

Roebourne Structure Plan

PART A July 2014



DRAFT



Councillor Peter Long
Mayor of City of Karratha

Foreword

It is with great pleasure that I present the Roebourne Structure Plan – an overarching framework for the revitalisation and future development of one of our oldest towns.

This Plan represents a new future for the people of Roebourne, acknowledging the role of local Aboriginal Corporations and working with them to create a better future.

The Roebourne Structure Plan has been developed in consultation with the people of Roebourne and emphasises the Shire's commitment to community development, local economic activity and protection of our heritage. I look forward to seeing continued engagement from the community as we work together to implement its strategies.

Our proactive delivery of this Plan demonstrates the City's leadership and a can-do attitude to the development of our Eastern Corridor. We have mapped out a role and identity for Roebourne which complements the other towns in the City. Our vision for the implementation of the Plan is for the community and the City, other government agencies and Aboriginal Corporations to work together to deliver growth and enhancements to Roebourne.

The investments being made by the City and Aboriginal Corporations in the catalyst sites are the key to the town's revitalisation. The recreation and education precinct, for example, is recognised as a key community asset. The Shire has already commenced the enhancement and re-development of this precinct, which will continue to be the town's hub for sport, leisure and learning.

Through this comprehensive Plan we aim to increase the liveability, social wellbeing and community identity of Roebourne. Through identifying redevelopment opportunities as well as areas for future growth and development, the City and the Roebourne community have laid out a plan for greater economic opportunities, protection of cultural values and an enhanced lifestyle in the town.

The Plan encourages Roebourne to celebrate its cultural strength and to have an open door for tourists to share and enjoy both the Indigenous and European heritage. I am pleased to see the spirit of co-operation that has gone into its creation and I congratulate all involved. I look forward to our continued collaboration with the community to make this vision for a reinvigorated and enhanced Roebourne township a reality.

Acknowledgements

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COMMERCIAL PRECINCT

The development of this precinct will be constrained to light industrial uses and associated commercial uses such as motor vehicle accessories, tyre store or car wash services.

Development which provides employment opportunities across a range of activities which can be described as light industry and does not compete with the existing retail centre is strongly encouraged. Transient workforce accommodation will not be acceptable in this location. Retail uses will not be allowed on this site and this is to assist with the re-vitalisation of the Roebourne Central Precinct.

RESIDENTIAL PRECINCT

Encourage a gradual improvement in the amenity and functioning of the residential precinct. Improving the safety of the dwellings, community locations and pathways is central to the purpose of this precinct. As redevelopment opportunities arise, the preferred response is neighbourhoods characterised by a response to the cultural, climatic and environmental conditions, and provide for social wellbeing, community identity, liveability and safety.



HERITAGE PRECINCT

It is intended that this historic part of town will be developed as a tourist-friendly place focusing on history and art places, cafés and restaurants, where people can sit down and relax indoors or in the shade outdoors food.

The existing administrative functions within heritage buildings are to continue.

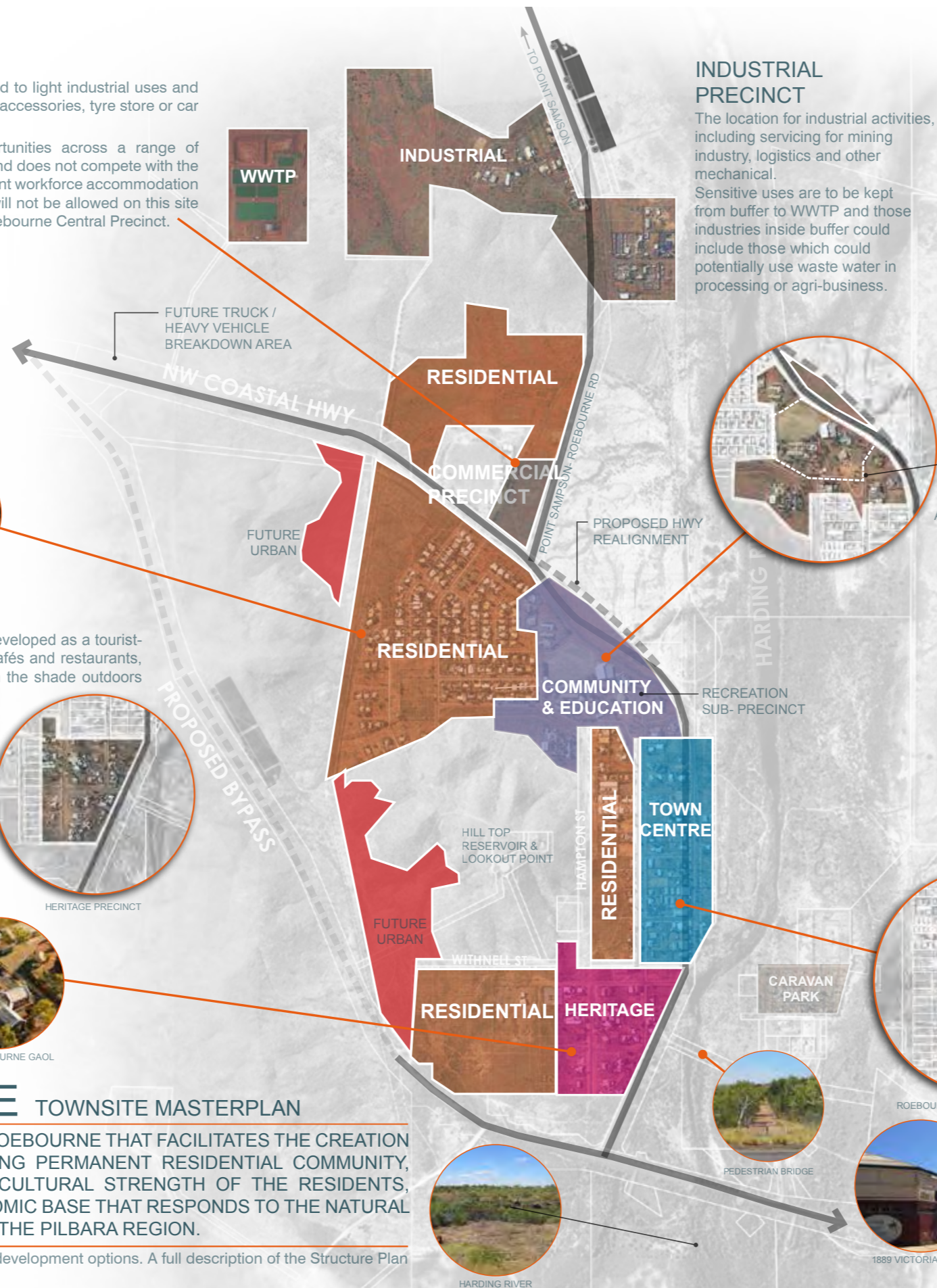
Roebourne's historic buildings will be respected and cared for. New buildings in Roebourne will be designed to sit comfortably alongside historic buildings, not duplicating old designs, but complementing them and most importantly, creating an easy to live in and attractive urban environment for living and working.



ROEBOURNE TOWNSITE MASTERPLAN

THE VISION: CREATE A FUTURE FOR ROEBOURNE THAT FACILITATES THE CREATION OF A DIVERSE AND WELL-FUNCTIONING PERMANENT RESIDENTIAL COMMUNITY, BASED ON A CELEBRATION OF THE CULTURAL STRENGTH OF THE RESIDENTS, WHILE BUILDING A DIVERSIFIED ECONOMIC BASE THAT RESPONDS TO THE NATURAL ENVIRONMENT AND CONTRIBUTES TO THE PILBARA REGION.

This Masterplan highlights the major changes and development options. A full description of the Structure Plan is shown within the Roebourne Structure Plan



INDUSTRIAL PRECINCT

The location for industrial activities, including servicing for mining industry, logistics and other mechanical. Sensitive uses are to be kept from buffer to WWTP and those industries inside buffer could include those which could potentially use waste water in processing or agri-business.

COMMUNITY & EDUCATION PRECINCT

ALSO INCLUDED IN THIS PRECINCT IS THE TAFE AND YAANDINA YOUTH CENTRE, HEALTH SERVICES AND CHURCH.



The Community & Education precinct will provide for Roebourne's leisure and educational services which enhance opportunities to foster life and artistic skills, encouraging traditional, contemporary and cultural activities. The Community & Education Precinct is centred on the school and key recreational facilities in town.

The **Recreation Sub-precinct** is included within this precinct. After extensive and highly targeted consultation the Shire is preparing detailed development plans.



ROEBOURNE CENTRE PRECINCT

This precinct forms the principal **commercial and community services hub** for Roebourne. This precinct is to remain as the key retail and economic focus of the Roebourne township. The key cultural, community activity and retail functions will be located within this precinct and an interface with the tourism industry will be clearly evident.

Padbury Street is to form an intimate scale main street featuring the retail and commercial hub for the town.

Community development functions, rehabilitation and welfare activities will be encouraged to re-locate along Sholl Street.

The key re-development opportunities which will encourage a stronger economy and community are shown below and described as the Catalyst sites:

- Roebourne Cultural Centre
- NAC Community Centre
- Victoria Hotel
- Other sites in Padbury Street
- General Store
- Yaandina Centre



ROEBOURNE TOWNSITE STAGING PLAN

THE VISION: CREATE A FUTURE FOR ROEBOURNE THAT FACILITATES THE CREATION OF A DIVERSE AND WELL-FUNCTIONING PERMANENT RESIDENTIAL COMMUNITY, BASED ON A CELEBRATION OF THE CULTURAL STRENGTH OF THE RESIDENTS, WHILE BUILDING A DIVERSIFIED ECONOMIC BASE THAT RESPONDS TO THE NATURAL ENVIRONMENT AND CONTRIBUTES TO THE PILBARA REGION.

The Staging Plan illustrates the preferred phasing of the various elements of the proposed re-vitalisation of Roebourne.

The timing and delivery of these various elements will depend on the proponents, the economic climate, and the fluctuations of the resource industries.

PRIORITY 2: INDUSTRY PRECINCT

This is to transition from a Mixed business zone to industrial activities. All existing lawful uses can remain while still in operation. No additional Transient workforce accommodation envisaged for this area. No extension beyond present boundaries.

PRIORITY 3: RESIDENTIAL PRECINCT

The darker shading shows the priority for infill development, next will be the residential area to the north, followed by investigation areas to the south. These southern residential area will require investigation prior to residential development.

PRIORITY 4: COMMERCIAL PRECINCT

This precinct is expected to provide employment opportunities in commercial and light industrial uses. Timing is likely to be influenced by the fluctuations in the resources industries.

PRIORITY 5: FUTURE URBAN

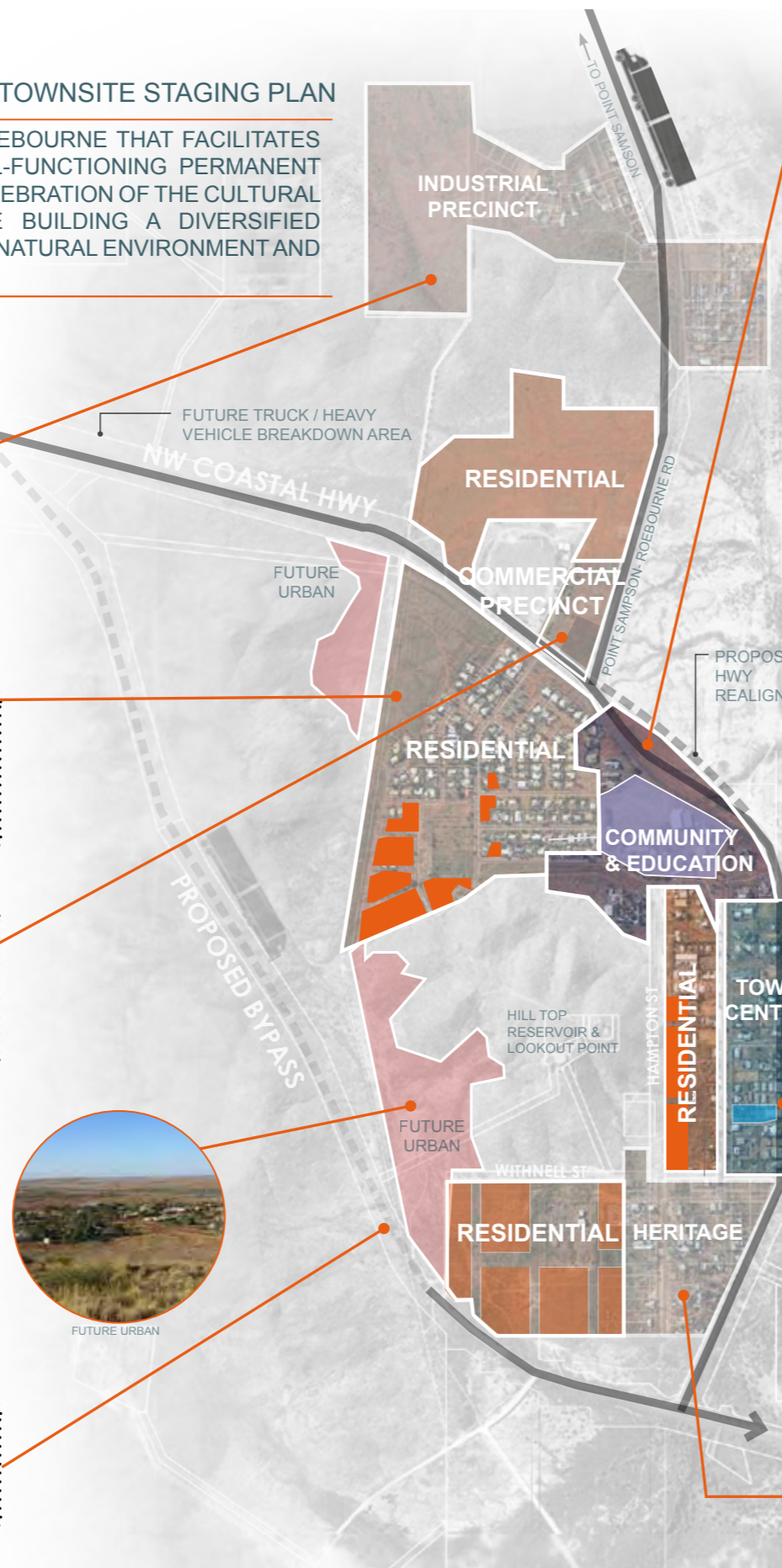
These areas are unlikely to be developed for a considerable period unless demand for large residential lots can be established. Further investigation required particularly relating to management of potential contamination.

PRIORITY 6: BYPASS

This initiative would only be triggered by significant traffic increases most likely associated with major projects. A project to be delayed until safety within town was permanently and significantly compromised.



FUTURE URBAN



PRIORITY 1: COMMUNITY & EDUCATION PRECINCT

The Community & Education precinct will provide for Roebourne's leisure and educational services which enhance opportunities to foster life and artistic skills, encouraging traditional, contemporary and cultural activities.

The **Recreation Sub-precinct**- A Shire led re-development programme.
Three (3) Stage development:
Stage 1: 1-3 years
Stage 2: 3-6 years
Stage 3: 6-10 years



PRIORITY 1: ROEBOURNE CENTRE PRECINCT

This precinct forms the principal retail, commercial and community services hub for Roebourne.

Padbury Street is to form an intimate scale main street featuring the retail and commercial hub for the town.

The key re-development opportunities which will encourage a stronger economy and community are shown below and described as the Catalyst sites:

Catalyst sites:

- Roebourne Cultural Centre
- NAC Community Centre
- Victoria Hotel
- Other sites in Padbury Street
- General Store
- Yaandina Centre



PRIORITY 1: HERITAGE PRECINCT

Preparation of a precinct plan - highlighting critical maintenance issues. The existing administrative functions within heritage buildings are to continue. Important heritage assets maintained over time.



1895 HOLY TRINITY CHURCH



1887 POST OFFICE



1896 ROEBOURNE GAOL

Contents

1.0 Introduction	6	4.0 Servicing and infrastructure	20	Figures	
1.1 Purpose	6	4.1 Power Supply	20	Figure 1 Location map	8
1.2 Context	6	4.2 Water Supply Infrastructure	20	Figure 2 Topography and flooding	9
1.3 Growth and Development Characteristics	6	4.3 Wastewater Infrastructure	20	Figure 3 Heritage Precinct	12
1.4 Vision	6	4.4 Drainage	20	Figure 4 Roebourne Centre Precinct	13
1.5 Objectives and Principles	7	4.5 Roebourne Centre Precinct	21	Figure 5 Residential precincts	14
1.6 The Spatial summary	7	4.6 Northern Residential Precinct	21	Figure 6 Community and education precinct	15
1.7 Structure and Content	8	4.7 Future Urban Areas	21	Figure 7 Industry Precinct – to replace Mixed business	17
1.8 Location and Context	8	4.8 Industry	21	Figure 8 Movement network	19
1.9 Site Analysis	9	5.0 Implementation	22		
1.10 Population Targets and Capacity for Growth	9	5.1 Implementation Staging	22		
2.0 Structure Plan	10	5.2 Land uses, zones and Planning Scheme review	22		
2.1 Heritage Precinct	12	5.3 Shire of Roebourne Local Planning Scheme	22		
2.2 Roebourne Centre Precinct	13	5.4 Detailed design of precincts	22		
2.3 Residential Precincts	14	5.5 Development Control	22		
2.4 Community and Education precinct	15	5.6 Subdivision	22		
2.5 Commercial Precinct	16	5.7 Development	22		
2.6 Future Urban Precinct	16	5.8 Local Planning Structure plan	22		
2.7 Industry Precinct	17	5.9 Priority actions	22		
2.8 Other Areas	18	6.0 Consultation and Community vision	24		
3.0 Movement Network – Linkages and Connections	19	6.1 Community Vision	24		
		6.2 Engagement strategy	24		
		6.3 Structure Plan response to key issues raised during consultation	28		



1.0 Introduction

1.1 Purpose

This structure plan has been prepared by the City of Karratha to provide an overarching framework for the revitalisation and future development of the town of Roebourne. This plan supports the on-going and planned development initiatives as well as protecting the significant heritage sites.

1.2 Context

- The town of Roebourne is located on the North West Coastal Highway, on the banks of the Harding River, approximately 40 km east of Karratha in the City of Karratha. It has a population of approximately 815 people; however the population base has been in gradual decline for some years.
- The townsite of Roebourne sits within the Ngarluma Determination Area which was granted in 2005 and made in favour of the Ngarluma and Yindjibarndi. The Aboriginal names for this site are respectively:
 - Yirramagardu – Ngarluma
 - Ieramugado – Yindjibarndi.

Due to wide and current usage the European term Roebourne will be used through out this Structure Plan, however the cultural significance of both names are acknowledged.

This plan provides:

- A set of objectives
- Urban design and implementation principles
- A masterplan for development including a staging plan.

This structure plan for Roebourne township sits within the wider City context and specifically within the Eastern Corridor. This concept has been developed in the Local Planning Strategy and this is a spatial concept which identifies complementary roles for the small settlements with the eastern sector of the Shire, that is:

- *Roebourne* – a small settlement with an Aboriginal cultural and tourist functions which is located on the North West Coastal Highway and contributes to the industrial land supply in the Eastern Corridor.
- *Wickham* – the largest settlement in the Eastern Corridor which provides the servicing, administrative and residential hub for Rio Tinto industrial activities.
- *Point Samson* – the smallest settlement in the Eastern Corridor with residential, tourist and boating functions.

1.3 Growth and Development Characteristics

The remote location of the Roebourne township has resulted in growth patterns closely allied to fluctuations of the resources industries which historically include the pastoral industry, an early gold rush and the more recent influence of theminerals and energy sector.

Several of the Aboriginal Corporations are emerging as the major agents of change and investment in the urban fabric of Roebourne. Other major influences on development and growth in Roebourne are unlikely until the next wave of resource projects trigger increases in demand for residential, commercial and industrial sites.

To accommodate this commitment from Aboriginal Corporations and the potential impact of the next wave of resources projects, a staged approach has been adopted for this structure plan. This approach has been designed to nurture existing initiatives while still encouraging development which can respond to residential and commercial pressures over time.

1.4 Vision

The Vision for this structure plan was developed after extensive consultation with the Aboriginal community as well as many other stakeholders with interests in the town of Roebourne. In recognition of the important role consultation has played in the development of this plan the engagement process and recommendations are Roebourne Township Structure Plan Engagement report (UDLA 2014).

A summary of how this structure plan responds to the recommendations from the consultation programme is provided in Section 6 of this document.

The vision which was developed to shape a more prosperous future for Roebourne is below.

Roebourne Townsite Vision

Create a future for Roebourne that facilitates the creation of a diverse and well-functioning permanent residential community, based on a celebration of the cultural strength of the residents, while building a diversified economic base that responds to the natural environment and contributes to the Pilbara region.

1.5 Objectives and Principles

In support of the vision, the following key objectives have guided the formulation of this structure plan described in the following sections. These objectives will continue to guide the implementation of the plan.

Structure Plan Objectives

- Celebrate the town's heritage and cultural identity by preserving and restoring historic buildings and fostering the development of artistic and cultural activities and businesses that facilitate economic and social diversification.
- Plan for a diversity of land uses and infrastructure that support the economic and cultural base of the town and provide for the needs of the local and regional community.
- Protect and improve the amenity of the residential precincts.
- Improve the accessibility and legibility of the movement network and provide suitable movement systems for the diversity of vehicle and pedestrian needs, recognising the importance of cultural and environmental linkages and pathways.
- Facilitate upgrading and improvement of the quality of the public realm, civic spaces, cultural and community facilities across the townsite to ensure the creation of safe, attractive, friendly and climatically appropriate public spaces.

The principles that underpin this structure plan and facilitate implementation are listed below.

Urban Design Principles

- Infill around existing development will be the preferred approach and is to provide a means of consolidating and building upon the existing development initiatives and economic activities.
- Economic opportunities will be led by investment in catalyst sites within the Roebourne Centre Precinct with Padbury Street to form an intimate scale main street featuring the retail and commercial hub for the town.
- The nature of this community requires transition from North West Coastal Highway to community uses through to residential areas. This is to address the constraints of the highway, the intrusive nature of tourist traffic and to meet the needs of a disadvantaged community.
- The climatic extremes recorded in Roebourne require that climate responsiveness must be demonstrated in all new developments and in the design of linkages throughout the town including paths joining precincts and provision of access to the Harding River.

Implementation principles

- Development within this masterplan and land use pattern will be encouraged by flexibility and minimal prescriptions.
- The City will play a strong leadership role in the development of the Recreation Precinct as well as other precincts.
- Improvements in safety are to be incorporated by the application of Crime Prevention Through Environmental Design (CPTED) principles and the short term management of truck behaviour within the townsite boundaries including the location of a load assembly area.
- To preserve the amenity of the residential areas there will be a separation from the policing, health and rehabilitative functions.
- The staging plan illustrates the preferred order of development with the townsite.

1.6 The Spatial summary

The spatial analysis of the Roebourne Structure Plan is summarised in Figure 1.

Figure 1 Summary for Structure Plan

Item	Response
Area of townsite	Approximately 1,400ha
Residential	85 ha
Town Centre	14 ha
Industry	36 ha
Estimated number of new dwellings	Approximately 160 dwellings, largely within existing vacant, already zoned areas
Estimated residential site density	R20 in neighbourhood areas up to R40 in and Town Centre areas
Estimated population growth	There is a need to cater for between 1500 and 3,000 people to 2032. Estimated Population in 2013 is approximately 815
Catalyst sites	Roebourne Cultural Centre NAC Community Centre Victoria Hotel Key sites along Roe and Padbury Streets The General Store and NFYL site on Roe Street
Open space	Two playing fields, one children's play park and a pocket park in the Town Centre. Opportunity to enhance pathways and recreation along the Harding River
Storm surge and flood protection	Areas redefined by flood study. Addressed by Omnibus Amendment 35.
Natural area enhancement	Limited opportunity due to degraded habitat but enhancement opportunities around the Harding River

1.7 Structure and Content

The Structure Plan is arranged in two parts:

Part A – the Structure Plan which is non-statutory and will inform the Local Planning Strategy and the planning scheme review.

Part B – analysis of the supporting information and maps with reference list.

The supporting technical reports which have been prepared for this structure plan are available on City of Karratha website.

The purpose of this structure plan is to provide a land use framework which will:

- provide land releases in a staged approach so that appropriate infrastructure can be provided
- encourage the emerging interest in development by the Aboriginal Corporations
- allow a range of development and investment while acknowledging the fluctuations which are likely in this mining and energy dependent Shire
- highlight the statutory responses required in the new planning scheme and reflect the strategic direction provided by the Local Planning Strategy; and
- ensure coordination with subsequent layers of more detailed planning.

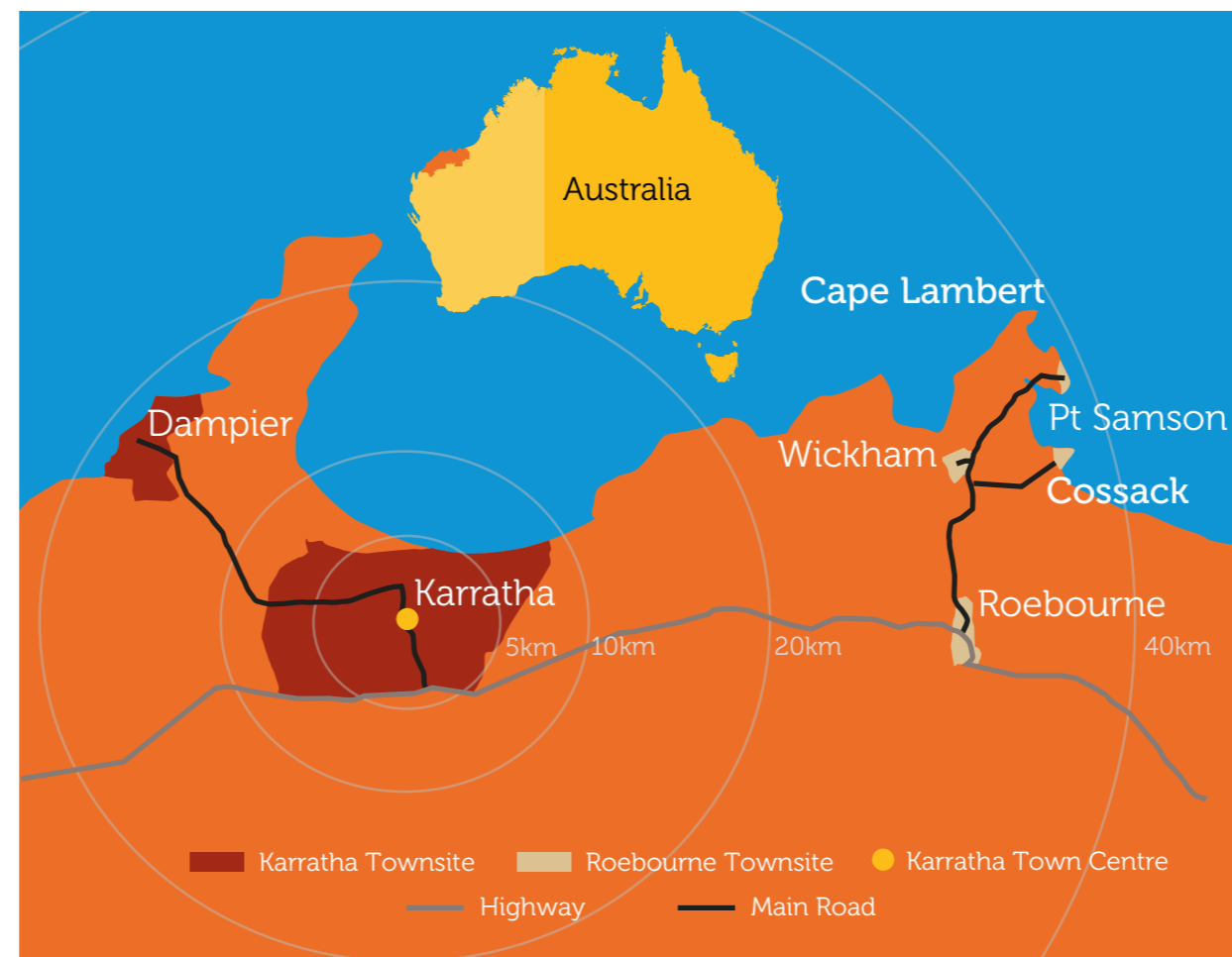
1.8 Location and Context

The town of Roebourne is situated in the Pilbara region in the northwest of Western Australia. It is located inland on the North West Coastal Highway, on the banks of the Harding River, approximately 10 km south of the nearest coastline. It is approximately 40 km east of Karratha which is the administrative and commercial centre for the City. The entire local government of City of Karratha has an area of approximately 15,000 ha and the official townsite boundaries of Roebourne include approximately 1,400 ha.

Roebourne is the oldest town in the North West and as early as 1860's was the service centre for a developing pastoral industry. Many significant heritage listed buildings remain and several are still in use.

The climate is arid and semi-arid which is typical of the Pilbara region and is characterised by hot summers with irregular rainfall and milder, dry winters. Average annual rainfall is 312 mm. The north coast of the Pilbara region experiences occasional tropical cyclones which can result in significant damage and produce a highly variable rainfall.

Figure 1 Location map



1.9 Site Analysis

The townsite is bounded to the east by the Harding River which is subject to infrequent flooding. This infrequent flooding imposes serious impacts on the town and is a significant constraint to development. (See Figure 3).

Steep ridge lines west of the Roebourne townsite, include the highest point, Mount Welcome (approximately 70M AHD) and this is a dominant land feature. Other than a second, smaller hill to the north and peaking at approximately 38 m AHD, the balance of the townsite is generally flat with an elevation of 10 -20 m AHD.

The soils in Roebourne are broadly described as a combination of flood plain alluvial sediments of sands, clay and igneous rock. There is a potential for Gilgai soils and no known risk of acid sulphate soils (within 3m of natural surface). There is a moderate to low risk of acid sulphate soils along the banks of the Harding River and its tributaries.

There is an historic association with the transportation of blue asbestos through Roebourne, however only insignificant amounts have been identified.

The constraints and opportunities are fully discussed and defined in Part B and summarised in the images below.

1.10 Strategy Population Targets and Capacity for Growth

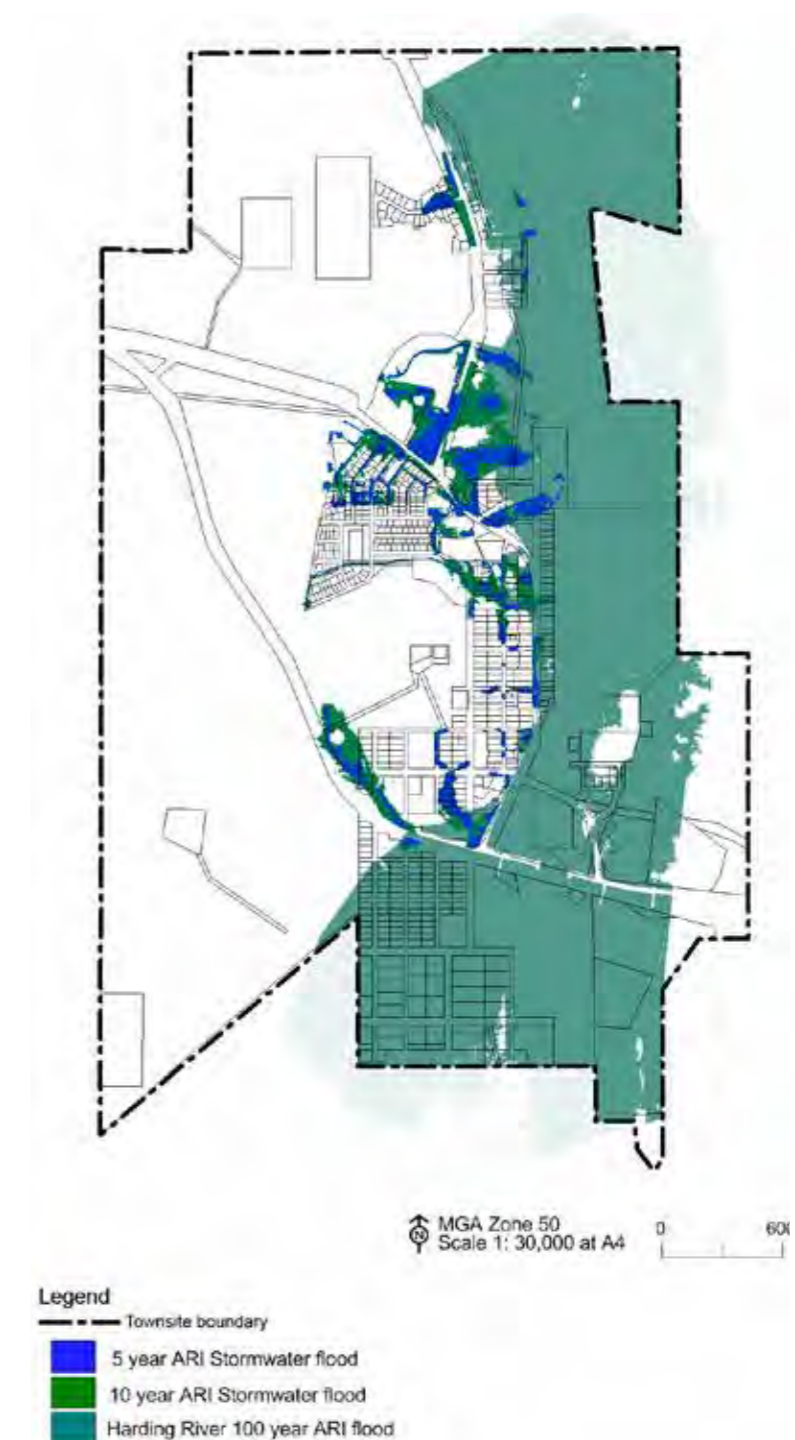
In accordance with the Local Planning Strategy the anticipated population out to 2031 for Roebourne is forecast between to 1,500(Low growth assumptions) and (3,000 high growth assumptions). Each of the population forecasts is based on the assumption that there will be some economic diversification. With current and likely low growth scenarios the total population within Roebourne is planned for 1,500 or an additional population of 685.

- Within the existing townsite and serviced there is the potential for an additional 305 dwellings on both existing vacant (161) and under developed sites (144)
- Using an average household occupancy of 3.5 people per dwelling would indicate a capacity for an additional 1067 people (or current Roebourne pattern of 3.2 people/dwelling an additional 990 people)
- The forecast population growth is for another 685 people, therefore it is unlikely that there will be a demand for additional residential land in the next 20 years.

Assuming all new dwellings were built on vacant land and densities remained low, 161 lots are available and could accommodate between 563 and 515 additional people. This suggests it would still be many years before any significant demand for residential land was evident in Roebourne.

In the short to medium, term a staged approach is planned for the release of any additional residential land in Roebourne and on the basis of expressed demand for this development.

Figure 2 Topography and flooding



2.0 Structure Plan

This structure plan has been developed over an extensive consultation period and is underpinned by extensive technical studies. This plan will guide development and provide advice on:

- land use planning, including the required statutory responses within the new planning scheme
- specific policy and precinct plan development required but beyond the scope of this plan
- infrastructure development and coordination
- timely release of any further land and subdivision.

A staged approach has been adopted for this structure plan which allows development to respond to residential and commercial demand pressures over time.

The precincts have been delineated on the basis of:

- the predominant urban form and land use which requires more detailed direction for planning and development
- proposed phasing
- specific and detailed planning and design principles.



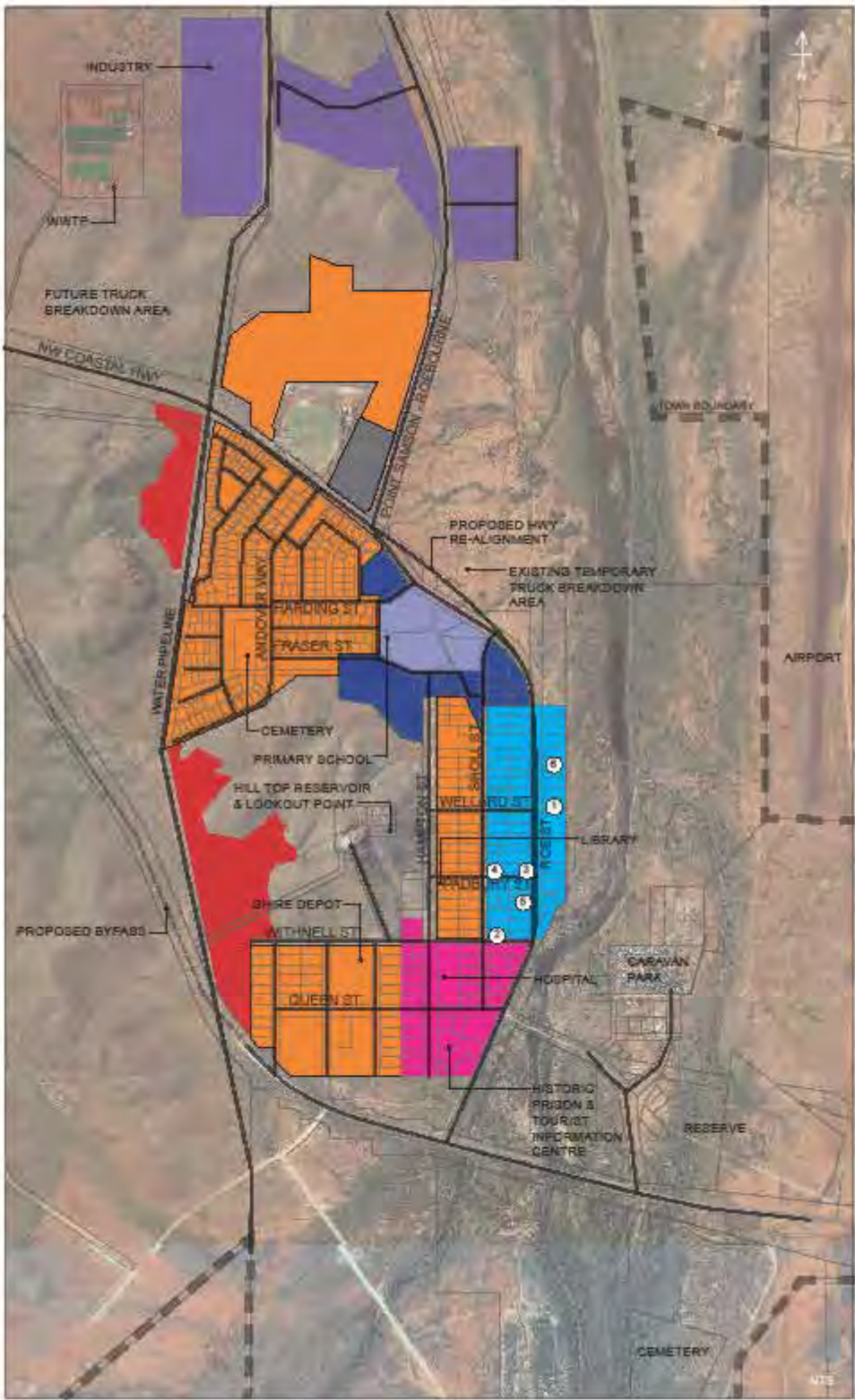
Seven precincts have been defined within this structure plan:

1. Heritage Precinct
2. Roebourne Centre Precinct
3. Residential Precincts
4. Community and Education Precinct
5. Industry Precinct
6. Commercial Precinct
7. Future Urban

It is proposed that the planning and design requirements for the following areas will be addressed through the planning scheme rather than a precinct plan.

1. Tourist accommodation – camping ground
2. Conservation, recreation and drainage areas
3. Other community
4. Open space.

ROEBOURNE TOWNSHIP STRUCTURE PLAN & PRECINCTS



PRECINCT LEGEND

- ROEBOURNE TOWN CENTRE
- HERITAGE
- RESIDENTIAL
- EDUCATION & COMMUNITY
- EDUCATION & COMMUNITY SUB-PRECINCT: RECREATION
- INDUSTRY
- COMMERCIAL
- FUTURE URBAN

- CATALYST SITES:**
- ① ROEBOURNE CULTURAL CENTRE
 - ② NAC COMMUNITY CENTRE (PROPOSED)
 - ③ VICTORIA HOTEL
 - ④ OTHER SITES IN PADBURY ST
 - ⑤ GENERAL STORE
 - ⑥ YAANDINA CENTRE - (PROPOSED MAJOR PROJECT)
- These sites are the focus for the next wave of economic development.

2.1 Heritage Precinct

Purpose

It is intended that this historic part of town will be developed as a tourist-friendly place focusing on history and art places, cafés and restaurants, where people can sit down and relax indoors or in the shade outdoors.

Location and boundaries

This precinct located at the southern edge of town forms an important vista and entry from the southern approach. Government architect George Temple Poole was the designer of several buildings including the police, gaol and courthouse district (1886), the Victorian Classical-style Post Office (1887), Hospital (1888) and the old schoolhouse (1892).

Dominant land uses

The dominant land uses will be both tourism and administrative principally located in heritage buildings. The existing administrative functions within heritage buildings are to continue.

Roebourne's historic buildings will be respected and cared for. New buildings in Roebourne will be designed to sit comfortably alongside historic buildings, not duplicating old designs, but complementing them and most importantly, creating an easy to live in and attractive urban environment for living and working.

Staging

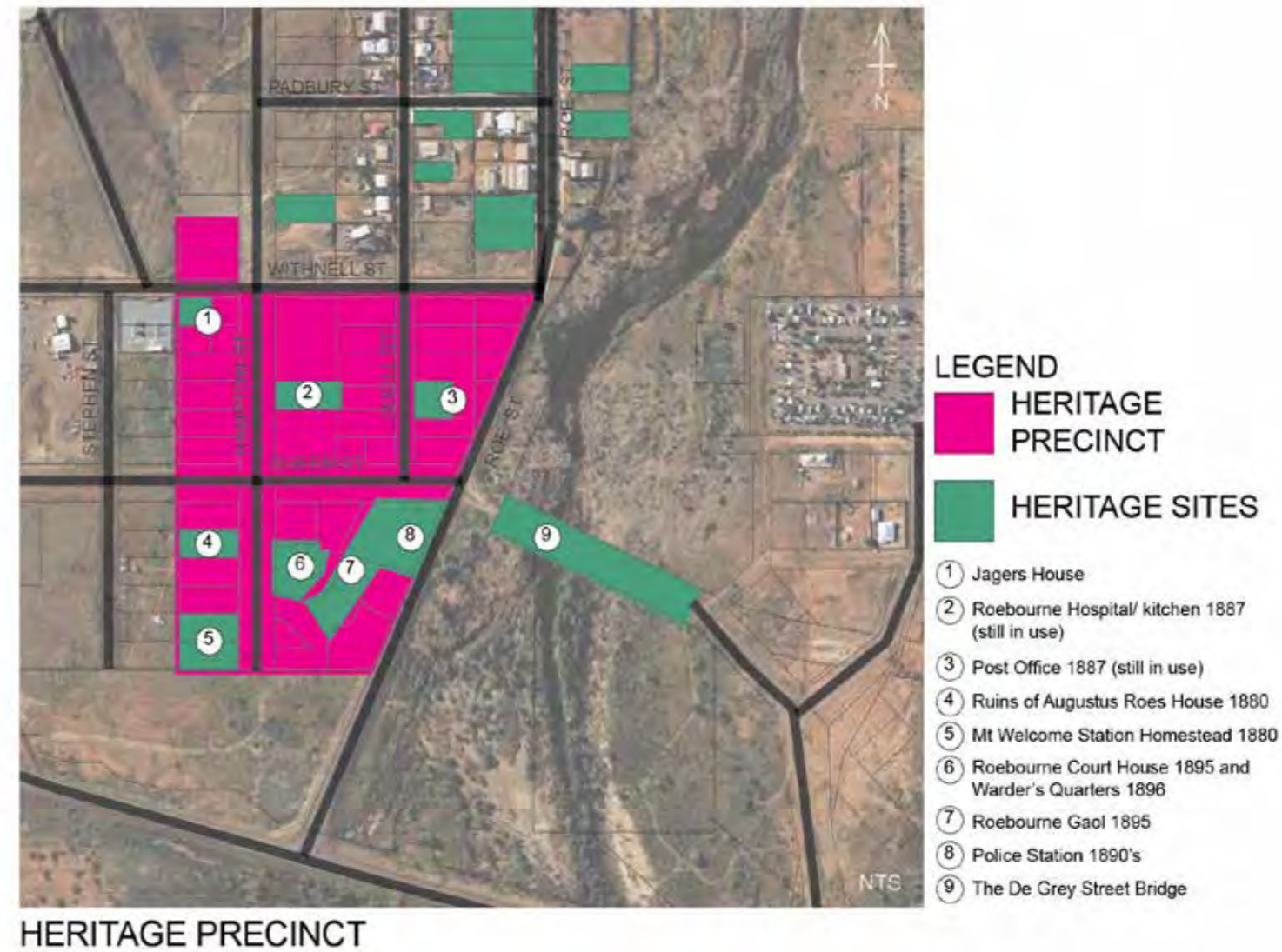
The only changes anticipated in this precinct are the repairs and restorations required as a result of cyclone Christine, January 2014.

Statutory response

Ensure that each of the Management Category A and B buildings in this precinct are included on the Heritage List which forms part of the new planning scheme.

A development plan will be required prior to any development being approved on this site.

Figure 3 Heritage Precinct



2.2 Roebourne Centre Precinct

Purpose

This precinct forms the principal retail, commercial and community services hub for Roebourne. This precinct is to remain as the key retail and economic focus of the Roebourne township. Retail, commercial office and community services will not be supported in locations outside this centre.

The key cultural, community activity and retail functions will be located within this precinct and an interface with the tourism industry will be clearly evident.

Padbury Street is to form an intimate scale main street featuring the retail and commercial hub for the town.

Community development functions, rehabilitation and welfare activities will be encouraged to re-locate along Sholl Street.

The key re-development opportunities which will encourage a stronger economy and community are shown below and described as the Catalyst sites. This is to be the focus of retail activities and associated commercial offices.

Catalyst sites

- *Roebourne Cultural Centre* – a major cultural and public cultural performance areas provide the first stage with later stages to follow. This will form the anchor for public cultural activities and tourist attraction in Roe Street.
- *NAC Community Centre* proposed for corner of Withnell and Sholl streets – this is the proposed community focus for the Roebourne community. Other community support services are to be located adjacent to this catalyst site and along Sholl Street. Community support services will be discouraged from locating in Roe Street.
- *Victoria Hotel* – at the corner of Roe and Padbury Streets has the potential to significantly change the commercial activity in this precinct. Developments to three stories may be considered and a sympathetic relationship to the existing built form will be required. This is to be the most intensively developed site in Roebourne and will provide extensive employment and economic opportunities. Tourist accommodation and a full range of hotel functions are anticipated in this location.
- Other sites in Padbury Street include the development of a main street with commercial, office and retail functions. Mixed use developments will be encouraged to maintain an activated street level while providing office space on first levels and above.
- *General Store* – this existing retail outlet provides the nucleus of retail functions in Roebourne and must be protected. The building has little relationship to Roe Street and the addition of shuttered windows which allow visual access would add significantly to the street activity.
- *Yaandina Centre* – also proposed for Roe Street.

Location and boundaries

This precinct extends in a northerly direction along the heavy trafficked interface of the North West Coastal Highway/Roe Street the intersection with Withnell Street and continuing to the Community and Education precinct. Both sides of Sholl Street form the western boundary of the precinct and the development of the town.

Dominant land uses and infrastructure priorities

There is to be a transition from the intense public and tourist activity along Roe Street through to the more community focused Sholl Street.

The major linkage will be along laneways and the side streets of Padbury and Wellard.

Roe, Padbury and Sholl Streets form the dominant spines of activity in this precinct.

Staging

The staging will be in response to projects put forward with a preference for development to focus on the catalyst sites.

It is noted that the Roebourne Cultural Centre is well advanced and it is desired that other complementary developments on adjacent sites will follow in a reasonable timeframe.

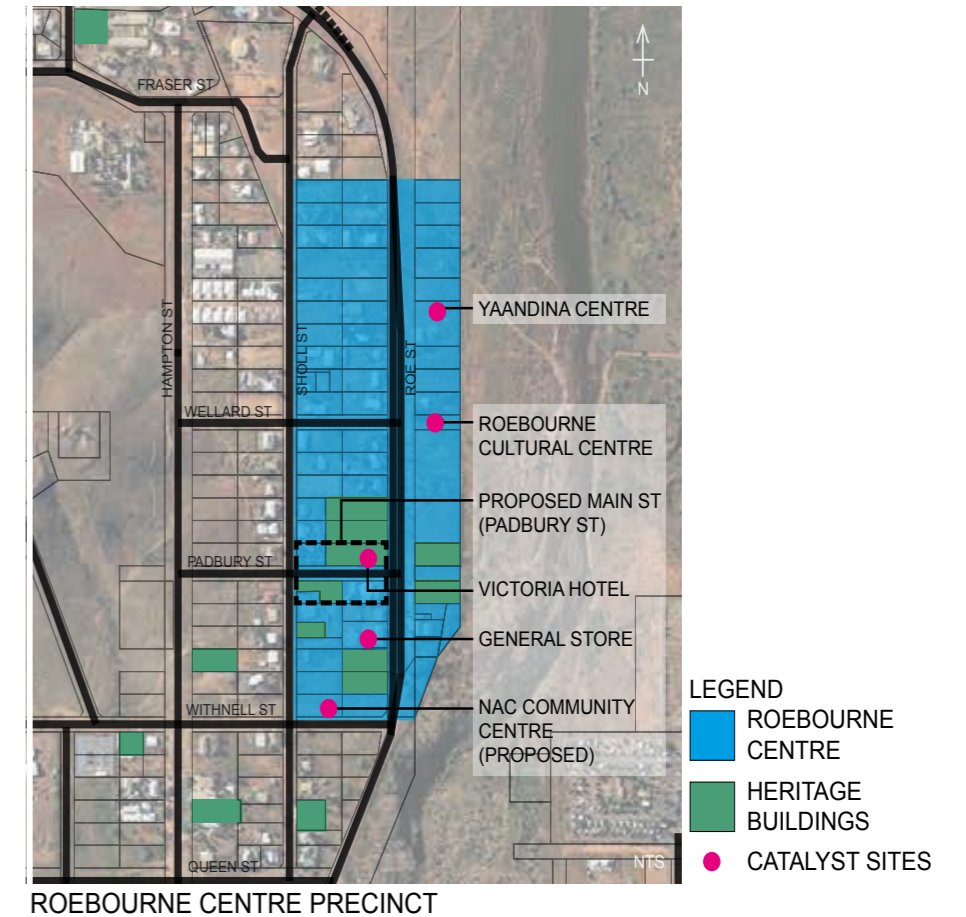
Other major development initiatives from Aboriginal Corporations and the minerals and energy sectors are strongly encouraged as early as possible. The early development of office space is strongly encouraged as demand has been identified.

Statutory response

Preparation of a precinct plan is required.

A Roebourne Centre development policy is to be prepared which provides guidance on the preservation of historic buildings in this precinct and how new development should complement this important heritage streetscape. This guidance would include description of the Roebourne and Padbury main street vernacular which includes local stone and a colour palette of federation creams and reds.

Figure 4 Roebourne Centre Precinct



2.3 Residential Precincts

Purpose

The purpose of this precinct is to encourage a gradual improvement in the amenity and functioning of the residential areas. Improving the safety of dwellings, community locations and pathways is central to the purpose of this precinct. As re-development opportunities arise the preferred response is neighbourhoods characterised by a response to the cultural, climatic and environmental conditions and to provide for social wellbeing, community identity, liveability and safety.

As noted in the staging plan the first priority for residential development and re-development is the vacant sites within the existing residential areas to the west and south of the North West Coastal Highway.

Location and boundaries

Residential precincts are in several locations within the townsite area – see Precinct map. The Ngarluma Aboriginal Sustainable Housing (NASH) project on the northern side of the North West Coast Highway is also included as a residential precinct (see Figure 7).

Dominant Land uses and infrastructure priorities

The residential areas to the north will have their close relationship to the school and recreation precinct reinforced through recognised pathways. These pathways will be gradually re-developed incorporating CPTED principles and suitable vegetation.

Infill development on land within existing residential precincts is the preferred priority and the construction of housing on these lots, together with enabling infrastructure such as parks, shaded pathways and linkages and appropriate lighting, should aim to meet local needs.

Reference to the outcomes of the “Healthy Homes” workshops which were held in Roebourne in June 2010, is strongly recommended for residential infill development.

Roebourne Townsite Stormwater and Flood Management Plan and the TPS No. 8 allows for the City to exercise its discretion of approvals as well as providing direction on floor levels for future development.

No commercial or retail development will be acceptable in this precinct.

Some rationalisation and re-instatement of accessways between the school and the residential areas to the west and north will be considered.

Staging

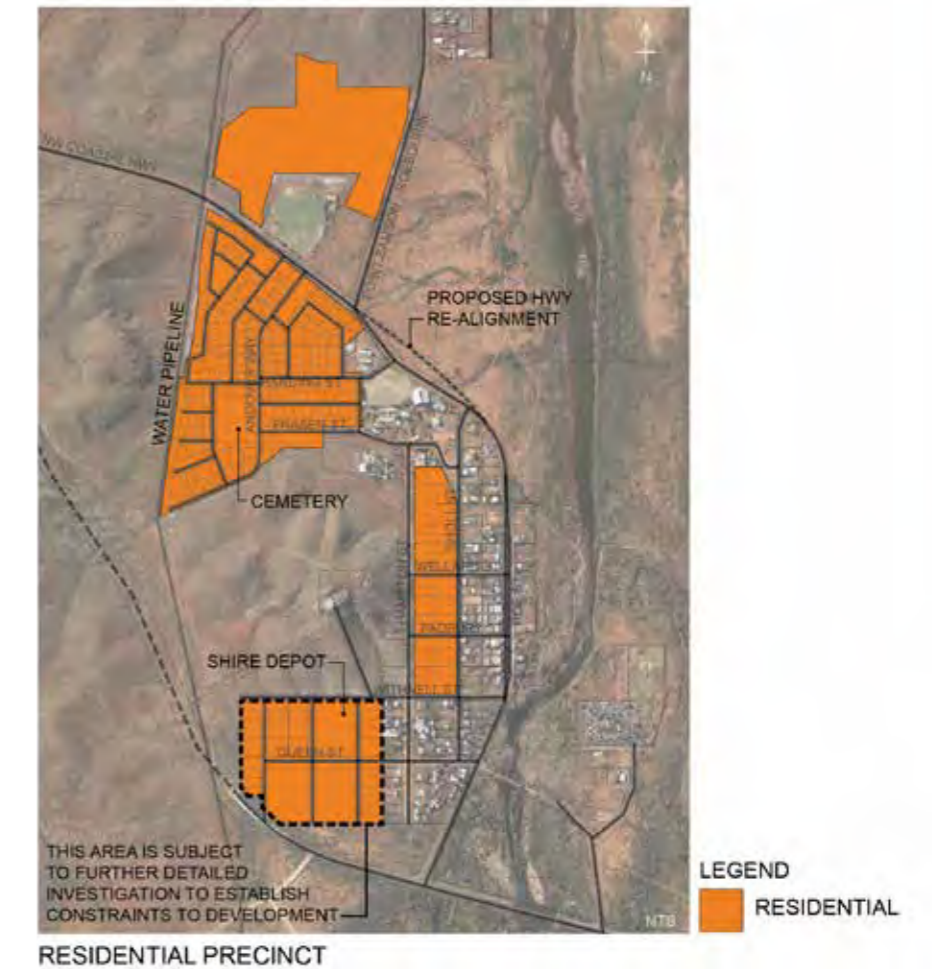
The development of lots within existing residential areas will take priority over areas which require rezoning and creation of new areas and additional infrastructure.

It is preferred that residential development in the residential area across the North West Coastal Highway is taken up after the infill opportunities in the existing residential areas have been exhausted.

Statutory response

Develop Roebourne residential policy based on outcomes of ‘Healthy Homes workshops’.

Figure 5 Residential precincts



2.4 Community and Education precinct

Purpose

The Community and Education Precinct will provide for Roebourne's leisure and educational services which enhance opportunities to foster life and artistic skills, encouraging traditional, contemporary and cultural activities. The precinct is centred on the school and key recreational facilities in town.

The Recreation Sub-precinct is included within this precinct.

Location and boundaries

The precinct is bounded on the west by the primary school and by the Highway to the north-east (Figure 8). Currently the facilities within this area include the primary school and high school; the PCYC hall; the swimming pool; basketball courts; Yaandina Youth Centre; and the TAFE. There are also residential lots, health services and a church within the precinct.

The Recreation Sub-precinct is the land south of North West Coastal Highway and adjacent to the Primary School.

Land uses and infrastructure initiatives

After extensive and highly targeted consultation the City is preparing detailed development plans. In addition to the planning and design principles discussed above the other issues for this precinct are;

- Realignment of the North West Coastal Highway to provide additional space for the planned extension of educational facilities on a single site, in order to ensure optimal access, connectivity and safety for pedestrians
- Creation of a pleasant micro-climate through the incorporation of shade, vegetation, seating and visibility
- Incorporation of active and passive recreational activities for all ages
- Building a sense of ownership within the community for the centre and its facilities that dissuades vandalism and unsavoury activities.

The Recreation Sub-precinct will feature sports and leisure amenities with the aquatic centre, kiosk, community outdoor kitchens, meandering interactive skatescape, community hall and meeting rooms.

Staging

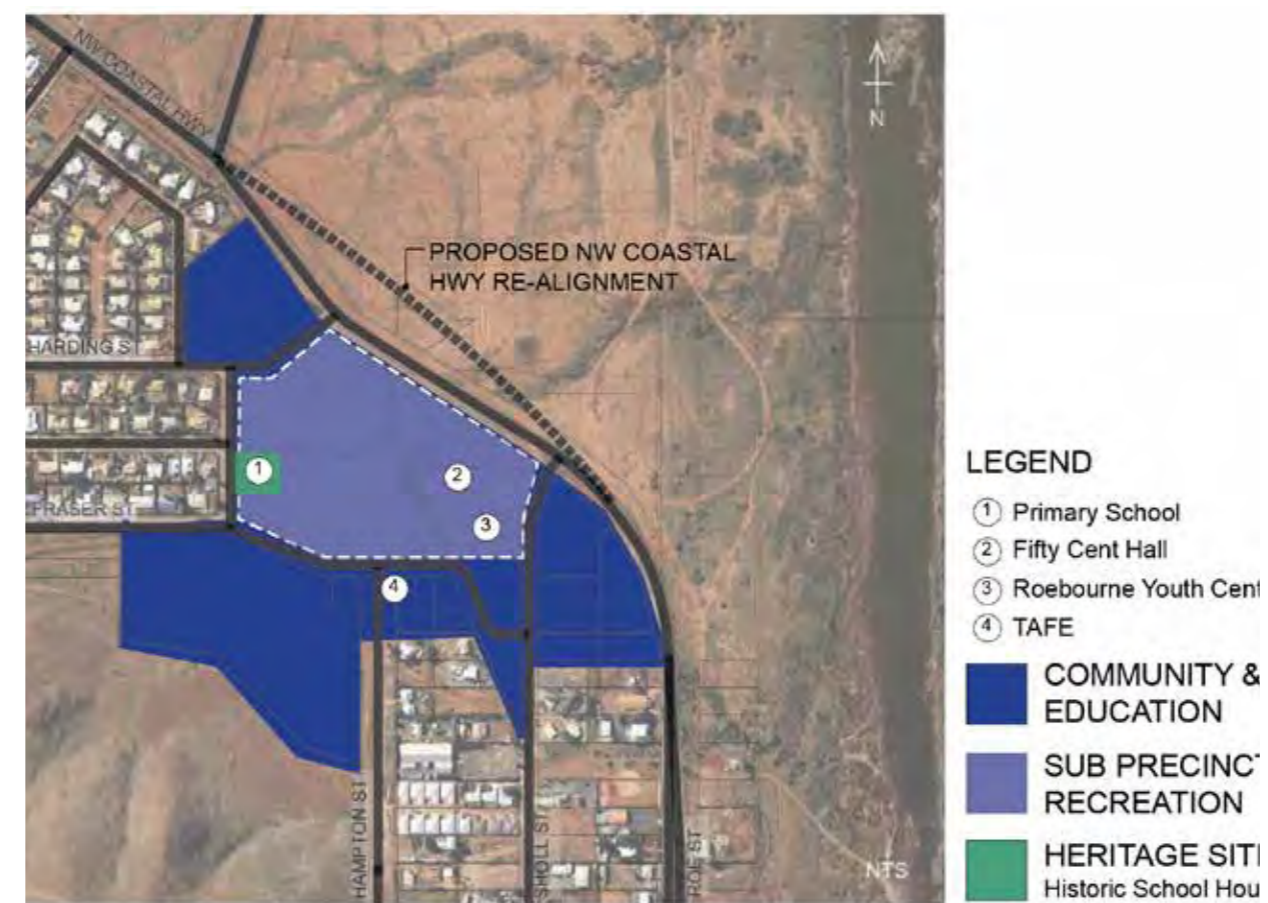
The staging within this precinct will be dependent on sourcing financial support and this will be led by the City through the Community Services directorate.

Statutory response

A development plan is required for the entire precinct and the requirements for a development plan include;

- A staged logical development and improvement of the built form and open space.
- Address the following movement network issues:
 - disjointed road network with streets connecting through convoluted junctions;
 - pedestrian flow is also interrupted by the unnecessary usage of fencing which extenuates the uneasy lot configuration and wasted areas; and
 - The large number of vacant lots, 'leftover' spaces and expansive carparks in this precinct does not encourage positive spaces.
- Clarification of the relationship with the Recreation Sub-precinct to ensure there is no duplication and the phased development programme makes sense within development of the overall precinct
- Improvements to the town's drainage system to reduce flood risk and address the findings of the Roebourne Townsite Stormwater and Flood Management Plan.

Figure 6 Community and education precinct



2.5 Commercial Precinct

The Commercial Precinct is situated on the corner of Cleaverville Road (North West Coastal Highway) and Point Samson – Roebourne Road and is proposed by the Ngarluma and Yindjibarndi Foundation Ltd.

Land uses and infrastructure

The development of this precinct will be constrained to light industrial uses and associated commercial uses such as motor vehicle accessories, tyre store or car wash services.

Development which provides employment opportunities across a range of activities which can be described as commercial and light industry and which do not compete with the existing retail centre is strongly encouraged.

Transient workforce accommodation will not be acceptable in this location.

Retail uses will not be allowed on this site and this is to assist with the re-vitalisation of the Roebourne Central Precinct.

Activities within this precinct which should not distract from the retail focus in the Roebourne Centre Precinct.

Staging

Development of employment opportunities from a range of industries will be encouraged. Retail is not anticipated at any stage.

Statutory response

Preparation of a detailed precinct plan to accompany any development application for this precinct.

Prior to any sub-division or development a detailed area plan must be adopted by Council.

2.6 Future Urban Precinct

Purpose

These areas appear to be developable land for predominantly residential purposes and they appear to be unconstrained by the Harding River floodplain, surface water flow paths or any significant heritage or environmental values. The purpose is to preserve this potentially developable land until there is sufficient demand to justify releasing more residential land. It must be established that any absetos in this area can be managed and treated prior to any development activity.

Location and boundaries

Located to the west of the existing residential areas, includes an extension around “the back” of Mount Welcome, as well as connecting with the northern residential area on the west of the water pipeline (DA20), and a small portion behind the school (Figure 9).

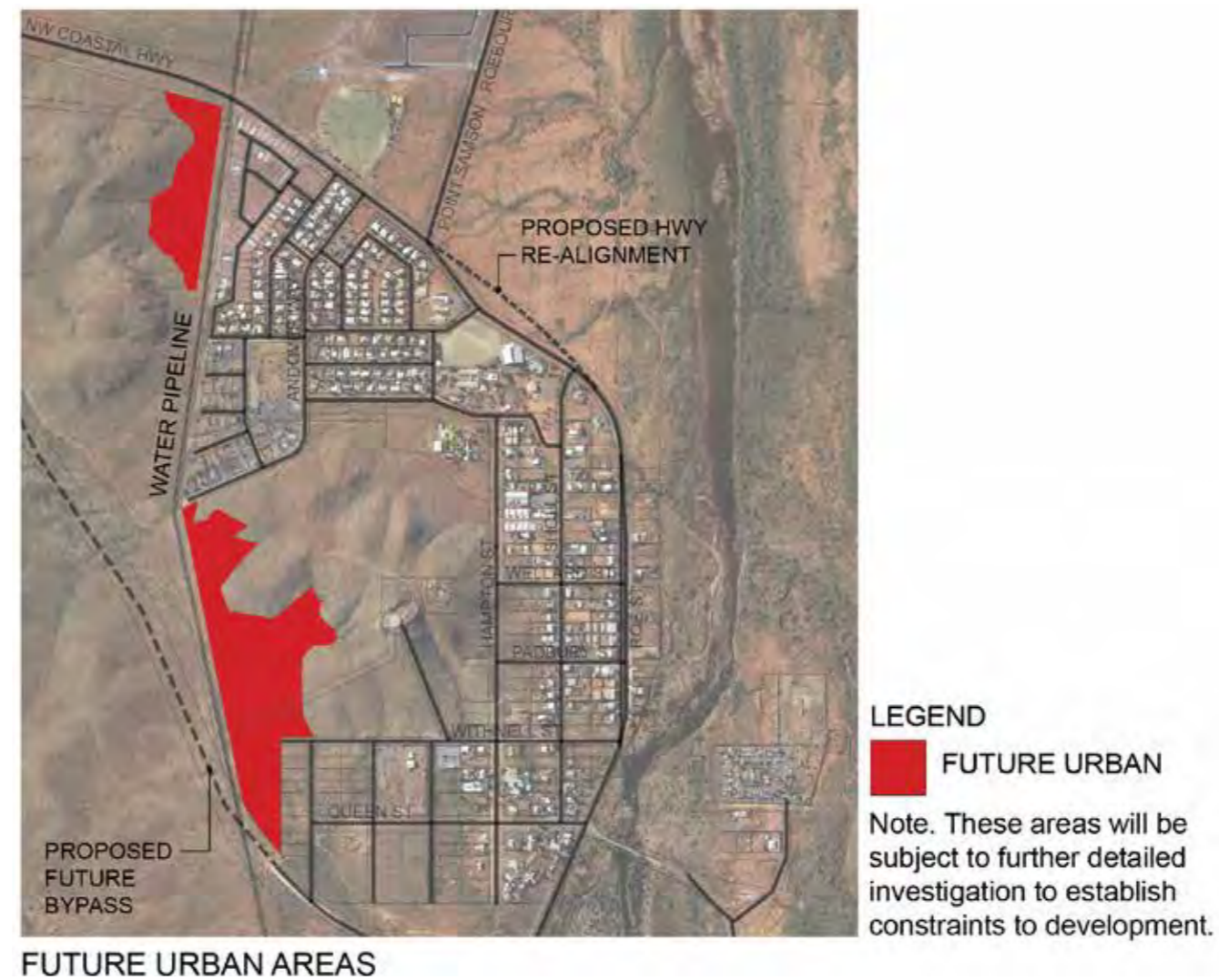
This precinct is the location for the next residential activity when infill is generally completed. This site is only partly considered appropriate for future development, largely due to the steepness of the terrain in a large proportion of this land.

Land uses and infrastructure initiatives

This land is to be preserved as future urban and predominantly residential uses.

Native Title has been recognised over this land. Any future development would need to be supported by an appropriate Native Title agreement with the land’s traditional owners, the Ngarluma people.

Figure 9 Future urban precinct



Staging

This precinct is the location for the next residential activity when infill is generally completed.

Preparation of a precinct plan for this area is viewed as a priority to ensure that residential land will be available for development in this preferred and relatively unconstrained area.

Statutory response

Any development in DA20 will, require the preparation of a development plan prior to subdivision and development.

Policy direction within new planning scheme will include this area the preferred area residential development once the infill sites have been developed.

2.7 Industry Precinct

Purpose

This precinct is to remain as a location for industries associated with serving the mining industry as well as mechanical and other light industries related to the residential needs of Roebourne.

Location and boundaries

The boundaries of this precinct coincide with the current Mixed Business zone and are shown below in the precinct plan.

Dominant land uses and access

Good access to Point Samson-Roebourne Road will be maintained and a buffer to residential areas will be enforced.

Logistics and other transport related industries will be encouraged in this area.

No further worker camps or Transient Workforce Accommodation will be allowed in this precinct. No further residential development is to be allowed in this precinct.

The expansion in this precinct will be towards the west in Jager Street and Hall St area will not expand beyond its current boundaries. Industries which can respond to the opportunities provided by the Waste Water Treatment Plant will be strongly encouraged, particularly within the 500m buffer area.

Staging

Developments which provide employment opportunities within light industries will be encouraged.

Transient workforce accommodation is not envisaged at any time in this precinct.

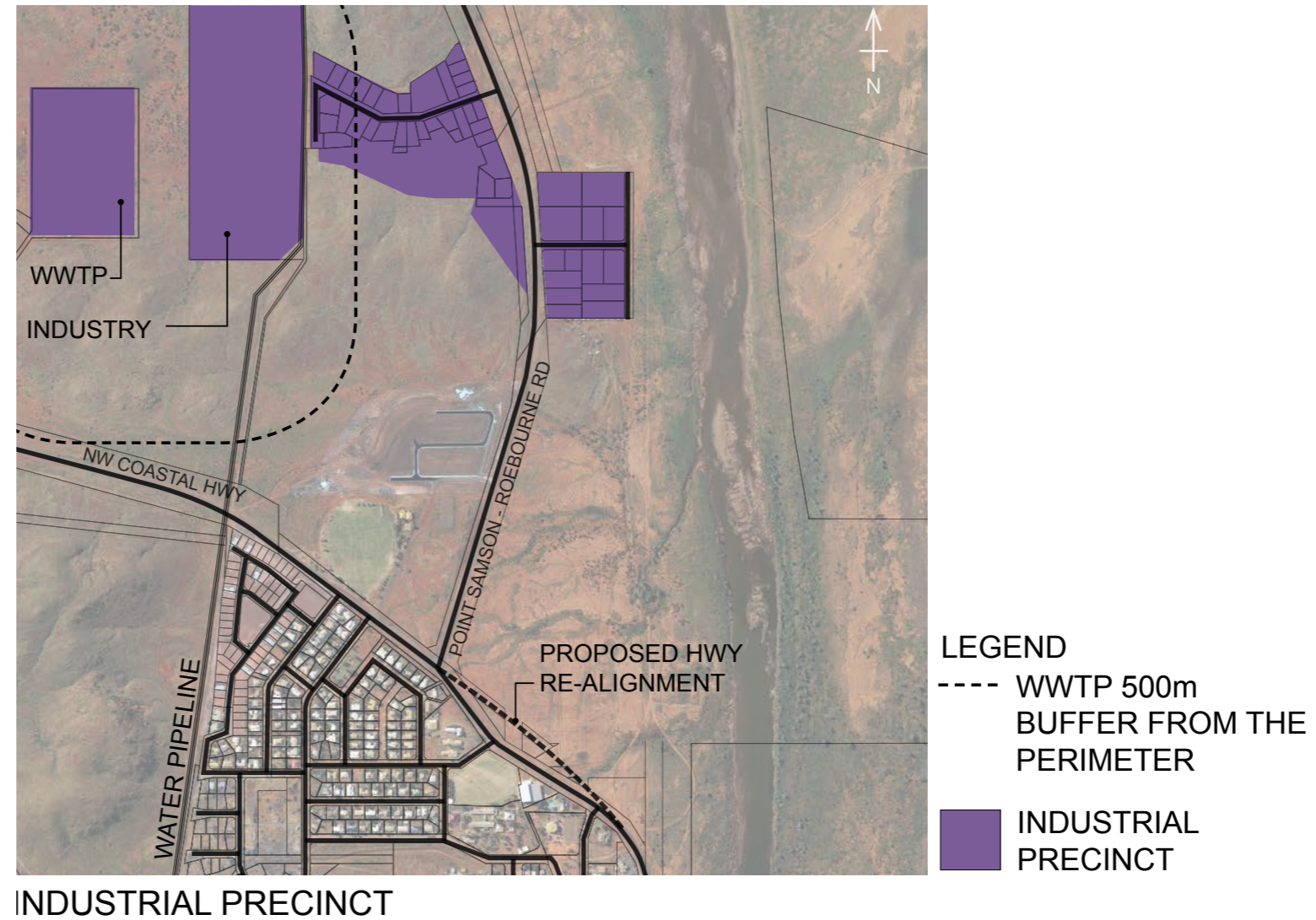
Statutory response

This significant change will be reflected in the Local Planning Strategy and into effect in the next planning scheme. All existing use rights will continue, and land uses which no longer conform with the intent of this precinct will be required to operate continuously if they are to remain.

A development plan will be required for any consideration of a subdivision.

A vegetation and fauna assessment will be required of the land within the wastewater treatment plant buffer as this was excluded from the 2012 survey.

Figure 7 Industry Precinct – to replace Mixed business



2.8 Other Areas

Other areas within the townsite which will be addressed through the planning scheme include the following.

Tourist precinct

Purpose

The purpose of this precinct is to preserve the only tourist accommodation in Roebourne.

Location and boundaries

The site is constrained, as it is within the floodplain of the Harding River and any future development of adjacent land is at significant risk of inundation and damage as a result of riverine flooding. In addition to on site flooding there is the strong potential of isolation during overtopping or failure of the North West Coastal Highway Bridge.

Land uses and infrastructure

To address the need to preserve this key to tourism in Roebourne while recognising the risks inherent in this site, all development will be temporary and re-locatable. The preferred urban form is restricted a caravan park.

Staging

Development proposals which provide additional low key tourist accommodation will be encouraged. Emergency Management Planning should identify specific actions to facilitate safe evacuation for occupants of the existing development in this area and this will be regarded as an essential component of any development proposal.

Statutory response

A development plan with an emergency management plan will be required prior to the approval of any development within this precinct.

No other development is to be allowed on this site.

Conservation, recreation and drainage

Purpose

The purpose of this area is to ensure that the conservation and recreation values are protected and the drainage functions are allowed to operate correctly. This area will conform to the requirements of the scheme and the purpose of this area is to protect the natural landscape values of Mount Welcome and to provide for the adequate management of stormwaters and flooding from the Harding River.

Location and boundaries

The scheme currently identifies a substantial proportion of the Roebourne townsite for Conservation, Recreation and Natural Landscapes, as well as for Parks, Recreation and Drainage

Staging

No development of these areas is anticipated at any stage.

All future development should have consideration of the Roebourne Townsite Stormwater and Flood Management Plan.

Statutory response

None required – will be addressed through Planning Scheme zoning

Other community

The land allocated for public purposes and community facilities is noted on the Structure plan. This includes a number of individual lots throughout the townsite. The Public Purpose reserves recognised by the scheme within or in proximity to the townsite include:

- Airport
- Cemetery
- Community
- Energy
- Education
- Health
- Telecommunications
- Water and drainage
- Waste disposal and treatment.

Many of the identified community facilities are contained in defined precincts. These include schools, the TAFE and the hospital, which form key components of each precinct. Roebourne cemetery is located with the existing residential area and Two Mile Cemetery is south of the Northwest Coastal Highway. These cemeteries are part of the town's heritage and are important in respecting past peoples. Some action is required to improve their level of care and maintenance.

The airport is located immediately east of the townsite area and the water and drainage areas are contained within the conservation, recreation and drainage areas as described below.

No changes are proposed to the identified public purposes in the Scheme.

Open space

Purpose

Roebourne sits in a natural environment dominated by the Harding River and the surrounding hills and plains. The development of the open space system will help the town over time to enhance the natural.

Location and boundaries

There is currently limited provision of open space within the built-up areas of the Roebourne townsite. Recreation areas consist of two ovals, a children's play park and a pocket park in the Town Centre. Other areas of open space have been designated (for example. 39 Sholl Street and 722 Roe Street); however many of these serve as a drainage reserves.

Land uses and infrastructure priorities

A programme of gradual enhancement of the open space and recreational values of the Harding River, including provision of seating, shade and other facilities will be undertaken by the Shire, particularly when associated with specific developments.

The old De Grey St Bridge provides many recreational and open space opportunities and will stay as a feature for use by the local community.

Enhancement of the existing network of pathways around the townsite will provide an opportunity to improve the connectivity of destinations including open spaces, and provide improved views to the river and mountain.

Staging

No development of these areas is anticipated at any stage.

A more formal pathway network is to be developed in partnership with the community, which should also be involved in its implementation. Consideration should be given to the provision of shade, solar lighting and signage. The staging of this infrastructure will depend on the partnership which can be developed.

All future development should have consideration of the Roebourne Townsite Stormwater and Flood Management Plan.

Statutory response

None required – this will be addressed through Planning Scheme zoning.

3.0 Movement Network – Linkages and Connections

The movement network is a critical component of the Roebourne structure plan. Although there are significant vehicular movements through the town, there is a need to focus on the provision of a safe and connected environment for pedestrians. This will require the recognition of a number of pathways through the town, which provide linkages between residential areas, services, the town centre and the river. These pathways should be formalised where possible, incorporating shade, lighting, seating and signage (Figure 13).

It is also necessary to ensure that vehicular access to arterial roads does not compromise their safe operation or desired transport function, balancing regional traffic requirements with local traffic access needs. In order to achieve this balance, the following conclusions and recommendations from the Roebourne town centre structure plan traffic report (Riley Consulting, 2013) should be considered.

The existing intersection of the North West Coastal Highway / Point Samson-Roebourne Road is constructed to a low standard. The minimum level of upgrading is recommended for this intersection to provide a left turn slip on North West Coastal Highway. Full channelisation to Austroads standards is highly desirable.

The existing intersection of North West Coastal Highway/Andover Way is constructed as a four-way priority intersection. With future development to the north using this intersection, the two minor approaches must be offset by at least 20 m to ensure safe operation.

North West Coastal Highway west of Point Samson-Roebourne Road is carrying a high level of freight and daily traffic volumes are currently over 4,200 vehicles per day (vpd). A 6.0 m wide median will provide appropriate shelter for turning traffic and will allow safe refuge for pedestrians.

The full development of 1,500 dwellings in Roebourne will result in traffic volumes on the North West Coastal Highway and Point Samson-Roebourne Road exceeding acceptable daily traffic volumes. Indicatively these roads would require the provision of a four-lane divided road; however, such major roads within the town are highly undesirable and will erode the urban environment.

Existing intersections to the North West Coastal Highway and Point Samson-Roebourne Road should be provided with a left turn and right turn pocket to provide a safer environment for turning traffic. Such protection will become more important as traffic increases on these two major roads.

Traffic planning does not raise a need for new roads within the town environment. All affected existing roads will continue to operate with daily flows appropriate to the road classification.

There is also a need to ensure loading/unloading facilities and associated vehicle manoeuvring areas (breakdown or load assembly areas) are provided in an appropriate location and are designed so as to optimise public safety and convenience. It is recommended that a heavy vehicle breakdown area is established as part of normalising a safe and inviting town environment, possibly at the junction of the heavy vehicle diversion route to the west of town.

In addition, as highlighted earlier, consideration should be given to the realignment of the North West Coastal Highway around the Education and Recreation Precinct. It is understood that there are plans to expand the existing education facilities and that consideration is being given to the location of these facilities on the other side of the North West Coastal Highway.

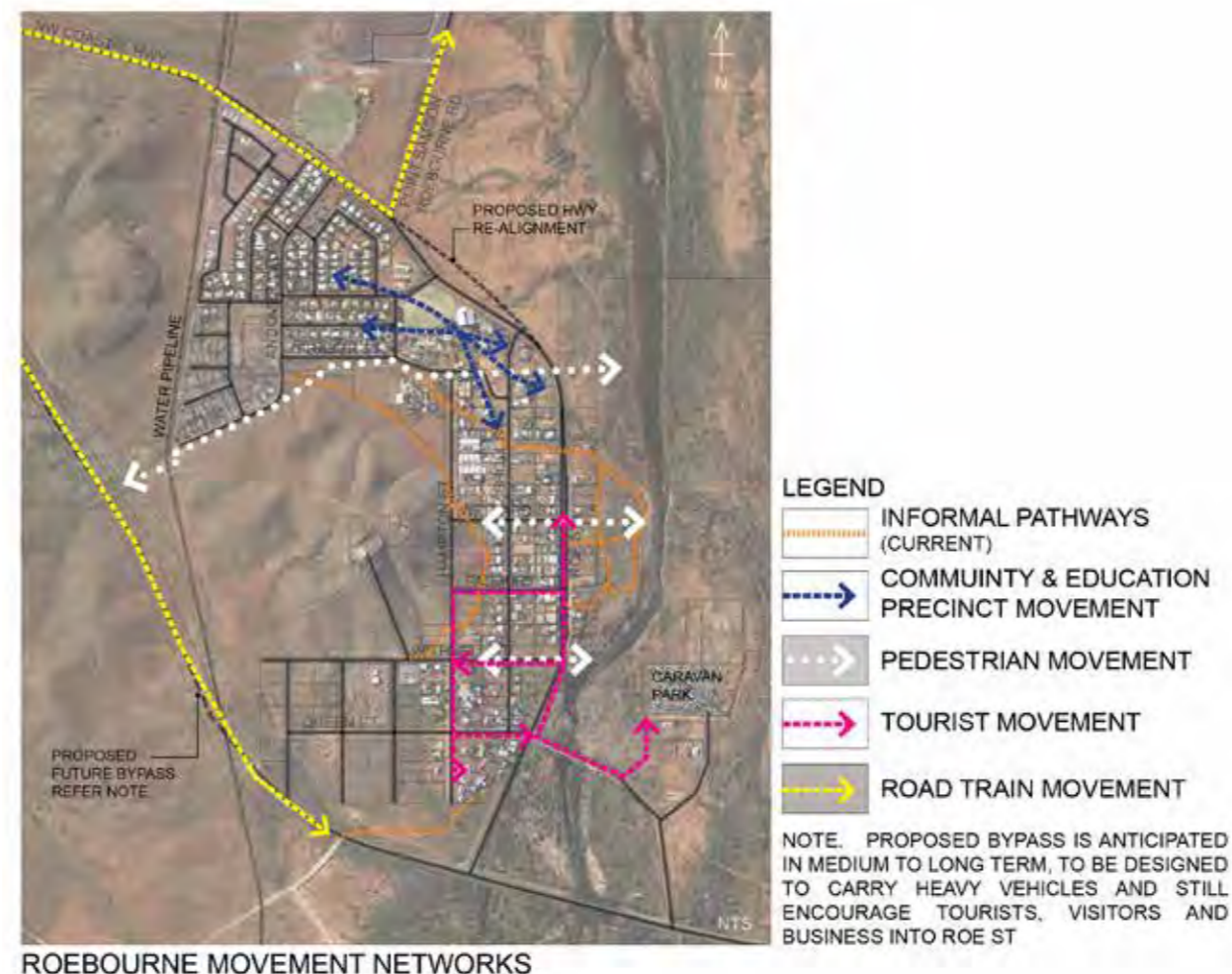
This proposal would result in sub-optimal outcomes in terms of access and integration of the new area, and would also pose significant safety issues for children and other users needing to cross this very busy road.

In response to health and safety concerns raised by the community the following actions to improve movement networks in Roebourne should be considered as priorities:

- address the dust issue around the current informal heavy vehicle or load assembly area (see Figure 13.) This area needs compacting, sealing and some beautification treatment.
- provide an area for expansion of the school the North West Coastal Highway should be re-aligned (see Figure 13).

Discussions should begin with Department of Transport to ensure that when the Cape Anketell project proceeds plans can be quickly put in place to facilitate a "truck only by-pass". To maintain the existing levels of passing traffic it is recommended that no direction or destination signs are erected.

Figure 8 Movement network



4.0 Servicing and infrastructure

4.1 Power Supply

Power for Roebourne is provided by Horizon Power, as part of their Northwest Interconnected System. The current capacity of the system is stretched and it is recognised that it will not be sufficient to cater for the projected growth in the Pilbara region. It is noted that some additional power generation may be available as a result of the Chevron Wheatstone LNG project.

Although capacity issues are identified at the regional scale, it is not anticipated that this will impact on the ability to deliver new development opportunities in the town.

4.2 Water Supply Infrastructure

The Water Corporation is the water supply service provider licenced to operate within the West Pilbara Controlled Area, in which the town of Roebourne is situated.

The Water Corporation provided advice to GHD in 2012 as part of a Water and Wastewater Services Capacity Assessment (2012c). The Water Corporation advised the following with respect to water supply for future populations of Roebourne:

Current water storage in the Mount Welcome storage tank is at capacity, additional water demand would require upgrades to the water system including the storage.

A high level hydraulic assessment of the tank outlet pipe showed that the current configuration has some spare capacity that could supply an additional 1500 people.

No reticulation exists in the areas west and south of Mount Welcome. Any development in these areas will require the expansion of the reticulation network. Connection to the network in some areas may necessitate upgrade of upstream pipework, and hydraulic modelling would be carried out by the Water Corporation to determine infrastructure requirements for new developments.

Overall, the major constraints to the system are source supply and conveyance infrastructure. It is anticipated that capacity will be very limited until 2014 when upgrades are scheduled to provide for future growth (GHD, 2012a). Water Corporation has indicated that the storage tank is scheduled to be upgraded in 2018 (GHD, 2012a).

To provide adequate water services for the development of Roebourne and service the future population without the installation of additional infrastructure, the following options for integrated water management assessed in the *Roebourne Water and Wastewater Services Capacity Assessment (GHD 2013)* are recommended for incorporation into design guidelines:

- reduced scheme water demand for residential and commercial users
- water efficient irrigation for public open space and recreational areas currently on water supply (i.e. to reduce demand)
- using recycled water (treated wastewater from the WWTP) for irrigation rather than the potable water supply.

4.3 Wastewater Infrastructure

The Water Corporation is the wastewater service provider licenced to operate and provide sewer connections in the controlled area covering the town of Roebourne.

Wastewater services in the town of Roebourne consist of a sewerage network including gravity and pressure pipework, pumping stations and a pond-type wastewater treatment plant that treats wastewater to a secondary standard and disposes of treated wastewater in evaporation/infiltration ponds.

Planning for connection of future development areas to the existing sewer network is to be negotiated between the City of Karratha and Water Corporation. For development in areas adjacent to and at a higher land level than existing gravity sewered lots, extension of existing wastewater catchments may be possible depending on the capacity of the existing sewers. The gravity sewer network would need to be extended and downstream pump stations may need to be upgraded (Essential Environmental, 2013c).

Increased wastewater flows would necessitate increased pump station capacity and changes may be required. Potential development areas that are not adjacent to and higher (land level) than existing sewers, will necessitate the construction of new pump stations and pressure mains. The Water Corporation confirmed that even though the wastewater treatment plant was recently upgraded, the increase in flows as a result of new connections associated with NASH will bring the wastewater treatment plant to capacity (Essential Environmental, 2013c). For further details on the capacity of the water supply and wastewater services of Roebourne, please refer to the *draft Roebourne Water and Wastewater Services Capacity Assessment (GHD, 2012)*.

4.4 Drainage

New planning proposals, including development and building applications will be required to consider the implications of flooding from the Harding River, stormwater inundation and storm surge incorporating an allowance of sea level rise, consistent with the findings and recommendations in the Roebourne Townsite Local Water Management Strategy (Essential Environmental, 2013d).

It will be the proponent's responsibility to undertake the necessary reviews, assessments and modelling to demonstrate, to the satisfaction of the City of Karratha and Department of Water, that any proposed development is consistent with the following floodplain management strategies:

Development in areas identified as being at risk of inundation from the 100 year ARI flood event that are outside the floodway are to be provided with a minimum 0.5 m clearance between finished floor levels of habitable rooms and the modelled 100 year ARI event flood level

Development in areas identified as being at risk of inundation from the 100 ARI year storm surge event, including allowance for sea level rise (currently 8.1m AHD) are to be provided with a minimum 0.5 m clearance between finished floor levels of habitable rooms to this storm surge level

Development in areas adjacent to and/or potentially affected by flooding in defined overland flow paths or stormwater drainage infrastructure are to be provided with a minimum 300 mm clearance from the 100 year ARI flood level in the adjacent overland flow paths or infrastructure.

Suitable emergency access and evacuation routes that are trafficable in the 100 year ARI flood and/or storm surge event are to be defined by the proponent.

Design of future drainage systems will be such that:

- the quantity and distribution of environmental flows are maintained
- sediment transport and potential erosion during major storm events is managed
- downstream peak-flow rates and levels for the critical 100 year ARI events are not increased
- maximum flow velocities in open channels do not exceed 2 m/s.

Design of developments will ensure:

- the 5 year ARI flood is contained below kerb height
- the habitable floor level of residential dwellings have a minimum of 300 mm clearance above the kerb height.

Additional recommendations specific to particular precincts are as follows.

4.5 Roebourne Centre Precinct

Water from the upstream slope of Mount Welcome currently flows overland along Padbury Street and across Roe Street before discharging to the Harding River. Existing and future development on adjacent properties will need to consider management of inundation and safety risk associated with this flow path. The estimated peak stormwater flow rate on Padbury Street, at 2.8 m³/s, is unlikely to be contained within the kerbs of the road, flowing at an estimated depth of 0.25 m and velocity of 1.7 m/s. The hazard at this location should be considered “extreme” in accordance with SCARM73 and must be managed accordingly.

Existing and future development on the eastern side of Roe Street should be considered in the context of predicted riverine flooding, the hazard assessment and risk tolerance outlined in the Roebourne Townsite Stormwater and Flood Management Plan (Essential Environmental 2013). On this basis it is recommended that development or redevelopment of private infrastructure in this area is not permitted.

4.6 Northern Residential Precinct

Assessment of inundation risk and design of infrastructure in this area will need to consider flooding from riverine flooding, arterial drainage and local drainage capacity.

The peak water 100-year ARI water level in the stormwater flow path immediately north is estimated to be 9.6 m AHD.

Access to the Education and Recreation Precinct during a large storm event may be limited by the passage of flood water over Sholl Street and Roe Street (to the south) and Cleaverville Road to the north.



4.7 Future Urban Areas

The future urban expansion on the south side of Mount Welcome will need to be designed in such a way as to manage drainage from local catchment runoff and the arterial drainage route from this area through to the Harding River.

Existing flood levels should inform the conceptual design of future subdivision and development layout. The proponent of the development will need to demonstrate an understanding of future flood levels throughout the development.

It is considered that establishing a link road around the southern and western side of the mountain will provide an important access that can be used in the case of an emergency movement of residents. Consideration should be given to establishing the alignment for this road along the higher edge of the development and providing a connection to North Coastal Highway.

4.8 Industry

The future industrial expansion west of the current industrial area will need to be designed in such a way as to manage drainage from local catchment runoff.

Drainage capacity and flood risk in this area is potentially affected by the passage of floodwater from the river tributary located immediately north of the development area and the hydraulic capacity of the flood crossing this tributary over Point Samson Roebourne Road. Flood and stormwater management for development in this area will need to be considered in the context of the additional surface water analysis and relevant strategies outlined in the Roebourne Townsite Stormwater and Flood Management Plan (Essential Environmental 2013).



5.0 Implementation

5.1 Implementation Staging

In order to implement this structure plan, further detailed planning will be required in the identified precinct areas. This detailed planning should be undertaken consistent with this Structure Plan as well as with the following planning principles.

- The revitalisation of key precincts is important in order to:
 - Diversify the economic base and social demographic of residents
 - Encourage land uses which stimulate community and tourist activity, with a focus on the arts, education and a rationalisation of services
 - Generate greater pedestrian safety and comfort
 - Provide flexibility through robust design
 - Provide greater diversity and choice of residential and commercial product
 - Provide further commercial and recreational opportunities for both long and short term residents.
- The creation of integrated, well connected, attractive and safe spaces for pedestrians, which respond to the local climate, should also be delivered using the following urban design principles:
 - Improve the amenity of streets for pedestrians, including provision of safe pathways, shading, seating and shelter
 - Ensure a highly connected and legible movement network to facilitate the most efficient and direct movement.
 - Encouraging an active frontage to streets to maximise passive surveillance.
 - Define the entry points into the town through spatial demarcation that includes appropriate gateway treatments and signage.
 - Encourage the upgrading of streets and intersections including road realignments and the heavy haulage bypass to provide safe passage of vehicles and pedestrians and improve amenity.

5.2 Land uses, zones and Planning Scheme review

The specific nature of the land use, zones and reserves applicable will be finalised during the Planning Scheme review due to begin in 2014/15.

This structure plan provides guidance for investment, planning and development within the Roebourne townsite including other planning initiatives which are required to deliver the vision identified for Roebourne.

Future planning and development activities include the preparation of local development plans for the key development precincts described above; subdivision/amalgamation of lots; and development and building applications.

5.3 Shire of Roebourne Local Planning Scheme

In order to address the findings of the supporting studies and achieve the vision for the townsite,

- Most recent findings regarding the management of flood risk from the Harding River (revision to the special control area)
- Most recent findings regarding storm surge risk (potentially a revision to the storm surge special control area)
- Any rezoning within the defined precincts to implement the recommendations of the local development plans.

Implementation of the Structure Plan also relies significantly on the Scheme Provisions and Zoning Maps of the Shire's Scheme.

The Roebourne Structure Plan will provide input into preparation of the new planning scheme.

5.4 Detailed design of precincts

It is recommended that local development plans are prepared for the following precincts:

- Heritage Precinct
- Roebourne Centre precinct
- Recreation precinct

These local development plans should be consistent with the vision and objectives contained in this Structure plan, and may result in the need for future amendments to the scheme.

5.5 Development Control

It is recommended that Development Areas be established in the scheme over the Future Urban Precincts.

5.6 Subdivision

The Roebourne Structure plan will provide input to Western Australian Planning Commission in its deliberation of applications for subdivision.

Any subdivision should be undertaken in accordance with the approved structure plan and the supporting technical studies.

5.7 Development

All development is to be in accordance with this structure plan and the Scheme. Additional design criteria may need to be met, particularly where they are specific to particular precincts. These will be outlined in the relevant Local Development Plan.

Engineering and building drawings submitted to Council for development approval are to be supported by clear and auditable documentation, providing all required details including any proposed staging, and demonstrating compliance with design criteria.

5.8 Local Planning Structure plan

This Structure plan will inform the development of the City of Karratha Local Planning Strategy, which is currently being finalised by the City.

5.9 Priority actions

After considerable consultation and collaboration with the Roebourne community the City is proceeding with the design and re-development of the Recreation Precinct. This re-development will occur in stages and will be subject to partnerships and funding arrangements.

The next priorities are expected to focus on the catalyst sites and the City looks forward to facilitating the development of these key sites.

The proposed staging for the implementation of this plan is shown below in the Roebourne Townsite Staging Plan.

ROEBOURNE TOWNSITE STAGING PLAN

THE VISION: CREATE A FUTURE FOR ROEBOURNE THAT FACILITATES THE CREATION OF A DIVERSE AND WELL-FUNCTIONING PERMANENT RESIDENTIAL COMMUNITY, BASED ON A CELEBRATION OF THE CULTURAL STRENGTH OF THE RESIDENTS, WHILE BUILDING A DIVERSIFIED ECONOMIC BASE THAT RESPONDS TO THE NATURAL ENVIRONMENT AND CONTRIBUTES TO THE PILBARA REGION.

The Staging Plan illustrates the preferred phasing of the various elements of the proposed re-vitalisation of Roebourne. The timing and delivery of these various elements will depend on the proponents, the economic climate, and the fluctuations of the resource industries.

PRIORITY 2: INDUSTRY PRECINCT

This is to transition from a Mixed business zone to industrial activities. All existing lawful uses can remain while still in operation. No additional Transient workforce accommodation envisaged for this area. No extension beyond present boundaries.

PRIORITY 3: RESIDENTIAL PRECINCT

The darker shading shows the priority for infill development, next will be the residential area to the north, followed by investigation areas to the south. These southern residential area will require investigation prior to residential development.

PRIORITY 4: COMMERCIAL PRECINCT

This precinct is expected to provide employment opportunities in commercial and light industrial uses. Timing is likely to be influenced by the fluctuations in the resources industries.

PRIORITY 5: FUTURE URBAN

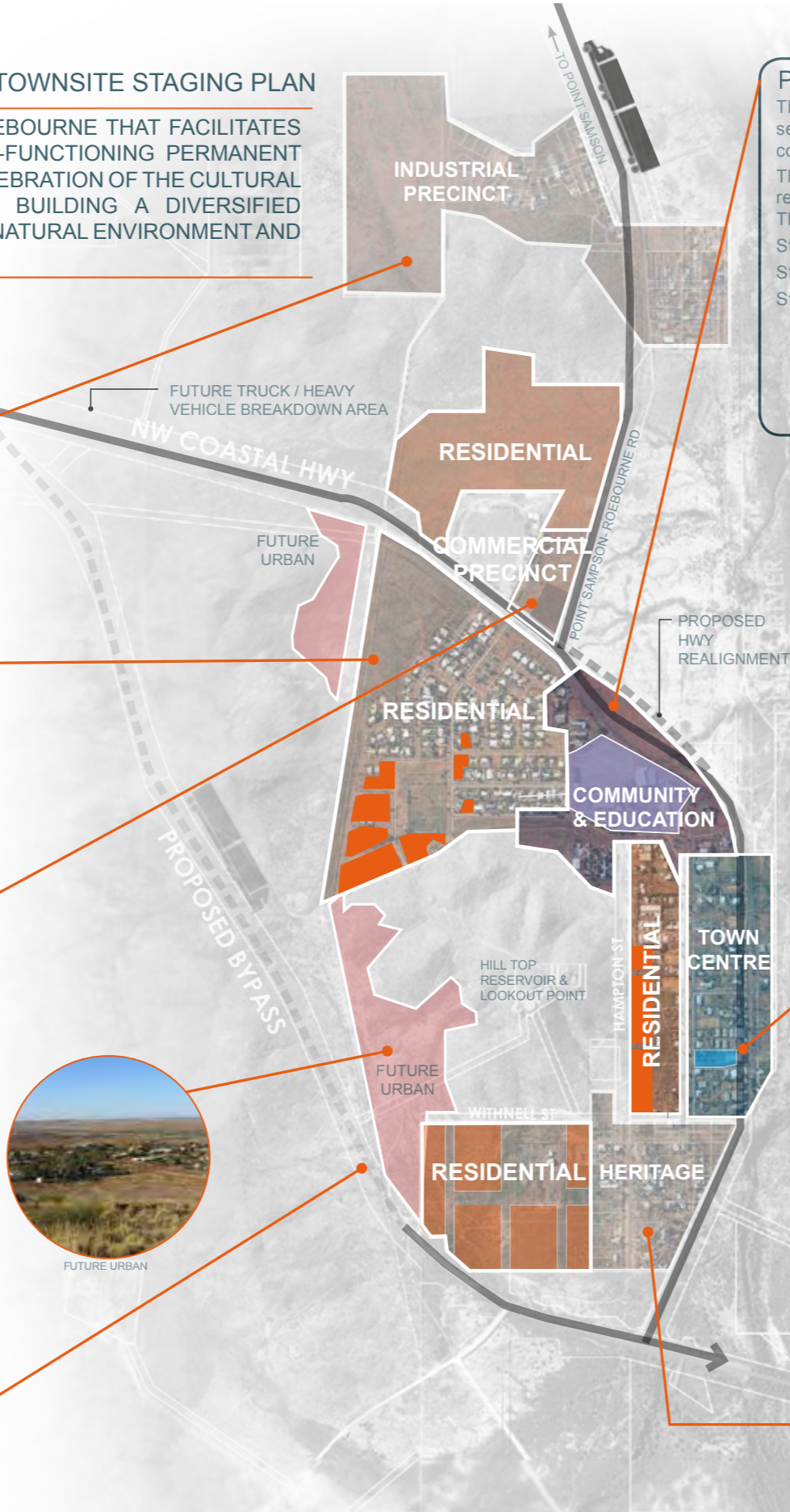
These areas are unlikely to be developed for a considerable period unless demand for large residential lots can be established. Further investigation required particularly relating to management of potential contamination.



FUTURE URBAN

PRIORITY 6: BYPASS

This initiative would only be triggered by significant traffic increases most likely associated with major projects. A project to be delayed until safety within town was permanently and significantly compromised.



PRIORITY 1: COMMUNITY & EDUCATION PRECINCT

The Community & Education precinct will provide for Roebourne's leisure and educational services which enhance opportunities to foster life and artistic skills, encouraging traditional, contemporary and cultural activities.

The **Recreation Sub-precinct**- A Shire led re-development programme. Three (3) Stage development:
 Stage 1: 1-3 years
 Stage 2: 3-6 years
 Stage 3: 6-10 years



PRIORITY 1: ROEBOURNE CENTRE PRECINCT

This precinct forms the principal retail, commercial and community services hub for Roebourne.

Padbury Street is to form an intimate scale main street featuring the retail and commercial hub for the town.

The key re-development opportunities which will encourage a stronger economy and community are shown below and described as the Catalyst sites:

Catalyst sites:

- Roebourne Cultural Centre
- NAC Community Centre
- Victoria Hotel
- Other sites in Padbury Street
- General Store
- Yaandina Centre



PRIORITY 1: HERITAGE PRECINCT

Preparation of a precinct plan - highlighting critical maintenance issues. The existing administrative functions within heritage buildings are to continue. Important heritage assets maintained over time.



1895 HOLY TRINITY CHURCH



1887 POST OFFICE



1896 ROEBOURNE GAOL

6.0 Consultation and Community vision

The City of Karratha recognised the importance of engaging with stakeholders in order to develop a plan that would be supported by the existing community and workforce. In order to achieve this, the City engaged UDLA to undertake the community consultation and development of the vision for Roebourne. This engagement took place during 2013.

6.1 Community Vision

Yirramagardu's (Ngarluma - Roebourne) Vision builds upon the cultural and historic richness of a small town that remains central to the historic narrative of Australia's North West.

The town established in 1864 as a colonial outpost with records explaining how Emma Mary Withnell, née Hancock, the first white female settler (North West) with her husband, John Withnell began operating Mount Welcome pastoral lease. The station homestead became the site of the first Town in Australia's North West. Roebourne was named after the Surveyor General JS Roe, and was proclaimed a township 17 August 1866.

The Traditional Owners speak of the recent Wharlu Song associated with Ieramugado (Yindjibarndi - Roebourne) at the time when Yindjibarndi (Tableland People) were resettled (mid 1900's) within Ngarluma Country (Coastal People).

A great storm rose towards Ieramugado (Roebourne). The sea snake had come inland, the Gurrin Gurrin bird leading him. At day break Ieramugado (Roebourne) was under water. The Yindjibarndi people thought they would be killed by the coastal sea snake (Wharlu), so they called up the freshwater snake from the Fortesque River to save them. The snakes fought a long battle in the sky and the freshwater snake pushed the sea snake back to the sea and the Yindjibarndi people were allowed to stay in Ieramugado.

'Exile of the Kingdom' abstract - Roger Solomon (deceased), Ngarluma and Yindjibarndi Elder

Present day Yirramagardu (Roebourne) is now a centre for numerous language groups whom all have unique Traditional practices. The Town has a young demographic with positive outcomes occurring through artistic expression, passing on these unique cultural practices through mediums such as:

- Traditional and contemporary visual arts
- Film and photography
- Digital and visual media
- Photography
- Traditional and contemporary dance
- Traditional and contemporary music/song
- Radio; and,
- Public art

Traditional and contemporary art practices are proving to make available a strong medium for positively fostering cultural learning, mainstream education and installing personal confidence. A growing appreciation of this artistic expression has also found interest beyond the region, through national contemporary mainstream prospects and outcomes.

In addition, Yirramagardu (Roebourne) being the oldest colonial settlement in Australia's North West has a myriad of late 19th century buildings that are within a walkable area of the towns recognised municipal hub. All of these heritage listed buildings are associated with a rich colonial and Aboriginal past, being held in high regard both by the community and visitors alike.

Vision statement

Yirramagardu's (Roebourne's) Vision aims to foster existing Traditional and contemporary artistic ventures, combined with a tourist backdrop of marketing the Town's rich colonial heritage, the first town established in Australia's North West. A future flourishing cultural arts and tourist market would aim to afford Yirramagardu (Roebourne) with the opportunity to socially and economically diversify from one which services an all-encompassing extractive industry.

6.2 Engagement strategy

The City of Karratha's ultimate goal is to develop a realistic, practical and most importantly implementable Strategy that is not only supported by the relevant government, stakeholder and planning authorities, but is also supported by the local community.

UDLA understood that for this Strategy to be embraced and supported by the Town of Yirramagadu (Ngarluma naming for Roebourne) a meaningful engagement process needed to be adopted that focused on the development of positive community relations.

6.2.1 Engagement Process

The adopted 5 phase engagement process ensured a minimum of two opportunities for community members to have empowered and meaningful participation in the planning process (Figure 15).

The engagement opportunities allow for early input into the Strategy by commenting on the site analysis, opportunities and directions in Phase 2 of the engagement strategy. The second occasion was Phase 4 where relevant Strategy options were presented for discussion, providing opportunity to highlight participant's previous input, and to encourage trust and support for the process.

Phase 2 and 4 both consisted of two, three day site visits, undertaken over a consolidated two month period. This allowed UDLA to have a regular presence in town and aided in building ongoing relationships with individual community members.

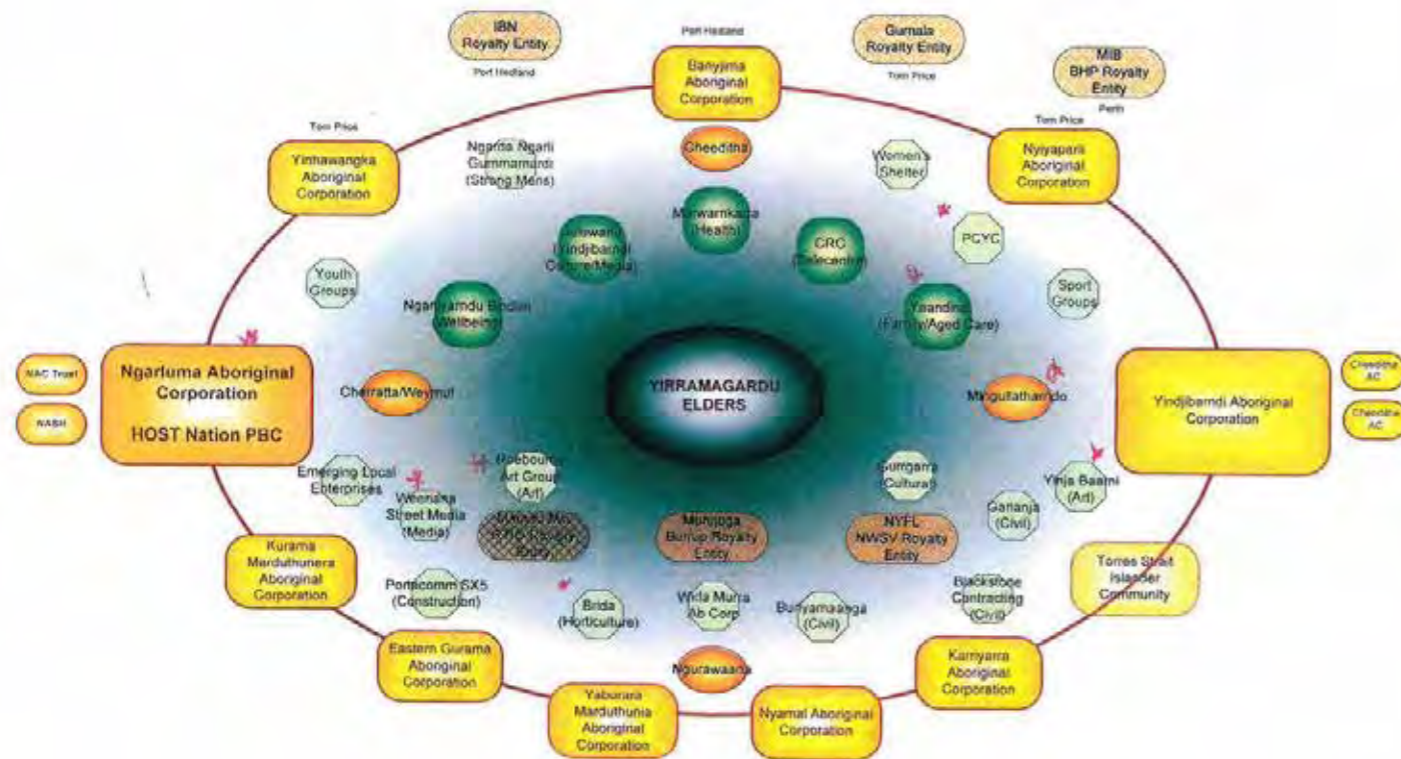
A third occasion for public input will exist when the Draft Strategy is presented for public comment. At this point the plan should be made readily available to participating community members for final comment.

6.2.2 Levels of Engagement

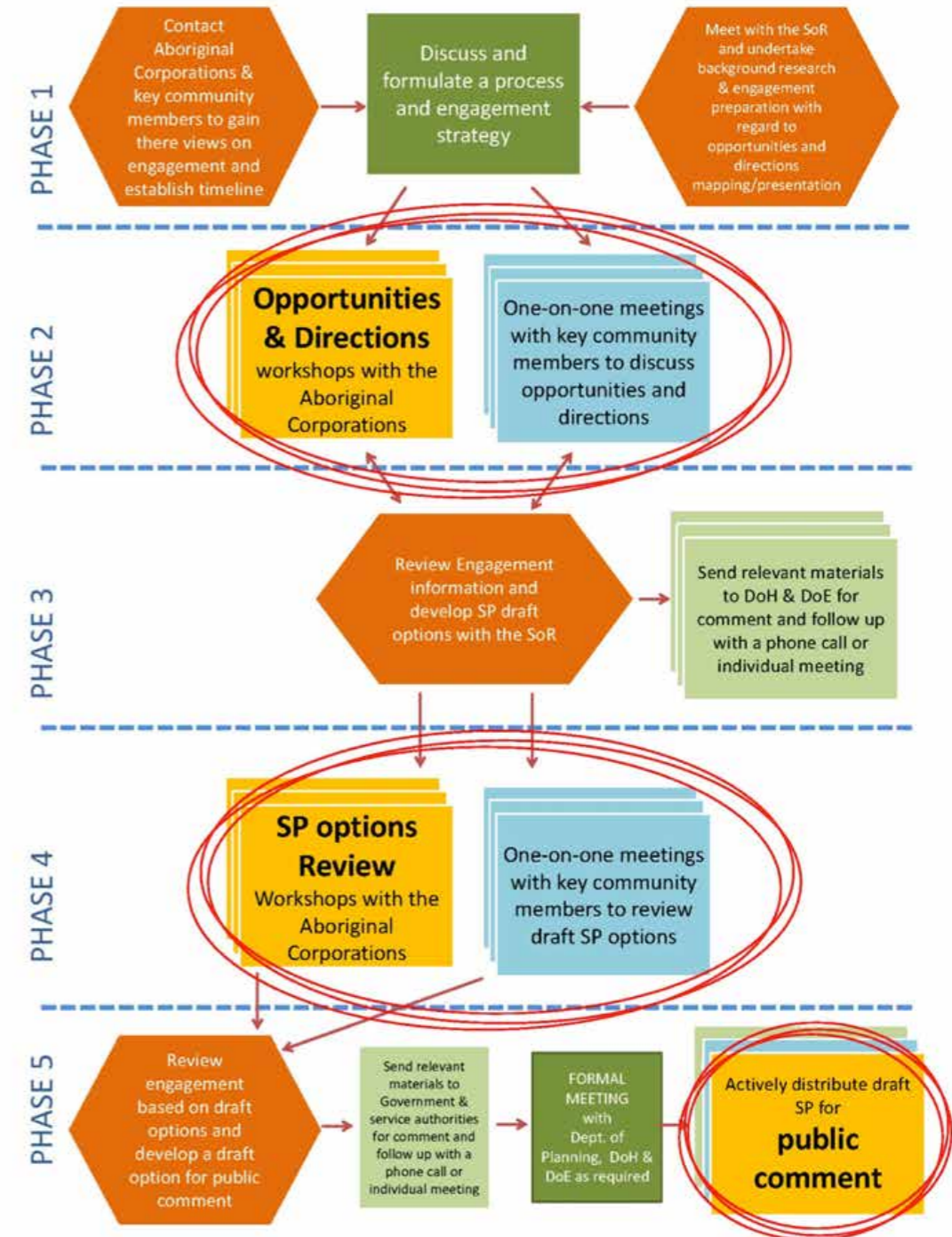
Within this engagement strategy UDLA have identified three levels of engagement - inform, involve and empower. As in all good engagement processes, the intention should be to empower as many participants as possible; however, in the context of this project, only levels of 'involve' and 'inform' were adopted. Empowerment is achieved when participants are not only included in the planning process but also have the opportunity to be part of the implementation phase.

Therefore, for the City of Karratha to reach a level of empowerment for the public of Yirramagardu, an action planning phase needs to follow this project which allows people to see their vision and ideas come into fruition.

Roebourne Tube Maps VII 02.2013



Engagement Process



6.2.3 Community feedback

The result of the UDLA consultation process raised significant concerns regarding the governance of the town. This, together with planning, is addressed in the following sections, which have been provided by UDLA.

The outcomes of the community engagement process resulted in a number of recommendations for the revitalisation and redevelopment of the Roebourne townsite (figure below).

The physical planning outcomes are to be understood within the context of Roebourne's present social and municipal governance capacity, which includes:

- a low socio economic demographic
- a high percentage of Aboriginal population
- low home ownership
- a young demographic with a high percentage of the population between the ages of 10-24 years of age
- minimal 'live in' service workers
- a high dependence on essential services being provided by NGO's
- major stakeholders being the Department of Education and Department of Housing
- a low intercession by the local government in relation to municipal governance

The following planning recommendations are listed from highest to lowest priority. These recommendations are supported by the majority of Roebourne's community and stakeholders and have been incorporated into the strategy where possible.

- 1) **Consolidation of the educational/leisure precinct** – The opportunity to build upon a precinct that is seen to be the social and physical heart of Roebourne. At present this area provides Roebourne's leisure and educational services. The precinct is also seen as a positive social meeting place for the community. Further opportunities exist to develop the educational facilities and associated open spaces where life and artistic skills can be fostered. This would be the precinct that continues to encourage traditional and contemporary artistic opportunities, i.e. future film, photography, media, dance, music centre.
- 2) **Consolidation of the town centre/commercial/tourist precinct** – The town is fortunate to have a walkable and pedestrian scaled streetscape. From this centre a visitor can park their vehicle and partake in many heritage and cultural activities. Present and future opportunities include visitor retail outlets (e.g. coffee shops), Aboriginal traditional and contemporary art centres, a locally run cultural centre, parks with vistas and connections to the river, and many heritage buildings including heritage walks. Consolidation of the town centre and strategic direction would deliver a fine town centre.

- 3) **Establishment of a heavy vehicle diversion route** – To normalise the town regarding noise, dust and safety, in addition to providing an inviting community and visitor environment, there needs to be redirection of heavy vehicles through the centre of town. It is suggested that this heavy vehicle route is a recognised turn off from the highway and does not lead visitors directly around town, causing a town bypass.
- 4) **Establish a heavy vehicle breakdown area** – As part of normalising a safe and inviting town environment it is proposed that a truck break down area is formalised out of town, possible at the junction of the heavy vehicle diversion route.
- 5) **Additional land for educational/leisure purposes** - Within the Education and Leisure Precinct there is an option to provide more land by broadening the curve of the main road (North West Coastal Highway). More land immediately adjacent to the school and leisure facilities will limit disconnection of future school facilities, planned to be constructed north of the busy main road. Part of the proposal was to investigate future road construction with the ability to alleviate existing town flooding issues, namely; a) maximise culvert flow alleviating a pinch point that retards water flow from a major drainage swale; and, b) use the new road as a levy device to minimise large flooding events entering within this area of town.
- 6) **Establish well lit turn off lanes to Cheeditha and Mingullatharndo Communities** – The North West Coastal Highway in this area has a high number of mine related service and infrastructure carrying vehicles. The communities of Cheeditha and Mingullatharndo that reside both sides of the town require safe lighting and turning lanes.
- 7) **Clear demarcation of town and CBD entries** – To improve town legibility for locals and visitors (tourists), in addition to strengthening town precincts, there is required to be spatial demarcation that includes appropriate gateway treatments and signage.
- 8) **Develop a pedestrian path network** – Local desire lines are required to be formalised to provide safe passage to and from the nominated precincts. Special attention is required regarding (?) crossing the North West Coastal Highway, especially while heavy haulage goes through town.
- 9) **Existing Two Mile and Town Cemetery to be cleaned up and respected** – A part of a town's heritage resides in respecting past peoples. At present Two Mile Cemetery adjacent to the horse raceway is still being used, however, it is not practically defined or recognised.
- 10) **Realise/consolidate land tenure** – The town has a large infill capacity with individual parcels requiring planning tenure realisation for development purposes.

- 11) **Provide land tenure opportunities for key service workers** – As part of investigating land tenure opportunities within the town, residential infill land is specifically required to provide service worker accommodation. Government and NGO organisations could be used for establishing these opportunities i.e. Questus, Foundation Housing, DoH etc.
- 12) **Establish a strong connection with the town and Ngurin (Harding River)** – The town physically and culturally has a strong connection with the Harding River. There are recognised opportunities to strengthen this link through visual corridors, parks and trails. The main street has a strong opportunity to link with the river especially within the Commercial and Heritage Precincts.
- 13) **Upgrade residential lighting** – A lighting study is required to upgrade or provide maintenance to existing residential lighting areas. Special attention is required to busy road crossing points and areas that require additional surveillance.
- 14) **Commercial development planned for the corner of the North West Coastal Highway and Point Samson Road** – Planning guidelines are required to direct appropriate retail use(s) with regard to complementing town centre (CBD) uses, i.e. supply supermarket, car wash etc.
- 15) **Asbestos removal is required within certain developable land areas** – As part of delivering viable land for infill purposes there is noted to be additional asbestos issues that should be understood as part of this broader issue.
- 16) **Preserve and rehabilitate significant vegetation around disturbed/eroded areas of town** – Disturbed vegetation along roadways provides a harsh environment in the North West. Special attention to restoring natural grasslands and local trees stocks especially along the main road into town and along Harding River would visually lift the town.
- 17) **Provide further residential development areas behind Mount Welcome** – Following town infill has been explored and (?) there is an opportunity to undertake limited green field development at the rear of Mount Welcome.
- 18) **Provide further industrial development areas adjacent to the treatment ponds** – There is an opportunity to increase industrial development within the treatment ponds buffer zone where areas are not suitable for residential purposes.

Key Recommendations | Planning

Following are sixteen (16) planning recommendations to be strongly considered within the Roebourne Structure Plan;

1. Consolidation of the educational/ leisure precinct
2. Consolidation of the town centre, commercial, tourist precinct
3. Establishment of a heavy vehicle diversion route
4. Establish heavy vehicle breakdown area
5. Additional land for educational/ leisure purposes
6. Establish well lit turn off lanes to Cheeditha and Mingullatharndo Communities
7. Clear demarcation of town and CBD entries
8. Develop a pedestrian path network
9. Existing Two Mile and Town Cemetery to be cleaned up and respected
10. Realise/consolidate land tenure
11. Provide land tenure opportunities for key service workers
12. Establish a strong connection with the town and Ngurin (Harding River)
13. Upgrade residential lighting
14. Appropriate development planned for corner of North West Coast Highway & Point Samson Road
15. Asbestos removal required within certain developable land areas
16. Preserve and rehabilitate significant vegetation around disturbed/ eroded areas of town

Parks/
Recreation

Housing

Industry

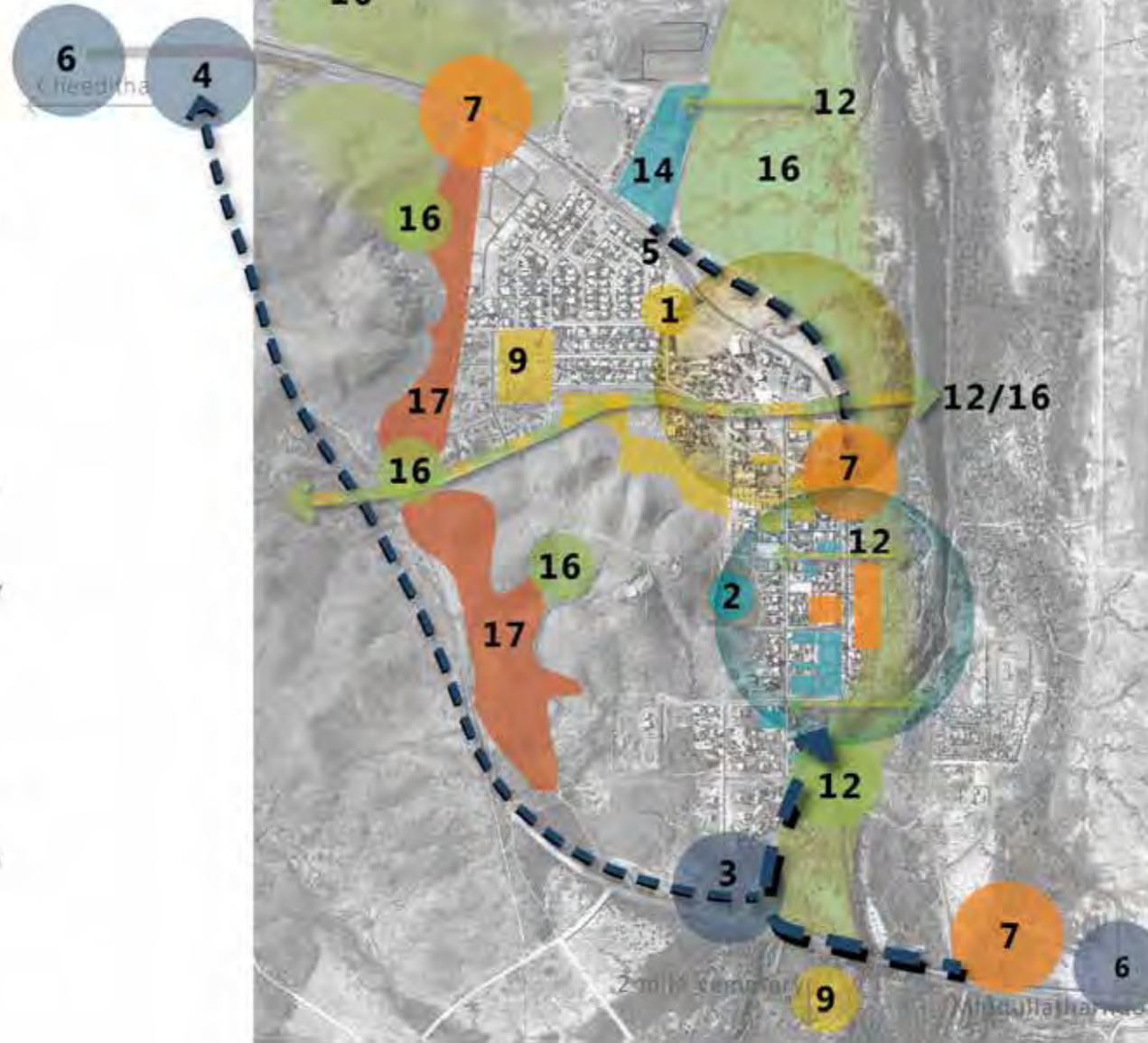
Commercial

Public
purpose

Transport/
Road

Tourism

Legend



6.3 Structure Plan response to key issues raised during consultation

Community feedback has been one of the sources which has shaped this structure plan. During the preparation of this structure plan many technical studies have been referred to and these are shown in the Reference list.

In the table below each of the items noted in the Community feedback is listed and the actions or response to the individual item is noted. Overwhelmingly these items have been incorporated in the plan, subject to the impact of the constraints identified for each site.

The City appreciates the time and consideration provided by all participants and their on-going commitment to the revitalisation of the township of Roebourne is welcomed and strongly encouraged.

Issue	Response/explanation for treatment
<p>1) Consolidation of the educational/leisure precinct – The opportunity to build upon a precinct that is seen to be the social and physical heart of Roebourne. At present this area provides Roebourne’s leisure and educational services. The precinct also seen as a positive social meeting place for the community. Further opportunities to develop the educational facilities and associated open spaces where life and artistic skills can be fostered. This would be the precinct that continues to encourage traditional and contemporary artistic opportunities. i.e. future film, photography, media, dance, music centre.</p>	<p>Shire has progressed these initiatives and developed detailed designs as well as continuing to seek funding for this ambitious project.</p>
<p>2) Consolidation of the town centre/commercial/tourist precinct – The town is fortunate to have a walkable and pedestrian scaled streetscape. From this centre a visitor can park their vehicle and partake in many heritage and cultural activities. Present and future opportunities include visitor retail (coffee shops), Aboriginal Traditional and contemporary art centres, a locally run cultural centre, parks with vista’s and connections to the river, many heritage buildings including heritage walks. Consolidation of the town centre and strategic direction would deliver a fine town centre.</p>	<p>Addressed with Roebourne Centre Precinct</p>
<p>3) Establishment of a heavy vehicle diversion route – To normalise the town regarding noise, dust and safety, in addition providing an inviting community and visitor environment there needs to be redirection of heavy vehicles through the centre of town. It is suggested that this heavy vehicle route is a recognised turn off from the highway and does not lead visitors directly around town, causing a town bypass.</p>	<p>Some caution is required with this concept because if this is poorly done all through traffic will by-pass Roebourne. This concept is unlikely in the short-term, but may be facilitated as and when the Anketell Project comes on stream.</p>
<p>4) Establish heavy vehicle breakdown area – As part of creating a safe and inviting town environment it is proposed that a truck break down area is formalised out of town, possible at the junction of the heavy vehicle diversion route.</p>	<p>Two proposals are put forward, 1. A temporary treatment of the existing informal area – short-term surface treatment. 2. Longer term solution is associated with the heavy vehicle by-pass route.</p>
<p>5) Additional land for educational/leisure purposes - Within the education and leisure precinct there is an option to provide more land by broadening the curve of the main road (North West Coastal Highway). More land immediately adjacent to the school and leisure facilities will limit disconnection of future school facilities, planned to be constructed north of the busy main road. Part of the proposal was to investigate future road construction with the ability to alleviate existing town flooding issues. a) Maximise culvert flow alleviating a pinch point that retards water flow from a major drainage swale; and b) Use the new road as a levy device to minimise large flooding events entering within this area of town;</p>	<p>The structure plan includes the proposed re-alignment on each plan produced.</p>
<p>6) Establish well lit turn off lanes to Cheeditha and Mingullatharndo Communities – The North West Coastal Highway in this area has a high number of mine related service and infrastructure carrying vehicles. The communities of Cheeditha and Mingullatharndo that reside both sides of the town require safe lighting and turning lanes.</p>	<p>This is outside the study area for the Roebourne Structure Plan however the City may consider approaching WA Department of Transport.</p>

Structure Plan response to key issues raised during consultation (Continued)

Issue	Response
7) Clear demarcation of town and CBD entries – To improve town legibility for locals and visitors (tourists), in addition strengthen town precincts there is required to be spatial demarcation that includes appropriate gateway treatments and signage.	One entry statement has been provided by the Roebourne Advisory committee and this concept will be forwarded to this group for further consideration.
8) Develop a pedestrian path network – Local desire lines are required to be formalised to provide safe passage to and from the nominated precincts. Special attention is required to crossing the North West Coastal Highway, especially while heavy haulage goes through town.	A footpath strategy has been prepared for other locations in the City this concept will be forwarded to Community Services Directorate.
9) Existing Two Mile and Town Cemetery to be cleaned up and respected – A part of a towns heritage resides in respecting past peoples. At present Two Mile Cemetery adjacent the horse raceway is still being used however not practically defined or recognised.	This concept will be forwarded to Roebourne Advisory committee for consideration.
10) Realise/consolidate land tenure – The town has a large infill capacity with individual parcels requiring planning tenure realisation for development purposes.	An expressed policy approach underpinning the residential precincts.
11) Provide land tenure opportunities for key service workers – As part of investigating land tenure opportunities within the town, residential infill land is specifically required to provide service worker accommodation. Government and NGO organisations could be used for establishing these opportunities i.e. Questus, Foundation Housing, DoH etc	This concept will be forwarded to Roebourne Advisory committee for consideration.
12) Establish a strong connection with the town and Ngurin (Harding River) – The town physically and culturally has a strong connection with the Harding River. There are recognised opportunities to strengthen this link through visual corridors, parks and trails. The main street has a strong opportunity to link with the river especially within the Commercial and Heritage Precinct	A footpath strategy has been prepared for other locations in the City this concept will be forwarded to Community Services Directorate.
13) Upgrade residential lighting – A lighting study is required to upgrade or provide maintenance to existing residential lighting areas. Special attention is required to busy road crossing points and areas that require additional surveillance.	Lighting and maintenance strategies have been prepared for other locations in the City this concept will be forwarded to Infrastructure Services Directorate.
14) Commercial development planned for corner of North West Coast Highway and Point Samson Road – Planning guidelines are required to direct appropriate retail use(s) with regard to complementing town centre (CBD) uses, i.e. supply supermarket, car wash etc;	No retail or convenience commercial activities are to be located in this precinct. The focus of this precinct is the creation of employment opportunities other than retailing.
15) Asbestos removal required within certain developable land areas – As part of delivering viable land for infill purposes there is noted to be additional asbestos issues and should be understood as part of this broader issue.	This issue will be addressed during the development assessment studies for the future urban areas.
16) Preserve and rehabilitate significant vegetation around disturbed/eroded areas of town – Disturbed vegetation along roadways provides a harsh environment in the North West. Special attention to restoring natural grasslands and local trees stocks especially along the main road into town and along Harding River would visually lift the town.	This concept will be forwarded to Roebourne Advisory committee for consideration.
17) Provide further residential development area behind Mount Welcome – Following town infill has been explored and developed there is an opportunity to undertake limited green field development at the rear of Mount Welcome.	The need for the preparation of a development plan for this precinct has been included and the underpinning technical studies are to be included in the work programme for Development Services Directorate, 2014/15.
18) Provide further industrial development area adjacent treatment ponds – There is an opportunity to increase industrial development within the treatment ponds buffer zone where areas are not suitable for residential purposes.	Recent guidelines have been released by Department of Water and these will be discussed with all prospective investors/ developers for these sites.

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