



TOWN PLANNING
URBAN DESIGN AND HERITAGE



TOWN OF PORT HEDLAND

**LOCAL PLANNING SCHEME AMENDMENT REQUEST
WATER CORPORATION INFRASTRUCTURE**

712-339
MARCH 2013

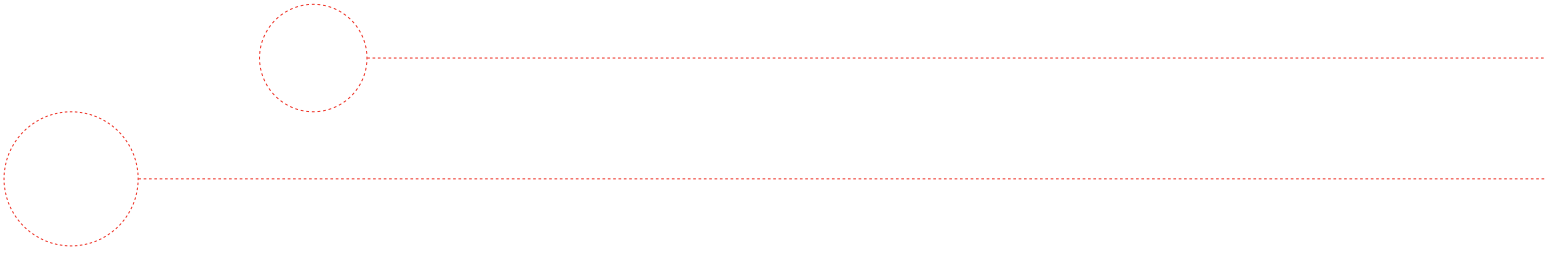
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INTRODUCTION

The rapid expansion and mining related growth in the north of Western Australia has resulted in the need for upgrading of existing infrastructure to accommodate expanded urban services that will facilitate the provision of additional housing and allow strategic expansion goals for the region to be realised.

In this respect, the Pilbara Joint Development Assessment Panel (JDAP) recently approved a development application lodged by TPG Town Planning, Urban Design and Heritage (TPG) on behalf of the Water Corporation for the expansion of the existing South Hedland Waste Water Treatment Plant (WWTP) to meet future requirements for waste water treatment and disposal in Port Hedland.

In order to ensure that the development of the WWTP and associated essential services infrastructure is located on appropriately reserved land and to also respond to updated odour modelling associated with the expanded WWTP facility, the Water Corporation has commissioned TPG to lodge a town planning scheme amendment request with the Town of Port Hedland (the Town) to modify the Town's Town Planning Scheme No. 5 (TPS5) to recognise these infrastructure improvements. The amendments to TPS5 will ensure that the entirety of the expanded WWTP facility is appropriately located within a 'Public Purpose - Waste Disposal and Treatment (WDT)' local scheme reserve that is most appropriate for the land use, and will also rectify the current situation where the area that will contain the expanded WWTP is designated as being within various zones, reserves and 'Special Control Areas' (SCA's) under TPS5.

A further objective of the scheme amendment is to formalise the odour buffer associated with the expanded WWTP facility as a SCA similar to the SCA that is currently in place around the Cooke Point WWTP. This will ensure orderly and proper planning outcomes by requiring that both development proponents and the Town carefully consider odour and noise impacts on future potentially sensitive development proposals and land uses within the buffer area.

In addition to the amendments associated with the WWTP, it is also requested that the land associated with the proposed pumping station located to the north in Cooke Point (pumping station), that is currently located within the 'Rural' zone, be incorporated within a 'Public Purpose - WDT' local scheme reserve under TPS5. The proposed pumping station is an integral infrastructure component to the overall wastewater management plan for the Town as it will transfer waste from the site of the existing Cooke Point WWTP to the South Hedland WWTP, allowing for the ultimate decommissioning of the Cooke Point WWTP.

The town planning scheme amendment will facilitate the future development and operation of the WWTP and pumping station, and provide for orderly and proper planning outcomes by ensuring that the zonings and local reservations in TPS5 are consistent with the proposed land uses. In the future the amended TPS5 will also assist by mitigating against any conflict between future land uses by ensuring proper consideration of the odour buffer and noise issues ordinarily associated with a facility of this type.

THE SITES

As noted above this town planning scheme amendment request relates to two separate but interrelated areas of land – that associated with the South Hedland WWTP site located on Shoata Road, South Hedland (WWTP site) and that associated with a pumping station located on Cooke Point Road, Port Hedland.

REFER TO FIGURE 1 – LOCATION PLAN

PROPERTY LOCATION AND TENURE DETAILS

The approved expanded portion of the WWTP will extend to the north and east of the existing facility in South Hedland, and will ultimately be located across a total of eleven landholdings, one of which is a local road reserve under the care and control of the Town. The pumping station site is located to the east of the existing Cooke Point WWTP and will be located within one lot.

The lot details and title particulars for both sites are tabulated below:

WWTP Site -

Lot Number	Reserve Number	Certificate Of Title	Area of Lot	Plan / Diagram Number	Status Order / Primary Interest Holder
Pt Lot 6067	31687	LR3137 – 754	48.255ha	Plan 220454	Reserve under management order – Water Corporation
4508	31687	LR3008-258	1.9642ha	Plan 182534	Reserve under management order – Water Corporation
Pt Lot 340	n/a	LR3161 – 712	62.887ha	Plan 72901	Unallocated Crown Land – State of Western Australia
300	31687	LR3021 - 73	0.42ha	Plan 182534	Reserve under management order – Water Corporation
6086	31687	LR3139 – 367	0.1353ha	Plan 194403	Reserve under management order – Water Corporation
6066	31687	LR3139 - 368	0.6367ha	Plan 194403	Reserve under management order – Water Corporation
6035	31687	LR3021 - 73	8.1069ha	Plan 193735	Subject to dealing at time of lodgement
341	31687	LR3161 - 713	8.3629ha	Plan 72901	Subject to dealing at time of lodgement
342	31687	LR3161 - 714	10.62ha	Plan 72901	Subject to dealing at time of lodgement
Pt 343	31687	LR3161 - 715	34.18ha	Plan 72901	Reserve under management order – Water Corporation
Pt 356	31687	LR3162 - 723	126.38ha	Plan 74206	Reserve under management order – Water Corporation

Pumping Station Site -

Lot Number	Reserve Number	Certificate Of Title	Area of Lot	Plan / Diagram Number	Status Order / Primary Interest Holder
Pt Lot 510	30768	LR3137 – 754	157.43ha	Plan 73210	Town of Port Hedland

REFER TO FIGURE 2 – SITE PLAN - WWTP SITE

REFER TO FIGURE 3 – SITE PLAN - PUMPING STATION SITE

EXISTING AND PROPOSED SITE FEATURES

The existing WWTP consists of three primary ponds, three secondary ponds, one treatment pond, three compensating basins and smaller buildings associated with switching rooms, pumping infrastructure and administration. The remainder of the proposed development area that is the subject of the town planning scheme amendment request is predominantly flat, uncleared land containing some natural scrubland. Access to the existing site is via a number of unsealed access driveways providing access into and around the site.

In addition to the existing site developments, the following expansion elements have recently been granted development approval under the Town's TPS5 (via the JDAP approval process):

- Two 3.75 megalitre reclaimed water storage tanks.
- A new 'switch room' operational building.
- A water recycling building.
- A new effluent disposal tank.

- A chlorine dosing area.
- A new 'water recovery plant' area for on-site water recycling.
- An administration and laboratory building.
- Reconfigured site access.
- New areas of gravel and limestone hardstand.
- New sealed access roads throughout the site.
- Reconfigured site access off Shoata Road located to the north of the existing access.
- Two new anaerobic ponds.
- 12 new 'sludge drying beds'.

The Cooke Point pumping station site is currently undeveloped and generally cleared of vegetation.

LAND USE AND TOPOGRAPHY

The proposed areas that are the subject of the scheme amendment are currently undeveloped landholdings containing no facilities or infrastructure.

REFER TO FIGURE 4 - AERIAL PLAN - WWTP SITE

REFER TO FIGURE 5 – AERIAL PLAN - PUMPING STATION SITE

FIGURE 1 – LOCATION PLAN

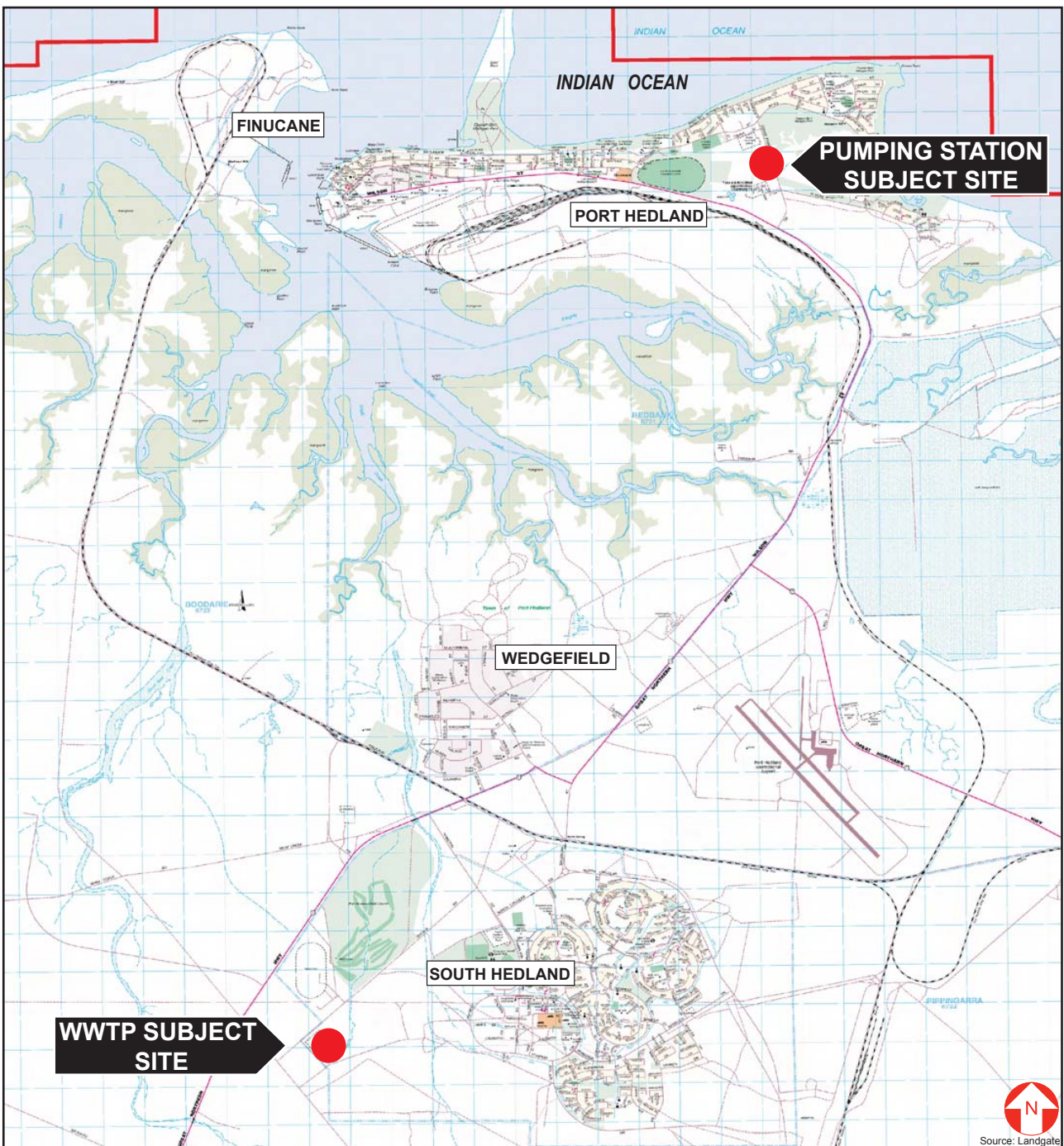


FIGURE 2 – SITE PLAN - WWTP SITE

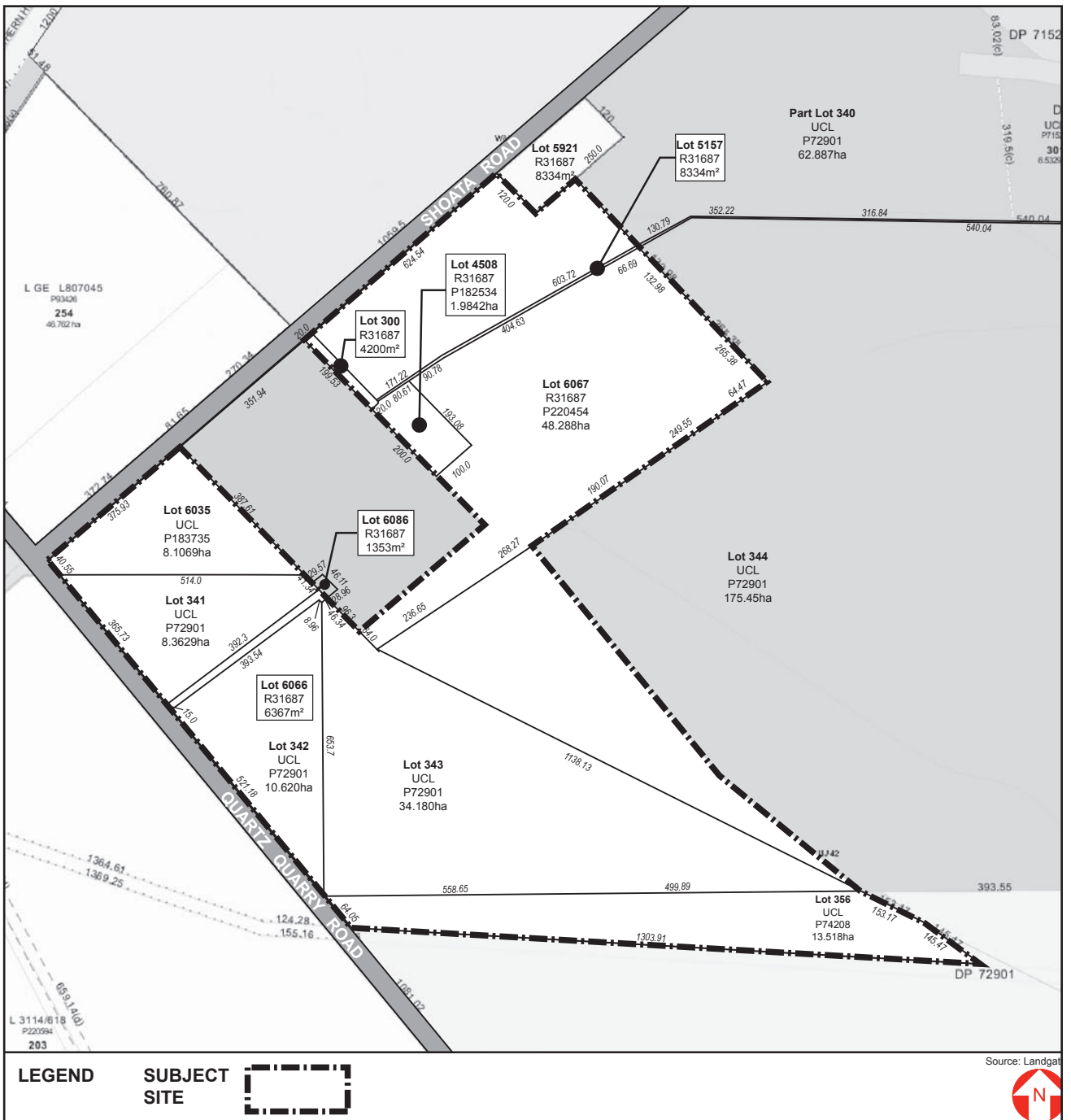


FIGURE 3 – SITE PLAN – PUMPING STATION SITE

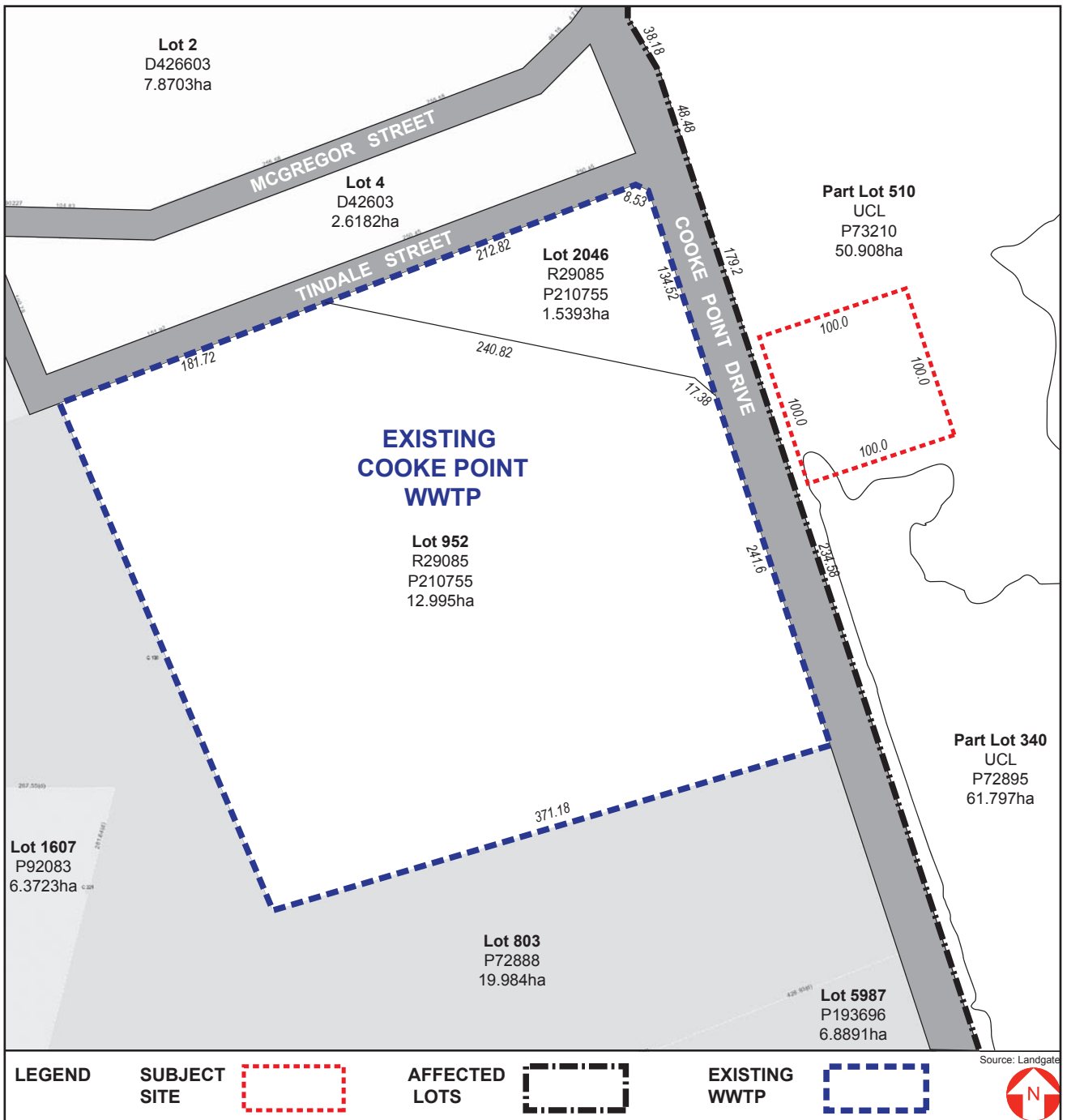
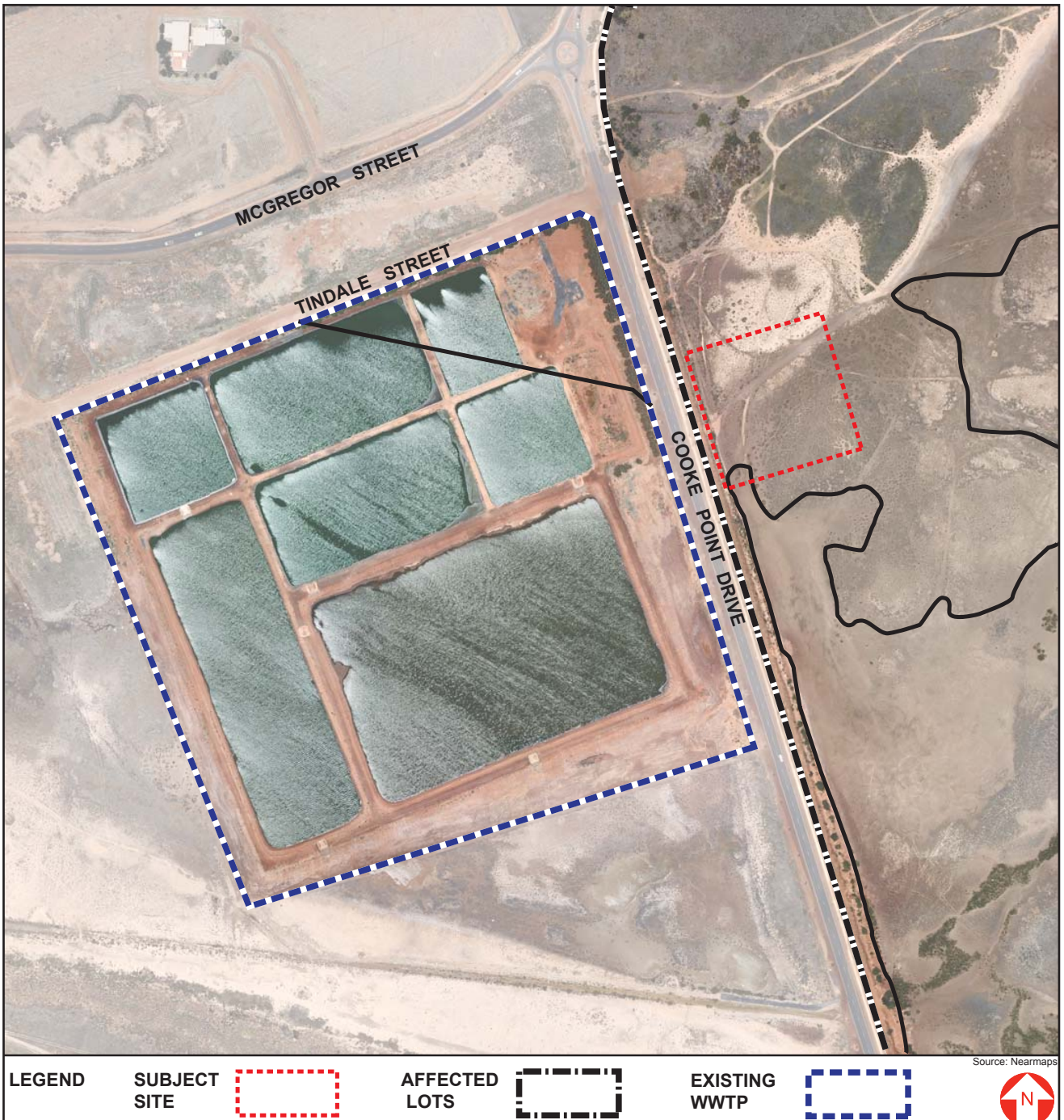


FIGURE 4 – AERIAL PLAN - WWTP SITE



FIGURE 5 - AERIAL PLAN - PUMPING STATION SITE



SURROUNDING LAND USES

The WWTP site is located approximately 1.7 kilometres to the west of the South Hedland residential area. Nearby land uses consist of scattered buildings and development directly to the west of the site across Shoata Road associated with the Port Hedland Owners and Trainers Association equestrian facilities, and the Port Hedland Golf Course approximately 800 metres to the north of the site. Vacant undeveloped land is located to the east and south of the site.

The pumping station site is located within close proximity of the centre of Port Hedland and is directly opposite the existing Cooke Point WWTP across Cooke Point Drive.

HERITAGE AND CULTURAL SIGNIFICANCE

Both sites have no identified aboriginal heritage or European cultural heritage significance.

ENVIRONMENTAL CONSIDERATIONS

The approved expansion of the WWTP is currently the subject of a Department of Environment and Conservation (DEC) application to obtain permission to commence works. The proposed development will also be the subject of applications for operational licenses from the DEC and approval from the Department of Health. Other environmental considerations will be managed in the course of current and future development applications with associated management plans.

STRATEGIC PLANNING FRAMEWORK

STATE PLANNING STRATEGY

The State Planning Strategy (SPS) was created in order to 'summarise the main strategic planning issues' facing the State to 2029. It has established four key principles for future planning, and provides a series of strategies and actions for achieving the principles.

The SPS contains a 'Vision Statement' in section 8.2.2 relating to development within the Pilbara, noting that :

In the next three decades, the Pilbara Region will be a world leading resource development area focusing on mineral extraction, petroleum exploration and production and the primary stages of downstream processing. The region's population will grow in the future, fuelled by specific resource development projects, the sustainable development of Karratha and Port Hedland and a more diverse economy. A growing tourism industry will have developed based on the region's unique natural environment

Of direct relevance is the 'Infrastructure' principle of the SPP with the strategy to 'Ensure infrastructure provision is the focus of government agencies'. Whilst the actions of the SPP are of limited direct relevance to the proposed scheme amendment, the intent of the proposals broadly align in that they seek the orderly and proper provision of infrastructure that will facilitate the strategic growth of the Town.

It is noted that the Western Australian Planning Commission (WAPC) is currently reviewing the State Planning Strategy and intends to release a draft of the updated Strategy 'for public comment in 2012'.

WESTERN AUSTRALIAN PLANNING COMMISSION – STATE PLANNING POLICIES

State Planning Policies (SPP's) are prepared by the WAPC 'and adopted by the WAPC under statutory procedures set out in part 3 of the *Planning and Development Act 2005*'. The WAPC and the Town must have 'due regard' to the provisions of the SPP's when amending town planning schemes or making planning decisions. The following SPPs have been identified as being relevant to the part of this scheme amendment proposal relating to the WWTP site:

- SPP 2.5 – Agricultural and Rural Land Use Planning - applies to the WWTP site due to it being within an area identified as a potential/developing area (subject to additional and detailed investigation) for an Agricultural Priority Management Area.
- SPP 4.1 – State Industrial Buffer Policy - applies to the WWTP site due to it being a sensitive land use, Waste Water Treatment Plant, requiring a buffer. Furthermore SPP 4.1 (draft) specifies wastewater infrastructure in Annexure A.

In terms of SPP 2.5, although the WWTP site is within a 'potential/developing area (subject to additional and detailed investigation)' for an Agricultural Priority Management Area, the Department of Agriculture advised when consulted by the Town during the recently approved development application process for the WWTP expansion that they do not require development application referral and generally consider the matters more broadly at the local planning strategy stage. Given this lack of objection to the WWTP expansion, SPP 2.5 is not considered an impediment to the proposed scheme amendment.

In terms of SPP 4.1, where the Environmental Protection Agency (EPA) agrees that emissions cannot be contained on-site or where expansion of a facility is proposed, the infrastructure provider and/or operator is required to provide a generic buffer in accordance with EPA 'Guidance for the Assessment of Environmental Factors' statement 3 or a buffer that has 'been scientifically prepared to the satisfaction of the EPA'.

Appendix 1 of EPA Guidance Statement 3 'Separation Distances between Industrial and Sensitive Land Uses' states the following in relation to WWTP buffer distances - 'buffer studies are in progress to determine appropriate separation distances'.

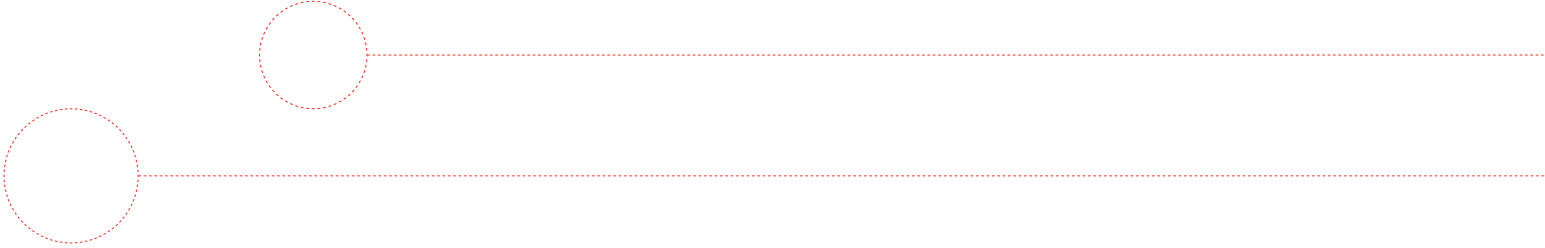
In the absence of any current guidance from the EPA statement in regard to buffer distances, scientific odour modelling has been undertaken by CEE Consulting Environmental Engineers.

The modelling assumes a 99.9 percentile 'odour frequency level', the final odour buffer will form part of the DEC Works Approval that is currently being sought and will be required for the operation of the expanded WWTP. In this respect it is proposed to insert a modified SCA into TPS5 to reflect the buffer that is determined by this process.

PILBARA PLANNING AND INFRASTRUCTURE FRAMEWORK (2012)

The Pilbara Planning and Infrastructure Framework (PPI Framework) defines 'a strategic direction for the future development of the Pilbara Region over the next 25 years'. The PPI Framework:

- *Addresses the scale and distribution of future population growth and housing development, as well as identifying strategies for economic growth, environmental issues, transport, infrastructure, water resources, tourism and the emerging impacts of climate change.*
- *Sets out regional planning principles, together with goals, objectives and actions to achieve these. It represents an agreed 'whole of government' position on the broad future planning direction for the Pilbara, and will guide the preparation of local planning strategies and local planning schemes.*

- 
- *Informs government on infrastructure priorities across the Pilbara and gives the private sector more confidence to invest in the region. The infrastructure priorities identified in the Framework have been determined following extensive liaison with State Government agencies, local government and other key stakeholders.*

Relevant to this scheme amendment proposal, the PPI Framework identifies a number of 'Utility infrastructure – Objectives / Actions', and makes specific reference to the following in regard to waste water infrastructure provision:

Waste water: Minimise waste water at source and recycle where feasible.

a) Provide appropriate sewerage facilities and services in all Pilbara cities and towns.

b) Provide adequate local absorption systems in the region's villages and Aboriginal communities.

c) Decommission Port Hedland Waste Water Treatment Plant and augment capacity at the South Hedland Waste Water Treatment Plant.

The proposed scheme amendment aligns with these objectives, and will ensure that currently proposed and future strategic development is adequately serviced by wastewater infrastructure located within land reserved appropriately for the purpose, and that is protected from encroachment by and potential conflict with other land uses in the future.

TOWN OF PORT HEDLAND STRATEGIC PLANNING FRAMEWORK

TOWN OF PORT HEDLAND – PLAN FOR THE FUTURE 2010 – 2015

The Town's 'Plan for the Future 2010-2015' is considered to be relevant to the town planning scheme amendment request. The proposed amendment is considered to accord with the intent of the strategic plan, in that it will directly facilitate the strategic objectives in Key Result Area 4: Economic Development, which are detailed as follows:

Other Actions 1: Work with the State Government to enact civil infrastructure projects that will enable additional land developments to occur including:

- a) Port Hedland Infill Sewerage*
- b) Relocation of the Port Hedland Sewerage Treatment Ponds*
- c) Upgrading water pressure in the West End*

It is also consistent with the strategic objectives of Key Result Area 5: Environment, which are detailed as follows:

Goal Number 2: Natural Resources

Other Actions 2: Water Planning – partner with State Government to implement water initiatives to support the growing community and industry based in Town.

The proposed scheme amendment will allow development of wastewater and disposal related infrastructure to be constructed within appropriate local town planning

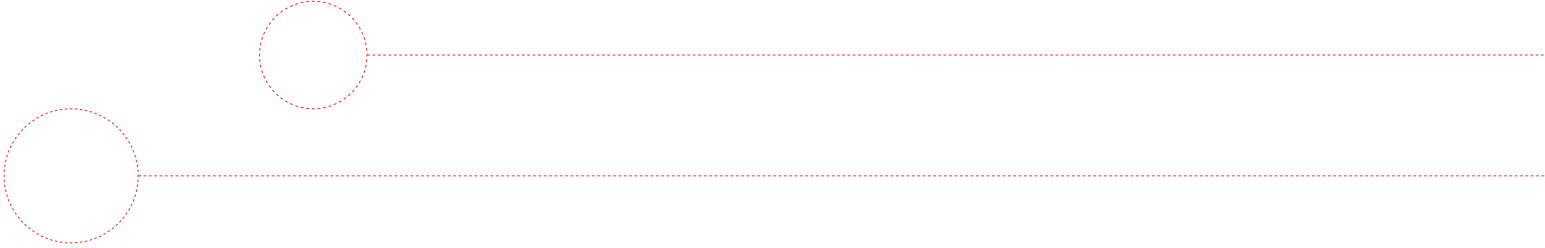
scheme reservations as required by the Water Corporation without the requirement for development approval and unnecessary associated administrative processes.

PILBARA'S PORT CITY GROWTH PLAN - 2012

The Pilbara's Port City Growth Plan (City Growth Plan) 'provides a high level strategic blueprint to facilitate the sustained growth of Port Hedland into Pilbara's Port City with a population of 50,000 people'. The City Growth Plan is intended to provide guidance on investment, community development, land use and layout, environmental response and the provision of infrastructure to facilitate the proposed population increase.

Five core themes have been identified by the City Growth Plan that are intended to assist in the delivery of the plan. The proposed scheme amendment will directly facilitate goal number five 'Building and Maintaining Infrastructure Capacity' detailed as follows:

strategic and urban transport, utilities and communications infrastructure are provided in a timely, sustainable and efficient manner to cater for a growing resident population and increasing economic activity.



The proposed scheme amendment is an integral part of the strategic plan for wastewater service provision to Port Hedland that includes developing, upgrading, expanding and decommissioning certain existing facilities in order to be able to service the forecast development expansion within the Town.

Section 5.6.2 of the City Growth Plan directly addresses the proposed ongoing provision of wastewater services to the Town in the context of the forecast growth, and notes that the strategic objective is to decommission the existing WWTP located in Cooke Point and to direct all wastewater into the expanded facility in South Hedland. The proposed scheme amendment is in accordance with this objective, and will ensure that proposed development is located within appropriate reserves and protected from encroachment by and potential conflict with other land uses.

STATE STATUTORY PLANNING FRAMEWORK

In the absence of a relevant region scheme, there are no directly applicable State level statutory planning instruments relevant to the proposed scheme amendment.

TOWN OF PORT HEDLAND STATUTORY PLANNING FRAMEWORK

TOWN PLANNING SCHEME No. 5

The Town's TPS5 is a land use based statutory town planning scheme gazetted in 2001.

Under TPS5 the two waste water treatment infrastructure sites are currently generally zoned for 'Rural' purposes, with some areas reserved for 'Local Road'. Cooke Point Drive adjacent to the Pumping Station site is reserved as a 'District Road'.

REFER TO FIGURE 6 - CURRENT WWTP SITE ZONING - TPS5

REFER TO FIGURE 7 - CURRENT PUMPING STATION ZONING - TPS5

REFER TO APPENDIX 1 – PROPOSED REZONING MAPS

Section 1.5 of TPS5 states that the general objectives of the scheme are to:

- a. *Encourage an appropriate balance between economic and social development, conservation of the natural environment, and improvements in lifestyle and amenity;*
- b. *Implement strategic planning for the municipality, including the recommendations of the State Planning Strategy and relevant regional planning strategies;*
- c. *Reserve certain portions of land required for public purposes;*

- d. *Zone the balance of the land within the Scheme Area for purposes described in the Scheme;*
- e. *Define the uses and types of development to be permitted on land within the Scheme Area; and*
- f. *Control and regulate the development of land, erection and demolition of buildings and the carrying out of works.*

The proposed amendment is in accordance with relevant general objectives (b) and (c) listed above as it will assist in delivering the strategic planning intent for the area, by ensuring that the provision of system enhancing essential urban services infrastructure occurs on appropriate public purpose reserved land.

TPS5 identifies the expanded WWTP as being within the 'South Hedland Entry Precinct' area which, as identified in Section 5.3.5, has the following objectives:

- a. *Improve the legibility of the locational and functional relationships between Wedgefield, Boodarie, South Hedland, Port Hedland and the airport;*
- b. *Enhance the visual amenity of entry roads to South Hedland;*
- c. *Give priority to recreation and community uses;*
- d. *Ensure that uses occurring within the Boodarie strategic industrial buffer*

FIGURE 6 - CURRENT WWTP SITE ZONING - TPS5

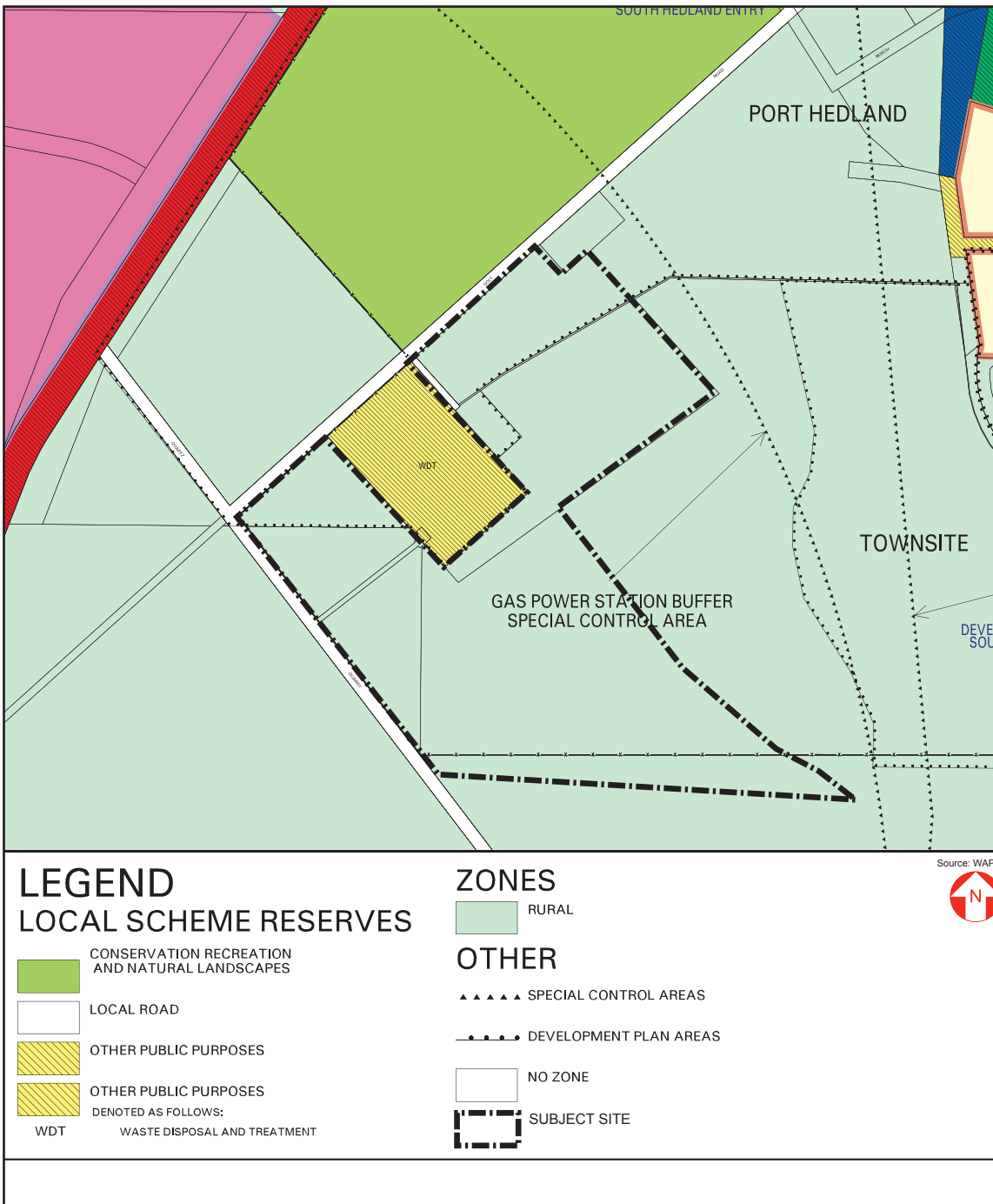
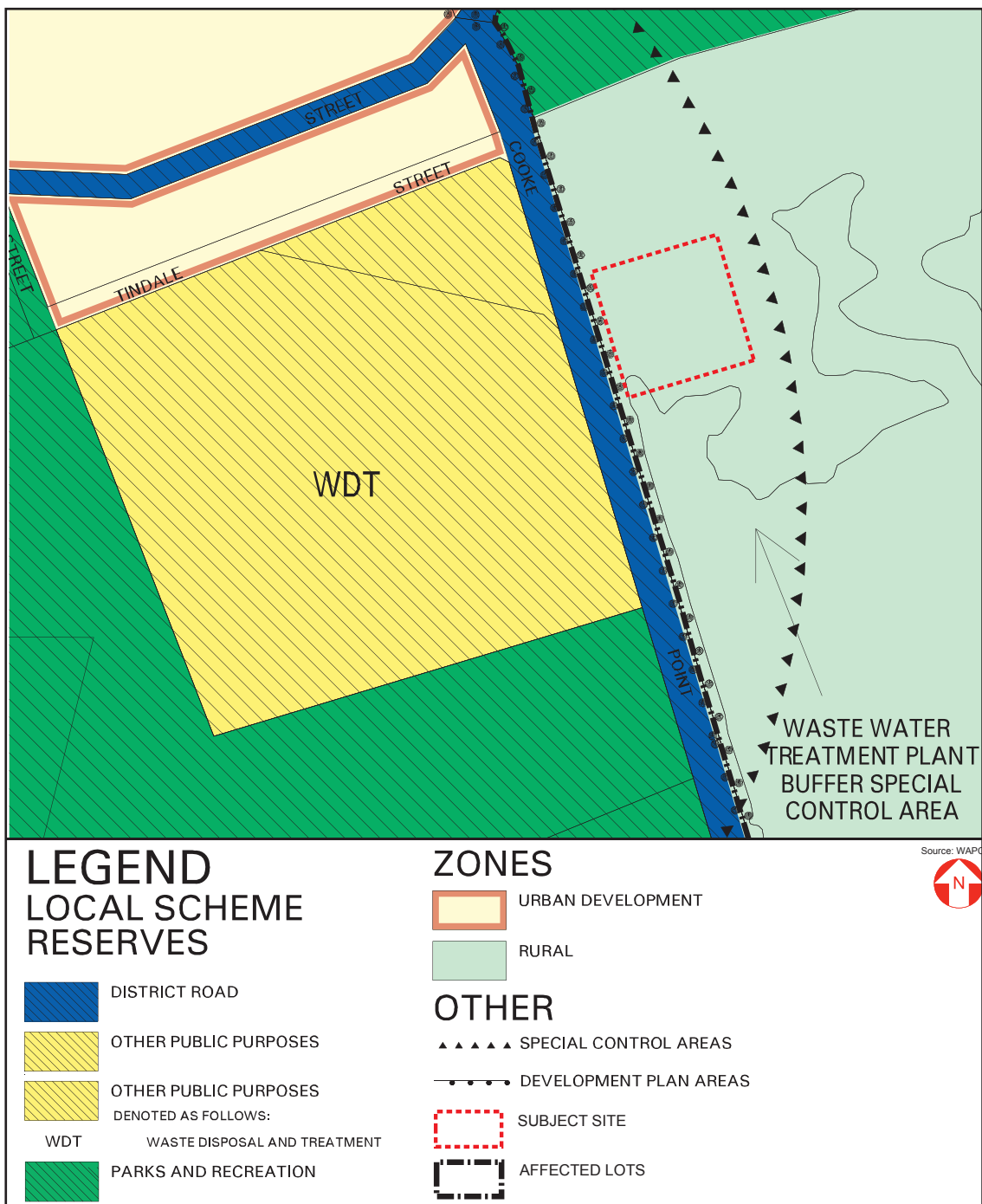


FIGURE 7 - CURRENT PUMPING STATION ZONING - TPS5



area place no constraints on industry operations within the Strategic Industry zone;

- e. Determine practical functional relationships between land uses as the basis for possible rationalisation of cadastral boundaries within the precinct; and*
- f. Protect options for future infrastructure within the area reserved for this purpose.*

The proposed amendment is in accordance with relevant objectives for the South Hedland Entry Precinct as it will assist in protecting the 'options for future infrastructure' by ensuring that the land associated with the wastewater treatment facilities is appropriately reserved and the subject of an odour buffer SCA that will reduce the potential for land use conflict as development occurs into the future.

TPS5 identifies the proposed pumping station as being within the 'Pretty Pool Precinct' area which, as identified in Section 5.3.3, has the following objectives:

- a. Reinforce the precinct as part of the entrance to Port Hedland,*
- b. Ensure that any further urban development within the precinct is compatible with its environmental values,*
- c. Give particular priority to the conservation and management of mangroves and tidal flats,*

- d. Ensure that the facilities and the active and passive recreation activities within the Pretty Pool reserve are consistent with its district function,*
- e. Permit additional tourist facilities provided these do not detract from the district recreational function and the environmental values of the precinct, and*
- f. Ensure that development within the precinct is compatible with potential storm surge conditions within the precinct.*

Whilst none of the objectives above can be considered to be directly relevant to the proposed public purpose reservation for the pumping station site, the greater strategic objective of the development of the infrastructure is to allow the existing Cooke Point WWTP to be decommissioned. This will assist in increasing the amenity of the entry roads into Port Hedland by removing a wastewater treatment facility from one of the main entry approaches into the Town.

PROPOSED SCHEME AMENDMENT

The expanded WWTP development as recently approved by the JDAP will sit over a number of different zonings and local reservations under TPS5. The amendment seeks to create a consistent reservation purpose across the site that is appropriate for the WWTP land use.

The correct local reservation purpose already exists under TPS5 for the expanded WWTP and proposed pumping station use – ‘Public Purposes – WDT’ (wastewater disposal and treatment). An odour buffer SCA is already in place for the existing Cooke Point WWTP facility on Cooke Point Drive, and a modified version of this mechanism is proposed to be utilised to introduce a new odour buffer requirement for the expanded WWTP.

The table below details the proposed scheme amendments as they relate to particular lots:

Lot Details	Current Zoning or Reservation under TPS5	Proposed Zoning or Reservation
Pt Lot 6067	Local Scheme Reserve – ‘Public Purposes – WDT’ ‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
4508	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
Pt Lot 340	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
300	‘Local Road’	Local Scheme Reserve – ‘Public Purposes – WDT’
6086	Local Scheme Reserve – ‘Public Purposes – WDT’	Local Scheme Reserve – ‘Public Purposes – WDT’
6066	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
6035	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
341	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
342	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
Pt 343	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
Pt 356	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’
Pt 505 (Pumping Station)	‘Rural’ Zone	Local Scheme Reserve – ‘Public Purposes – WDT’

In addition to the above amendments to the TPS5 mapping, the following changes are proposed to the TPS5 text relating to the SCA associated with the South Hedland WWTP Expansion. –

Delete the following text from TPS5 –

7.4 WASTE WATER TREATMENT PLANT SPECIAL CONTROL AREA

7.4.1 When considering applications for planning approval within the Waste Water Treatment Plant Special Control Area, Council shall have regard to the :

- a) compatibility of the development with the operations of the treatment plant, and
- b) impact of the proposal on the operations of the treatment plant.

7.4.2 When determining applications for planning approval within the Wastewater Treatment Plant Special Control Area, Council may approve, with or without conditions, or refuse a proposal for reasons relevant to the operations of the treatment plant.

And insert the following text -

7.4 WASTE WATER TREATMENT PLANT ODOUR BUFFER SPECIAL CONTROL AREA

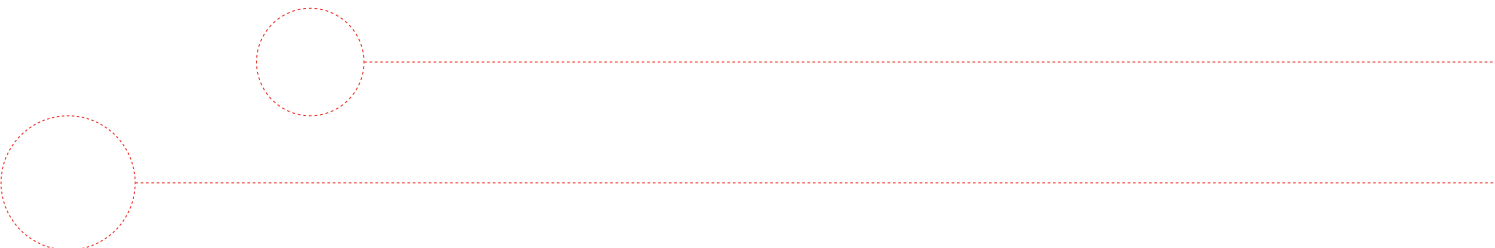
7.4.1 The purpose of identifying the Waste Water Treatment Plant Odour Buffer is to avoid incompatible or odour-

sensitive land use or development being established within the odour buffer, and to protect the long term operation of the plant which provides an essential service to the community through the treatment, re-use and safe disposal of the town's treated waste water.

7.4.2 Despite the land use permissibility indicated in the Scheme Zoning Table or any provisions elsewhere in the Scheme, Planning Approval is required for any proposed use or development within a Waste Water Treatment Plant Buffer Special Control Area as depicted on the Scheme Map.

7.4.3 The Waste Water Treatment Plant and its associated infrastructure may create odour and/or noise nuisance to surrounding land uses. Therefore, when determining applications for planning approval for development or land use within the Special Control Area, the Council shall:

- a) Consider the compatibility of the use or development with wastewater treatment plant infrastructure having regard to potential odour and noise emissions from the waste water treatment plant;
- b) Consider whether the use or development would have a detrimental impact on the long term operation of the waste water treatment plant;

- 
- c) Obtain and have regard to the advice and recommendations of the Water Corporation and the Department for Environment and Conservation and any relevant policies of the Department of Environment and Conservation and the Western Australian Planning Commission including State Planning Policy 4.1 (State Industrial Buffer Policy) and EPA Guidance Statement No.3 (Separation Distances between Industrial and Sensitive Land Uses);
 - d) Impose conditions as appropriate on any planning approval to attenuate or minimise odour and noise impacts; and
 - e) Not approve any application for land use or development within the buffer that would suffer unacceptable impacts from odour or noise emissions, or which by its nature may adversely impact on the continued operation of the waste water treatment plant.

It is considered that the amended text will provide the Town with greater guidance and development control relating to land uses proposed within the vicinity of the WWTP, and ensure that consideration is given directly to issues relating to the WWTP such as odour and noise that may be encountered within the identified SCA. This expanded wording is also consistent with that currently being implemented around the State for similar infrastructure.

RATIONALE AND PLANNING JUSTIFICATION

The principles of orderly and proper planning require that development be a logical and consistent response to the planning vision as established through strategic planning processes for the area. The proposed scheme amendment is consistent with the strategic intent for the area and will allow for the appropriate reservation of land for public purposes associated with critical wastewater treatment infrastructure.

Reserving the expanded WWTP and proposed pumping station sites for 'Public Purposes - WDT' under TPS5 is considered appropriate as it allows for ongoing development to occur in accordance with the reserve purpose and be exempt from the need to obtain future planning approvals. The addition of the modified SCA based on the odour buffer modelling for the expanded WWTP facility and associated modifications to the TPS5 text will ensure that any future development proposal will be required to have regard to odour buffer and noise considerations and will assist in removing potential incompatibility between land uses in the future.

The proposed scheme amendment to facilitate a 'Public Purposes - WDT' local reservation for the expanded WWTP and proposed pumping station is appropriate, as it will:

- Respond to strategic planning directions of the WAPC and the Town by facilitating strategic infrastructure development;
- Allow for both sites to be developed in the future for waste disposal and treatment

purposes to respond to changes in demand as Port Hedland develops into the future; and

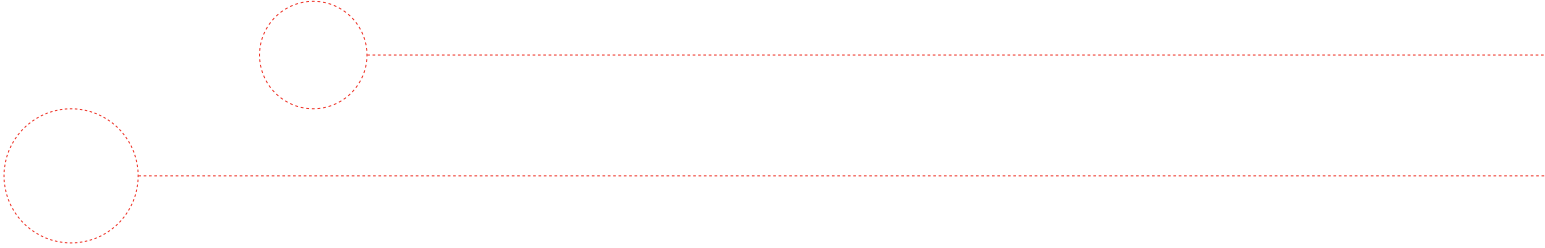
- Assist in creating a logical and consistent reservation purpose for permanent wastewater treatment infrastructure within the Town.

ODOUR EMISSIONS AND BUFFERING

As part of a process of obtaining the required DEC License to Commence Works, the Water Corporation has commissioned odour modelling for the proposed WWTP expansion. The modelling has been undertaken by CEE Consulting Environmental Engineers, who are recognised nationally as leaders in odour modelling.

Local topographical information and meteorological data obtained from a local weather station on the site, were used in the computer-based odour model to produce odour contours based on expected odour emission rates from the various stages of the WWTP upgrade. The odour model reflects the immediate and the long-term ultimate capacity of the WWTP. The modelling assumes a 99.9 percentile 'odour frequency level' which will provide a high level of protection to the community against odour annoyance.

The buffer supplied by the Water Corporation provides the basis for the boundary of the SCA that will be inserted into TPS5 to reflect the area impacted by the odour associated with the expanded WWTP. This will assist the Town in the



future with development control in the vicinity of the WWTP and avoid the establishment of odour and noise sensitive land uses within the area affected by the buffer.

CONSISTENCY WITH SURROUNDING LAND USES

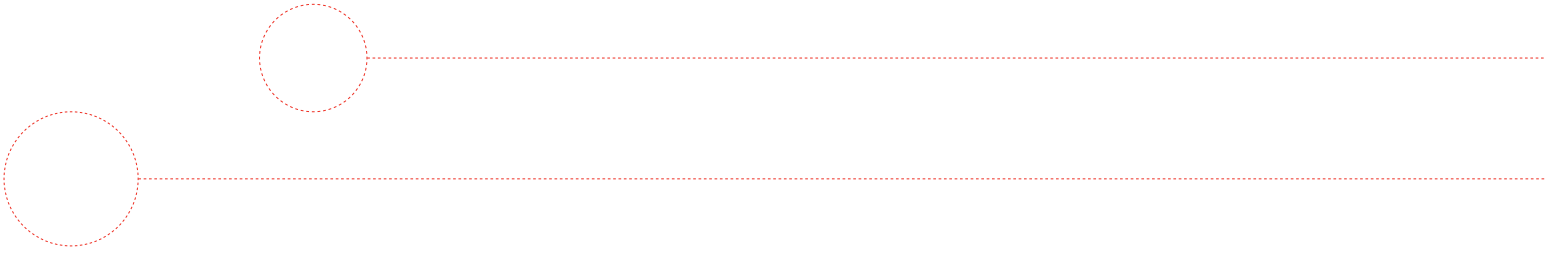
The properties that are to be the subject of the WWTP expansion and proposed pumping station should be located on appropriately reserved land under TPS5 that relates to the future land use. The inclusion of the WWTP odour buffer as a SCA will assist in ensuring that all land uses that are proposing to locate within the affected area are scrutinised to ensure their suitability with the proposed location and will reduce the potential for land use incompatibility and potential conflicts as development within the area progresses.

SUMMARY AND CONCLUSION

This report has been prepared in support of a proposed amendment to the Town's TPS5 to rezone the subject sites to a suitable local reservation purpose that is consistent with the proposed use of the land.

The proposed amendment will assist in the ongoing development and protection of critical wastewater treatment infrastructure, and ensure that the land is appropriately reserved to accommodate both recently approved and likely future development. The scheme amendment will also ensure that the land impacted by the odour buffer associated with the expanded WWTP facility will be protected from the development of incompatible land uses leading to a minimisation of the potential for land use conflict in the future.

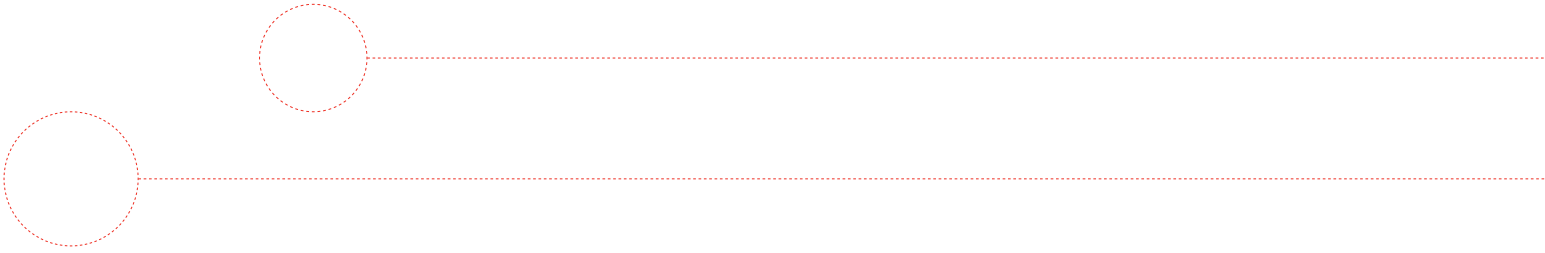
Based on the above it is respectfully requested that the Town initiate an amendment to TPS5 to rezone the subject sites from their current reservations and zonings to 'Public Purposes – WDT' with the associated odour buffer SCA as proposed.



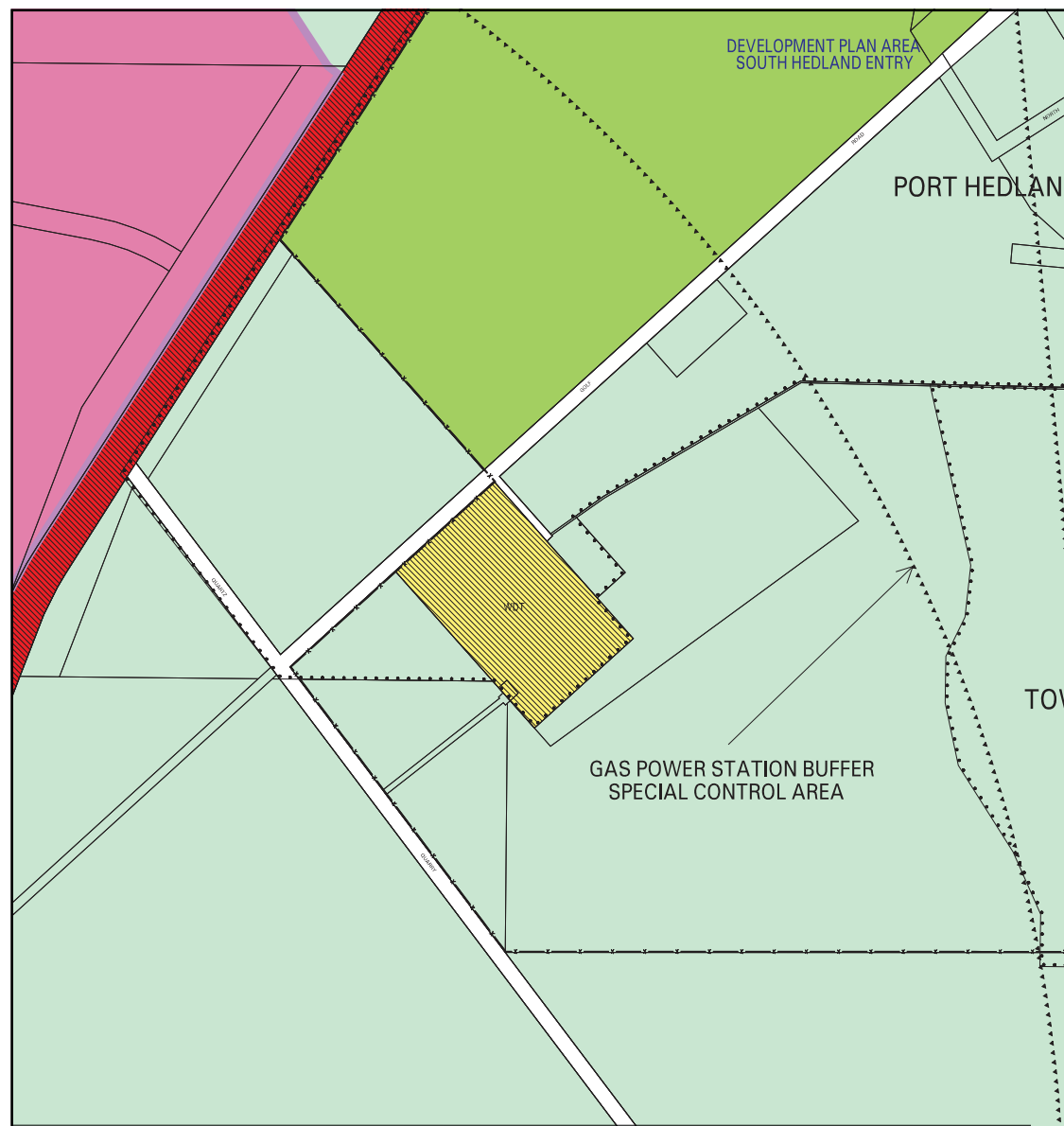
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APPENDIX 1

PROPOSED REZONING MAPS








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EXISTING ZONING




LEGEND LOCAL SCHEME RESERVES

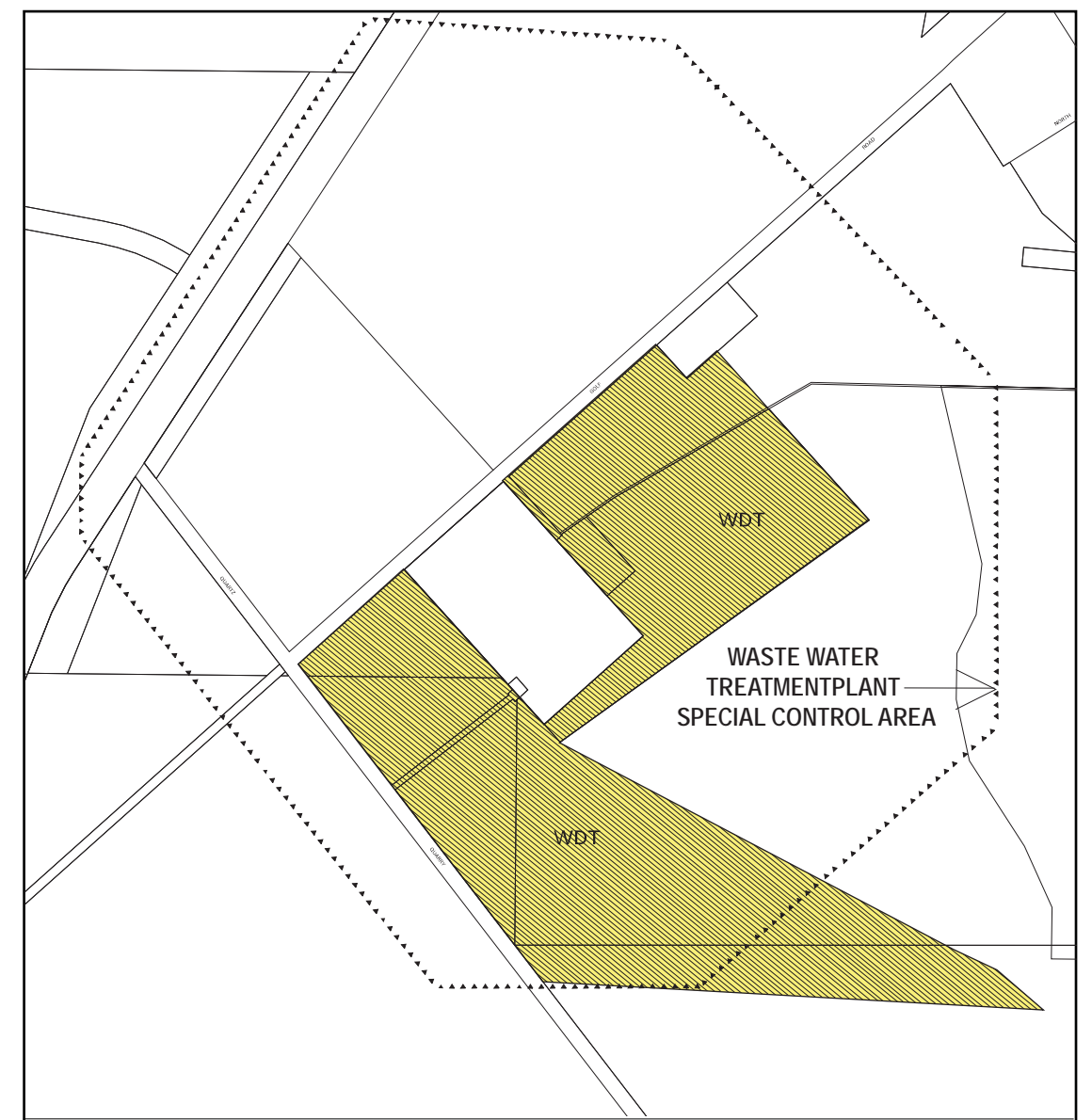
-  CONSERVATION RECREATION AND NATURAL LANDSCAPES
-  LOCAL ROAD
-  OTHER PUBLIC PURPOSES
-  OTHER PUBLIC PURPOSES DENOTED AS FOLLOWS:
-  WDT WASTE DISPOSAL AND TREATMENT

ZONES

-  RURAL

OTHER

-  SPECIAL CONTROL AREAS
-  DEVELOPMENT PLAN AREAS
-  NO ZONE



PROPOSED ZONING

ADOPTION

ADOPTED BY RESOLUTION OF THE SHIRE OF PORT HEDLAND AT THE ORDINARY MEETING OF THE COUNCIL HELD ON THE _____ DAY OF _____ 201_____

SHIRE PRESIDENT

CHIEF EXECUTIVE OFFICER

FINAL APPROVAL

1. ADOPTED FOR FINAL APPROVAL OF THE SHIRE OF PORT HEDLAND AT THE ORDINARY MEETING OF COUNCIL HELD ON THE _____ DAY OF _____ 201_____ THE COMMON SEAL OF THE SHIRE OF PORT HEDLAND WAS HEREUNTO AFFIXED BY AUTHORITY OF A RESOLUTION OF THE COUNCIL IN THE PRESENCE OF

SHIRE PRESIDENT

CHIEF EXECUTIVE OFFICER

2. RECOMMENDED/ SUBMITTED FOR FINAL APPROVAL BY THE WESTERN AUSTRALIAN PLANNING COMMISSION

DELEGATED UNDER S.16 OF THE P&D 2005

DATE

3. FINAL APPROVAL GRANTED

MINISTER FOR PLANNING

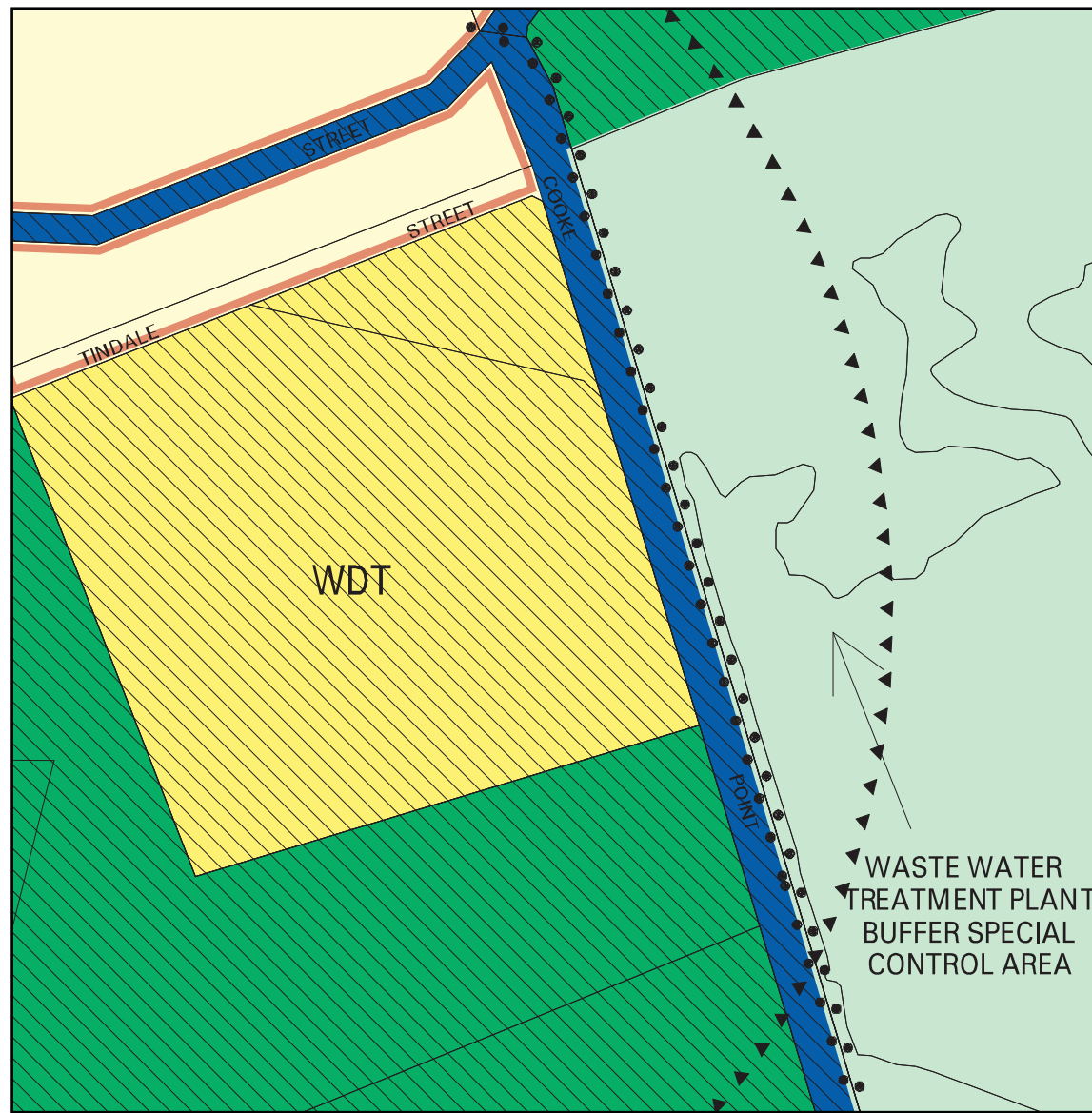
DATE

SEAL

PLANNING AND DEVELOPMENT ACT 2005

SHIRE OF PORT HEDLAND

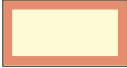
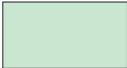
TOWN PLANNING SCHEME NO.5
AMENDMENT NO. XX



LEGEND LOCAL SCHEME RESERVES

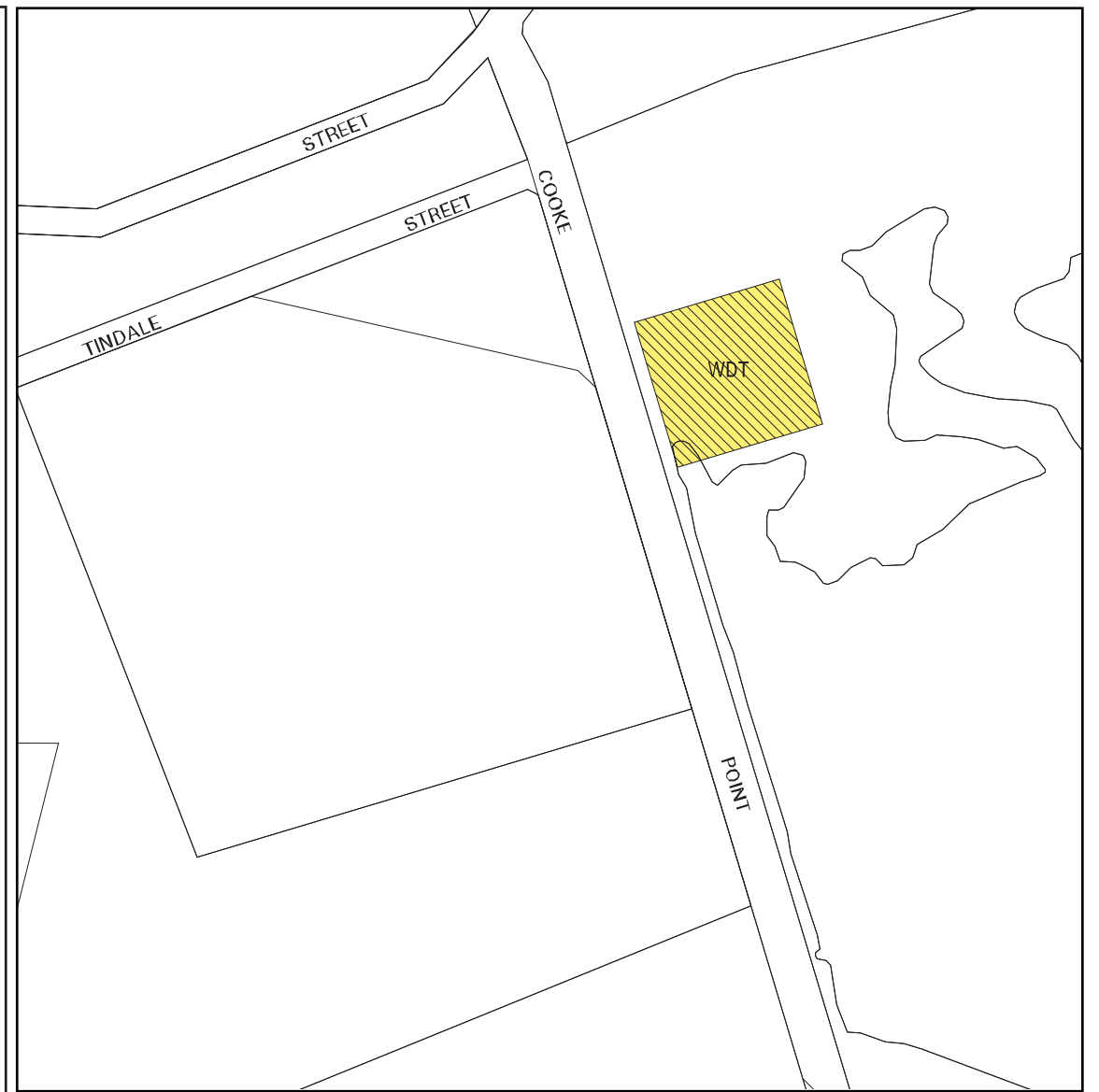
-  DISTRICT ROAD
-  OTHER PUBLIC PURPOSES
-  OTHER PUBLIC PURPOSES DENOTED AS FOLLOWS:
WDT WASTE DISPOSAL AND TREATMENT
-  PARKS AND RECREATION

ZONES

-  URBAN DEVELOPMENT
-  RURAL

OTHER

- ▲▲▲▲ SPECIAL CONTROL AREAS
- DEVELOPMENT PLAN AREAS



EXISTING ZONING

EXISTING ZONING

ADOPTION

ADOPTED BY RESOLUTION OF THE SHIRE OF PORT HEDLAND AT THE ORDINARY MEETING OF THE COUNCIL HELD ON THE _____ DAY OF _____ 201_____

SHIRE PRESIDENT

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SEAL

PLANNING AND DEVELOPMENT ACT 2005

SHIRE OF PORT HEDLAND

TOWN PLANNING SCHEME NO.5
AMENDMENT NO. XX