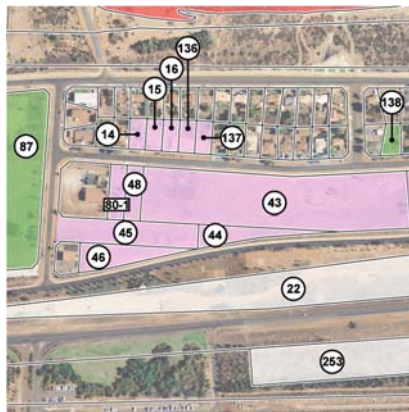


# HEDLAND LAND AVAILABILITY PLAN

## Part A: Explanatory Report

February 2011 (Incorporating December 2009 Aerial Photography)







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February 2011 (Incorporating December 2009 Aerial  
Photography)

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## EXECUTIVE SUMMARY

Port Hedland and South Hedland are facing significant ongoing growth pressures as a result of the mineral wealth of the Pilbara. Historically growth in regional centres was supported by increasing numbers of fly-in, fly-out workers requiring short term services and accommodation. In the modern era, however, the Town of Port Hedland is aiming to accommodate an ever increasing permanent population which seeks to live and work in the Pilbara while requiring accepted metropolitan standards of services, facilities and infrastructure.

Since 2000 the Australian economy has grown consistently, and trade in iron ore from the resource rich Pilbara region has proven to be the backbone of this economic growth. The Town of Port Hedland's 'Gearing Up' material notes that:

*"Port Hedland has been described and recognised as the beating heart of the national resource economy with exports from the port, largely consisting of iron ore from the eastern Pilbara estimated to grow from the current level of 180 million tonnes per annum to upwards of 450 million by 2015.*

*With this industrial growth and parallel spike in population comes the need for commitment, planning and investment by Local and State Government in partnership with the private sector to face the opportunities and challenges which lay ahead of a booming community."* (Town of Port Hedland. 2010).

The Town of Port Hedland is progressing with a wide ranging program of community development, infrastructure improvement and town centre revitalisation that responds to the many pressures for growth. A key part of this process has been to recognise that an orderly plan for the ongoing release of underutilised urban land is needed. This first commenced with the Port Hedland Public Land Rationalisation Plan in 2008/9. This was the first step in an ongoing process for the Town of Port Hedland in responding to the abovementioned issues of land availability and housing affordability.

The Town of Port Hedland (ToPH) commissioned this review of the earlier released Port Hedland Land Rationalisation Plan, to ensure the documents' ongoing relevance and to broaden its scope to encompass greater areas of the municipality as well as to examine private land and non-residential land. The Hedland Land Availability Plan (HLAP) as it is now names, encompasses the key developed areas of the 11,800 square kilometres of the Town of Port Hedland as illustrated in **Figure 1**. The document now also provides greater alignment with work undertaken by the WA Planning Commission's "Hotspots" team to allow integration of the report's findings into WAPC reporting.

The process used to review and identify sites for potential land release is outlined within this report, together with site review outcomes and recommendations. The outcomes comprise mapping and schedules for each of the Port Hedland and South Hedland areas and detail site particulars, location, and potential for future urban development. The HLAP reflects the ongoing

input of representatives from the DP, ToPH, Department of Lands (DL), Department for Housing (DoH) and LandCorp among others.

The extent of population growth for the Town of Port Hedland is a key driver of land release and land affordability. This report provides an analysis of demand based on a number of population projections for the Town. The report also considers the approval requirements needed for development of the identified sites, including divestment/excision and/or rezoning. In the context of population growth forecasting, this will allow the Town of Port Hedland to push ahead where land requires rezoning and/or strategic planning, while readily zoned land is considered immediately for release.

The completion of this second substantial review of land availability within the Town of Port Hedland allows for an orderly program of detailed site review, release, and development. Importantly, it also allows the Town and key agencies to consider land for residential as well as commercial, industrial and other uses; and in areas outside the two key urban settlements.

The HLAP will provide the ToPH and DP with a database resource identifying opportunities for urban development and analysis of population projections. It is expected to be a key tool in addressing future land demand. The information is in a format suitable for use by the public and private sector, though readers are advised to make their own further enquiries regarding any individually identified sites.

The HLAP is intended to be a dynamic document that is annually reviewed and updated.

The Hedland Land Availability Plan comprises TWO parts:

### **PART A – Hedland Land Availability Plan - Explanatory Report**

**Part A of this report is intended to assist the user in detailing the background to the study, the process by which site identification was undertaken and, most importantly, highlight the demands being faced by the Town of Port Hedland for residential and non residential land release given extraordinary population growth and economic pressures.**

### **PART B – Hedland Land Availability Plan - Identified Site Schedules and Site Plans**

Part B of this document comprises A0 and A3 sized site schedules and site plans for the broader municipality, Port Hedland and South Hedland investigation areas. These act as a stand-a-lone reference guide for the day to day assessment of priority sites and their potential, Part B forms the ongoing database resource for the Town of Port Hedland.

<b>TABLE OF CONTENTS</b>	<b>Page</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>i</b>
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
<b>1.1 BACKGROUND – PILBARA CITIES</b> .....	<b>1</b>
<b>1.2 PROJECT AREA</b> .....	<b>2</b>
1.2.1 Residential Land .....	2
1.2.2 Non-Residential Land.....	2
1.2.3 Definition of Residential and Non-Residential Land.....	2
<b>1.3 LAND AVAILABILITY PLAN OBJECTIVES</b> .....	<b>3</b>
<b>2.0 LAND &amp; HOUSING DEMAND</b> .....	<b>4</b>
<b>2.1 ECONOMIC OUTLOOK</b> .....	<b>4</b>
<b>2.2 POPULATION GROWTH PRESSURES</b> .....	<b>7</b>
2.2.1 Town of Port Hedland Population Estimates .....	8
2.2.2 Western Australian Planning Commission Population Projections 2010.....	11
2.2.3 Pilbara Industry Community Council Population Projections.....	11
2.2.4 Employment Growth .....	12
2.2.5 Comparative Analysis of Population Projections .....	14
<b>2.3 RESIDENTIAL LAND DEMAND</b> .....	<b>16</b>
2.3.1 PDC Housing and Land Snapshot 2010 .....	16
2.3.2 Transient Workforce Accommodation .....	18
2.3.3 Rural-Residential Land Demand .....	19
<b>2.4 NON RESIDENTIAL LAND DEMAND</b> .....	<b>19</b>
2.4.1 Industrial Land Demand .....	19
2.4.2 Commercial Land Demand.....	22
2.4.3 Tourism Accommodation Demand.....	23
2.4.4 Rural Land Use Demand .....	24
<b>2.5 FUTURE GROWTH DIRECTIONS</b> .....	<b>24</b>
<b>2.6 SUMMARY</b> .....	<b>25</b>
<b>3.0 THE LAND AVAILABILITY PLAN</b> .....	<b>26</b>
<b>3.1 SITE SELECTION METHODOLOGY</b> .....	<b>27</b>
<b>3.2 SITE IDENTIFICATION ASSUMPTIONS</b> .....	<b>28</b>

3.2.1	Site Review Limitations .....	28
3.2.2	Site Dwelling Lot Yield Assumptions.....	29
3.2.3	Residential Land Schedules .....	29
3.2.4	Non Residential Schedule .....	30
<b>3.3</b>	<b>SCHEDULE AND SITE REVIEW METHODOLOGY .....</b>	<b>31</b>
3.3.1	Site Schedules .....	31
3.3.2	Site Colour Coding System .....	33
<b>4.0</b>	<b>KEY REVIEW OUTCOMES .....</b>	<b>34</b>
<b>4.1</b>	<b>RESIDENTIAL LAND .....</b>	<b>34</b>
4.1.1	Port Hedland .....	34
4.1.2	South Hedland.....	35
4.1.3	Rural Residential Land .....	36
<b>4.2</b>	<b>NON-RESIDENTIAL LAND.....</b>	<b>36</b>
4.2.1	Port Hedland and surrounds.....	36
4.2.2	South Hedland and surrounds .....	36
4.2.3	Wedgfield and surrounds.....	37
4.2.4	Boodarie Industrial Estate and surrounds .....	37
<b>5.0</b>	<b>ACTION PLAN FOR LAND RELEASE .....</b>	<b>38</b>
<b>5.1</b>	<b>INTRODUCTION .....</b>	<b>38</b>
<b>5.2</b>	<b>WA PLANNING FRAMEWORK .....</b>	<b>38</b>
5.2.1	State Planning Strategy.....	38
5.2.2	Pilbara Planning Framework 2010 .....	38
5.2.3	Port Hedland Land Use Master Plan 2008 .....	39
5.2.4	Town Planning Scheme No. 5 .....	40
5.2.5	Hedland's Future Today Action Blueprint.....	40
5.2.6	Port Hedland Regional Hotspots Land Supply Update.....	41
<b>5.3</b>	<b>STATUTORY PLANNING CONSIDERATIONS .....</b>	<b>41</b>
5.3.1	Scheme Amendments .....	41
5.3.2	Development Plans.....	41
5.3.3	Amalgamation & Re-subdivision .....	41
<b>5.4</b>	<b>OTHER LAND TENURE CONSIDERATIONS.....</b>	<b>42</b>
5.4.1	Native Title .....	42
5.4.2	Reserved Land.....	42
<b>6.0</b>	<b>CONCLUSIONS.....</b>	<b>44</b>

<b>6.1</b>	<b>LAND AVAILABILITY POTENTIAL .....</b>	<b>44</b>
6.1.1	Residential Potential .....	44
6.1.2	Non Residential Potential .....	46
<b>6.2</b>	<b>RELATIONSHIP TO POPULATION PROJECTIONS .....</b>	<b>47</b>
<b>6.3</b>	<b>LAND RELEASE ACTIONS .....</b>	<b>48</b>
<b>6.4</b>	<b>DYNAMIC DOCUMENT .....</b>	<b>48</b>

## FIGURES

Figure 1	Project Area Location Plan
Figure 2	Port Hedland Review Area
Figure 3	South Hedland Review Area
Figure 4	Overall Extent of Project Area
Figure 5	Port Hedland – Average House Price and Sales
Figure 6	South Hedland – Average House Price and Sales

## TABLES

Table 1	Persons Residing in Port Hedland
Table 2	Port Hedland Airport Passenger Numbers
Table 3	Town of Port Hedland Accommodation Type, Location and Population Estimate
Table 4	WAPC Population Projections for Residential Population 2010-2029
Table 5	Port Hedland Service Population Estimates 2010 - 2015
Table 6	Resource Related Employment July 2008 and April 2010 Projections compared
Table 7	Pilbara: Resource related employment 2008-2020.
Table 8	Comparison of Population Figures – 2010 - 2015
Table 9	New Residential Dwelling Approvals (Total Numbers)
Table 10	Industrial Zoned Land Supply – Town of Port Hedland
Table 11	Commercial Zoned Land Supply - Town of Port Hedland

Table 12	Tourism Zoned Land Supply
Table 13	Assumed Industrial Lot Yield Averages
Table 14	Schedule Heading Detail
Table 15	Explanation of Site Schedule Legend
Table 16	Vacant Public Land Identified for Urban Development
Table 17	Vacant Private Land Identified for Development for Residential Purposes
Table 18	Vacant Non Residential Land Identified
Table 19	Relationship between available Public Land and Population Projections

## **PLATES**

Plate 1	Typical Small Vacant Site Within Built Up Residential Cell, Port Hedland
Plate 2	Typical Excess Road Reserve, South Hedland
Plate 3	Typical Excess Land that could be Amalgamated into Adjoining Lot, South Hedland

## **APPENDICES**

Appendix 1	Plan 1 - Hedland Land Availability Plan – Port Hedland Residential
Appendix 2	Plan 2 - Hedland Land Availability Plan – South Hedland Residential
Appendix 3	Plan 3 - Hedland Land Availability Plan – Overall Rural Residential
Appendix 4	Plan 4 - Hedland Land Availability Plan – Overall Non-Residential
Appendix 5	Plan 5 - Hedland Land Availability Plan – Overall Residential and Non-Residential Site Mapping

## **I.0 INTRODUCTION**

The Town of Port Hedland (ToPH) “2010 Hedland Land Availability Plan” (HLAP) is the culmination of several years of ongoing work by the Town and RPS. Initial ‘Land Rationalisation Plan’ surveys focusing on public land available for residential development were first undertaken by RPS in 2008. The surveys were documented in the 2009 Land Rationalisation Plan report and plans adopted by Council and released for public review. In April 2010, the State Government released the first sites from the 2009 report recommendations and commenced what is expected to be an ongoing release program for the Town of Port Hedland.

This 2010 study has an expanded brief to not only update the earlier survey work and recommendations, but to also consider the wider Town of Port Hedland municipality outside the main urban centres. The work now also considers both residential and non-residential land availability and, wherever possible, both publicly and privately owned land.

### **I.1 BACKGROUND – PILBARA CITIES**

At the heart of the national economy, the Town of Port Hedland is recognised as a future Pilbara City. The communities of Port and South Hedland have identified development projects for sustainable growth toward this. The Town of Port Hedland is working with the Community, Government, Industry, and other agencies, to turn the Pilbara City vision to Reality.

The Western Australian Government, on 27 November 2009, announced the Pilbara Cities Programme, a State Government initiative to encourage more people to live and settle in Port Hedland and Karratha. The purpose of the programme is to set a framework to transform Port Hedland and the Pilbara region by creating modern higher density centres that can support significant population growth in matching economic demand, supported by all the services and facilities enjoyed in other Australian cities.

In announcing the Pilbara Cities Programme, the Premier acknowledged that one of the main problems the government needed to address was the retention of local workers in Port Hedland and the Pilbara. Large scale land release was outlined by the Premier as essential in addressing this problem.

A key component of the platform for sustainable growth is the ongoing, timely and coordinated release of land. This Hedland Land Availability Plan sets the platform for further land releases, de-risking of development areas prior to release, and importantly, the continuation of a land availability program. It is this certainty in the release of land that gives the local community, the development industry and those new to the Pilbara, the confidence that Port and South Hedland will become sustainable places to live.



## 1.2 PROJECT AREA

The Town of Port Hedland covers some 11,800 square kilometres of land, much of which remains in public ownership, and is potentially suited to release by the State Government. For the purposes of the HLAP, the project area was established to recognise both at a broader scale the extent of potential land available for release in outer settlement areas, as well as in the two main urban settlement areas of Port Hedland and South Hedland. **Figure 1** illustrates the HLAP Project Area – Location Plan.

### 1.2.1 Residential Land

The residential land considerations have focussed on the two main settlement areas of Port Hedland and South Hedland. The Port Hedland assessment has included all residential land from the West End east to Cook Point and Pretty Pool. The South Hedland assessment has revisited the existing residential areas of South Hedland, together with identified future expansion areas immediately west of the town centre. **Figures 2 & 3** illustrate the extent of the settlement areas examined.

In addition to the main urban areas, the HLAP now also incorporates a review of outer rural-residential settlement areas and their opportunities for further growth. While the Town of Port Hedland remains mindful of planning for growth in its primary areas where infrastructure and community services are available, an assessment of existing outer settlements has been included to understand the extent to which these areas might also provide for growth and offer an alternative lifestyle. **Figure 4** identifies the Overall Extent of Project Area, including both Rural Residential and Non-Residential investigation areas.

### 1.2.2 Non-Residential Land

The Town of Port Hedland has not only faced demand for supply of residential land but also rural, commercial and industrial land. A lack of opportunities to purchase or lease commercial and industrial land continues to result in unrealistic price growth for industrial areas such as Wedgefield, leaving it difficult for business operators to both purchase/lease their business site and a place of residence.

The HLAP identified areas for future land release and, in doing so, may assist in the commercial/industrial land supply pending the planned expansion of Wedgefield for transport/logistics and light industrial uses; and the establishment of a Boodarie General Industrial area.

### 1.2.3 Definition of Residential and Non-Residential Land

The HLAP study examines both residential and non-residential land availability. For the purposes of site identification the reader is advised that these categories have been defined as:

- Available Residential Land – any land parcel identified as being undeveloped or underdeveloped and potentially surplus to landowner requirements; lies within or in

proximity to a predominantly residential area, or has primarily future residential (including rural-residential) potential as its main land use.

- Available Non-Residential Land – any land parcel identified as being undeveloped or underdeveloped and potentially surplus to landowner requirements; lies within or in proximity to a predominantly non-residential area (eg. Industrial, Commercial, Tourism, Rural and Town Centre) or has primarily future potential which is non-residential in nature as its main use.

### **1.3 LAND AVAILABILITY PLAN OBJECTIVES**

The HLAP has two primary purposes:

- To provide the ToPH with a resource identifying land release opportunities for publically owned land; and
- to demonstrate the importance of swift government action in assisting with the release of land in both Port and South Hedland and key areas outside the main settlements.

The HLAP also addresses a number of key elements:

- The report sets out the methodology and limitations faced in the selection of identified sites;
- The report provides a divestment and excision programme to realise and prioritise development;
- In identifying certain sites for priority release, the HLAP will facilitate the development of land to ease supply issues in the Town of Port Hedland;
- In identifying sites the HLAP considers approval processes that will be required in order to achieve land release, and uses this to help prioritise unconstrained and less constrained land;
- The HLAP has also identified more substantially constrained land parcels that could be included in future excision programs as their existing constraints to development are resolved;
- Coordination with the Hotspots Land Supply Update being prepared by the Department of Planning and Housing Capability Study being undertaken for the Town of Port Hedland; and
- The HLAP includes a review of, wherever possible, private land within Port Hedland and South Hedland. While assumptions cannot be made as to the timing of development in respect to these land parcels without specific investigation, they serve as a further guide to the land availability levels with the Town of Port Hedland.

## 2.0 LAND & HOUSING DEMAND

The two main residential centres of the region are Port Hedland and South Hedland, with the remaining population living on pastoral stations or in Indigenous communities such as Yandeyarra. Port Hedland boasts a range of community services, including cultural, educational, medical, recreation and shopping facilities to support the main economic drivers in the Town. The Wedgefield Industrial Area contains a variety of light and service industry premises.

The Town of Port Hedland's "Gearing Up Port and South Hedland – A Pilbara City: Vision to Reality" material highlights the growth being faced in noting that the operating expenditure of the Town has grown from \$18,231,799 in 2005 to \$28,486,670 in 2010 and is forecasted to be \$45,000,000 by 2015.

Similarly, the Town notes that rateable properties have increased from 5,170 in 2004/5 to a forecasted 9,000 by 2014/15. Building approvals (total value) have grown from \$10 million in 2005 to \$241 million currently in 2010 and a forecasted \$800million+ by 2015. Airport passenger numbers have also exploded with growth from 111,549 in 2005 increasing to the current 280,000 at 2010 and forecasted 450,000 by 2015.

The extent of growth the Town of Port Hedland faces is substantial and is directly linked to its role as the economic powerhouse of the nation and the population pressures that this brings.

## 2.1 ECONOMIC OUTLOOK

The Town of Port Hedland's 'Gearing Up' material referred to in 2.0 above, highlights quite simply the economic strength of Port Hedland:

*"Gross Regional Product for Port Hedland in 2008-9 was \$3.6 billion, an increase of 18.0% from the previous financial year. **This growth was significantly higher than for both Western Australia (0.7%) and Australia (1.0%).**" (Town of Port Hedland. Gearing Up Port and South Hedland. 2010).*

Port Hedland's growth in the previous financial year was also considerable higher than that for Western Australia and Australia. The growth in Port Hedland's Gross Regional Product in 2008-9 was mainly driven by increased iron-ore processing and shipments. 154 million tonnes of iron ore was shipped through the port in 2008-9 compared to 125 million tonnes in 2007-8. (*Port Hedland Port Authority Annual Report. 2009*).

The main industries in Port Hedland are iron ore processing and export, salt production (from extensive evaporation ponds) for export, shipping of manganese and other minerals and livestock production (mainly cattle). In 2008-09, the Port Hedland port regained its status as the largest tonnage port in Australia and largest bulk export port in the world. Current capacity expansions include a multi user Panamax berth at Utah Point and proposed additional berths over the next five years meaning the port is likely to increase its statistical lead. The port's iron ore throughput increased by 28.6 million tonnes in 2008-09 taking the overall exports to 158 million tonnes. Iron ore made up 96 per cent of all exports by volume.

According to figures produced by the Department of Local Government and Regional Development the Pilbara gross region product (GRP) for 2006-07 was \$7636 million, which equates to \$172 252 GRP per capita. These figures compare with a 2006-07 total GRP for Western Australia of \$141 368 million and \$68 657 GRP per capita. Based on data compiled by the Department of Regional Development and Lands, in 2008-09 the Pilbara accounted for 47.6 per cent of the value of Western Australia's mining production.

The Access Economics Investment Monitor March 2010 reports that overall conditions in 2010 are expected to encourage a lift in business investment, with the resources sector likely to lead the growth. Investment in mining softened amid the worst of the recent global financial downturn, but strong demand and price increases for iron ore have reinvigorated investment plans. Investment interest in Western Australia's mining sector continued largely unaffected during the downturn, and recent months have seen a renewed lift in project announcements and approvals. (*Department of Planning. Hotspots 2010*)

While the resources boom has enriched Western Australia over the last 10 years, it has also led to increasing pressures on towns like Port Hedland where the increase in workers, including those moving to the Town, and those on short term contracts, has placed undue pressure on local housing stock, housing affordability and demand for industrial and commercial land.

Reporting by 'The Australian' newspaper in October 2009 highlighted not only the continued strong mining growth, but the further involvement of other players into the export market. Report extracts are included with the following references:

*"RIO Tinto has provided further signs of resurgent global growth, with the nation's biggest iron ore producer boosting 2009 production guidance after running its huge Pilbara region mines in Western Australia at record rates in the last quarter."* (*The Australian newspaper: 15 October 2009*)

And in relation to iron ore mining company Atlas:

*"The Pilbara-based miner announced today that the first commercial shipment of iron ore from its Pardoo project in Western Australia commenced loading yesterday at Herb Elliot Port in Port Hedland and is scheduled to depart for China today...."*

*...Atlas signed a binding Heads of Agreement with Fortescue Metal Group in August this year for access to Fortescue's Port Hedland port facilities – representing the first Third Party Port Access Agreement of its kind in Western Australia."* (*The Australian newspaper: 13 October 2009*)

The BHP Billiton Pilbara iron ore operations continue to expand through the Rapid Growth Project 5 (RGP5). The RGP5 will also deliver significant infrastructure upgrades, including additional shipping berths at the Port Hedland inner harbour (Finucane Island), substantial double tracking of the company's rail system and additional crushing, screening and stockpiling facilities at Yandi. The RGP5 is expected to deliver its first production in the second half of the 2011 calendar year. Two further berths as part of RGP 6 within the Inner Harbour are also planned. Total iron ore throughput was expected to reach 155 million tonnes by 2010 (in accordance with RGP 4 detailed above), but latest figures for 2008/2009 show throughput of 158 million tonnes. Throughput is expected to reach 200 million tonnes by 2011 and subject to approvals, 240 million tonnes by 2013.



The following extracted presentation slides from the Town of Port Hedland’s ‘Gearing Up’ (2010) material similarly demonstrate the growth pressures being faced given iron ore production expansion, and this associated Port Hedland port facility expansion.



On 18 October 2009 Mr Tim Shanahan, Chairman Pilbara Development Commission was interviewed by Stateline (ABC TV) and in his address he noted that the Pilbara economy has *not really slowed down*. There is an expectation the population will grow in the order of 40 percent over the next 5 years. Mr Shanahan also detailed concerns with rental prices being in the order of \$2,000 to \$2,500 per week for *ordinary housing stock*.

In the context of abovementioned substantial growth continuing unaffected by the broader pressures of the global economic situation, it is clear that local efforts must continue to be made to release land for residential and non-residential purposes within the Town of Port Hedland.

This must be done in a regular and orderly fashion if an ongoing market of land development projects is to be established and residential, commercial and industrial land availability (and affordability) is tackled. This HLAP recognises the issue in prioritising sites suited to immediate release while work is undertaken in other areas.

## 2.2 POPULATION GROWTH PRESSURES

The Town of Port Hedland has a **current population of approximately 19,500 people** (estimated by Town of Port Hedland 2010). This is significant in itself as the Town's 'Gearing Up' material indicates Council estimates show population on any given day at:

**Table 1 – Persons Residing in Port Hedland**

2005	15,000 people
2010	19,000 people
2015	27,000 people

(Source: ToPH. 'Gearing Up'. 2010).

While other sources of population data are slightly more conservative than the Town's, they are not necessarily cognisant of the local working population which, while permanently residing, are not always captured in real terms given the lengthy time gaps between census and other survey periods. The total passenger numbers through Port Hedland airport alone shows the influx of population pressure:

**Table 2 –Port Hedland Airport Passenger Numbers**

2005	111,549 people
2010	280,000 people
2015	450,000 people

(Source: ToPH. 'Gearing Up'. 2010).

The figures released by the Western Australian Planning Commission (WAPC) in 2010 detail an estimated residential population of 13,375 people. It should be noted at the outset that the WAPC figures are considered by the Town of Port Hedland, through their experience and ongoing discussion with local corporate stakeholders, to be extremely conservative. The WAPC's own Hotspots report notes issues with population counts, estimates and projections with evidence of undercounts and underestimates.

By way of further example, in the 2006 Australian Bureau of Statistics (ABS) census, a considerable number of people residing in mining towns reported that they usually live elsewhere, such as in a capital city. These people are classified as 'visitors' to the town on the basis of their census form response. Yet many may spend most of their time in either Port or South Hedland. For this reason, ABS and WAPC estimates of the usually resident population of mining towns tend to understate the number of people these towns need to service during any given 24 hour period.

In addition, the 2010 WAPC figures do not correlate with projections from BHP Billiton, Rio Tinto and FMG for future iron ore processing through the port, and Pilbara Industry's Consultative Council data on demand for future employees to be living in the Town and the Pilbara in general. BHP Billiton, Rio Tinto and FMG are among a number of companies with a commitment to the Pilbara region, and particularly to Port and South Hedland. This commitment is long term.

The following analysis of population forecasts examines State Government, Town of Port Hedland, and the Pilbara Industry's Consultative Council data in demonstrating the need for swift government action in assisting with the release of residential and non residential land throughout the Town of Port Hedland.

### **2.2.1 Town of Port Hedland Population Estimates**

The Town of Port Hedland estimates the locality's population as at 1<sup>st</sup> Week of May 2010 to be approximately 19,523 (**Table 3**). This estimate has been calculated by using existing information from the 2006 Census, actual surveys of businesses/industries that provide accommodation, and Government Departments and/or Agencies which have the most up to date information on population numbers at any given site/location/operation.

To better validate the information, figures in many instances are provided on two levels:

- Actual number of people; and
- Available number of beds/rooms/dwellings.

This method is considered by the Town of Port Hedland to better reflect actual population rather than probable population. In addition, allowances have also been made in the population calculations for persons per dwelling (PPD), with the State average of 2.6 PPD being used rather than the Pilbara average of 2.9 PPD as contained within the 2006 Census. The state average has been used as it is a more conservative measure. To account for increases in numbers of dwellings since the 2006 Census, the Town's Building Department has supplied statistics for the number of dwellings built and demolished between January 2007 and January 2010. These numbers have been

further compared with the number of residential lots released via subdivision during the same period.

In the 2010 '*Gearing Up*' material referred to previously, the ToPH's calculations show an increase in rateable properties to 9,000 by 2015; up from 5,170 in 2004/5. If used to guide dwelling, and therefore population estimates, this equates to an estimated residential population of 23,400 (with the multiplier of 2.6 people per dwelling) by 2015. The ToPH recognised current population figure of 19,000 is therefore considered reasonable.

The current population information is shown in **Table 3** and includes a break down of population by types/location/nature of residence. (Town of Port Hedland, 2010).



**Table 3 – Town of Port Hedland Accommodation Type, Location and Population Estimate**

Property	People	Multiplier Used	Dwellings/Rooms
Dwellings	14739	2.6	5669
Esplanade	21	Nil	21
All Seasons	65	Nil	65
Hospitality	40	Nil	40
Pier Hotel	20	Nil	20
Walkabout	94	Nil	61
South Hedland Motel	104	Nil	104
Port Hedland Caravan Park	122	Nil	164
Cook Point Caravan Park	328	Nil	205
Blackrock Caravan	200	Nil	200
Wedgefield Camp	720	Nil	720
Port Haven	478	Nil	855
Pundulmurra	170	Nil	170
Club Hamilton	389	Nil	456
Mia Mia	173	Nil	192
Beachfront	390	Nil	395
Yandeyarra	340	Nil	55
Pippingarra	Closed	Nil	
Punju Numal	21	Nil	7
Jinparinya	13	Nil	9
Strelley	5	Nil	4
Tkalka Boorda	55	Nil	15
Tkalka Wara	Closed	Nil	Closed
Woodstock Homestead	7	Nil	1
Marta Marta	6	Nil	2
Atlas Iron - Pardoo	53	Nil	75
Rural/Pastoral	130	Nil	13
Petermurra	12	Nil	4
Wodgina	275	Nil	315
Indee Station	0	Nil	0
FMG rail camp 195	186	Nil	356
FMG rail camp 145	67	Nil	129
BHPB - Turner River	300	Nil	300
<b>TOTAL</b>	<b>19523</b>		<b>10622</b>

(Source: Town of Port Hedland, May 2010)

### 2.2.2 Western Australian Planning Commission Population Projections 2010

The WAPC population projection figures estimate the Town of Port Hedland has a current estimated population of approximately 14,300 people (estimated 2010) and a conservative population forecast estimate by the WAPC of 15,700 in 2020 (WAPC 2010). This figure, does not represent the pressures being experienced by the continuing development and mining of resources that has drawn large numbers of workers (both fly-in, fly-out and short term contract) to the Town, nor does it correlate with projections from the Pilbara Industry's Consultative Council, the Town of Port Hedland, Pilbara Development Commission or the affect on housing purchase and rental prices examined under section 2.6 above.

**Table 4 – WAPC Population Projections for Residential Population 2010-2029**

Local government authority	Projected population 2010	Projected population 2015	Projected population 2020	Projected population 2030	Average annual growth 2010-2015 (per cent)	Average annual growth 2010-2020 (per cent)	Average annual growth 2010-2030 (per cent)
Port Hedland	14 300	15 000	15 700	16 700	1.0	0.9	0.8
Total Pilbara region	44 200	46 200	47 900	50 000	0.9	0.9	0.6
Total Western Australia	2 177 630	2 343 380	2 503 690	2 778 310	1.5	1.4	1.2

Source: Western Australia Tomorrow, Western Australian Planning Commission (2005) as cited in Hotspots, (WAPC 2010)

As a result of demand for housing there has been a commensurate increase in the demand and cost for residential dwellings and affordable housing. There are significant population pressures in the Pilbara region caused by fly-in/fly-out workers and short term contract workers who are not appropriately represented in the abovementioned forecasts undertaken by the WA Planning Commission. This additional population is significant and could equate to an extra 25 percent to the resident population.

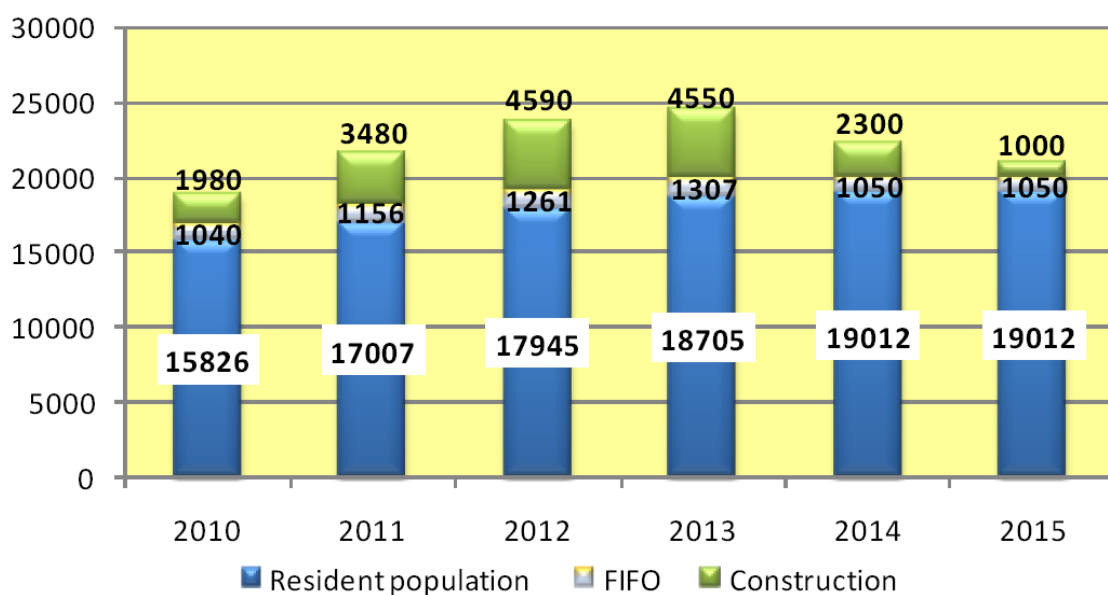
### 2.2.3 Pilbara Industry Community Council Population Projections

Port Hedland is predicted to become the world's largest tonnage port by 2017 as a result of the proposed expansion in the production of iron ore by BHP Billiton and other mining operations. In 2007 129 million tonnes were processed by the port, with projections by BHP Billiton of 300 millions tonnes by approximately 2017. BHP Billiton's RGP5 will take the port operations to 205

tonnes by 2011. FMG have also commenced operations in the Port, with up to an additional 45 millions tonnes being processed each year. Matching this growth in iron ore processing will be an anticipated spike in the local population, including those directly involved in the iron ore operations and those employed in support industries (multiplier effect).

The following table shows Pilbara service population projections to 2015, as produced by the Pilbara Industry's Community Council, April 2010. It also demonstrates the disparity with predictions by the WA Planning Commission and Town of Port Hedland predictions.

**Table 5 – Port Hedland Service Population Estimates 2010 - 2015**



(Source: Pilbara Industry Community Council, April 2010)

The above table demonstrates figures for the predicted service population of Port Hedland, being 21,062 by 2015 with a current estimated population of 18,846. This includes a spike to the overall service population in 2012 and 2013 as the constructions projects hit a peak. The service population through this period is estimated to be 23,796 in 2012 and 24,562 in 2013. This is a steep short term increase in the Town's service population and is likely to have a significant impact on demand for services and the price of purchase and rental prices in the Town of Port Hedland. These figure may be disproportionate and actually lead to a higher population, more in line with town of Port Hedland forecasts, as Port Hedland becomes a greater focus in the region, and an increase in local infrastructure, amenities and the quality of life makes it a more attractive place to live, in accordance with the objectives of the Pilbara Cities Programme.

#### 2.2.4 Employment Growth

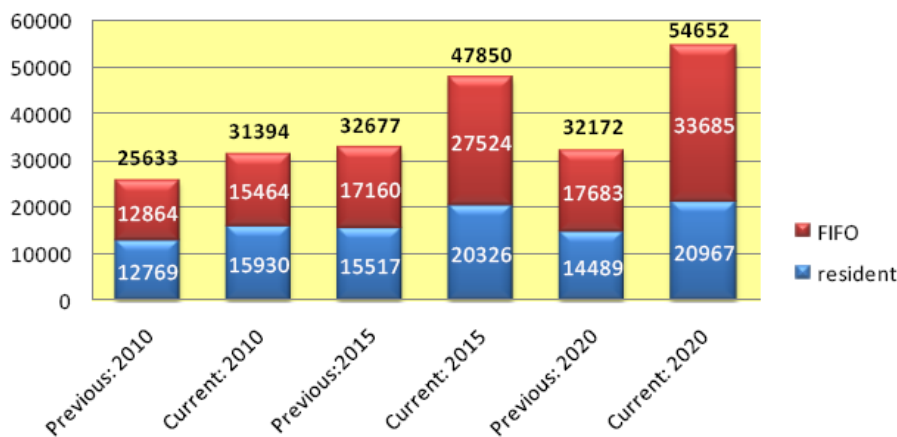
Iron ore projects remain the dominant driver of operating employment in the Pilbara. Employment growth and projections are an important indicator of the economic activity in Port Hedland and the Pilbara in general. They also provide an indicator of the level of demand for

local services and infrastructure. It is acknowledged that the level of fly-in/fly-out (FIFO) and construction workers on workers camps makes the relationship between employment growth and demand for residential, commercial and industrial land difficult to predict. Nonetheless, this data on future employment demonstrates the significant pressure on all sectors of the economy now and into the future as demand for additional industrial and commercial development continues.

In the Pilbara Industry Community Council's (PICC) *Planning for Resources Growth in the Pilbara: Revised employment and population projections to 2020* (April 2010) report, further work is undertaken to build on and review the projections made in the same report published in July 2008. The summary extracts provided below relate to employment projections and population projections.

In undertaking the review the estimated residential population (ERP) data used in the PICC report in July 2008 needed to be supplemented with other information that better reflects the likely level of demand for goods and services across the Pilbara (and Port Hedland). This is due to rapidly growing numbers of transient workers on different employment conditions, such as FIFO. Evidence from the Pilbara, for example, points to the large difference between ERP and the actual numbers of people using services (e.g. water, waste treatment, transport). This is a matter of major concern to those planning for service provision in key Pilbara centres (PICC, 2010). **Table 6** below demonstrates the rapid growth in employment in Pilbara since the last review in 2008.

**Table 6 - Resource Related Employment July 2008 and April 2010 Projections compared**

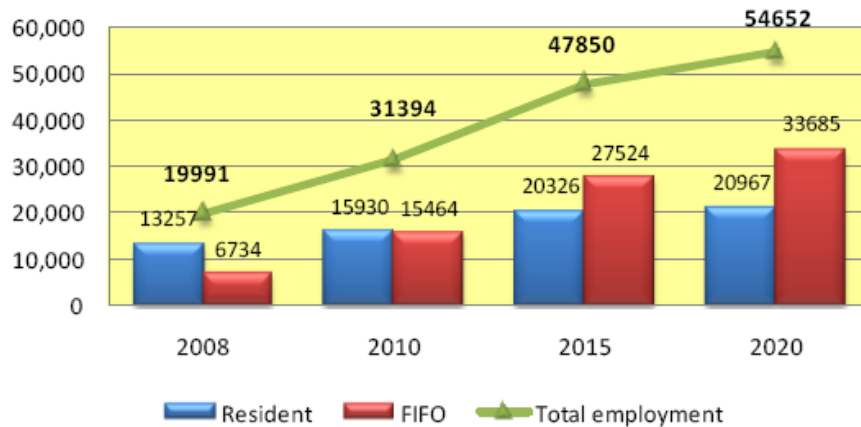


(PICC 2010)

Based on information available as at March 2010, total resource related employment in the Pilbara is projected to grow from some 19,000 in 2008 to some 47,000 in 2015, reaching 53,000+ by 2020. These totals include local jobs required to support direct employment in the Pilbara and FIFO positions but exclude construction workforce numbers which are shown separately. Residential employment increases by 28% between 2010 and 2015, from 15,900 to some 20,300, with growth moderating thereafter. FIFO projections grow at a faster rate, increasing by 83% between 2010 and 2015 and by a further 23% to 2020. In utilising these figures specifically for Port Hedland the rate of change, being a 28% increase, is important in noting recent exponential

increases in employment and therefore demand for industrial and commercial land, as well as housing. (PICC 2010). The rate of change is further detailed in the graph below.

**Table 7 – Pilbara: Resource related employment 2008-2020.**



(PICC 2010)

Projecting future construction employment is difficult as some companies choose only to include expansion/new projects at an advanced planning or approvals stage and not those where the information may be commercially sensitive. Projected construction activity generates construction employment in the Pilbara reaching over 22,000 in 2010, 28,000 in 2012 and dropping away from 2015 onwards. This represents a more concentrated and intense pattern of employment than suggested by the July 2008 estimates, and again reiterates the recent growth well beyond previous projections. This rapid change in employment (and population) growth rates reiterate the effect the resources sector can have on the local population. Even if these workers are predominately expected to be FIFO they may also create a range of pressures on infrastructure and services as well as the commercial and industrial land required to support such employment growth. In this regard a recent survey carried out by the town of Port Hedland suggests a significant proportion of the “non-resident” workforce will be accommodated within travelling distance of Port Hedland.

### 2.2.5 Comparative Analysis of Population Projections

The following provides a comparative analysis of both the estimates for service populations with the Town of Port Hedland from 2010 to 2015. In undertaking the comparison the service is used to provide a better understanding of the demands and pressures for both residential land but also general infrastructure, industrial and commercial land supply. The purpose of this is to set the context and justification for the HLAP. The following table compares the figures described above.

**Table 8 – Comparison of Population Figures – 2010 - 2015**

<b>Organisation</b>	<b>2010</b>	<b>2015</b>
WAPC (Residential Pop. plus 25%)	(14,300 + 25%) 17,875	(15,000 + 25%) 18,750
PICC	18,846	21,062
Town of Port Hedland	19,523	27,000
<b>Mean Service Population</b>	<b>18,748</b>	<b>22,270</b>

The Town is currently experiencing a chronic shortage of both residential and non residential land and with the population to continue to increase into 2015 by at least 18% (mean growth) but up to 38%, (predicted Town of Port Hedland growth) it is critical that land supply issues are addressed. This emphasises the need for government, both local and state, to act swiftly in providing for both the expected future population growth and promote the permanent residency of fly-in fly-out employees through the release of urban land.

Further comment on future employment and population growth is provided by Mr Mike Waller, advisor to the Pilbara Industry's Consultative Council:

- *“The population projections indicated in the “high” and “base” figures indicate a potential doubling of total employment within the Pilbara over the next 10-15 years. These projections include various local jobs required to support direct employment such as contractors, public and commercial services, as well as fly-in/fly-out positions.*
- *Projected rises in the fly-in/fly-out population indicate an increase from 4000 to 12,000-14,000 people over this period, with iron ore expansions accounting for approximately 80% of this increase.*
- *The projected population growth has important implications for public service employment, with significant additional numbers of teachers, nurses and police to be required in the region in the future.”*

## 2.3 RESIDENTIAL LAND DEMAND

The 'Gearing Up' material produced by the Town of Port Hedland (July 2010) highlights the ever increasing demand for residential accommodation with evidence that new residential dwelling approvals (total number) are forecast to have grown 8.75 times over between 2005 and 2015. (See **Table 9** below).

**Table 9 – New Residential Dwelling Approvals (Total Numbers)**

2005	80
2010	230
2015	700+

(Source: ToPH. 'Gearing Up'. 2010).

### 2.3.1 PDC Housing and Land Snapshot 2010

In addition to the above, the Pilbara Development Commission (PDC) releases a quarterly "Housing and Land Snapshot" which has been reviewed for this report. The previous Land Rationalisation Plan undertaken for the Town, reviewed all publically owned urban land in Port and South Hedland, including analysis of the September 2009 quarter Snapshot. The purpose of this section of the report is to provide a brief summary of findings and conclusions drawn from the September 2009 Snapshot and examine in detail the current state of play as detailed in the March 2010 Snapshot.

The September 2009 Housing and Land Snapshot provided an important insight into the affects of sustained economic growth and housing pressures being experienced in Port and South Hedland. These are summarised below:

- Rental and sale prices for all types of housing stock was well in excess of acceptable inflation<sup>1</sup> levels and well above metropolitan averages;
- There was generally very little housing stock available for rent or sale;

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<sup>1</sup> The Governor and the Treasurer have agreed that the appropriate target for monetary policy in Australia is to achieve an inflation rate of 2–3 per cent, on average, over the cycle. This is a rate of inflation sufficiently low that it does not materially distort economic decisions in the community. (<http://www.rba.gov.au/monetary-policy/inflation-target.html>)

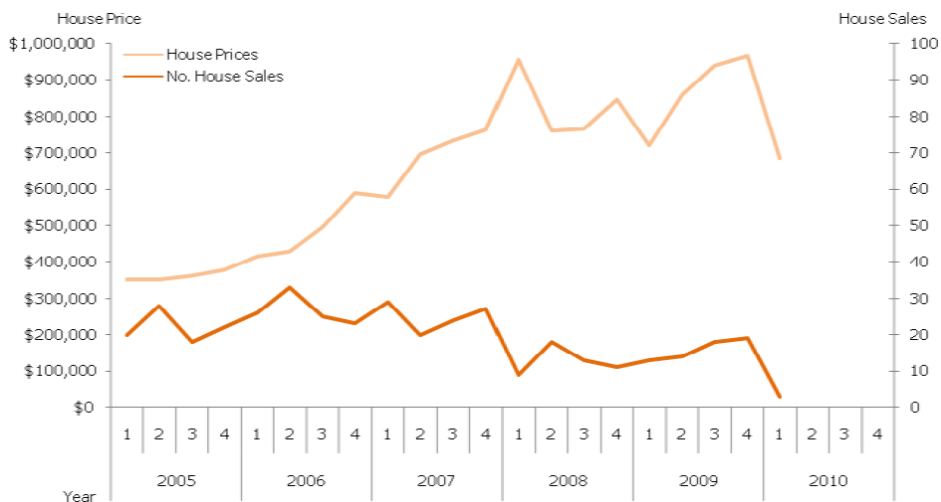
- The housing stock for sale and lease did not appropriately provide for diversity in housing stock to accommodate workforce aged people who may not have families (one and two bedroom dwellings);
- Since 2008 in South and 2006 in Port Hedland there has been a significant disparity in the gap between house prices and the number of homes sold, with prices increasing (demand) as there is less on the market (supply).

In the March 2010 report there were 51 properties in Port and 118 properties in South Hedland offered for rent; Port Hedland remained static from the December 2009 figures with, South Hedland recording a 16% increase. These properties were predominately three to four bedrooms with only 16% being offered as one or two bedroom dwellings (this is consistent with the September 2009 figures). The rental cost of these dwellings is in the order of \$1,229 (two bedroom) to \$2,054 (four bedroom) per week in Port Hedland and \$1,035 (two bedroom) to \$1,720 (four bedroom) per week in South Hedland, this represents a increase in South Hedland of approximately 15% to 20% since September 2009, Port Hedland has remained relatively static.

Sales also follow the above trends with 52 properties (21% one or two bedroom) in Port and 110 properties (5.5% one or two bedroom) in South Hedland being offered for sale over the March 2010 quarter. The purchase cost of these dwellings is in the order of \$792,250 (two bedroom) to \$1,378,750 (four bedroom) in Port Hedland and \$493,000 (two bedroom) to \$907,000 (four bedroom) in South Hedland. This represents a percentage increase in the order of 23% (Port) to 26% (South) for four bedroom and above dwellings since September 2009. This is a significant indicator of the shortage of housing supply provided in both Port and South Hedland.

To supplement the above information the following graphs (refer **Figure 5 and 6**) demonstrate the relationship between the average house price and number of house sales from 2004 until 2010. The graphs also demonstrate the steep rise in house prices generally over this period as demand for housing caused by job and economic growth surpasses supply.

**Figure 5 Port Hedland – Average House Price and Sales**



(Source: Landgate as cited in Pilbara Development Commission 2010)



**Figure 6 - South Hedland – Average House Price and Sales**

(Source: Landgate as cited in Pilbara Development Commission 2010)

The above situation continues today with the same issues and findings from the March 2010 being reiterated by the analysis commentary provided from the September 2009 snapshots data. In addition local real estate agents indicated late last year that there have been record levels of buyer inquiries and stock levels at an all time low (North West Telegraph 2 December 2009).

The solution to address the disparity being experienced in Port and South Hedland is to provide for a greater supply and diversity of housing stock. The purpose and intent of the HLAP is to provide a framework and schedule of available sites to help redress the balance.

### 2.3.2 Transient Workforce Accommodation

Port Hedland has accommodated a large transient workforce over recent years. There are currently established transient workforce accommodation facilities in Wedgefield, South Hedland and adjacent to the airport. There is currently only one site zoned transient workforce accommodation in the Town of Port Hedland which accommodates the Wedgefield facility.

In response to increased demand for workforce accommodation, the Town of Port Hedland recently entered into a 10 year lease arrangement with the Compass Group for 12 ha of land at the airport. Under the terms of the lease the Compass Group will build and operate a 1200 person workforce accommodation village on the leased land and then remove the infrastructure at the conclusion of the lease. The completed village will include 1200 air-conditioned modular buildings, a swimming pool, gym, hotel, cinema room, tennis court, lawn bowls green and indoor soccer/cricket pitch.

Additional workforce accommodation facilities are planned for sites identified as 'Area A' and 'Area B' in South Hedland. Area A (west of the Pilbara TAFE campus buildings) will be developed by the West End Integration Group (consortium). The project will yield approximately 1900 beds.

Area B (immediately south of Site A) will be developed by Auzcorp (with the project to be named Australia Cove) as a permanent residential development project. Stage I of the project will comprise worker accommodation with associated facilities that ultimately convert to normal residential. The plan is to provide at least 300 new permanent quality houses. The project will commence in early 2010 with expected completion in 2015.

### **2.3.3 Rural-Residential Land Demand**

Anecdotal evidence indicates there is an untapped market in the Pilbara for the further release of rural-residential land, albeit in a controlled manner and in key designated areas. Discussion with the ToPH staff suggests that enquiries for land that offers this alternative lifestyle while working in the Pilbara does regularly occur. Similarly, owners of the rural-residential estate balance land south of the South Hedland Town Centre have recently sought approval to subdivide their balance land holding for a further 71 lots.

The release of land for rural-residential uses does require a planned orderly program in which land is allocated in limited key areas (identified by the ToPH based on criteria which may include existing small allotments, strong access provision, natural amenity and the like). Notwithstanding this, and the need to continue to meet land demand within established urban centres, this provides an opportunity for alternative lot product for those wishing a rural lifestyle in the Pilbara.

The HLAP does consider key areas for this use and makes recommendations on the consolidation or further development of such areas to meet this rural residential demand. This analysis is, however, only in respect to the potential for such use and should not be interpreted to imply land capability or an expectation of approval.

## **2.4 NON RESIDENTIAL LAND DEMAND**

For the purposes of the HLAP study non-residential includes all commercial, industrial and broad acre rural land where the predominant land use is not, or is not likely to be residential. For example, 'Town Centre' zoned land within the South Hedland Town Centre will in many cases be developed to incorporate residential apartments, but the primary ground level use will be commercial. For this reason, such sites are classified as non-residential. Specific comments are provided below.

### **2.4.1 Industrial Land Demand**

Industry is the largest land use in Port Hedland, accounting for more than half of all developed land in the town. In recent years, Port Hedland has experienced relatively low levels of industrial subdivision activity, with the majority of activity relating to minor subdivision and amalgamation in Wedgefield.

There is currently more than 6300 ha of land zoned for industrial uses in the vicinity of Port and South Hedland. Approximately two-thirds of this land area comprises the Boodarie Industrial Estate, zoned Strategic Industry. Aside from the lack of an ongoing industrial land release program, however, there has also been no traditional distinction in industrial land uses (largely

given the lack of established alternate areas for heavy uses). As a result, the Town's main industrial area of Wedgefield has faced the challenge of accommodating relatively heavy and noxious uses, while also supporting light industrial uses and caretaker's residences. Ultimate establishment of Strategic Industrial, General Industrial, Transport/Logistics Industry, and also Light Industry areas is expected and will address many of the existing shortcomings.

Suitable for downstream processing facilities and the strategic industry support uses, General Industrial zones are located in the West End area of Port Hedland and at Wedgefield, located to the north-west of South Hedland urban area. These areas are almost fully developed, with only a small portion of undeveloped zoned land at Wedgefield. As stated, there are land use conflicts in Wedgefield with a large number of existing caretakers' dwellings and lighter industrial uses in proximity to heavy industrial uses that would ideally be located elsewhere in the event that such land is available. (Hotspots 2010). Table 10 below explains the current land supply for industrial land in Port Hedland.

**Table 10 - Industrial Zoned Land Supply – Town of Port Hedland**

<b>Zone</b>	<b>Developed (ha)</b>	<b>Undeveloped (ha)</b>	<b>Total (ha)</b>
<b>Port Hedland</b>			
Industry	24.5	0	24.5
Strategic industry	1750.3	0	1750.3
<b>Wedgefield</b>			
Industry	161.6	16.1	177.7
<b>Boodarie</b>			
Industrial development	0	169.1	169.1
Strategic industry	0	4230.9	4230.9
<b>Total</b>	<b>1936.4</b>	<b>4416.1</b>	<b>6352.5</b>

Source: Internal databases, Department of Planning (2009) (Hotspots 2010)

The demand for industrial land generally derives from a local, national or international demand for goods and services, with value adding to both locally generated products and products generated in other regions. The WAPC's Industrial Land Needs Study identified industrial land supply and demand cycles as having three main drivers, summarised as follows:

#### Population and settlement growth

- Increased population growth and labour force participation rates equating to more jobs and increased demand for industrial land (20 per cent of jobs across the State are likely to be in the industrial sector).

#### Economic growth and decline cycles

- High levels of economic growth and productivity will result in an increased demand for land for industrial activity. This is particularly true for the Pilbara region, given the contribution of the mining industry to the economy of the region.
- The cyclical nature of economic growth can make short-term predictions difficult, therefore long-term predictions provide the best indication of demand.
- An additional supply (land bank) of 25-30 per cent above the long-term requirements should be allowed to create flexible market choice, respond to short-term hyper growth situations and for emerging and inward investment opportunities.

#### Location criteria and market preferences

- Industries will seek sites with sufficient amenity and location advantage in order to perform their activity in a competitive way (for example proximity to services, proximity to transport such as roads and ports, protected and buffered sites and sites where industry is able to expand).
- When land is in short or limited supply industries may be forced to limit expansion plans, seek alternative sites (interstate or overseas) or cease trade altogether. Industry may also experience increased levels of competition from all land uses, particularly retail and commercial uses.

Strong growth in the resource, building and construction industries, coupled with limited land releases have led to the current strong demand being experienced for industrial land in Port Hedland. While no detailed analysis has been undertaken to determine demand for industrial land in Port Hedland, LandCorp has used surveys in order to determine the level of market demand and specific end user requirements for land at Wedgefield. Many respondents indicated they were looking to purchase land to enable expansion of their existing businesses, and were mainly interested in lots suitable for light industrial (< 5000 m<sup>2</sup>) or transport related uses (0.5 to >5 ha). (Hotspots 2010)

Demand for land suitable for transport, light and general industrial uses will likely be met by future land releases in the Wedgefield area. There is also existing demand for sites to accommodate noxious land uses (Boodarie). (Hotspots 2010)

## 2.4.2 Commercial Land Demand

Commercial uses are concentrated in three areas, these being the West End and Boulevard Plaza in Port Hedland and the town centre area in South Hedland. There is currently 86 ha zoned 'Town Centre' zone, 20 ha zoned 'Mixed Business' Zone and approximately 5 ha zoned 'Commercial'. Just under two-thirds of this land is developed.

The South Hedland Town Centre Development Plan was recently prepared to provide a framework for the orderly release and development of land in the South Hedland Town Centre. The master plan outlines areas for residential, town centre, retail, community and public purpose uses. The plan was adopted under Town Planning Scheme No. 5 in 2009. In many cases land release sites identified that fall under the Pilbara Cities / Royalties for Regions South Hedland Town Centre project have both a retail/commercial and residential component. As the primary focus of these sites both in the short and longer term is the ground level 'street activation' through commercial retail uses these sites are appropriately classified non-residential.

A significant proportion of commercial land demand, in terms of retail commercial and office related uses will be met by the ongoing release of key sites under the South Hedland Town Centre project. Similar opportunities can be expected to be borne out of the review of land use allocation in the West End of Port Hedland in due course.

The allocation of mixed business, bulky goods retail and light industrial land are expected to be predominantly met through the allocation of new land releases in proximity to the planned expansion of the Wedgefield Industrial Area. This expansion will provide greater light industrial and transport logistics land, while to the south (in accordance with the ToPH's LUMP) a mixed business / bulky goods precinct is anticipated. Similar land offerings will potentially become available as part of a review of the ToPH Airport master plan work.

Table II demonstrates the current land supply for Commercial land in the Town of Port Hedland.

**Table II - Commercial Zoned Land Supply - Town of Port Hedland**

<b>Zone</b>	<b>Developed (ha)</b>	<b>Undeveloped (ha)</b>	<b>Total (ha)</b>
<b>Port Hedland</b>			
Commercial	4.1	0	4.1
Mixed business	1.2	3.1	4.3
Town centre	15.3	0	15.3

**Table 11 - Commercial Zoned Land Supply - Town Of Port Hedland (cont'd)**

<b>Zone</b>	<b>Developed (ha)</b>	<b>Undeveloped (ha)</b>	<b>Total (ha)</b>
<b>Redbank</b>			
Mixed business	7.2	0	7.2
<b>South Hedland</b>			
Commercial	0.6	0.8	1.4
Mixed business	5.7	2.4	8.1
Town centre	37.2	33.7	70.9
<b>Total</b>	<b>71.3</b>	<b>40.0</b>	<b>111.3</b>

Source: Internal databases, Department of Planning (2009) (Hotspots 2010)

### 2.4.3 Tourism Accommodation Demand

There were an estimated 540,400 visitors to North-West Western Australia (encompassing the Pilbara and Kimberley regions) for the year ending December 2008. This represent a decline from the previous two years with visitor numbers estimated at 568,900 (2007) and 735,900 (2006). For the period international visitors had the longest average stay at 20.1 days, with interstate visitors staying an average of 11 days and intrastate visitors an average 7.2 days.

Data collected by Tourism WA shows that the leading purpose of visit to the North-West of Western Australia (Pilbara and Kimberley regions) for intrastate visitors was business (51 per cent). The holiday or leisure purpose of visit was prominent amongst all groups including intrastate (33 per cent), intrastate (50 per cent) and international (73 per cent).

Data collected by the ABS indicates a high average occupancy rate for the Town of Port Hedland of 88.4 per cent (hotels, motels, serviced apartments) and 92.2 per cent (caravan parks) in the September quarter 2009. Availability of short-stay accommodation has been reduced in recent years as a result of housing and workforce accommodation supply shortages. Much of the available tourist accommodation is occupied by long-term guests such as resource company employees (contractor block bookings) or lower paid service workers unable to afford more permanent accommodation (caravan parks). Approximately one-third of caravan park sites were occupied by long-term guests staying two months or more.

The high level of permanent occupancy of the visitor accommodation in the area means that many visitors face difficulties in securing affordable accommodation, requiring them to book months in

advance of their stay. As a result of the crowded nature of caravan parks, visitors are now seeking alternate, more remote camping locations. (Hotspots 2010).

Approximately 20 ha of land is presently zoned for tourism uses, of which the majority is located in Port Hedland. Approximately 80 per cent of the land is developed, with only the Lot 406 Acton Street in Port Hedland remaining vacant and a small area adjacent to the Port Hedland Caravan Park remaining undeveloped. Lot 406 Acton Street remains the subject of an offer to develop to hotelier Mirvac for a Hotel site, though at the time of writing the project has not proceeded. Notwithstanding this it is anticipated that the site will remain designated for this use.

**Table 12 - Tourism Zoned Land Supply**

<b>Zone</b>	<b>Developed (ha)</b>	<b>Undeveloped (ha)</b>	<b>Total (ha)</b>
<b>Port Hedland</b>			
Tourism	12.6	4.0	16.6
<b>South Hedland</b>			
Tourism	4.7	0	4.7
<b>Total</b>	<b>17.3</b>	<b>4.0</b>	<b>21.3</b>

Source: Internal databases, Department of Planning (2009) as cited in Hotspots (2010)

#### **2.4.4 Rural Land Use Demand**

At present there is limited ability to assess the broader demand for rural land within the Town of Port Hedland given both its limited availability and the absence of empirical data regarding requests for broad acre rural land releases.

Notwithstanding this, the HLAP acknowledges that in examining the outer areas of the Town of Port Hedland opportunities exist for the ToPH to consider in its future growth planning the designation of rural land.

## **2.5 FUTURE GROWTH DIRECTIONS**

The Town of Port Hedland (TOPH) is currently in the process of preparing a Strategic Growth Plan to guide the future growth of Port Hedland to a sustainable City. TOPH envisions a city of 40,000 people by 2025 and the Western Australian Government has further established the Pilbara Cities vision which is for 50,000 people by 2035. The City Growth Plan will outline the principles, objectives and strategies for delivering on these visions to establish a vibrant, active and

diverse future Regional City. The City Growth Plan will provide the strategic basis for future growth of the town site and surrounding lands, which will be used by future decision makers in assessing rezoning, subdivision and development applications and detail the future requirements for economic growth and the infrastructure (hard and soft) and community facility requirements.

The Growth Plan will consist of two key parts being the Growth Plan and Implementation Plan. The emphasis of the Growth Plan will be to provide the strategic planning framework that will enable this long term vision to be achieved by clearly identifying; the objectives for the town; key issues and opportunities; strategies for how sustainable growth of the town should occur; and the implications for land use and development. It is envisioned that this will include a social infrastructure framework which aligns the population growth trajectory with provision of corresponding social and physical infrastructure requirements to meet the needs of that growth. The Implementation Plan proposes to identify actions needed and direct responsibility to appropriate partners/parties. Whilst substantial action will be necessary from the TOPH, for the full vision of the Growth and Implementation Plans to be achieved a collaboration with other Government and Private Sector organizations as well as the broader community will be imperative.

A key component of the Strategic Growth Plan will be the Implementation Plan which will set out the program for the delivery of community, economic, environmental, physical and governance projects and programs at a regional, city-wide and city centre level.

## **2.6 SUMMARY**

The analysis of current and future growth demonstrates the importance of strategic planning to the Town of Port Hedland and the rapidly changing nature of both economic and therefore population pressures. Land availability and affordability both residential and non-residential has become a key issue for Pilbara Cities in both Port Hedland and Karratha. As the state government seeks to understand the opportunities for land release, and the demand on service infrastructure, it is expected that this HLAP study will act as a key information source. On this basis an ongoing 'land release program' of surplus/identified land can take place, in the context of projects undertaken by the private sector and the State Government.



### 3.0 THE LAND AVAILABILITY PLAN

The Hedland Land Availability Plan (HLAP) outcomes are documented in detail within Part B of the study reports. This document, comprising **Part A – Explanatory Report**, includes the key site plans and mapping only. Contained within Part B is the following:

**Part B – Identified Site Schedules** comprising sets of mapping and spreadsheet schedules:

i. **List of Figures & Plans**

Figure 1 – Project Area

Figure 2 – Port Hedland Review Area

Figure 3 – South Hedland Review Area

Figure 4 – Overall Extent of Project Area

Plan 1 - Hedland Land Availability Plan – Port Hedland Residential

Plan 2 - Hedland Land Availability Plan – South Hedland Residential

Plan 3 - Hedland Land Availability Plan – Overall Rural Residential

Plan 4 - Hedland Land Availability Plan – Overall Non-Residential

Plan 5 - Hedland Land Availability Plan – Overall Residential and Non-Residential Site Mapping

ii. **List of Schedules**

Schedule 1 - Port Hedland Residential Schedule

Schedule 2 - South Hedland Residential Schedule

Schedule 3 – Overall Rural Residential Schedule

Schedule 4 - Overall Non-Residential Schedule

All identified sites within the HLAP have a designated site number on plans, which correspond to the same designated site number on the associated schedule. Each plan and schedule has its own unique set of numbers which are reflective of those contained in the original Land Rationalisation Plan dated October 2009. The continuation of these numbers ensures consistency with the original plan.

As part of the review of the earlier report, additional information has been provided in South Hedland to assist with the location of sites on the plan. A prefix to each site number has been included to reflect the Australian Bureau of Statistics (ABS) sub-precinct collector district, as taken in the 2006 census. There are 13 sub-precincts in total and the site number begins with the

prefix SP01 (to reflect sub precinct 1) and so on. This numbering system is being reflected in the 'Housing Demand Study' also being undertaken by the Town of Port Hedland. In some instances the numbers have been given a dash at the end to reflect sites in similar locations, these numbers have the same status as numbers without a dash at the end.

### 3.1 SITE SELECTION METHODOLOGY

The methodology used to identify sites was developed through a collaborative process between the Town of Port Hedland, LandCorp, Department of Housing (DoH) and the Department of Planning (DP) through the original Land Rationalisation process. It has been an extensive selection process and has involved the use of local knowledge, aerial photography, literary and plan reviews and ground truthing.

As a disclaimer to this set of study outcome reports, it should be noted that:

- Aerial photography used to assist in site identification is from December 2009, being the latest aerial photography available;
- extensive ground truthing of the Port and South Hedland town sites and consultation with the Town of Port Hedland staff was undertaken in a series of site list reviews and meetings to improve site identification accuracy;
- ongoing review of sites identified by the Town of Port Hedland, including new aerial photography sourcing, is recognised as the only way to ensure continued accuracy of the selection process given land use change, development of current surplus land, and the implementation of initial land release stages from the original Land Rationalisation Plan and this HLAP; and
- the accuracy of site selection is generally to December 2009, notwithstanding the continued refinement of study documents and ground truthing occurring in May and June 2010.

Site visits were first conducted May and June 2010, during which time a project start-up meeting was held with the Town of Port Hedland and DP. Following discussions regarding the Town's expectations for the project, a 'ground truthing' exercise was undertaken to identify currently vacant parcels of land within both Port and South Hedland. Following an initial mapping exercise to identify vacant land parcels a number of comments were provided Town of Port Hedland during meetings held both in Perth and Port Hedland. These meetings provided a rich source of information on future growth areas and areas of interest to inform the investigations of sites and the action plan.

The current HLAP contains all sites that are currently under development: (a) by the Town of Port Hedland; (b) form part of the New Living project being undertaken by the DoH; (c) are active projects of LandCorp / Pilbara Cities, such as the South Hedland Town Centre project and (d) other relevant authorities and government agencies. These project sites are separately identified on the plans and schedule to indicate that they are under or are actively being

considered for development. Their inclusion assists in recording the overall extent of land under consideration for development at this time, given the significant pressure being faced by the Town of Port Hedland for continued immediate land release.

In undertaking the HLAP, RPS has used both its local knowledge and feedback from the Town of Port Hedland to determine the opportunities and constraints for each land parcel, and therefore, the land parcel's opportunities for rationalisation and priority for divestment. It is important to note that the HLAP represents a database of sites with potential opportunities for development; further investigations specific to each land parcel will be required. In some limited instances, investigation of numerous sites resulted in a deficiency of information available to reasonably determine potential. This may be a result of a limited history of planning and/or government registration of those sites. Such sites are denoted with a 'not applicable' or blank field in the schedule, and will require further investigation in subsequent HLAP reviews or by the Town of Port Hedland directly.

In summary, HLAP is essentially a desktop and ground truthing survey with limited technical input into each parcel. Additionally the effect on key infrastructure (roads, services etcetera) that may result from the development of the identified land parcels has not been included; this would form part of the structure planning approval process and further investigation is recommended for many such land parcels.

## **3.2 SITE IDENTIFICATION ASSUMPTIONS**

### **3.2.1 Site Review Limitations**

Some of the issues with the development potential of each site and thus forming part of the limitations of the HLAP are summarised below, these are consistent with the original Land Rationalisation Plan released in October 2009. The range of issues demonstrates the importance of further investigating the potential of each site. In short, the HLAP is intended to be the 'start' for both residential and non residential land release rather than the completion.

- Proximity to the Port operations;
- Demand for industrial land, all light, noxious, transport related and strategic;
- Location of reticulated sewer (especially in Port Hedland);
- Dust emissions from mineral export port operations, and the management of dust impacts;
- Noise associated with rail and road transport and environmental buffers;
- Future provision and location of new transport infrastructure (especially new train lines;)
- Future requirements for drainage reserves for storm events;
- Sites levels and flood prone land;
- Proximity adjoining residential areas and density of that land;
- Gazetted road access to lots in South Hedland;
- Irregular lot shapes;
- Native title and Unallocated Crown Land (UCL);
- Consultation with rural residential communities to understand their future aspirations;

- The need for lots to be amalgamated with adjoining properties to realise potential;
- Further investigations of essential services infrastructure requirements;
- The need to formalise the use of access ways and reserves where they have been informally fenced and included in private landholdings;
- Changing or unknown requirements for accommodating resource company workforces, and the split of workforces between mine, rail and port operations;
- Accommodation for construction workers;
- The safety and efficiency of the regional road network to cater for increased travel demand and conflict between local and regional traffic, including heavy freight vehicles;
- Light and disturbance impacts on turtle nesting activities;
- Disturbance of mangroves (clearing and indirect impacts); and
- The need for significant improvements to facilities and services;

The above list is a guide only rather than a comprehensive, all-inclusion checklist.

### **3.2.2 Site Dwelling Lot Yield Assumptions**

The scope of work includes the identification of attributes, constraints, and policy directions for each land parcel. This has been undertaken through:

- An analysis of aerial photography for the site and surrounds;
- ground truthing on site;
- review of the zoning provisions contained in TPS No. 5;
- review of other relevant strategic planning material including the Land Use Master Plan and Hotspots Land supply Update ; and
- desktop analysis of any major known planning, environmental or other constraint (e.g. flood prone land).

### **3.2.3 Residential Land Schedules**

#### **3.2.3.1 Dwelling Yield – Small Residential Sites**

The potential zoning and density for smaller residential land parcels has been primarily influenced by the prevailing zoning in the immediate area.

For example, areas of Port Hedland that are adjacent to the Residential R12.5/50 split density area have been based on a potential zoning of Residential R12.5/R50, whereby dwelling yield is based on the R50 density. Lots less than 5,000m<sup>2</sup> in area have been based on a calculation of the total area divided by the average lot size required by the Residential Design Codes for the corresponding density code.

### 3.2.3.2 Dwelling Yield – Larger Residential Sites

The ultimate development of larger residential land parcels is expected to be subject to broad structure planning for the site and its surrounds, which may include a variation in residential density.

In the instances where structure planning is assumed to be required the lot yield has been based on a net 12 dwellings per hectare. This is a conservative estimate based on a density of R20, with approximately 25 percent of the land to be given up for public open space, roads and drainage. These figures are based on the actual net development yields resulting from “R20” density development through the structure planning process. This includes up to 15 percent of the land being given up for roads and drainage and the statutory ceding free of cost of 10 percent for Public Open Space (POS). These calculations are a guide only, and the yields could be amended to reflect a different development assumption (ie *Liveable Neighbourhoods* target densities where up to 30 dwellings per hectare could be provided within 200 metre of neighbourhood centres), or if POS, for example, was paid for as cash-in-lieu depending on the ToPH expectations for the locality.

It should be noted that, in all instances, detailed design and concept planning is required before further accurate lot and/or dwelling yields can be determined, and all constraints can be fully understood and taken into account. The estimated lot and dwelling yields are indicative only, and subject to further review, investigation, and assessment. Ultimately, users will need to make their own enquiries, as these calculations are considered a starting point to site investigation rather than a definitive yield.

### 3.2.3.3 Irregular Shaped Sites

South Hedland contains a number of irregular shaped public drainage, parkland and other reserves identified in HLAP. In these instances, a Structure Plan is not necessarily proposed if the shape of the parcel is assumed to allow for subdivision without the need for a Structure Plan. In many instances, reserves are either irregular in shape or form a long linear parcel that, if excised, may provide opportunities for amalgamation into adjoining parcels or subdivision of lots directly onto existing road reserves. This has been determined on a case by case basis and is reflected in the HLAP mapping and schedules.

## 3.2.4 **Non Residential Schedule**

Non-residential land has been defined to include commercial/ mixed business zoned land, tourism land, town centre zoned land, rural land, and industrial land.

### 3.2.4.1 Industrial Land

It is very difficult to ascertain lots yields for industrial land without having a good understanding of the types of industrial uses proposed. Generally light industrial land may have lot sizes between 2,000m<sup>2</sup> to 10,000m<sup>2</sup> and general industry 5,000m<sup>2</sup> to 10 hectares. There is no limit to the potential size of lots for strategic industry. Respondents to a LandCorp survey indicated that they were looking for land in Wedgefield suitable for light industrial (< 5000 m<sup>2</sup>) or transport related

uses (0.5 to >5 ha). For the purpose of the HLAP the assumed lot areas for industrial development are based on the following averages:

**Table 13 – Assumed Industrial Lot Yield Averages**

Industry Use	Average Lots size for Lot Yield Purposes
Light	2,000m <sup>2</sup>
General	8 hectares
Strategic	20 hectares

Given the generally smaller nature of other commercial, town centre or mixed business land such sites have been assumed to be single development parcels. Accordingly, for the purposes of the HLAP only industrial lot yields have been calculated. This is considered a sensible approach as in many instances the further fragmentation of town centre or tourism land may not be appropriate and would require justification on a case by case basis.

#### 3.2.4.2 South Hedland Town Centre

The Pilbara Cities/ Royalties for Regions South Hedland Town Centre (SHTC) rejuvenation project land parcels were not included in the original Land Rationalisation Plan in October 2009. The updated HLAP has included the SHTC. Sites forming part of the project are identified given the prevailing aim of delivering commercial land uses with, in some cases, a residential element.

### 3.3 SCHEDULE AND SITE REVIEW METHODOLOGY

#### 3.3.1 Site Schedules

The site identification schedules have been prepared in accordance with the requirements of the brief. The schedule provides details relating to certificate of title details, lot zoning, size, potential zoning, native title requirements or encumbrances, and provide a brief insight into potential issues and general comments associated with each land parcel.

An example of the headings contained in the schedules is provided below, these have changed from that provided for in the original Land Rationalisation Plan with the inclusion of numbering references from, the Hotspots schedule (DOP Location Number). Both RPS reference number (HLAP Study) and (DOP number Hotspots) have been included to assist the reader in locating sites and reconciling both reports:

**Table 14 – Schedule Heading Detail**

RPS Reference Number	DoP Location Number	Land ownership	Lot No.	House No.	Street Name	Owner/ Existing tenure	CT Details	Reserve No.
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Vesting/MO	Purpose	Zoning/planning			Area (m2)
		Current zoning	Amendment required/initiated	Other planning under way	

Area/yield			Subdivision approvals		
Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Lots on non-cleared agreements

Anticipated release (commencing January 2010)				Constraints			
Short term (0-2yrs)	Medium term (2-5yrs)	Medium term (5-10yrs)	Long term (10+yrs)	Resolved	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite





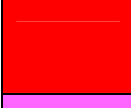
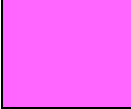


DoP Comments	RPS Comments
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### 3.3.2 Site Colour Coding System

Identified land parcels have been categorised on the basis of desktop opportunities and constraints analysis. A colour code system has been used to generally categorise land according to the planning process required to realise development (for residential or non residential purposes) having regard to development complexity and timeframe requirements.

The colour code system has been shown as different colours on the schedule and in the plan to demonstrate the potential for development and excision. Sites left with no colour are low priority, unsuitable for development, or heavily constrained land parcels. This is further detailed below in **Table 15**:

**Table 15 – Explanation of Site Schedule Legend**

Legend	Land Release Category	Explanatory Notes
	Category 1 – Immediate Development Potential	The existing zoning and site particulars appear to offer immediate development potential
	Category 2 - Amalgamation	Site review suggests amalgamation of the land would offer early development potential
	Category 2 - Extinguishment of Reserve	Site review suggests extinguishment of an existing reserve would offer early development potential
	Category 3 - Road Closure, Amalgamation and Rezoning	Site review suggests that road closure, rezoning and associated processes will be necessary for development
	Category 3 – Rezoning/Development Planning	Site review suggests that rezoning and/or Development Planning for the land will be necessary to realise development potential
	Category 3 – Infrastructure Constraints	Site review suggests that development is constrained by major infrastructure requirements, ie reticulated sewer.
	Other - Under Development	The site is already the subject of an established project or land release process aiming to realise development potential
	Long Term / Heavily constrained	Site review suggests that the land is heavily constrained or longer term or may not be suitable for development. The site may require further investigation.



## 4.0 KEY REVIEW OUTCOMES

### 4.1 RESIDENTIAL LAND

#### 4.1.1 Port Hedland

The majority of sites identified in Port Hedland, and particularly the 'West End' were found to be in private ownership, with greater land availability in and around the Sutherland Street / Spoil Bank area and in proximity to Styles Road where known land investigations have been underway.

The land availability circumstances in Port Hedland continue to be such that the West End of Port Hedland, may offer limited opportunities for rationalisation of road reserves and the like though the greater public land development opportunities remain to the east. The investigation of substantial areas north and south of Styles Road, and around the potential relocation of the Wastewater Treatment Plant present significant challenges but also offer the greatest opportunity for a substantial long term land release program. Progression of strategic planning in these areas should be seen as a priority, with the accompanying land release of smaller land parcels where appropriate.

#### **Plate 1 – Typical Small Vacant Site Within Built Up Residential Cell, Port Hedland**



#### 4.1.2 South Hedland

There remain significant numbers of surplus land parcels within the South Hedland residential areas that are suited to continued land release. Many present as vacant or underutilised land parcels that can be either combined with adjoining land or developed in their own right, notwithstanding some irregular lot configurations. Many are also readily serviceable and therefore developable in the short term.

In the context of both the Department of Housing New Living program, and the LandCorp South Hedland Town Centre Revitalisation, the release of smaller land parcels to the local development market or not-for-profit organisations has added value. Affordability is a key issue in the shortage of land and housing and many such land parcels present an opportunity for government to respond.

Given the complexities of the South Hedland residential layout it remains important that the Town of Port Hedland review drainage functionality as a priority within these areas. Many identified land parcels are either apparent surplus drainage land, or offer greater potential when combined with adjoining drainage land. As a result the need for certainty on required or surplus drains should be addressed.

#### Plate 2 – Typical Excess Road Reserve, South Hedland



#### Plate 3 – Typical Excess Land that could be Amalgamated into Adjoining Lot, South Hedland



#### **4.1.3 Rural Residential Land**

There remain opportunities for new rural residential land releases though these should be managed by the Town of Port Hedland as forming only a limited part of the supply solution and be focused on similarly established areas with good accessibility and amenity.

The South Hedland Rural Estate has approved expansion capacity to the south of its existing allotments and is a logical source of further release. Similarly land identified at Twelve Mile and Turner River provide development opportunities.

## **4.2 NON-RESIDENTIAL LAND**

### **4.2.1 Port Hedland and surrounds**

The West End of Port Hedland continues to have development potential on zoned land along Anderson Street, on Wilson Street in proximity to the BHPB lease area and on a well located parcel in Wedge Street. Final land use decisions in these areas ultimately need to consider the Town of Port Hedland's Land Use Master Plan review outcomes, though it is clear that a range of development opportunities exist.

### **4.2.2 South Hedland and surrounds**

Many of the South Hedland non-residential opportunities identified may include residential elements but will primarily be mixed use development outcomes in the Town Centre area. Those sites west of the Town Centre proper (west of Hamilton Street in particular) may ultimately

become identified residential land only, but are listed in this category pending greater certainty on their rezoning from Rural land to Residential or Urban Development.

Other areas also identified include land immediately east of the Forrest Circle/north of Murdoch Drive where greater intensification of mixed use development is already being encouraged by the Town of Port Hedland.

#### **4.2.3 Wedgefield and surrounds**

The Wedgefield Industrial Area Expansion has been the subject of several years of planning, with the various precincts identified in this HLAP review. A transport logistics precinct will be established to the east of the existing estate, offering a purpose designed release area allowing road transport based operations to develop in an area set aside for their use. Associated areas of Light Industrial land release to the south and south west of the existing area will also progress simultaneously. These areas are identified as “Other – Under Development” and are being progressed by LandCorp and the Town of Port Hedland presently.

#### **4.2.4 Boodarie Industrial Estate and surrounds**

The Boodarie Industrial Estate land will ultimately, if progressed provide significant long term certainty for Strategic Industrial land requirements tied to the port, but also establish the Boodarie General Industrial Area (support precinct). This is significant in offering much needed General Industrial land away from the West End of Port Hedland or the existing Wedgefield Industrial Area. Not only does this ideally bring more realistic industrial land pricing, but also opportunities for the rationalisation of land use in the West End and Wedgefield.

## **5.0 ACTION PLAN FOR LAND RELEASE**

### **5.1 INTRODUCTION**

The scope of work requires that an excision program be prepared for the identified sites. In addressing this aspect of the brief, the land parcels have been identified for excision on the basis of opportunities and constraints, and the site's potential prioritisation for development. The excision program is therefore linked to the colour codes on the schedules and plans, and incorporated into the overall HLAP. This provides a user friendly document whilst also achieving the requirements of the brief.

The HLAP has listed an inventory of all vacant residential and non-residential land within Port and South Hedland, and provides a potential excision program to realise each parcels development potential. A number of statutory planning processes and strategic and statutory policies, schemes and documents must be considered and/or undertaken in most instances before development can occur. The documents include the local Town Planning Scheme, Land Use Master Plan and other relevant documents. Planning processes to be undertaken includes the rezoning of land, amalgamation and/or subdivision of land, structure planning, and potential closure of a number of roads and extinguishment of a number of vesting's in reserves and, most importantly, extinguishment of native title for Unallocated Crown Land.

### **5.2 WA PLANNING FRAMEWORK**

#### **5.2.1 State Planning Strategy**

The State Planning Strategy (SPS) provides a strategic guide for land use planning through to the year 2029 and aims to develop a land use planning system to help Western Australia achieve a number of key goals. Included in this is the regionalisation and decentralisation of urban and industrial development in Western Australia, the direction towards accelerating growth in regional areas driven by extensive natural resources available throughout the State, and the desirability of regional areas as places to live. It seeks to promote a logical and informed approach to the development of the state, balancing the multiple considerations this involves.

The HLAP aims to assist the Town in achieving the objectives of the SPS by providing a data base and excision programme for all residential and non-residential sites to promote sustainable regional development and cater for future housing and non-residential land demand in the Town of Port Hedland.

#### **5.2.2 Pilbara Planning Framework 2010**

The Pilbara Planning and Infrastructure Framework defines a strategic direction for the future development of the Pilbara region over the next 25 years, while safeguarding its significant natural, landscape, conservation and social attributes. The framework addresses the scale and distribution of future population growth and housing development, as well as identifying strategies for dealing with: economic growth, environmental issues, transport, infrastructure, water resources, tourism

and the emerging impacts of climate change. It seeks to ensure that development and change in the Pilbara region is achieved in a way that improves people's lives and enhances the character and environment of the region.

It sets out regional planning principles, goals and objectives and to achieve these, identifies short, medium and longer term actions. Since infrastructure capacity is now a significant inhibitor to urban development, an imperative for the framework is the need to address the Pilbara's priority infrastructure needs over the next five years. The framework represents an agreed 'whole of government' position on the broad future planning direction for the Pilbara, and will guide the preparation of local planning strategies and local planning schemes. It will be particularly important in informing government of infrastructure priorities in the Pilbara and giving the private sector confidence to invest in the region.

The Framework will be endorsed by the WAPC as a regional strategy under the State Planning Framework.

**Governance:** The Framework will guide the decision making of the Pilbara Regional Planning Committee of the WAPC. It will perform three roles:

- **Planning:** It will provide the overarching policy framework within which local governments will prepare their local planning strategies and schemes.
- **Infrastructure:** It will inform the Infrastructure Coordinating Committee of the WAPC when assigning priorities to infrastructure funding and development.
- **Economic development:** It will inform the Pilbara Development Commission and other agencies in their roles attracting investment to the region.

**Current and future planning work:** Further work identified by the Framework includes:

- Mapping storm surge and flooding.
- Preparing a Port Hedland development plan.
- Preparing a Wickham and district development plan.
- Undertaking investigations for a potential Karratha-Wickham link road.

### 5.2.3 Port Hedland Land Use Master Plan 2008

The purpose of the Port Hedland Land Use Master Plan 2008 (LUMP) is to guide the growth and development of Port Hedland through the next 20 - 25 years. It focuses on the use of land and its development character, defining the community's long-range vision of how the physical form of the Town should develop. It was adopted by the Town of Port Hedland in December 2007 and endorsed by the WAPC in September 2008. At the time of writing the Town of Port Hedland was commencing a further review of the LUMP. Documents including HLAP will form a key part of this process.

Given the growth that has occurred since the endorsement of the LUMP and unveiling of the "Pilbara Cities Vision", a review of the LUMP was considered necessary. A preliminary review has identified the need for a City Growth Plan which is currently being prepared that will guide the future growth of Port Hedland to a sustainable City of 50,000 people.

#### 5.2.4 Town Planning Scheme No. 5

Town of Port Hedland Town Planning Scheme No. 5 (TPS No. 5) provides the statutory framework for the imposition of planning and development controls in the Town. Residential development is controlled by the “Residential” and “Urban Development” zones and development is to accord with the R Codes, TPS No. 5 and any other relevant Council policies. Non-residential development is predominately covered by the “Commercial”, “Industry”, “Industrial Development”, “Strategic Industry” and “Mixed Business” zones. Land in the “Residential” zone is subject to the density notated on the Scheme Maps and the relevant Residential Design Codes requirements.

The purpose of land in the “Urban Development” and “Industrial Development” zone is to identify land where detailed planning and the provision of infrastructure are required prior to the further subdivision and development of land. This should be documented in a Development Plan to be adopted and endorsed by the Council and WAPC. The Scheme outlines the requirements for Development Plans.

Any other land in the Scheme area considered as potentially suitable for residential or non residential development will be subject to rezoning to the appropriate zone.

#### 5.2.5 Hedland’s Future Today Action Blueprint

The Hedland’s Future Today Action Blueprint document (HFTAB) was undertaken by BHP Billiton and the Town of Port Hedland and published in September 2007. It articulates a vision to transform Port Hedland into a vibrant and liveable town through a fast tracked investment program that will support the Western Australian and Australian economies.

The HLAP forms part of the background data in assisting with the expedited development of residential and non residential land

The key aims of the HFTAB are to:

- *“Describe the investment required from the WA Government, Commonwealth Government and other stakeholders for the effective development of essential infrastructure and services in Port Hedland that will make it a more attractive place for people to live, work, shop and recreate.*
- *Redress the negative impacts on the quality of life for residents of Port Hedland and South Hedland due to the current lack of amenity and community dysfunction.*
- *Articulate a phased approach to community development, by building on the outcomes already achieved through the close collaboration of key stakeholders.*
- *Provide an effective model for the integrated and cost effective delivery of infrastructure and community services across the Pilbara, through the development of cross sector partnerships.”* (HFTAB: September 2007)



### **5.2.6 Port Hedland Regional Hotspots Land Supply Update**

The Regional Hotspots series assess land for future residential, industrial and commercial uses and identifies the planning and infrastructure coordination needed to meet demand across selected regional centres in Western Australia. The series has been prepared by the Department of Planning (DoP), for the WAPC.

The Port Hedland Regional Hotspots Land Supply Update has been prepared as part of the Urban Development Program (UDP) and is the result of consultation with a number of stakeholders, including local governments and servicing authorities. RPS has worked in coordination with the Department of Planning to ensure the latest Hotspots report and the HLAP are prepared in a coordinated manner with schedules consistent and Hotspot site numbers included in HLAP.

## **5.3 STATUTORY PLANNING CONSIDERATIONS**

### **5.3.1 Scheme Amendments**

Under the Town of Port Hedland TPS No. 5, many land parcels identified will require a Scheme Amendment to suitably rezone them for Industrial or residential development purposes. The recommendations of this report include rezoning to a residential density corresponding with the prevailing density or, in the case of a site greater than 5,000m<sup>2</sup>, it is recommended that the land be rezoned to “Urban Development” or “Industrial Development” whereby a structure planning process, in accordance with the Scheme, is undertaken.

In general terms, a rezoning would take in the order of 12 to 18 months to complete. In the instance where there are numerous land parcels to be rezoned in a similar manner, the rezoning could be completed as an ‘omnibus amendment’ to the Scheme. This would simplify the process, and provide opportunities for numerous land parcels to achieve rezoning in an efficient manner. An example of this would be the closure and rezoning of road reserves in Port Hedland.

### **5.3.2 Development Plans**

Strategically located and/or large land parcels have been identified for rezoning to “Urban Development” or “Industrial Development” zone under TPS No. 5 to ensure that structure planning is undertaken prior to development. TPS No. 5 requires the adoption of a ‘Development Plan’ (Structure Plan) for the coordinated provision of land use, development, infrastructure, and the allocation of services at the local level. As stated in the Scheme, the purpose of the “Urban Development” and “Industrial Development” zones is to identify land where detailed planning and the provision of infrastructure is required prior to the further subdivision and development of that land.

### **5.3.3 Amalgamation & Re-subdivision**

The most efficient and effective means to realise development of a number of land parcels is for them to be amalgamated into adjoining lots. A number of these lots are private land holdings, and negotiations with the corresponding landowners will need to be undertaken. To achieve this, it is



recommended that the local community be canvassed to ascertain those interested in the purchase of adjoining areas programmed for excision, and those landholdings be given further priority for rezoning and/or amalgamation. In addition, there are a number of sites that could be amalgamated to form a developable land parcel. These should be amalgamated immediately.

## 5.4 OTHER LAND TENURE CONSIDERATIONS

### 5.4.1 Native Title

"Native Title" describes the rights held by Aboriginal people and Torres Strait Islanders in relation to land or waters that arise under their traditional laws and customs. There is a common law framework which establishes the principles that govern the creation, identification, modification, and enforcement of native title rights. Native title rights can be surrendered to the Crown and, in certain circumstances, they can be extinguished.

For native title to exist there must have been no event that had the effect of extinguishing the native title rights, such as a valid freehold grant, or valid extinguishing legislation. Usually, it will be necessary for the Crown to acquire the freehold interest by agreement or compulsory acquisition. It is prudent to regard all land (unless subject to freehold interests granted before, and still in effect on, 1 January 1994) as potentially encumbered by native title. In regard to the HLAP study areas this includes unallocated crown land, and the subsequent need for extinguishment through negotiation is required.

To support timely progression of the development of the identified sites, the clearance of Native Title on all unalienated zoned land in Port and South Hedland should be initiated immediately.

### 5.4.2 Reserved Land

Numerous land parcels, still reserved for no longer required use have been identified as follows:

#### 5.4.2.1 Road Reserves

Numerous areas of road reserve were identified in the schedule as being surplus to requirements and, as such, could be closed and amalgamated into adjoining land parcels that may ultimately be redeveloped. The opportunity to close road reserves would be affected by any existing services, and this would require further investigation as part of the road closure process. The closure of road reserves are initiated and endorsed by the Council under section 58 of the *Land Administration Act 1997* (LAA). Section 87 of the LAA provides for the disposal of the land. In such instances, a valuation would be undertaken, and the land could potentially be amalgamated with adjoining properties.

Once the closure of a road has taken effect, the reserve will require rezoning to the corresponding zone of the adjoining land parcel. (These processes could, with justification, also be run simultaneously). It is recommended that once the identified road reserves for prioritisation for closure have been confirmed, an omnibus amendment be prepared to rezone the parcels subject to closure and amalgamation.

#### 5.4.2.2 Drainage Reserves

There are a number of identified sites shown as “Drainage Reserve” in South Hedland. It is recommended that the Town of Port Hedland undertake further investigation to confirm the availability of these reserves for redevelopment. The excision program for “drainage reserves” is not deemed appropriate until relevant engineering and technical data is analysed. This is consistent with the commentary provided in the original Land Rationalisation Plan dated October 2009.

#### 5.4.2.3 Parks and Recreation Reserves

There are a number of identified sites shown “Parks and Recreation Reserve” in both Port and South Hedland. It is recommended that the Town undertake further investigations, in addition to the Town of Port Hedland *Parks Improvement Plan*, to confirm the requirements of these reserves. It will be imperative that each proposal be looked at holistically, and areas of adjoining reserves be appropriately considered.

## 6.0 CONCLUSIONS

### 6.1 LAND AVAILABILITY POTENTIAL

The following tables and analysis represents calculations from the overall HLAP plan and demonstrates overall land availability, with breakdowns between residential and non-residential, private and public land and also the different categories as detailed on the schedule and mapping.

#### 6.1.1 Residential Potential

Table 16 below details the final summary of land identified in total figures against each category of site identification. The final figures of 397 hectares and 280 hectares of land identified in Port and South Hedland are shown.

Ultimately, the individual assessment of sites, the timing of their release to market and the development outcomes will influence the extent to which this land has a meaningful impact on residential land supply. The total of almost 180 hectares of land requiring rezoning/development planning highlights the potential for an 'Omnibus Amendment' to TPS5 or the urgent progression of the TPS5 Scheme Review process. Importantly, though it is clear that the extent of land involved is significant and has the ability to have a meaningful impact on land release programs for residential use.

**Table 16 - Vacant Public Land Identified for Development for Residential Purposes**

Legend	Development Status	Port Hedland (ha)	South Hedland (ha)	Total Area (ha)
	Category 1 – Immediate Development Potential	7.9224	9.412	<b>17.3344</b>
	Category 2 - Amalgamation	0.1453	9.5444	<b>9.6897</b>
	Category 2 - Extinguishment of Reserve	N/A	5.9748	<b>5.9748</b>
	Category 3 - Road Closure, Amalgamation and Rezoning	N/A	N/A	<b>N/A</b>
	Category 3 – Rezoning/Development Planning	89.1699	89.1284	<b>178.2983</b>
	Category 3 – Infrastructure Constraints	14.0621	0.1955	<b>14.2576</b>
	Other - Under Development	0.6531	98.9831	<b>99.6362</b>
	Long Term / Heavily constrained	285.0161	73.5649	<b>358.581</b>
<b>Overall Total</b>		<b>396.9689</b>	<b>279.9262</b>	<b>676.8951</b>

The evaluation of private land and the expectations that can reasonably be created for the release or development of this land is not easy to establish. Table 17 does provide a clear indication though, that a not insignificant amount of land already exists in private ownership that could be more urgently brought forward for development. Particularly when some 18 hectares of land appears suited for immediate development, the Town of Port Hedland could consider measures to encourage more urgent use of land.

**Table 17 - Vacant Private Land Identified for Development for Residential Purposes**

Legend	Development Status	Port Hedland (ha)	South Hedland (ha)	Total Area (ha)
	Category 1 – Immediate Development Potential	5.9904	12.4978	<b>18.4882</b>
	Category 2 - Amalgamation	N/A	0.0501	<b>0.0501</b>
	Category 2 - Extinguishment of Reserve	N/A	N/A	<b>N/A</b>
	Category 3 - Road Closure, Amalgamation and Rezoning	N/A	N/A	<b>N/A</b>
	Category 3 – Rezoning/Development Planning	0.1798	0.3861	<b>0.5659</b>
	Category 3 – Infrastructure Constraints	0.6474	N/A	<b>0.6474</b>
	Other - Under Development	0.2024	11.923	<b>12.1254</b>
	Long Term / Heavily constrained	N/A	0.0493	<b>0.0493</b>
<b>Overall Total</b>		<b>7.02</b>	<b>24.9063</b>	<b>31.9263</b>

### 6.1.2 Non Residential Potential

From both a review of this documents findings and anecdotal review of current projects under consideration it is clear that substantial land areas are available to address pressure for non-residential land. Some 700 hectares is potentially suited to industrial usage, with the progression to actual lot release being the issue at this time. Current strategic planning allocation of industrial areas is underway, though timing to release of land is only certain for initial releases at Wedgefield for Light and Transport Industry uses. Strategic and General Industry land releases at Boodarie in particular require prior planning and zoning completion.

Much of the Town Centre zoned land identified relates to the South Hedland Town Centre and is well advanced in its land release program, notwithstanding the ongoing urgency for this to continue quickly.

**Table 18 - Vacant Non Residential Land Identified**

Legend	Development Status	Industrial (ha)	Commercial (ha)	Town Centre (ha)	Rural (ha)	Other (ha)
	Category 1 – Immediate Development Potential	10.3591	0.0901	17.1273	N/A	11.456
	Category 2 - Amalgamation	N/A	N/A	N/A	N/A	N/A
	Category 2 - Extinguishment of Reserve	10.159	N/A	N/A	N/A	7.51
	Category 3 - Road Closure, Amalgamation and Rezoning	N/A	N/A	N/A	N/A	0.3249
	Category 3 – Rezoning/Development Planning	754.117	N/A	0.4588	612.3174	13658.2031
	Category 3 – Infrastructure Constraints	N/A	N/A	N/A	N/A	N/A
	Other - Under Development	N/A	N/A	1.1665	13.212	272.9606
	Long Term / Heavily constrained	N/A	N/A	N/A	92030.0232	3121.9062
<b>Overall Total</b>		<b>774.6351</b>	<b>0.0901</b>	<b>18.7526</b>	<b>92655.5526</b>	<b>17072.3608</b>

## 6.2 RELATIONSHIP TO POPULATION PROJECTIONS

Table 19 provides an analysis of population forecasts against land availability and gives an indication of both the potential yields and population catered for through site land releases as well as, importantly, the overall shortfall against growth forecasts.

Key elements are as follows:

- Population is forecast to grow from 19,000 to 27,000 by 2015, meaning a requirement to accommodate a further 8,000 people;
- Using the earlier stated rate of 2.57 persons per household a demand of 3,112 dwellings is envisaged;
- Approximately 280 hectares of vacant public land requiring rezoning or can be readily developed;
- A conservative guide of 500m<sup>2</sup> per lot (having regard to the fact that higher densities will apply in many instances, but conversely many land parcels cannot be developed efficiently given irregularities of shape etc) should be used to demonstrate 5,600 lots could result from the 280 hectares of public land; and
- The 5,600 lots at 2.57 persons per dwelling accommodate 14,392 people.

**Table 19 – Relationship between available Residential Land and Population Projections**

Projection Source	Population Increase (Projection at 2015 less Current Population 2010)	Number of additional dwellings required (1 dwelling per 2.57 people)*	Vacant Residential Land Identified (Public Land Only)	Number of potential lots @ 500m <sup>2</sup> /lot av. & population housed @ 2.57/dw
Town of Port Hedland 'Gearing Up'	27,000 – 19,000 = 8,000	3,112 dwellings	280 ha	5,600 lots & 14,392 people

The above table is by no means conclusive, but clearly demonstrates that the HLAP identified sites, if released to market, will play a significant role in addressing land supply in both Port and South Hedland. The next step in realising the development potential of the public land is through affirmative action from the various local and state government agencies to allow for the land to be rationalised and released for urban purposes.

### 6.3 LAND RELEASE ACTIONS

The following is a summary of recommend actions resulting from the HLAP and detail contained in this report:

- The clearance of Native Title on all zoned land in Port and South Hedland should be initiated immediately.
- Immediately excise those portions of land that do not require rezoning and may be immediately developed through the subdivision and/or development application process.
- Immediately amalgamate public land parcels as shown in the schedule to provide for developable land parcels for immediate rezoning and development or residential development if zoned appropriately.
- Immediately excise those portions of land that do not require rezoning and may be immediately developed through the structure planning process.
- Canvass local landowners and ascertain further opportunities for road closures and sale of land for private developments.
- Depending on the response to opportunities to close roads and have them amalgamated into adjoining lots, initiate the road closure process and an omnibus amendment to have these areas rezoned.
- Canvass local landowners and ascertain realistic opportunities for excess land to be included into private landholdings for further development.
- Canvass service authorities to confirm infrastructure requirements to ensure there are no impacts on land to be excised.
- Undertake further investigations regarding demand and supply of areas of Parks and Recreation Reserve within Port and South Hedland.
- Undertake an engineering study to determine the requirements and possible alternative solutions to the drainage reserves within South Hedland. Following this, a further excision and rezoning program could be developed for the “Drainage Reserves”.

### 6.4 DYNAMIC DOCUMENT

The HLAP is an important resource for the Town as it continues to face significant growth pressures. The important next step will be for an open discussion on the priority sites for development and the progression of these through the statutory approvals process.

It is important to note that for the HLAP to remain valid and useful it will require updating as areas and land parcels are developed or the opportunities and constraints are modified over time. To ensure this document can be updated, it is recommended that the Town initiate measures and funds to allow an annual review and provision of annual aerial photography. Advice on recommended methods to undertake annual updating has been provided separately to the Town of Port Hedland.

Rpt\_3400-4-3730\_Land\_Availability\_Plan\_Draft PART A 170810.doc





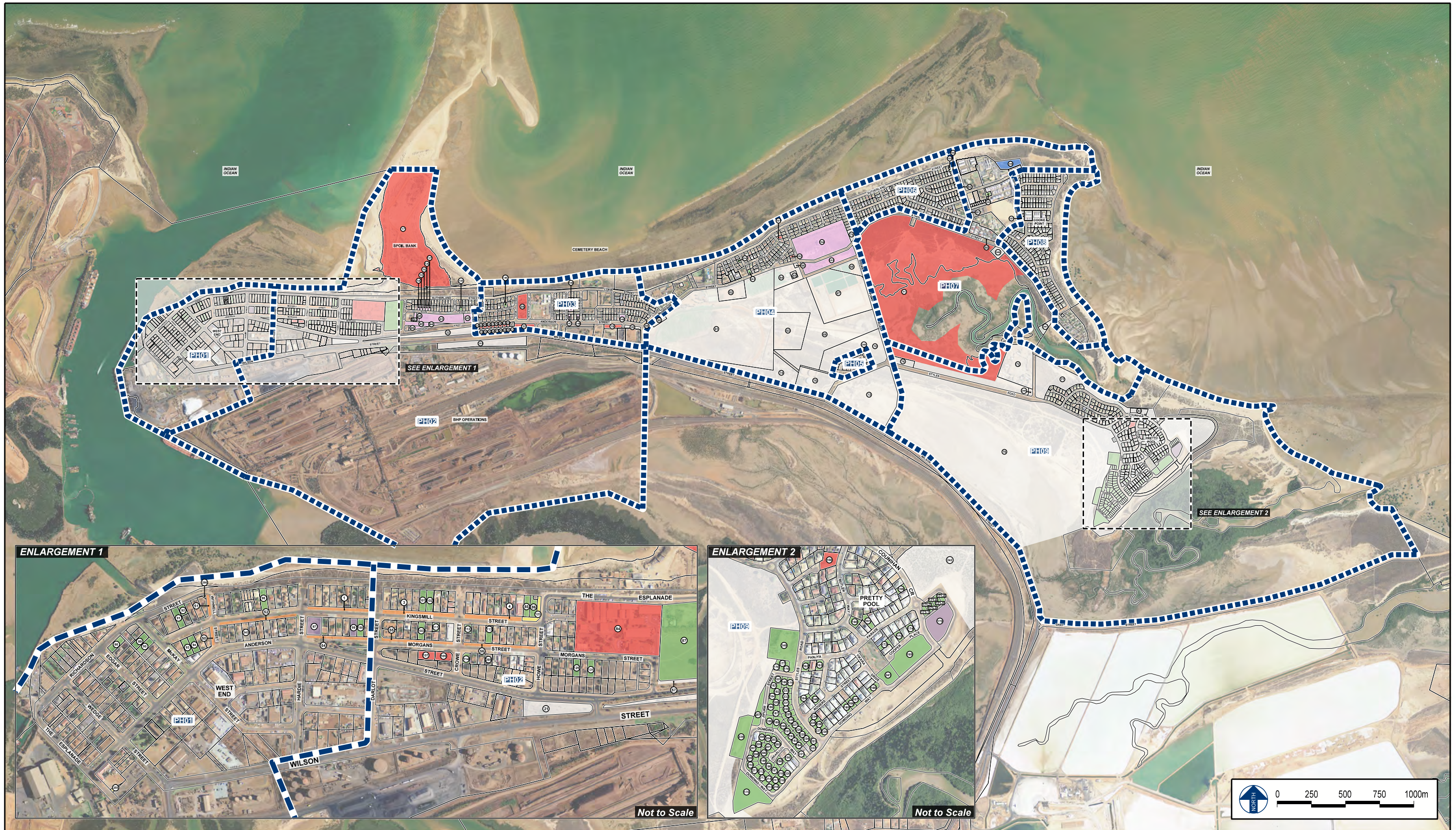
## APPENDIX I

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Plan I            Hedland            Land  
Availability    Plan – Port    Hedland  
Residential







**PLAN 1 - LAND AVAILABILITY PLAN - PORT HEDLAND**  
Town of Port Hedland

**LEGEND**

- 195 Reference Number
- Census Collector District Sub-Precinct Boundaries
- SP11 Census Collector District Sub-Precinct Numbers
- Category 1 - Immediate Development Potential
- Category 2 - Amalgamation

- Category 2 - Extinguishment of Reserve
- Category 3 - Road Closure, Amalgamation and Rezoning
- Category 3 - Rezoning
- Category 3 - Infrastructure Constraints
- Other - Under Development
- Long Term / Heavily Constrained

Town of Port Hedland : CLIENT  
Not to Scale@A3 : SCALE  
27 January 2011 : DATE  
3730-4-002c.dgn : PLAN No  
c : REVISION  
T.D. : PLANNER  
R.F. : DRAWN  
Not : CHECKED



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Base data supplied by Landgate

Aerial Photography dated January 2009, accuracy +/- 4m, Projection MGA Zone 50

Areas and dimensions shown are subject to final survey calculations.  
All carriageways are shown for illustrative purposes only and are subject to detailed engineering design.





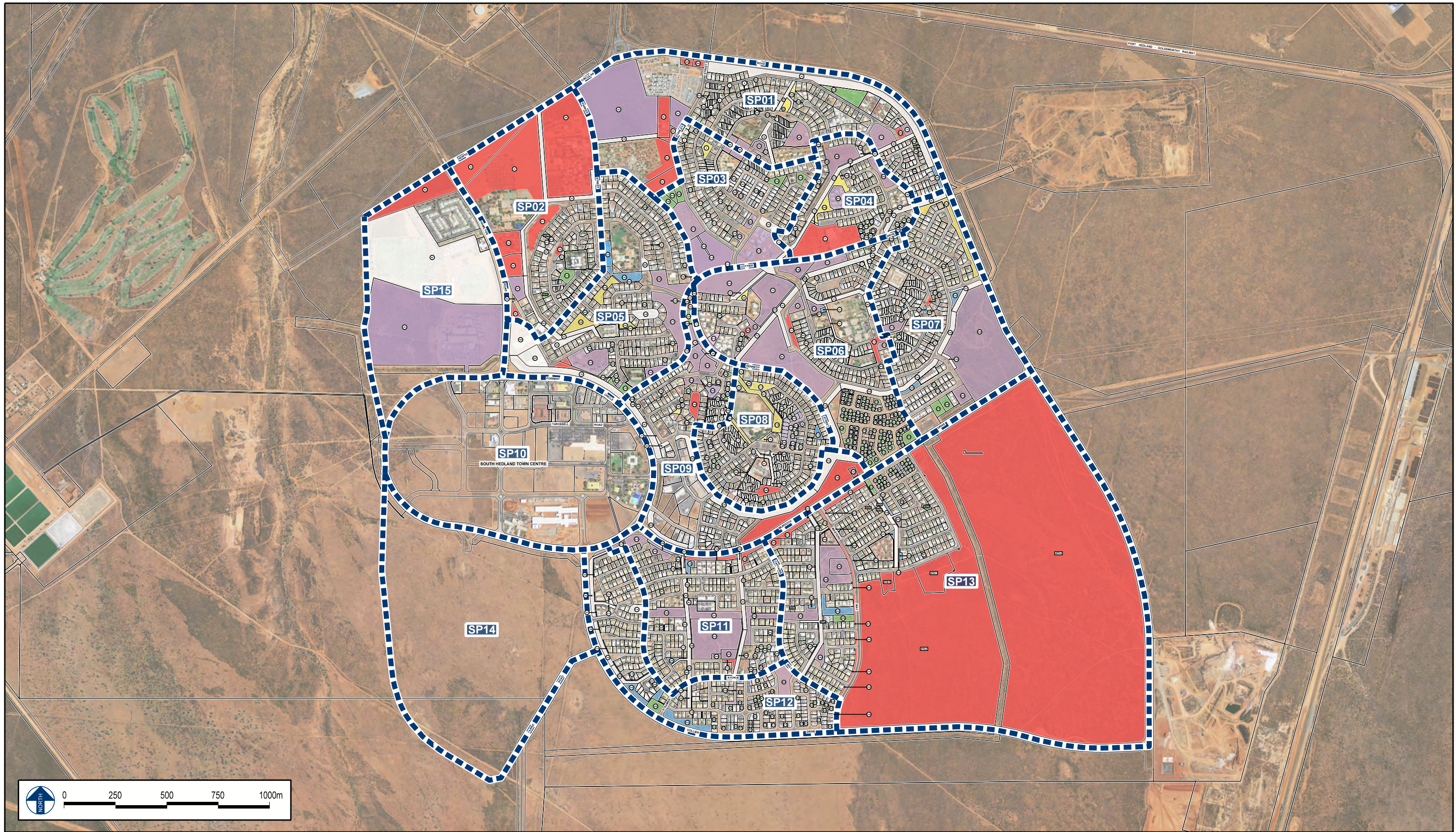
## APPENDIX 2

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**Plan 2      Hedland      Land  
Availability Plan – South Hedland  
Residential**







**PLAN 2 - LAND AVAILABILITY PLAN - SOUTH HEDLAND**  
Town of Port Hedland

**LEGEND**

Base data supplied by Landgate  
Aerial Photography dated December 2009, accuracy +/- 4m, Projection MGA Zone 50  
Areas and dimensions shown are subject to final survey calculations.  
All carriageways are shown for illustrative purposes only and are subject to detailed engineering design.

- |  |   |  |  |  |   |
|--|---|--|--|--|---|
|  | Reference Number                                  |  | Category 1 - Immediate Development Potential         |  | Category 3 - Rezoning                   |
|  | Census Collector District Sub-Precinct Boundaries |  | Category 2 - Amalgamation                            |  | Category 3 - Infrastructure Constraints |
|  | Census Collector District Sub-Precinct Numbers    |  | Category 2 - Extinguishment of Reserve               |  | Other - Under Development               |
|  |   |  | Category 3 - Road Closure, Amalgamation and Rezoning |  | Long Term / Heavily Constrained         |

Town of Port Hedland : CLIENT  
Not to Scale@A3 : SCALE  
14 January 2011 : DATE  
3730-4-003c.dgn : PLAN No  
c : REVISION  
T.D. : PLANNER  
R.F. : DRAWN  
Not : CHECKED



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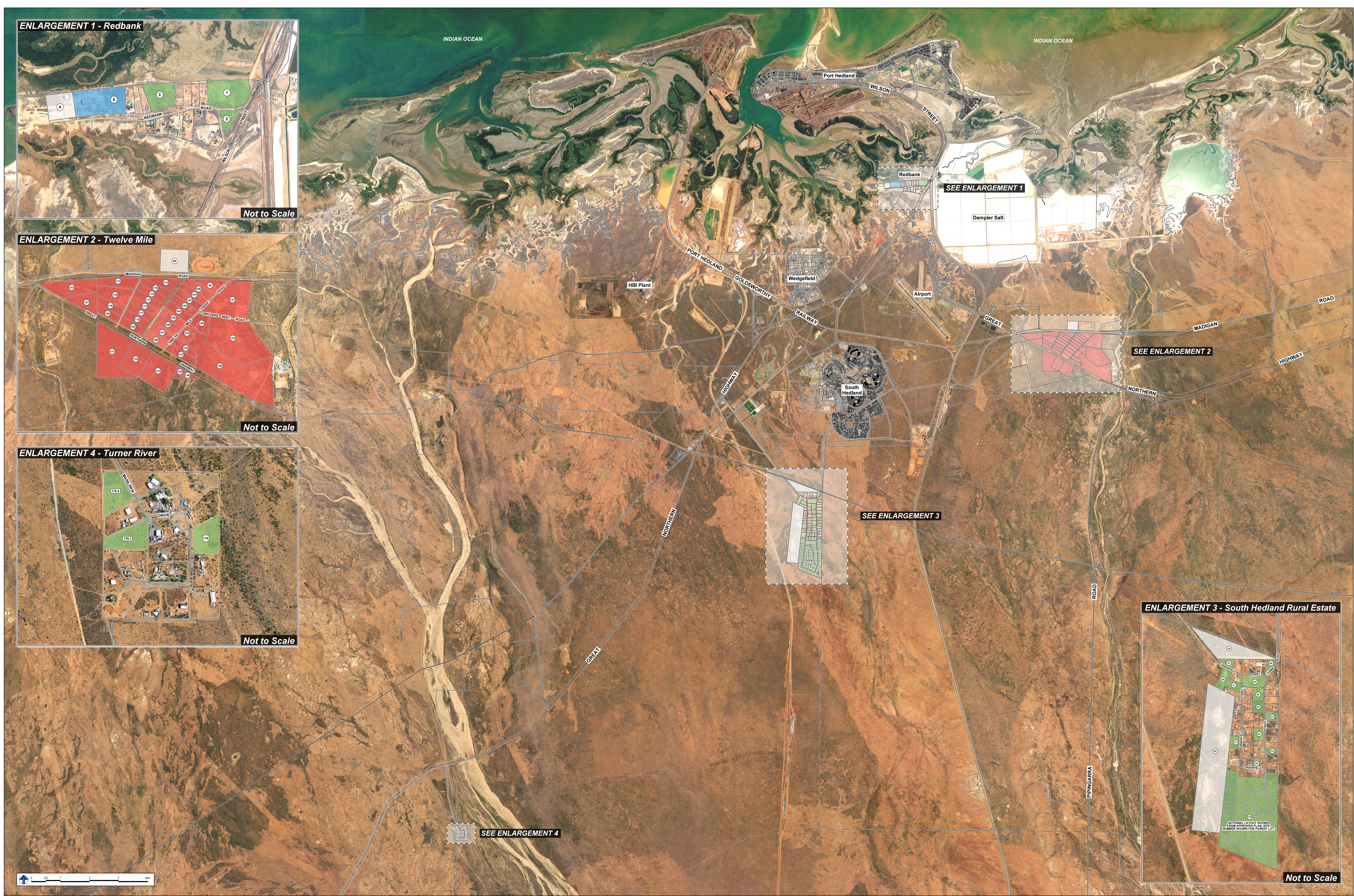
## APPENDIX 3

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<b>Plan 3</b>	<b>Hedland</b>	<b>Land</b>
<b>Availability</b>	<b>Plan - Overall</b>	<b>Rural</b>
<b>Residential</b>		





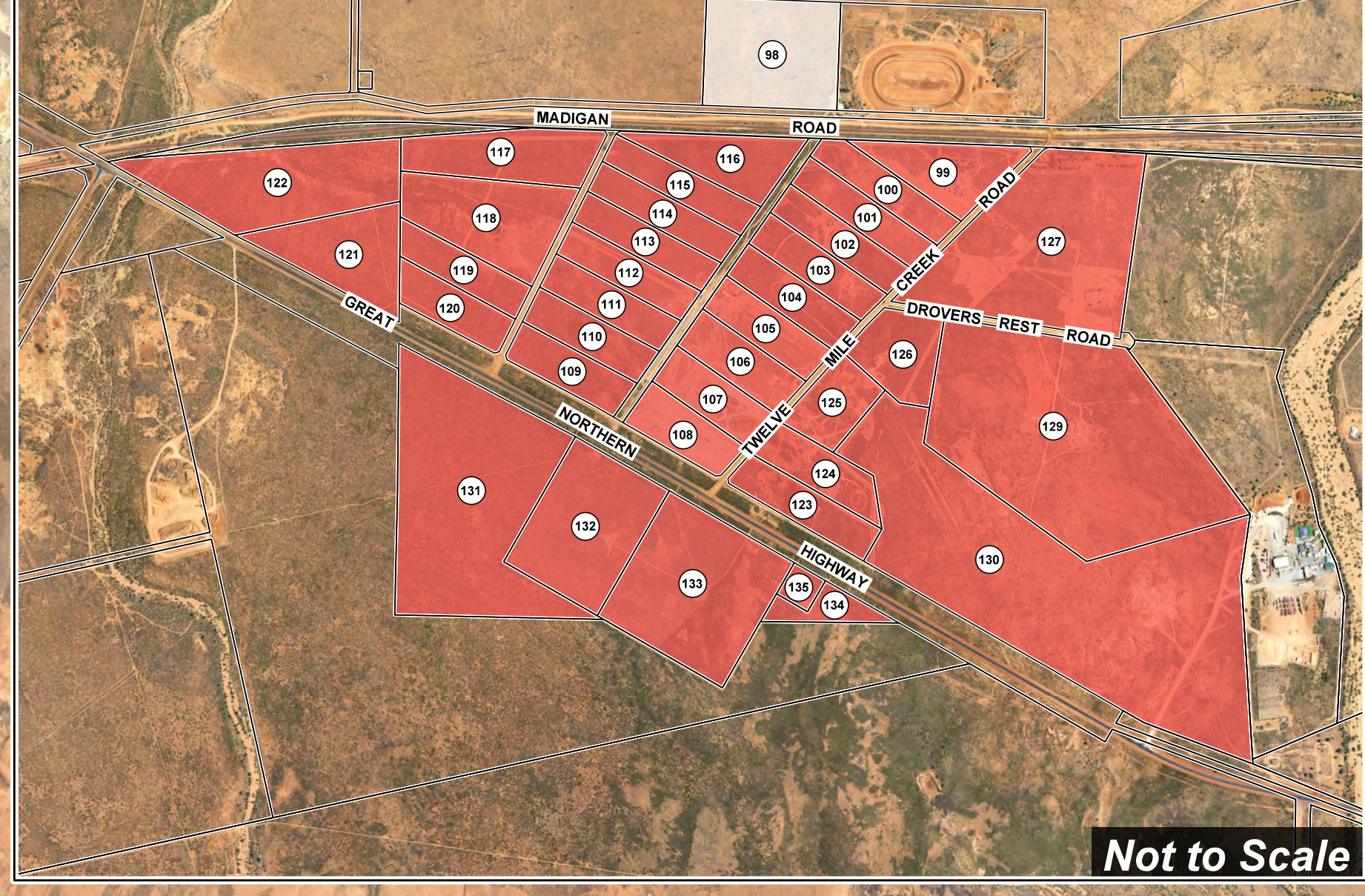


**ENLARGEMENT 1 - Redbank**



Not to Scale

**ENLARGEMENT 2 - Twelve Mile**



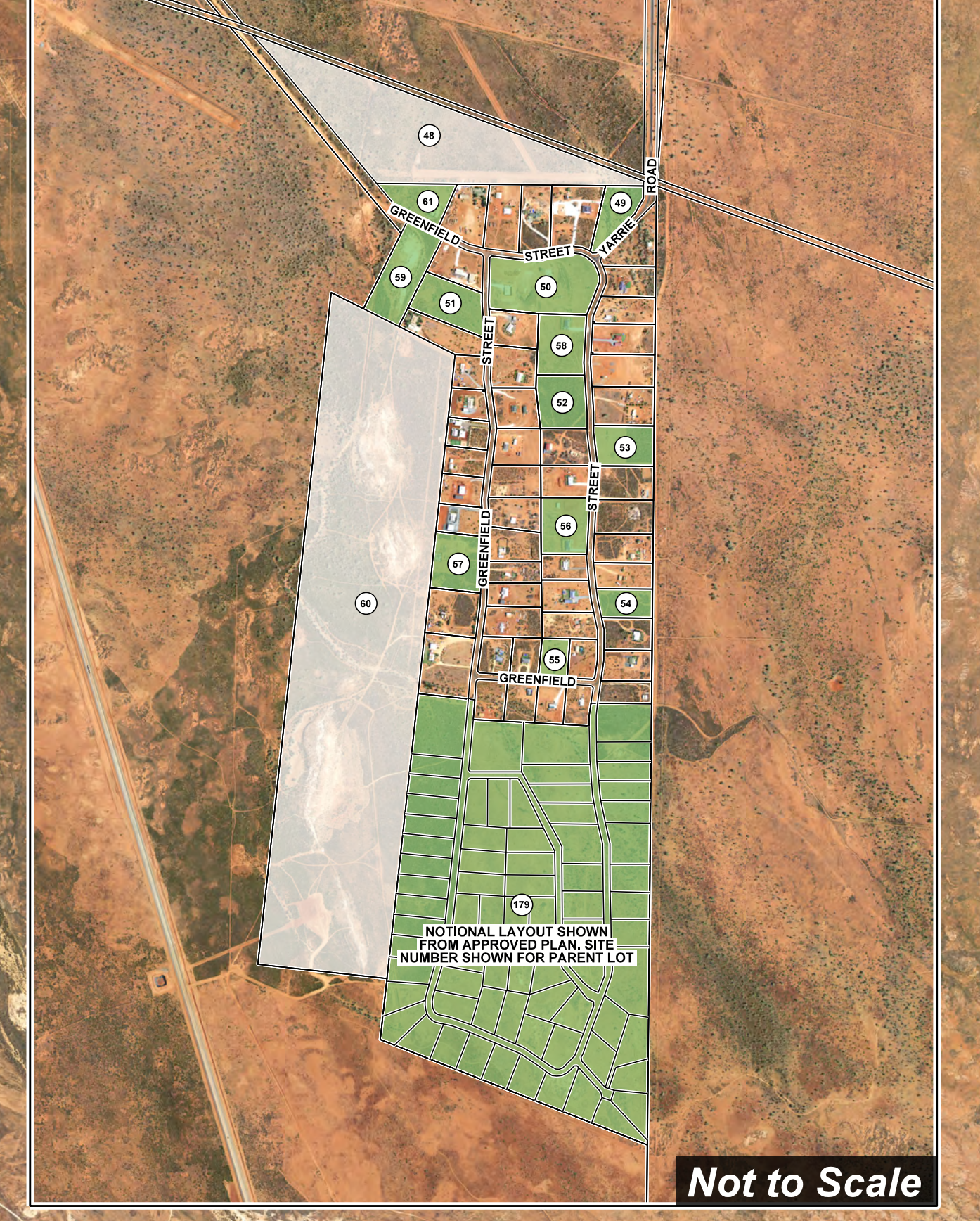
Not to Scale

**ENLARGEMENT 4 - Turner River**



Not to Scale

**ENLARGEMENT 3 - South Hedland Rural Estate**



Not to Scale

Revision	Date	By
a	06/01/2016	Category Colour Ltd
b	04/09/2016	Asx Approved Submittal Layout to Site 178

LEGEND	
	REFERENCE NUMBER
	Category 1 - Immediate Development Potential
	Category 2 - Amalgamation
	Category 2 - Extinguishment of Reserve
	Category 3 - Road Closure, Amalgamation and Rezoning
	Category 3 - Rezoning
	Category 3 - Infrastructure Constraints
	Other - Under Development
	Long Term / Heavily Constrained

**NOTES**  
 Base data supplied by Lintlogan  
 Aerial Photography dated December 2008, accuracy to 1m. Projection: MGA50  
 Areas and dimensions shown are subject to final survey establishment.  
 All contingencies are shown for illustrative purposes only and are subject to detailed engineering design.

Town of Port Hedland	CLIENT	Property Description:
1:40,000@A0	SCALE	Town of Port Hedland
5 August 2016	DATE	Town of Port Hedland
3732-4-004-001	PLAN No.	Town of Port Hedland
b	REVISION	Town of Port Hedland
T.D.	PLANNER	Town of Port Hedland
M.H.	DRAWN	Town of Port Hedland
T.D.	CHECKED	Town of Port Hedland

**PLAN 3 - LAND AVAILABILITY PLAN - RURAL RESIDENTIAL**

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## APPENDIX 4

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<b>Plan 4</b>	<b>Hedland</b>		<b>Land</b>
<b>Availability</b>	<b>Plan</b>	<b>-</b>	<b>Overall</b>
<b>Residential</b>			<b>Non-</b>

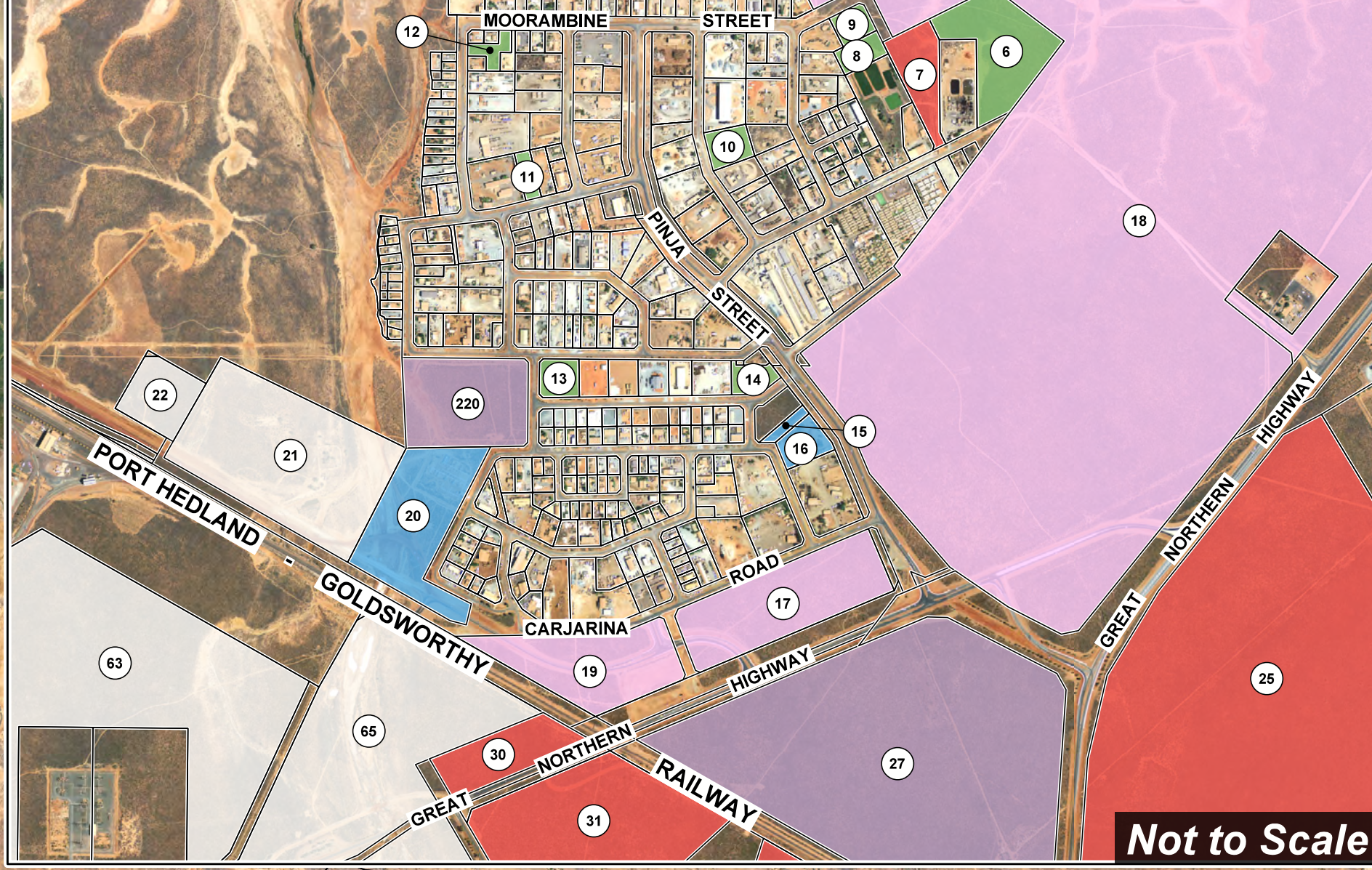




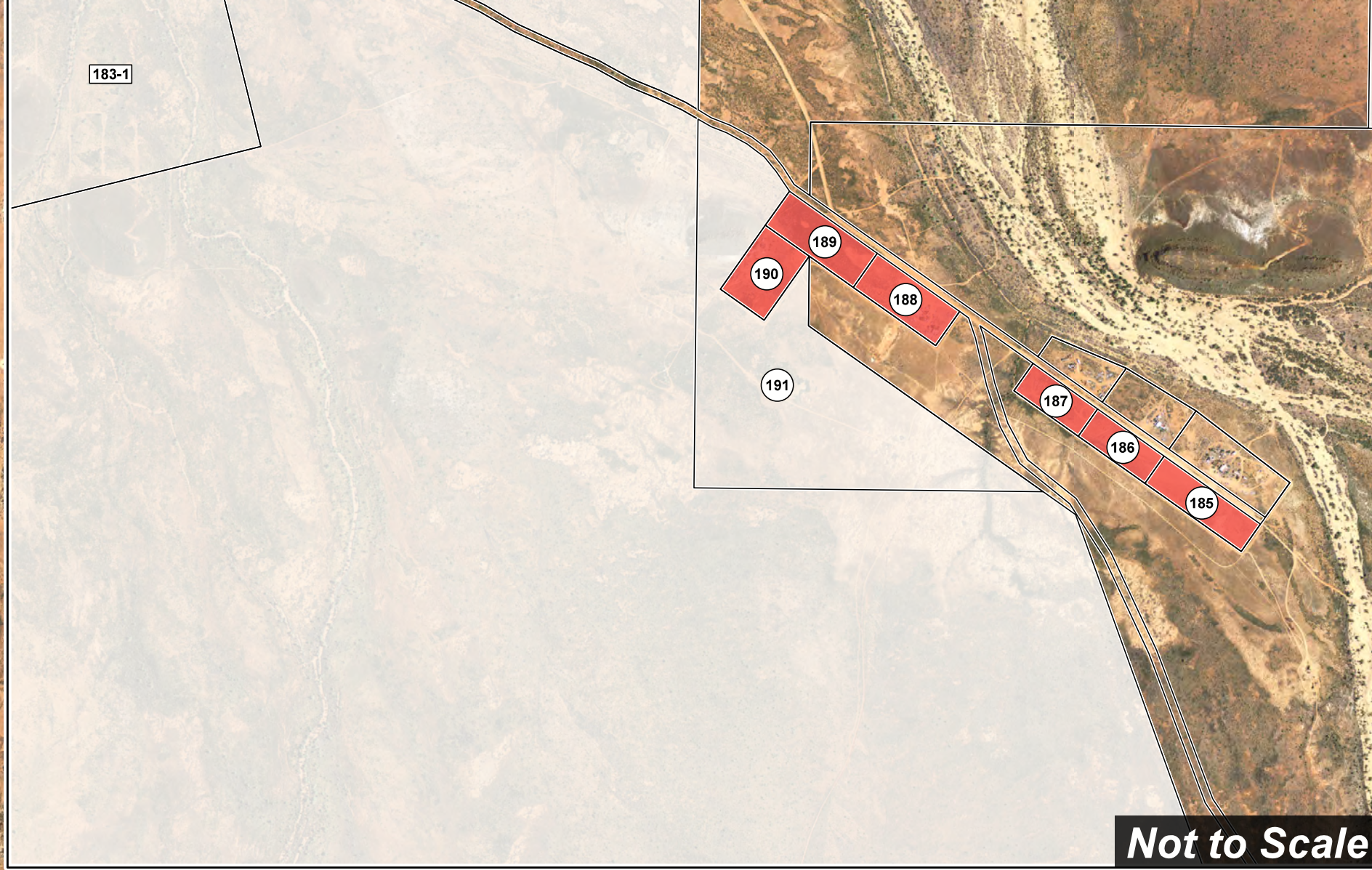
**ENLARGEMENT 2 - Redbank**



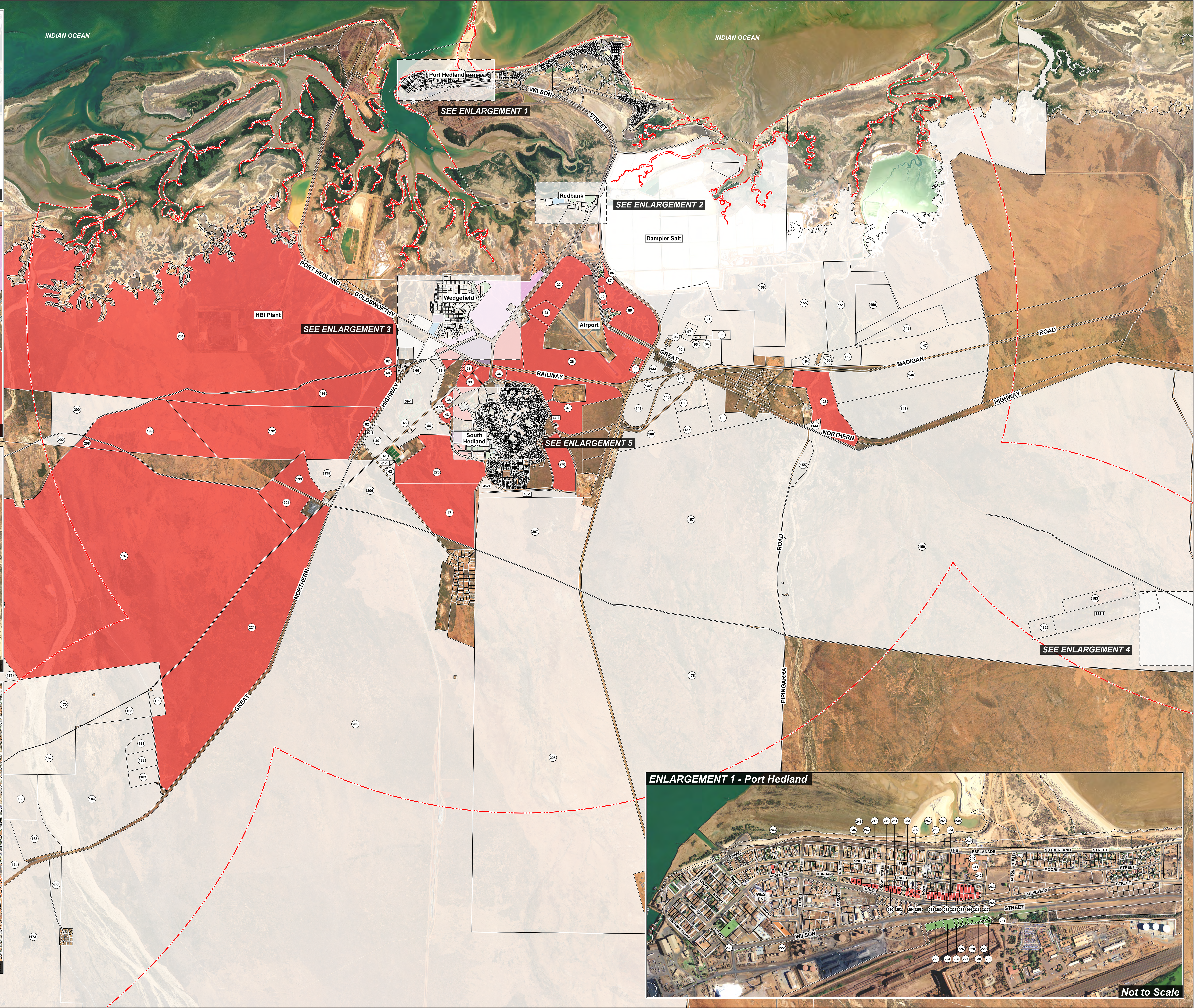
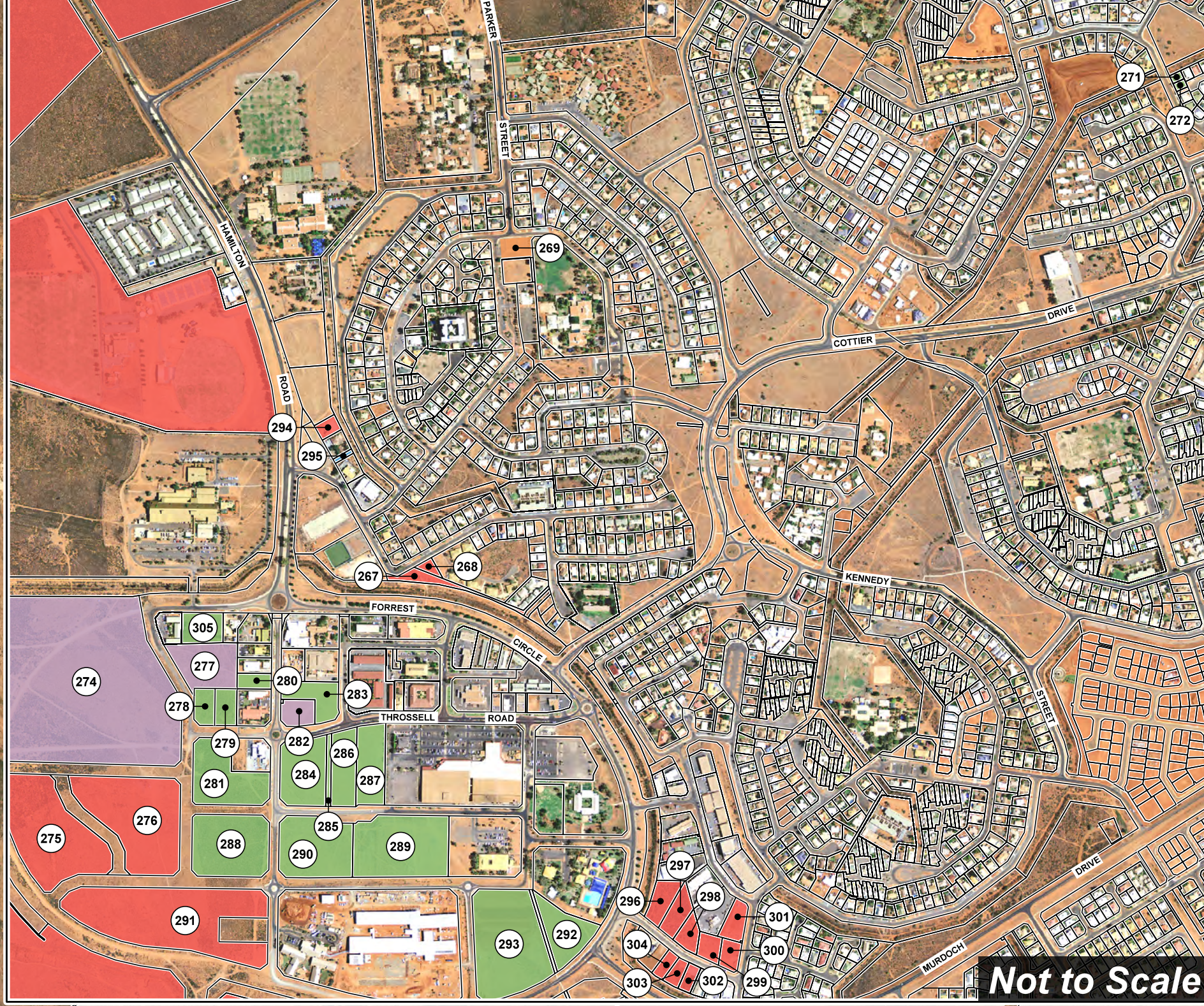
**ENLARGEMENT 3 - Wedgefield**



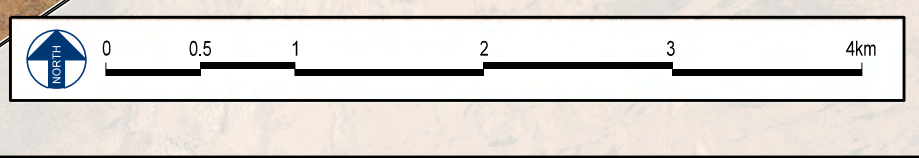
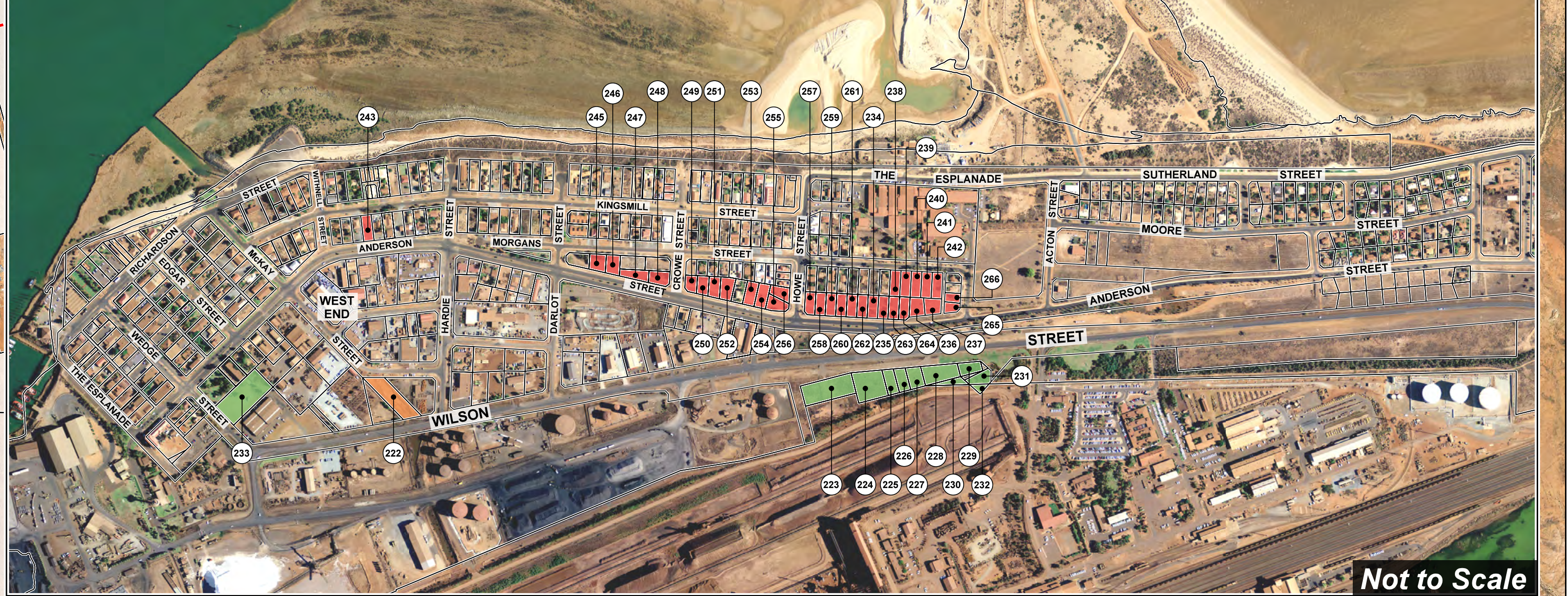
**ENLARGEMENT 4 - 12 Mile Creek**



**ENLARGEMENT 5 - South Hedland**



**ENLARGEMENT 1 - Port Hedland**



Revision	Date	By
a	30/05/2010	Prepared 4 Enlargements
b	13/07/2010	Add colour to file as per Port Hedland Overall No-Res Schedules
c	05/02/2011	Modification to some site colour/catch plan number

LEGEND	
	Project Area
	Reference Number
	Category 1 - Immediate Development Potential
	Category 2 - Amalgamation
	Category 2 - Enlargement of Reserve
	Category 3 - Rezoning
	Category 3 - Infrastructure Constraints
	Category 3 - Road Closure, Amalgamation and Rezoning
	Other - Under Development
	Long Term / Heavily Constrained

**NOTES**  
 Base data supplied by Lintlogan  
 Aerial Photography based December 2008, available on line - Projectfile MGA50  
 Areas and dimensions shown are subject to final survey establishment.  
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Town of Port Hedland	CLIENT	Property Description:
1:40,000@A0	SCALE	Town of Port Hedland
8 August 2010	DATE	
3732-K-0016-001	PLAN No.	
c	REVISION	
T.D.	PLANNER	
M.H.	DRAWN	
T.D.	CHECKED	

**PLAN 4 - LAND AVAILABILITY PLAN - NON RESIDENTIAL**

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## APPENDIX 5

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**Plan 5      Hedland      Land  
Availability Plan – Overall Residential  
and Non Residential Site Mapping**

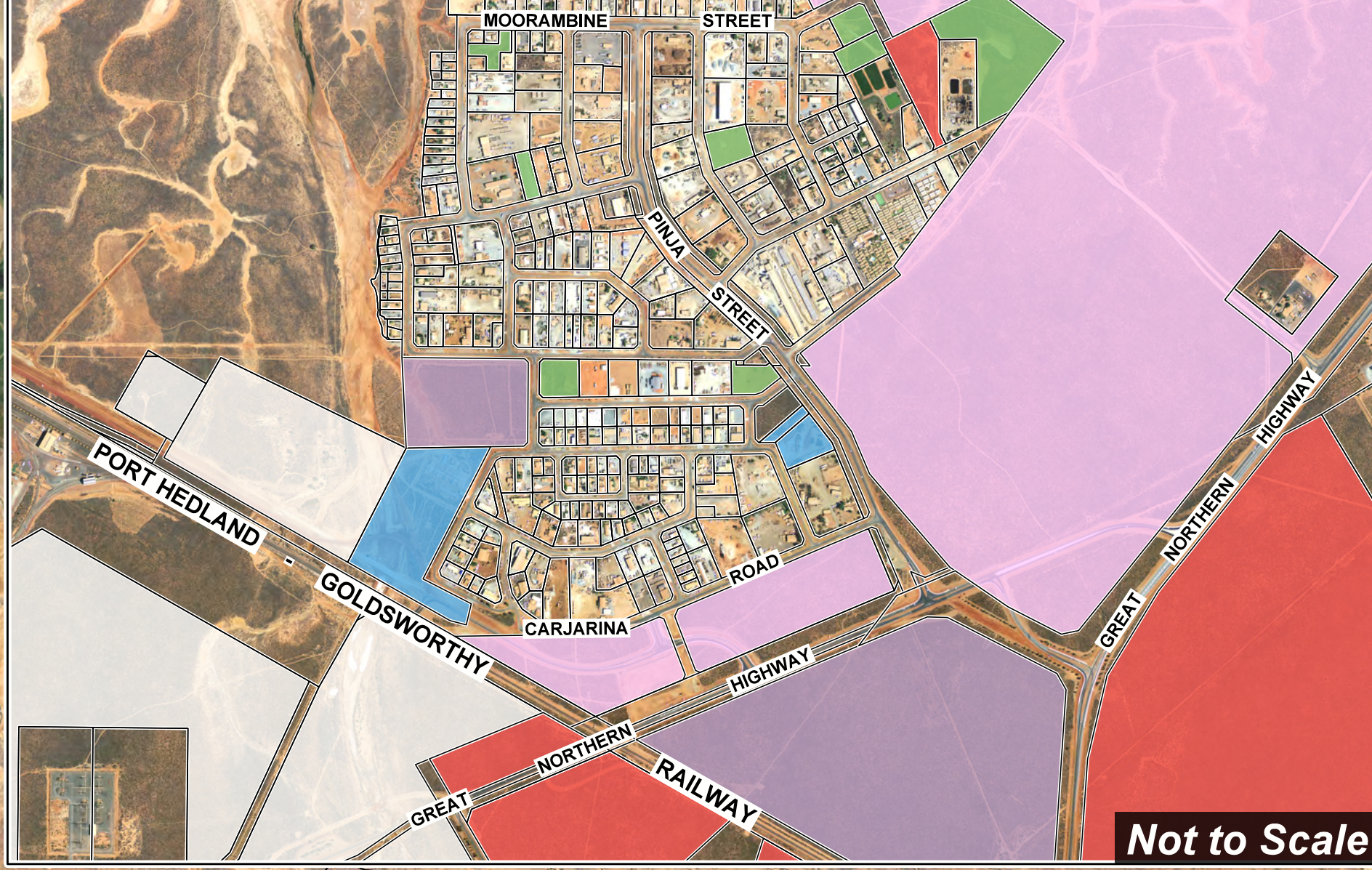




ENLARGEMENT 2 - Redbank



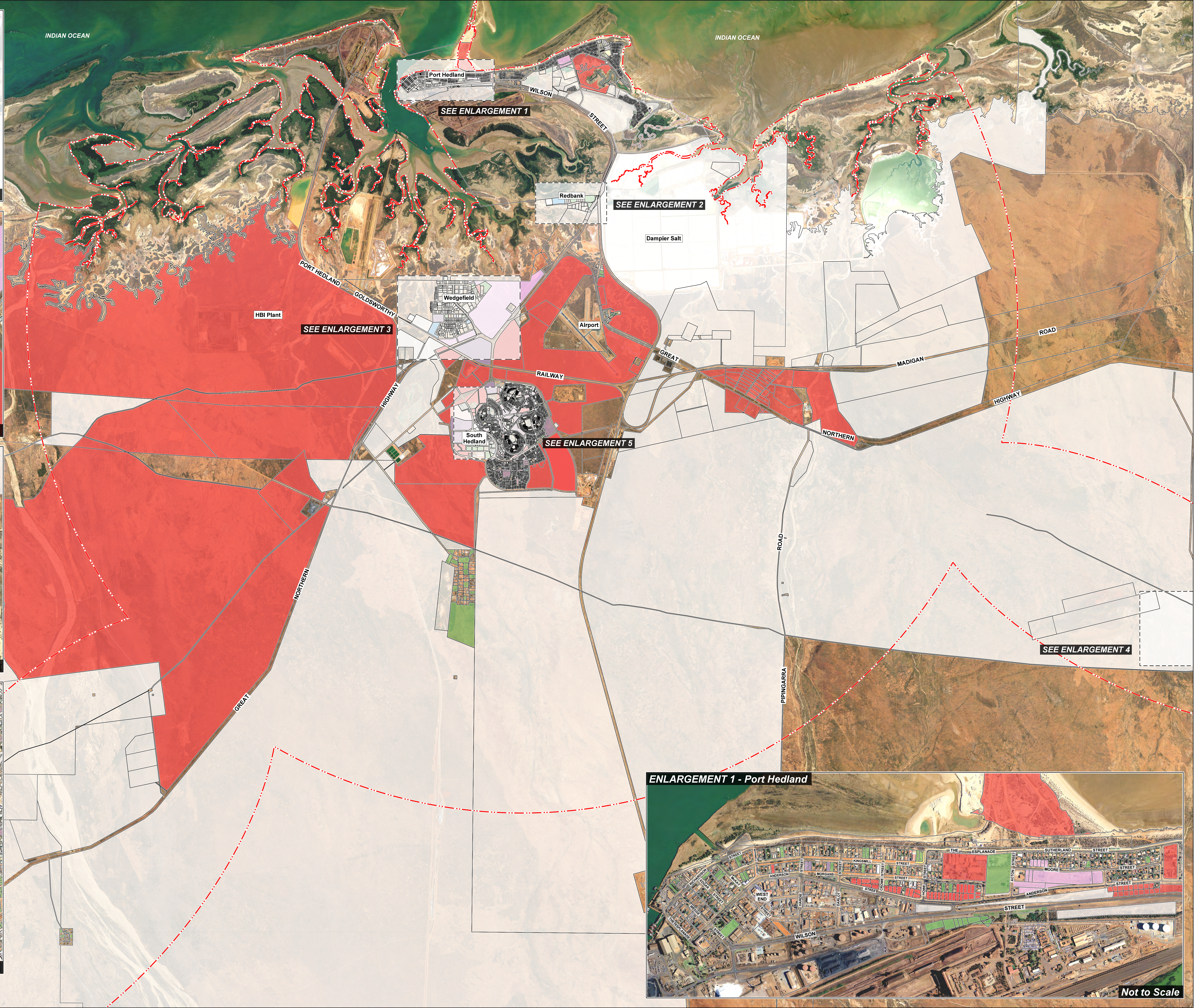
ENLARGEMENT 3 - Wedgefield



ENLARGEMENT 4 - 12 Mile Creek



ENLARGEMENT 5 - South Hedland



**LEGEND**

Project Area	Category 1 - Immediate Development Potential	Category 3 - Infrastructure Constraints
Category 2 - Amalgamation	Category 3 - Road Closure, Amalgamation and Rezoning	Other - Under Development
Category 2 - Establishment of Reserve	Long Term / Heavily Constrained	
Category 3 - Rezoning		

**NOTES**

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Areas and dimensions shown are subject to final survey establishment.  
All contingencies are shown for illustrative purposes only and are subject to detailed engineering design.

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1:40,000:9A0	SCALE	Town of Port Hedland
8 August 2010	DATE	
3700-4-006-89	PLAN No.	
	REVISION	
	PLANNER	
	DRIVEN	
	CHECKED	

PLAN 5 - OVERALL LAND AVAILABILITY PLAN

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