* Based on HBA's estimate of the overall net business floorspace capacity at 120,930,000sqm and considering around 66% of the net plan-enabled floorspace capacity is supplied by industrial zones.

Source: Auckland Council

Notes: Both "Additional industrial employment growth" and "Additional industrial floorspace demand" in the table are sourced from Tables 51-53 on pages 183-187 of the HBA 2023. Property Economics has applied the required NPS-UD demand buffers to these floorspace demand figures.

To calculate the "Plan-enabled industrial floorspace capacity under AUP(OIP)", Property Economics used the overall net additional plan-enabled business floorspace capacity of 120,930,000sqm for the wider region, as shown in Table 57 on page 196 of the HBA 2023 and considered the industrial capacity ratio of 66%. This 66% assumption is based on the share of light and heavy industrial plan-enabled capacity in all business land capacity in the region, i.e., 242,947,000sqm out of 368,827,000sqm, both found in Table 42 on page 145 of the HBA 2023.

⁵ 20% over the short and medium terms and 15% over the long term.

The “Estimated infrastructure constraints ratio” and the “Land suitability ratio” are the ratios used in the HBA 2023, such as those in Table 57 on page 196. Based on these ratios, the “Unconstrained & suitable industrial land floorspace capacity” can be calculated.

Based on the assessments of industrial floorspace capacity / supply, the Auckland Region has sufficient existing capacity to accommodate the anticipated growth in industrial employment over the forecast period by 2052, when considering the aggregate regional level.

However, this sufficiency does not inherently undermine the economic efficiency and viability of potential new industrial developments, which would depend on their location efficiency and their potential contribution to fostering a well-functioning urban environment, i.e. the PPC location may provide more economic efficiencies to the market than some existing capacity.

In essence, the crucial question revolves around whether the existing capacity meets the large land requirements for FPH Campus to future-proof their operations and growth in Auckland. Answers to this question can be partly found in the adopted FDS.

According to the adopted FDS, the results from the council's 2023 Housing and Business Assessment indicate a need to ensure adequate vacant business land is available over the long term. However, as per the adopted FDS, *“not all of the vacant and underutilised land in existing centres and business areas should be expected to be available for development, or be available at a price, or size suitable for all business needs. For land intensive uses, new greenfield land may sometimes be the most practicable option”* (Page 34).

This anticipates that the operational and future growth requirements of certain companies may not be satisfied by the existing zoned capacity, given the extensive land area required in a single location for some operations.

Furthermore, the adopted FDS indicates that Drury, Red Hills and Whenuapai combined are projected to see *“additional 6,000 jobs over the medium term and nearly 12,000 additional jobs over the long term”*. To address this requirement for land, the FDS states that *“over the medium to long-term, additional business zoned land will need to be live-zoned, including through the provision of centres in new development areas”* (Page 34).

This implies that the live zoning of additional business lands is expected to occur in the broader Auckland Region, especially at the edge of the current urban areas (such as Drury, Red Hills, and Whenuapai), to accommodate projected employment growth over the medium to long term.

A further consideration is the uncertainty around the amount of ‘Vacant Potential’ land that would become available over the short-, medium -, and long terms, particularly given it is such a significant proportion of identified industrial land capacity, combined with lack of surety of timing and funding for the future provision of industrial land in the Structure Plan areas across the region. This suggests high downside risks to ‘market ready’ available industrial land supply in the future.

In terms of timing, there are no material economic costs of rezoning the PPC land for industrial use in the short term. It adds industrial land supply to the market, makes the industrial land market more competitive, is already identified as an appropriate location to urbanise given its FUZ zoning and importantly provides long term surety for one of New Zealand's largest and most successful international manufacturing businesses.

Furthermore, from an economic perspective, there is no propensity that the PPC would significantly reduce the need for light industry land indicated in the Drury-Opāheke Structure Plan area. The proposed industrial rezoning for FPH is specifically designed to accommodate the land requirements for its R&D, manufacturing, distribution, and office activities. This is a unique, one-off development that will not detract from the potential of existing or planned industrial areas in the local market, including those within the Drury-Opāheke Structure Plan area. As identified above, it is more likely to catalyse growth at a slightly faster rate than without the FPH PPC and give market credibility to the Drury-Opāheke area as an industrial, employment and business location.

While FPH's manufacturing and distribution activities align with the 'light industry' classification, they differ significantly from other light industrial activities across the region by offering unique products and targeting a substantial market beyond Auckland and NZ. This means that, FPH's activities will not compete with local industrial businesses or their demand for land.

Furthermore, considering the potential opportunities for establishing industrial businesses to support future R&D and manufacturing activities at the FPH site, which may include businesses involved in raw material production, tool manufacturing, machining / assembly, storage, or logistics, it is reasonable to anticipate an increased demand for light industrial land in the area as a result of the FPH development.

8. FRANKLIN & PAPAKURA RESIDENTIAL CAPACITY SUFFICIENCY

While the current zoning of the Site is predominantly FUZ with a small amount of Rural – Mixed Rural, the Drury-Opāheke Structure Plan has identified the area indicatively as appropriate for a mix of medium and high residential land use. As such, a high-level overview of lost residential capacity from the Site being developed for LIZ activities provides a more complete picture of economic costs.

The following table shows the identified level of residential capacity within Franklin and Papakura local boards based on HBA 2023 information. This is cross referenced with projected demand for the two localised Wards that comprise the localised area – namely Franklin and Papakura, utilising Council's growth scenario.

TABLE 5: FRANKLIN AND PAPAKURA LOCAL BOARDS RESIDENTIAL CAPACITY SUFFICIENCY

AGSv1.1 Growth Scenario	2024	2028	2033	2038	2043	2048	2052
Population	154,680	162,580	175,360	199,780	223,530	239,670	249,270
Households	52,240	56,780	62,290	72,530	82,670	89,800	93,500
Households Growth		4,540	10,050	20,290	30,430	37,560	41,260
Total Dwellings Required (incl. Unoccupied)		4,990	11,040	22,300	33,440	41,270	45,340
Net Dwellings Required + NPS Buffer		5,990	13,250	25,640	38,460	47,460	52,140
2023 Estimated Urban & Greenfield Capacity	71,200						
Sufficiency of Residential Capacity		65,210	57,950	45,560	32,740	23,740	19,060

Source: Auckland Council, Stats NZ

Based on the feasible capacity information from the HBA 2023 and the expected yield figures for FUZ areas as identified in the Auckland Plan 2050 and FULSS⁶, the total estimated capacity of the Franklin and Papakura Local Boards is approximately 71,200 dwellings, comprising an urban feasible⁷ capacity of 51,470 dwellings (incl. increased feasible capacity resulting from PC78 unzoning) and a greenfield capacity of around 19,730 dwellings⁸.

⁶ Since the adopted FDS lacks capacity estimates, the analysis relies on Auckland Plan 2050 as the basis for quantifying anticipated greenfield capacity within the catchment.

⁷ Note that the NPS-UD Guide Report states that a development project is deemed "feasible" if the rate of return on total costs meets or exceeds a 20% target return. This economic analysis therefore utilises a 20% gross profit criterion to quantify the feasible capacity within the catchment.

⁸ This includes the estimated remaining capacity in Drury - Paerata FUZ, Pukekohe FUZ, Cosgrave Takaanini FUZ, Opāheke FUZ, Takaanini FUZ, Clarks Beach FUZ, Glenbrook Beach FUZ and Maraetai FUZ, based on Auckland Plan 2050 anticipated dwelling capacity figures. The removal of certain FUZ land in Drury East and Takaanini, as outlined in the adopted FDS, has been excluded from the identified capacities for Auckland 2050.

This total capacity of 71,200 dwellings is compared with the demand for housing in the catchment based on the most recent population and household projections for the area under Council's growth scenario.

Under the Council's growth scenario, Franklin and Papakura are projected to need around 52,140 dwellings by 2052, including the required NPS-UD buffer. According to the latest 2023 NZ Census data, the dwelling occupancy ratio for the Franklin and Papakura local boards is around 91%. As a result, unoccupied dwellings - such as those used for holiday homes, batches, or vacant homes - are factored into the total dwelling requirement for the area, contributing to the estimated 52,140 dwellings.

As a result, Franklin and Papakura local boards are expected to have more than enough commercially feasible capacity to meet demand through 2052. Specifically, these areas are forecast to have a surplus capacity of slightly over 19,000 dwellings by 2052, after accommodating projected market growth.

Given this anticipated long-term residential capacity sufficiency, the loss of the FPH Campus to residential development is not expected to cause any long-term supply shortages for the local area or the Auckland Region as a whole.

To quantify the potential impact of enabling FPH campus development on the local and regional residential market, Property Economics has also analysed three different scenarios to estimate the expected dwelling yield from residential development of the Site.

The following analysis employs three methods to estimate the potential residential yield for the plan change area

Method 1: Proportionalised Structure Plan Yield

According to the Structure Plan, the Drury-Opāheke structure plan area is expected to deliver approximately 21,600 dwellings across 624ha of identified developable residential land. Applying the same 45% infrastructure ratio, the plan change area, with a total land area of 87ha, would result in a net developable area of approximately 48ha. This represents around 7.7% of the total developable residential area.

Based on this proportion, the potential loss of residential capacity due to the PPC is estimated to be approximately 1,670 dwellings (i.e., 7.7% of 21,600 dwellings).

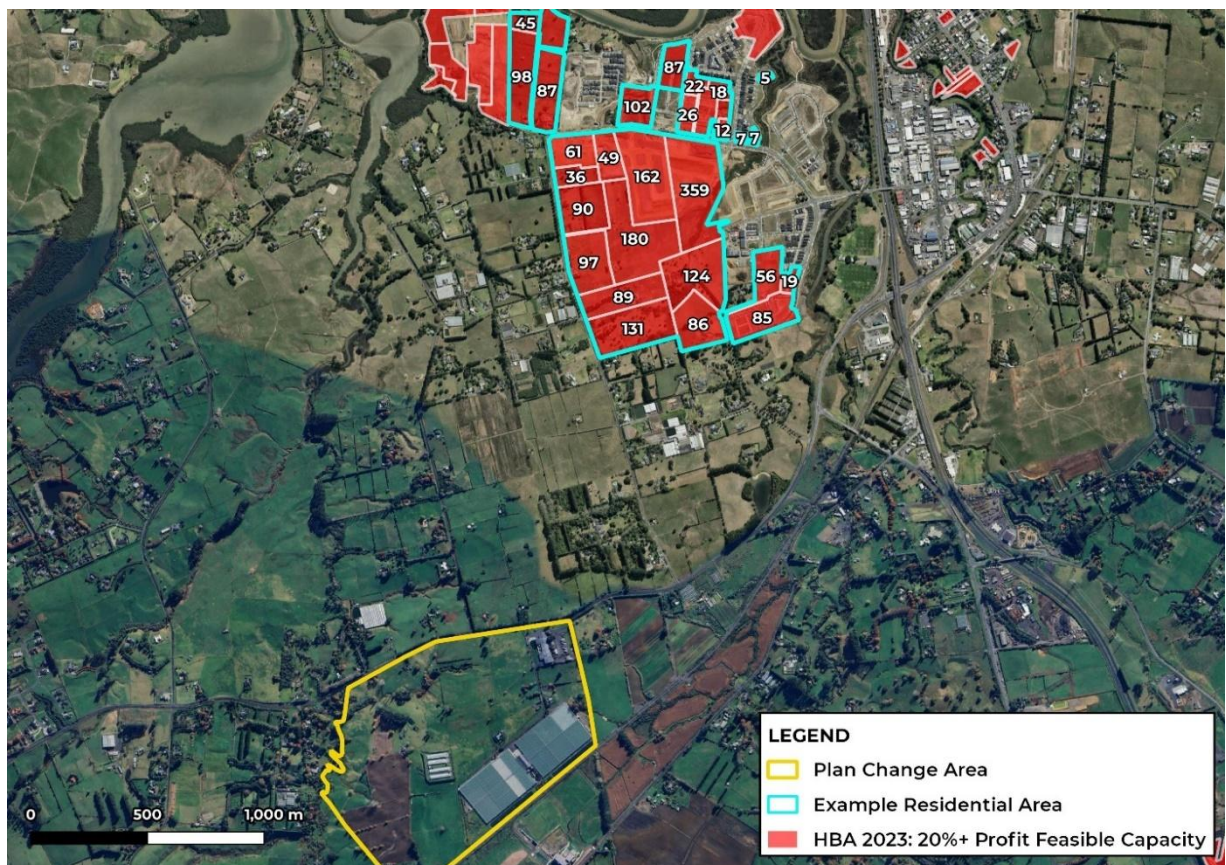
Additionally, the wider Auckland Region has a total commercially feasible capacity of approximately 1,230,000 dwellings under the maximum percentage profit scenario, as outlined in Table 17 of the HBA 2023. The potential reduction of 1,700 dwellings within the Drury-Opāheke structure plan area would therefore represent only about 0.14% of the region's total commercially feasible capacity.

Method 2: HBA 2023 As A Basis

Using the HBA 2023 feasible capacity data for an existing residential area in the Drury-Opāheke local market as a reference (see figure 2 below), it is assumed that the plan change area, if used for the anticipated residential activities, would include a mix of terraced and standalone homes similar to those in the established area along both sides of Bremner Road.

Based on the HBA 2023, the reference residential area with a similar gross land area is estimated to have a commercially feasible capacity of around 2,250 dwellings. This can be used as a useful 'upper end' benchmark for the likely commercially feasible yield of the plan change area.

FIGURE 6: EXAMPLE RESIDENTIAL AREA (OUTLINED IN BLUE) IN THE DRURY-OPAHEKE LOCAL MARKET



Source: Google Maps, LINZ, Auckland Council

Method 3: Recent Residential Trend in the Local Market

According to residential property data from CoreLogic, the average residential land area per dwelling in Drury is about 230sqm. Based on this figure, combined with the 45% infrastructure ratio assumption outlined in the Structure Plan, the plan change area could accommodate approximately 2,000 dwellings. This projected yield falls between the estimates generated under the Method 1 and Method 2 scenarios.

In light of the above high-level estimates, Property Economics considers that the reduction in residential capacity resulting from the PPC would not significantly impact the structure plan's ability to meet future residential demand, nor would it materially affect the broader regional residential market or community growth. Any lost residential potential would need to be considered against the significant economic benefits as outlined in our wider Economic Assessment.

In addition, it is important to note that the implementation of the MHU zone (with MDRS) across the region which will enable greater density to be achieved within the wider Structure Plan area which has not yet been rezoned for residential uses. As a result, any reduction in residential capacity due to the FPH development is unlikely to significantly impact the region's or the local catchment's residential growth potential.

9. ALTERNATIVE SITES OVERVIEW

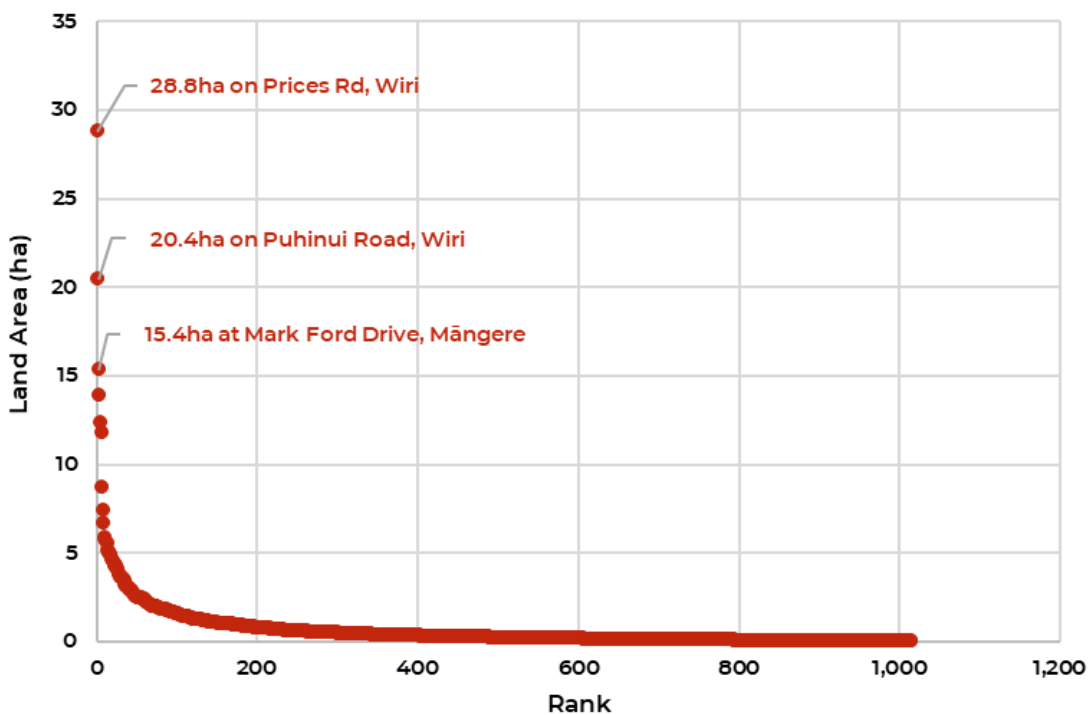
To provide a comparative context, this section assesses the presence of any alternative sites within the existing industrial zone network within the wider Auckland region that could potentially accommodate the proposed hi-tech business park campus. This assists in understanding the economic efficiencies of the Site in contrast to the alternative sites.

For the purpose of the assessment, it is assumed that a threshold of **100ha** of land would be required to facilitate the full set of research and development labs, administrative offices, pilot manufacturing facilities and distribution required for the new FPH Campus.

To assist with this exercise Property Economics has identified vacant industrial sites across the wider Auckland region using the geospatial industrial land capacity data from the HBA 2023. The figure below illustrates the size and ranking of each identified vacant industrial site.

Note that the large area of heavy industrial land (328ha) occupied by NZ Steel and Transpower Glenbrook Substation in Glenbrook, as well as the 16.4ha lake land near Rosedale Park, are both classified as vacant in the HBA 2023 geospatial industrial land capacity data. However, the potential for these two locations to accommodate the FPH campus is considered impractical and unfeasible. Therefore, these parcels of land are not included in the figure below.

FIGURE 7: AUCKLAND REGION VACANT INDUSTRIAL SITES BY SIZE (HA)



The summary table indicates that 98% of the sites in the Auckland region have a land area smaller than 5ha. This is not unexpected with the vast majority of industrial business requiring sites less than 5ha of land.

Importantly, none of the vacant sites within the current industrial zoned provision are of a land area that could sufficiently accommodate the FPH Campus land requirement (i.e., at least 100ha). There are only three non-adjacent sites with a land area larger than 15ha (as shown in the figure below), indicating that there is no propensity to group large vacant sites together to meet FPH's land requirements.

FIGURE 8: LARGEST THREE VACANT INDUSTRIAL SITES IN AUCKLAND



Source: Google Maps, Auckland Council

Clearly, there are no appropriately zoned options for FPH within Auckland's industrial zone network, so FPH's only option to facilitate growth within New Zealand is to rezone a piece of land that satisfied their locational and future growth requirements.

While the FPH Campus could theoretically be delivered across a number of smaller industrial sites in a range of locations on a 'piecemeal' basis or allocating activities to different locations by function, it would be significantly less efficient to provide for the comprehensive facility package required for their operations, high quality environment for their employees and catalysing future growth opportunities in an efficient manner.

There are significant efficiencies that are generated in a comprehensive master planned development and important market certainty for FPH to be able to expand their building

footprint in the same location to future proof their significant infrastructure investment and business operations in Auckland.

Overall, Property Economics considers that the proposed FPH Campus could not practically be accommodated by an alternative LIZ site(s) within the existing industrial zoned network in Auckland. This was similar for the recently consented new Sleepyhead factory in Ohinewai, just north of Huntly. Sleepyhead required a circa 37ha site with rail siding potential and there was nothing available in Auckland to meet their land size, locational and operational requirements.

At its heart, FPH is a multi-faceted hi-tech research & development and manufacturing organisation. Large multi-national manufacturing companies typically require more extensive land holdings to accommodate their vast operations and associated support services. Given the preceding industrial location analysis and the alternative sites overview above, the Site is a large quantum of land with a single land ownership that would provide for more efficient and seamless development of the FPH Campus.

It is also located adjacent to the designated Drury West train station which enables its significant workforce to access the Site by public transport. The close proximity of the site to recently zoned land for residential purposes in Drury also allow opportunities for employees to live close to the FPH Campus.

There is a potential risk, as Property Economics understands, that if a single site could not be found in Auckland, then the production facility of FPH would need to be moved outside Auckland or NZ. This is considered as a significant economic opportunity cost for the region and NZ.

10. LIGHT INDUSTRIAL ACTIVITY LOCATIONAL ATTRIBUTES

This section identifies the main characteristics influencing the attractiveness and competitiveness of the Site for LIZ activity.

Note that the location decision process of many industrial companies in Auckland, as in other areas around the country, is often complex and is specific to each business and its operational requirements. There are, however, a set of key locational criteria that give an understanding of some important factors affecting business location, albeit to varying degrees. These are outlined below.

- **Good access to transportation network:** Sites (or locations) adjacent to major arterial roads are preferred and often receive a premium in the market. Industrial activities that require an efficient delivery of materials or products often prefer these locations.

As part of this criterion, improved transportation in industrial areas is also seen as a future requirement for growing industrial businesses, particularly in regard to better roading networks, traffic management, and close to public transport services.

- **Proximity to an appropriate labour supply:** This varies between sectors based on the skill level of the workforce required. For example, hi-tech businesses require a more highly skilled / qualified workforce so the location requirements vary between sectors. For these businesses, proximity to universities and R&D activities would be beneficial.

For many industrial businesses access to labour is an important consideration in their location decision making processes, especially for manufacturing businesses where access to a skilled workforce is vital. In general, business locations in areas that have a lower level of access to the workforce are seen as problematic.

- **Access to customers or target markets:** This has a strong influence on location depending on whether the business is servicing a localised market, a regional market or the national or international market. For those businesses servicing the national and international markets such as FPH an Auckland location is preferable to reduce travel costs and have better access to support services and businesses.

Operations servicing the national and international markets and those businesses that have a large transport component, locations in close proximity to the main state highway network, rail, port or airport networks are preferable to mitigate time and costs.

- **Room for potential expansion and growth on the site:** For most businesses relocating is a very expensive exercise, and for businesses with significant capital investment costs into plant, machinery and on-site infrastructure such as FPH, they like to have a level of certainty that they will be able to operate from the site for a long period of time to ensure they achieve a return on their investment.

Thus, having the ability to expand their operation to allow for business and building footprint growth onsite is important. It is an important consideration for businesses who want to mitigate long term risks on their capital investment.

- **Location of suppliers:** This can be especially important for businesses that have significant raw material inputs and freight costs.
- **Exposure / Profile:** Most businesses seek locations that offer some level of exposure and profile. This is a cost-effective method of marketing and is able to elevate the brand of a business significantly.

For larger national or international businesses this is less important as they are often well established, their markets are non-local, and site and operational efficiencies are a higher priority to increase international competitiveness.

- **Undisrupted water and electricity supply:** Note for some businesses the escalating price of electricity translates into lower profit margins, especially in power intensive industries. Black-outs and power surges are costly occurrences for businesses, especially if generators need to be hired.

Good quality and reliable infrastructure are important for large businesses such as FPH as disruptions can cost a lot of time and money with lost production. This includes high speed internet.

- **A company's existing network and infrastructure:** This can have a major influence on location. This is important to FPH with the Site being within easy drive time of the existing FPH operations in Highbrook Business Park. This is important to minimise down time commuting between each campus.
- **Land and property costs:** This is a key criterion in the location decision of almost all businesses. For such a significantly scaled development as proposed by FPH, the investment requirement is substantial. Having the ability to masterplan and develop the entire 105ha Site in a comprehensive manner creates significant economic efficiencies and improves the experience and workforce environment for everyone.
- **Level of congestion in peak times:** This is becoming increasingly important, as it can have a significant influence on delivery businesses. In many main centres for example, this is now a major consideration where time delays and trucks getting caught in traffic is having significant flow-on implications for company logistics and their ability to service clients to the level required.

The Site's location adjacent to the Drury West train station provides significant benefits for workforce accessibility and eases the burden on roading infrastructure in the area.

Having assessed the subject land against these critical industrial location criteria, the Site is considered suitable for industrial activities, and FPH in particular, for the following reasons:

- Good access to major transportation network (SH1)
- Proximity to an existing (and fast growing) skilled labour supply
- Closer proximity to hospitals, universities, and R&D activities located in the Auckland and Waikato regions (relative to locations in the rest of the country)
- Consolidated campus site - room for potential expansion and growth on a single site
- Economies of scale and agglomeration benefits – having FPH develop a single masterplan campus creates agglomeration benefits and market efficiencies, as well as development efficiencies.
- FPH's existing network and infrastructure – proximate to the existing East Tāmaki campus
- Increased local employment opportunities.
- Adjacent to new Drury West train station for employees – potential to reduce road traffic loads.
- Close to future major commercial services and support businesses – Drury Metropolitan Centre.
- Reduction in marginal cost infrastructure cost for FPH.

Based on this analysis, the Site can be expected to provide a competitive and attractive industrial land capacity option within the wider Auckland market, whilst attracting greater levels of employment retention within the localised market.

11. APPROPRIATE ACTIVITIES

11.1. AUP(OIP) CONTEXT

Under the Unitary Plan, the LIZ anticipates industrial activities that do not generate objectionable odour, dust, or noise. This includes manufacturing, production, logistics, storage, transport, and distribution activities.

The objectives (H17.2) of the LIZ are defined as:

- (1) *Light industrial activities locate and function efficiently within the zone.*
- (2) *The establishment of activities that may compromise the efficiency and functionality of the zone for light industrial activities is avoided.*
- (3) *Adverse effects on amenity values and natural environment, both within the zone and on adjacent areas, are managed.*
- (4) *Development avoids, remedies or mitigate adverse effects on the amenity of adjacent public open spaces and residential zones.*

Given the H17.4.1 Activity Table, activities that are permitted within the LIZ primarily include:

- **Industry**⁹: General industrial activities, wholesaler, storage, and lock-up facilities, etc.
- **Rural**: Rural activities such as animal breeding or boarding and horticulture.
- **Commerce**: Activities such as dairies, food and beverage, garden centres, motor vehicle sales, marine retail, retail and offices that are accessory to the primary activity on the site, service stations, show homes, trade suppliers (some of these activities are subject to GFA restrictions).
- **Community**: Such as emergency services and tertiary education facilities that are accessory to an industrial activity on the site.

The list of permitted activities identified within the LIZ under the AUP(OIP) is generally what is appropriate and expected on the subject land. Of the permitted activities, the suite of business types and activities appropriate for the Karaka Road FPH Campus development are identified below:

- **Research and development**: The FPH Campus will provide floorspace for research and development activities, including prototyping, testing and iterating new devices and

⁹ As defined by AUP(OIP), industrial activities include freight depots and warehousing and storage, industrial laboratories, manufacturing and light manufacturing and servicing, repair and maintenance services, waste management facilities, refuse transfer station and recycling facilities, rail siding, bus depots, storage and lockup facilities, wholesalers.

technologies, improving existing devices, and exploring new applications for medical devices.

- **Clinical trials and testing:** Before medical devices can be approved for use, they must undergo rigorous clinical trials and testing to ensure their safety and effectiveness. The FPH Campus has the potential to provide some of the facilities and resources necessary to conduct these trials and tests.
- **Training and education:** The FPH Campus can offer training and education opportunities for healthcare professionals, manufacturers, and other stakeholders in the medical equipment industry. These activities can help individuals stay up-to-date with the latest advances in medical device technology.
- **Collaboration and networking:** The FPH Campus can provide a hub for collaboration and networking among researchers, developers, and other professionals in the industry. Collaborative activities such as workshops, conferences, and networking events can help foster innovation and promote the exchange of ideas. This ultimately generates agglomeration benefits for the Auckland economy.
- **Regulatory compliance:** Medical devices are subject to strict regulations and standards. Medical device campuses can provide resources and expertise to ensure that devices comply with these regulations and standards. Activities such as quality assurance, risk management, and regulatory affairs can help ensure that medical devices are safe and effective.
- **Social events:** High-tech campuses are often large, and it can be challenging for employees to get to know one another. Having on-site cafeterias and organising social events such as special meals, team-building activities, and sports leagues can help employees build relationships and foster a sense of community. This is important for the social, health and mental wellbeing of staff.

11.2. OTHER EMPLOYMENT INTERNALISATION POTENTIAL

To better understand the extent of employment opportunities available within the localised market to internalise a higher proportion of employment, and to the benefit of the local economy, the following table compares the differences in the number of employees residing within the localised market against the area's employment base across ANZSIC sectors that are likely to be located in the industrial zones, based on Stats NZ 2023 Census and 2023 Business Demography Statistics.

The right-most column shows the employee internalisation ratio by sector and can be interpreted as, for every one employee in a sector within the localised market there is this many employees in that sector that live in the area. A ratio above 1 indicates that there is a net inflow of employees in that sector to the catchment while a ratio below 1 indicates a net outflow of employees in that sector.

It is important to note that it would be unrealistic to expect a one-to-one match of residents within the catchment to localised employment across all sectors due to the competitive nature of the employment market. However, the lower the rate, the lower the level of employment internalisation for that sector in the catchment and, therefore, the greater the market opportunity, growth potential and market efficiencies can be gained.

TABLE 6: LOCALISED AREA EMPLOYMENT INTERNALISATION RATES (2023)

ANZSIC Sector	Local Resident Employment Base	Employed within Southern Auckland	Local Employment Base Rate
 A - Agriculture, Forestry and Fishing	2,445	1,866	0.76
 B - Mining	159	192	1.21
 C - Manufacturing	8,988	7,093	0.79
 D - Electricity, Gas, Water and Waste Services	771	419	0.54
 E - Construction	8,418	5,320	0.63
 F - Wholesale Trade	5,190	2,291	0.44
 G - Retail Trade	6,339	5,447	0.86
 H - Accommodation and Food Services	3,327	3,116	0.94
 I - Transport, Postal and Warehousing	4,668	2,043	0.44
 J - Information Media and Telecommunications	699	96	0.14
 K - Financial and Insurance Services	1,986	339	0.17
 L - Rental, Hiring and Real Estate Services	1,809	724	0.40
 M - Professional, Scientific and Technical Services	5,538	2,023	0.37
 N - Administrative and Support Services	3,042	2,000	0.66
 O - Public Administration and Safety	3,960	1,140	0.29
 P - Education and Training	5,103	4,118	0.81
 Q - Health Care and Social Assistance	5,757	3,192	0.55
 R - Arts and Recreation Services	945	554	0.59
 S - Other Services	2,943	1,551	0.53
Total All Industries	72,090	43,520	0.60

Source: Stats NZ, Property Economics

There is a clear pattern of leakage across all ANZSIC06 Industrial Classifications, with seven industrial classes showing internalisation of less than 50%, i.e., significant leakage or conversely a lack of jobs in the localised market in the sector. The localised market overall has an employment internalisation of just 60%, meaning over a third of people travel outside the localised area for work.

This reflects that the localised market has an employment retention issue as there is a significant industrial employment base within the localised market but not enough industrial activity and employment opportunities locally to satisfy this demand.

Of note in relation to FPH is the significantly lower internalisation rate of the high-tech knowledge-intensive sectors, for instance, Information Media and Telecommunications (0.14), Financial and Insurance Services (0.17), and Professional, Scientific and Technical Services (0.37), in the area have an average internalisation rate of only 30%.

These sectors have approximately 2,460 employees that work in the localised market with a significantly larger number living in the area but working elsewhere in Auckland (i.e., around 8,220 employees).

Based on this high-level analysis, Property Economics considers that the proposed FPH Campus at the Site would support the diversification of employment opportunities in the localised market and increase employment internalisation to the benefit of the economy.

12. ECONOMIC IMPACT ASSESSMENT

This economic impact assessment relates to a development comprising a total of 105ha land (i.e., the full Structure Plan land).

Based on the information provided by FPH, a first building of the FPH Campus will be completed in the early 2030's, with the associated land development and core infrastructure required. In the decade following the completion of the first stage of the campus development, the construction of two further 36,000sqm buildings is anticipated to support R&D and pilot manufacturing. Other supporting infrastructure could include the construction of a distribution centre.

Note that the above growth is indicative only and will be influenced by a range of factors including ongoing demand for FPH's products.

The following economic impact assessment estimates the total additional gross economic injection¹⁰ (added Gross Domestic Product (GDP)) into the Auckland economy that would be brought about by the project. The initial specifications and details have been provided by FPH and represent the development's configuration and costings at this point in time.

It is important to note that this is not site specific (i.e., it has not been endeavoured to identify the extent to which particular parts (geospatially) of the Auckland Region will benefit economically). It also assesses the likely economic impacts upon aggregate Auckland business activity given the composition of activities proposed.

Although there are undoubtedly economic benefits that are specific to the location, they are primarily driven by proximity to transport corridors, universities & hospitals, efficiencies, ownership opportunities, site size and the opportunity costs associated with other sites.

The economic impacts likely to be experienced as a result of the Project are broken down by the development phase which includes the construction costs (CAPEX¹¹) of the development and the proportion of those costs that are retained within the Auckland Region. As well as the operational benefits attributable to the on-going operation of FPH in this area.

The direct economic impacts are derived from the actual spending / expenses incurred through the operation of the anticipated development.

Indirect economic impacts are the increased spending brought about by those firms / households and their employees / occupants, who supply the development, while induced economic benefits are measured in terms of the additional income that will be spent in the area due to increased business activity.

¹⁰ For example, this has not taken into account the short-term loss of operational employment currently on site.

¹¹ CAPEX – Capital Expenditure

12.1. TOTAL ECONOMIC ACTIVITY

This includes construction costs, which have been valued for the overall development.

The impact of this injection on the initial business cycle has been calculated. This 'construction multiplier' was based on the national input-output tables produced by Statistics New Zealand (based on 48 sectors), which were then assessed at a district level based on Auckland economic activity, composition and productivities.

This estimates the 'leakage' from the regional economy (within specified sectors), and therefore the overall regional production (within a given business cycle) for each \$1 injected.

This was performed for the general residential / commercial construction sectors. These multipliers are based on 'net' flows by broad sector type and are therefore approximations.

Total output impacts to the Auckland catchment for the proposed developments include:

- Direct Construction Cost x 'Construction Multiplier' +
- Direct Development Cost x 'Development Multiplier' +
- Direct Increased Commercial Spending x 'Commercial Multiplier' +
- Indirect Business Spend x 'Commercial Multiplier' +
- Induced Retail Spending x 'Retail Multiplier'

Each identified multiplier relates simply to the economic sector from which the activity is generated.

12.2. ASSUMPTIONS

The following assumptions have been applied in this impact analysis in order to assess the level of economic injection into the overall economy at this time. This has some (limited) impact on the distributional effects of the costs and benefits but can be quickly adjusted to accommodate more specific construction and on-going costs and injections.

1. For the purposes of this Economic Impact Assessment, it has been assumed that the construction costs will fall within the definition of the following categories (based on a standard 'special' commercial ratio): 'residential construction', 'non-residential construction', 'non-building construction', 'other construction services'.
2. Associated (and estimated) land costs have been included in the financial repayment assessment for the Project.

3. Financial or loan costs on capital primarily fall outside of the local catchment and impact the national economy.
4. The origin of labour has been assessed based on regional labour movements furnished by Statistics NZ based on 2018 data. However, employment data has been updated as per the Statistics NZ Business Frame data¹² to March 2023.
5. This report deals with the economic impact of proposed development on Auckland. These are specifically the direct impacts related to the operation and construction of the proposed development.
6. The economic activity generated is based on the development's gross activity and does not consider this redirecting growth opportunities from elsewhere in the catchments. As stated, this assessment is not site specific.
7. For the purposes of this report a 6% discount rate has been applied.
8. Labour movements are based on average retention rates rather than specific company locations.
9. The proportion of materials and labour internalised in direct benefits to Auckland are based on standardised labour movements as well as employment and production composition within the Region. The amount of each 'flow-on' dollar retained in Auckland are based on the movement of resources (including labour) between other districts and regions.

The tables and figures following outline the resulting impacts on the Auckland economy as a result of the development.

¹² Business Frame Data – provides Statistics NZ measure of employment in an area by ANZSIC sector.

TABLE 7: PHASE 1 REGIONAL ECONOMIC IMPACT

	Before 2026	2027-2029*	Total
Direct Expenditure (\$m)			
Land			
Earthworks / Civil Works / Infrastructure		\$25.0	\$25
Consultants	\$1.6	\$3.4	\$5
Total Development Costs (excl. Land)	\$1.6	\$28.4	\$30
Construction		\$200.0	\$200
Total Constructure and Development Costs (excl. Land)	\$1.6	\$228.4	\$230
Increased Local Spend**		\$3.1	\$3.1
Total Direct Expenditure (excl. Land)	\$1.6	\$231.5	\$233.1
Level 2 Multiplier Impacts			
Total Auckland Output NPV (48 sector multipliers)***	\$2.0	\$250.6	\$252.6
Employment (FTE Years)****			
Development Employment	14	305	319
Construction Employment	0	1,814	1,814
Other Employment	1	243	244
Total Employment (FTE Years)	15	2,362	2,377

Source: Property Economics

* Indicative timeframe

** Increased Local Spend by employees, and additional local business spend through the different stages of development.

*** The impacts on Auckland as a result of direct, indirect and induced activities.

**** Note that these figures are different from the average FTEs required for Phase 1 of the development, which are presented in Appendix 3.

The preceding table illustrates that the total impact on business activity within Auckland as a result of the first stage of the FPH development is estimated to be just over \$250 million.

In terms of employment multipliers this would contribute 1,100¹³ jobs during the peak construction year within Auckland, with a total number of FTE years at approximately 2,400 over the construction period.

Following the development, it is expected that the FPH Campus will accommodate some 600 FTEs in both research and development and manufacturing. In terms of the potential loss of economic activity from the absence of the FPH Campus, it is assumed, as outlined in this

¹³ NB These are all jobs created through the direct construction phase including indirect and induced employment through all business sectors (not solely construction jobs).

report, that the alternative to developing this site is the potential loss of this activity altogether from Auckland (overseas).

TABLE 8: TOTAL DEVELOPMENT ECONOMIC INJECTION AS A RESULT OF THE FULL FPH DEVELOPMENT (\$NPV)

	2030	2040	2050	2070	Total
Direct Expenditure (NPV\$m)					
Total Development Costs (excl. Land)	\$30.0	\$37.7	\$25.1	\$27.7	\$120.5
Construction	\$200.0	\$339.4	\$225.6	\$249.7	\$1,014.7
Total Construction and Development Costs (excl. Land)	\$230.0	\$377.1	\$250.7	\$277.5	\$1,135.2
Increased Local Spend	\$3.1	\$19.1	\$25.8	\$35.4	\$83.4
Total Direct Expenditure (excl. Land)	\$233.1	\$396.2	\$276.5	\$312.8	\$1,218.6
Total Nominal Spend	\$230.0	\$450.0	\$450.0	\$900.0	\$2,030.0
Level 2 Multiplier Impacts					
Total Auckland Output (NPV-48 sector multipliers)	\$252.6	\$446.1	\$311.3	\$352.2	\$1,362.2
Employment (FTE Years)					
Total Employment (FTE Years)	2,377	5,564	3,883	4,393	16,217

Source: Property Economics

Table 8 above indicates the total development Net Present value (NPV) of the construction relating to the FPH Campus through to 2070. It indicates a total of just over \$1.36b injected into the Auckland economy over this period with over 16,200 FTEs supported during the development period.

There are several assumptions relating to this that have contributed to the conservative nature of this assessment.

- While the total nominal development cost is expected to be in excess of \$2b no increase in construction costs has been assessed. This fact coupled with a discount rate of 6% provides a very conservative contribution.
- The associated employment is also based on a 4% increase in productivity over the period assessed.
- This is based on the development of the FPH campus alone, with an expectation that up to 18,000 FTEs could be accommodated within this facility by 2070. This is separate from the FTE years in Table 8 which represents jobs created during the development period.

13. ECONOMIC COSTS AND BENEFITS

The proposed PPC to live zone the Site to LIZ would generate a range of potential economic costs and benefits. This section outlines the high-level economic costs and benefits of the PPC in the context of the AUP(OIP) and RMA.

ECONOMIC BENEFITS

- **Economies of scale:** The Site is part of the extensive Drury-Opāheke Structure Plan area. In total the proposal seeks to develop nearly 400,000sqm of built form space.

When considering a proposed development, it is prudent to assess the wider business activity that is associated (geo-spatially) that enables economies of scale for the activities as well as its serviceability. In relation to this proposal the level of activity is so expansive that the proposal itself is likely to materially exhibit economies of scale internally as well as supporting significant levels of activity outside of the direct activity accommodated.

The proposed provision of activities would gain benefits and efficiencies working with the existing operations. The broader the range of activities enabled at the Site, the more agglomeration benefits, efficiencies, and improved business performance that could be generated.

- **Improved economic profile:** Enabling the development of another high-tech campus in Auckland would enhance the economic profile of both the local market and the wider Auckland Region by facilitating knowledge transfer and innovation. As the following point outlines, this also raises the profile of high valued employment within the region.

Overall, the health sector is one which has and is likely to continue to experience significant levels of growth, with the competition for accommodating these activities driving amenity and accessibility for suitable locations.

- **Job Creation:** A high-tech campus has the potential to create a significant number of jobs in the local area. On average these jobs are likely to be more highly skilled having a positive impact on the local employment rate.

Additionally, the presence of high-tech jobs can attract talent from other regions, which can further stimulate the local economy. The proposed FPH campus has the potential to accommodate thousands of jobs that could otherwise be located offshore.

- **Increased Investment and regional GDP:** The development of a high-tech campus can attract new investment to the region. High-tech companies are often associated with high levels of investment in research and development, which can lead to new innovations and products. This investment can have a positive impact on the regional GDP by increasing economic activity and creating new jobs.

As identified above the development of the FPH Campus alone is likely to contribute over \$1b (NPV) to the regional economy. Additionally, the accommodation of some 5,000 plus staff within the region will add a further \$500m annually to the regional GDP.

- ⊕ **Economic Diversification:** A high-tech campus can help to expand the local economy by providing jobs in a diverse industry. This can reduce the local economy's dependence on a single industry or sector, which can help to make it more resilient to economic shocks.
- ⊕ **Reduced peak motorway traffic:** By having a new industrial employment node located adjacent to the new Drury West train station, employees and visitors can be encouraged to use public transportation instead of driving their own cars. This can reduce the number of cars on the road and ease traffic congestion.
- ⊕ **Increased industrial land provision:** With additional industrial land supply rezoned within the market, the development would put less pressure on existing supply.

Given the unique requirements of FPH's operations the alternatives are generally considered a moot point, with no real alternatives for a consolidated campus.

- ⊕ **Innovation:** The development of a high-tech campus can foster innovation and new ideas. The presence of high-tech companies can encourage collaboration and the sharing of ideas, which can lead to new products and services.

This innovation can contribute to the growth of the regional GDP by creating new economic opportunities.

ECONOMIC COSTS

For the Structure Plan Area, which includes the Plan Change area, which includes the Plan Change Area zoned Future Urban and the small area of Mixed Rural Zoned land to the southwest

- ⊖ **Loss of rural land production (the rural extent only):** Part of the FPH proposal includes a component of Mixed Rural Zone. This area has a mix of Class 2, 3 and 4 soils¹⁴, however the land that is identified as highly productive in this part of the Structure Plan area is fragmented. The part of the Structure Plan that is zoned Mixed Rural is not included in the Plan Change area and is not proposed to be rezoned through this process.

A potential economic cost associated with the wider Structure Plan Area is the potential loss of the Mixed Rural Zone land. While this, approximately 15ha, land holding represents a small area of the larger HPL land areas within the localised area, the level of potential cost is mitigated firstly through the significant level of economic activity associated with the

¹⁴ Refer to Appendix 2 for the geospatial distribution of highly productive soil in the local area, as identified using the NZLRI Land Use Capability (LUC) classification.

proposal, and secondly due to the nature of the master planned and comprehensive development requiring the total land area associated with the 400,000sqm facility.

Moreover, the rural extent of the PPC site is primarily bordered by land unsuitable for rural production activities, such as the land immediately to the west, which encompasses Oira Creek, and a local road situated to the south. Additionally, the land to the immediate northeast of this rural land is earmarked for future urban development (i.e., the FUZ extent of the PPC site). These locational characteristics suggest that the rural extent of the land is highly fragmented and there is minimal likelihood for intensive rural production activities to occur in this location.

In light of these factors, Property Economics considers that the impact of the proposed wider development (or the development in the wider Structure Plan Area) on rural land production would be minor and would not pose a threat to the broader region's cumulative productive capacity and the growth potential of the rural sector.

Note that this economic cost is for the Structure Plan area as a whole as the PPC application does not include the small rurally zoned land. As such, this economic cost should not be interpreted as an economic cost of the PPC.

- **Residential development opportunity cost:** The land is identified suitable for future residential development under the Drury-Opāheke Structure Plan adopted by Council. Therefore, LIZ development is not an anticipated outcome and residential capacity for the area could be compromised.

Based on Property Economics' high-level estimates, using three methods - proportionalised Structure Plan yield, HBA 2023 feasible capacity, and recent residential trends in the local market (based on CoreLogic residential property data) - the potential loss of residential development on the FPH site is estimated to range between 1,700 and 2,250 dwellings, depending on the method applied.

Specifically, the estimated upper-end commercially feasible yield of 2,250 dwellings represents approximately 10% of the cumulative expected yield of 21,600 dwellings for the Drury-Opāheke Structure Plan Area and about 0.18% of the region's total commercially feasible capacity of approximately 1,230,000 dwellings under the maximum profit scenario, as outlined in Table 17 of the HBA 2023.

The above high-level estimates suggest that the reduction in residential capacity resulting from the proposed development would not significantly impact the Structure Plan's ability to meet future residential demand, nor would it materially affect the broader regional residential market or community growth. Any lost residential potential would need to be considered against the significant economic benefits as outlined above.

In addition, it is important to note that the implementation of the MHU zone (with MDRS) across the region which will enable greater density to be achieved within the wider Structure Plan area which has not yet been rezoned for residential uses. As a result, any

reduction in residential capacity due to the FPH development is unlikely to significantly impact the region's or the local catchment's residential growth potential

As such, this economic cost of the loss of residential land capacity is more than offset by increased capacity in more efficient locations.

In Property Economics' view, balancing all the economic considerations, the proposed development would generate significantly more economic benefits for the local and regional economy and communities than economic costs. As such, Property Economics supports the proposed FPH Campus from an economic perspective in the context of the RMA.

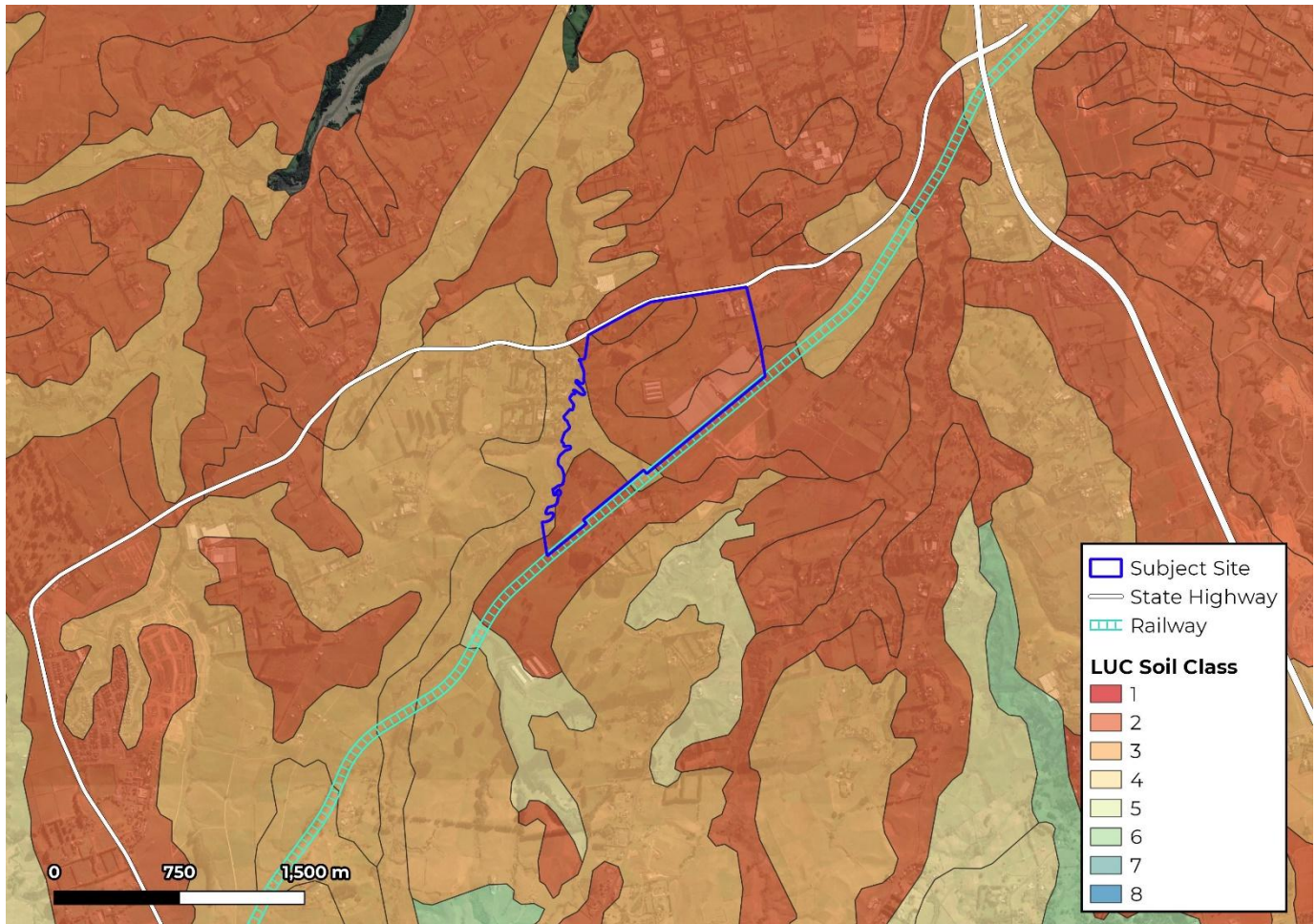
APPENDIX 1. INDUSTRIAL BUSINESS CLASSIFICATIONS

Property Economics utilises the 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC) as guidance, whereby businesses are assigned an industry according to their predominant economic activity.

Industrial activities, in general, refer to land extensive activities, including part of the primary sector, largely raw material extraction industries such as mining and farming; the secondary sector, involving refining, construction, and Manufacturing; and part of the tertiary sector, which involves distribution of manufactured goods. The employees work for the following sectors are considered an industrial sector employee:

- 10% of Agriculture, Forestry and Fishing
- 10% of Mining
- Manufacturing
- 30% Electricity, Gas, Water and Waste Services
- Construction
- Wholesale Trade
- Transport, Postal and Warehousing
- 40% Rental, Hiring and Real Estate Services

APPENDIX 2: LUC STATUS OF THE SITE



Source: NZLRIS, LINZ, Property Economics

APPENDIX 3. AVERAGE FTES REQUIRED FOR PHASE 1 OF THE DEVELOPMENT

Average FTEs required for Phase 1 of the Development								
	2023	2024	2025	2026	2027	2028	2029	
Plan Change	7	3.5	3.5					
Master Planning work	7	7						
Design Works			14	14				
Infrastructure Works				20	20			
R&D and Pilot Manufacturing Facility			3	3	3	80-100	80-100	
Construction Monitoring				3	3	3	3	
Total	14	10.5	20.5	40	26	83-103	83-103	277-317

Source: Fisher & Paykel Healthcare Properties Limited