



**Shire of Exmouth
Local Planning Scheme No. 4
Amendment No. 13**

***Rezoning Lot 9510 on DP 55557, Exmouth to an 'Urban Development' zone
to facilitate subdivision and development.***

PLANNING AND DEVELOPMENT ACT 2005
RESOLUTION DECIDING TO ADOPT AMENDMENT TO LOCAL PLANNING
SCHEME
SHIRE OF EXMOUTH
LOCAL PLANNING SCHEME NO.4
AMENDMENT NO. 13

Resolved that the Local Government pursuant to Section 75 of the *Planning and Development Act 2005*, amend the above Local Planning Scheme by:

1. Rezoning Lot 9510 on Deposited Plan 55557, Exmouth from the 'Special Use 7' zone to the 'Urban Development' zone;
2. Deleting 'SU7' from 'Schedule 4 – Special Use Zones';
3. Deleting 'Lot 9510 on DP5557' from 'A8' in 'Schedule 2 – Additional Uses'; and
4. Amending the Scheme Map accordingly.

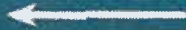
The amendment is standard under the provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* for the following reasons:

- The proposal is addressed by a WAPC-endorsed Local Planning Strategy that applies to the Shire of Exmouth.
- The amendment will have minimal impact on land in the scheme area that is not the subject of the amendment;
- The amendment does not result in any significant environmental, social, economic or governance impacts on land in the scheme area; and
- It is not a complex or basic amendment.

Dated this 21st day of November 2024

 CHIEF EXECUTIVE OFFICER

EXMOUTH 4KM



MURAT ROAD

SUPER LOT D

Image Credit: DevelopmentWA

Scheme Amendment Request

Superlot D, Exmouth Marina

Prepared for Exmouth Superlot Pty Ltd

Prepared by Taylor Burrell Barnett

November 2024



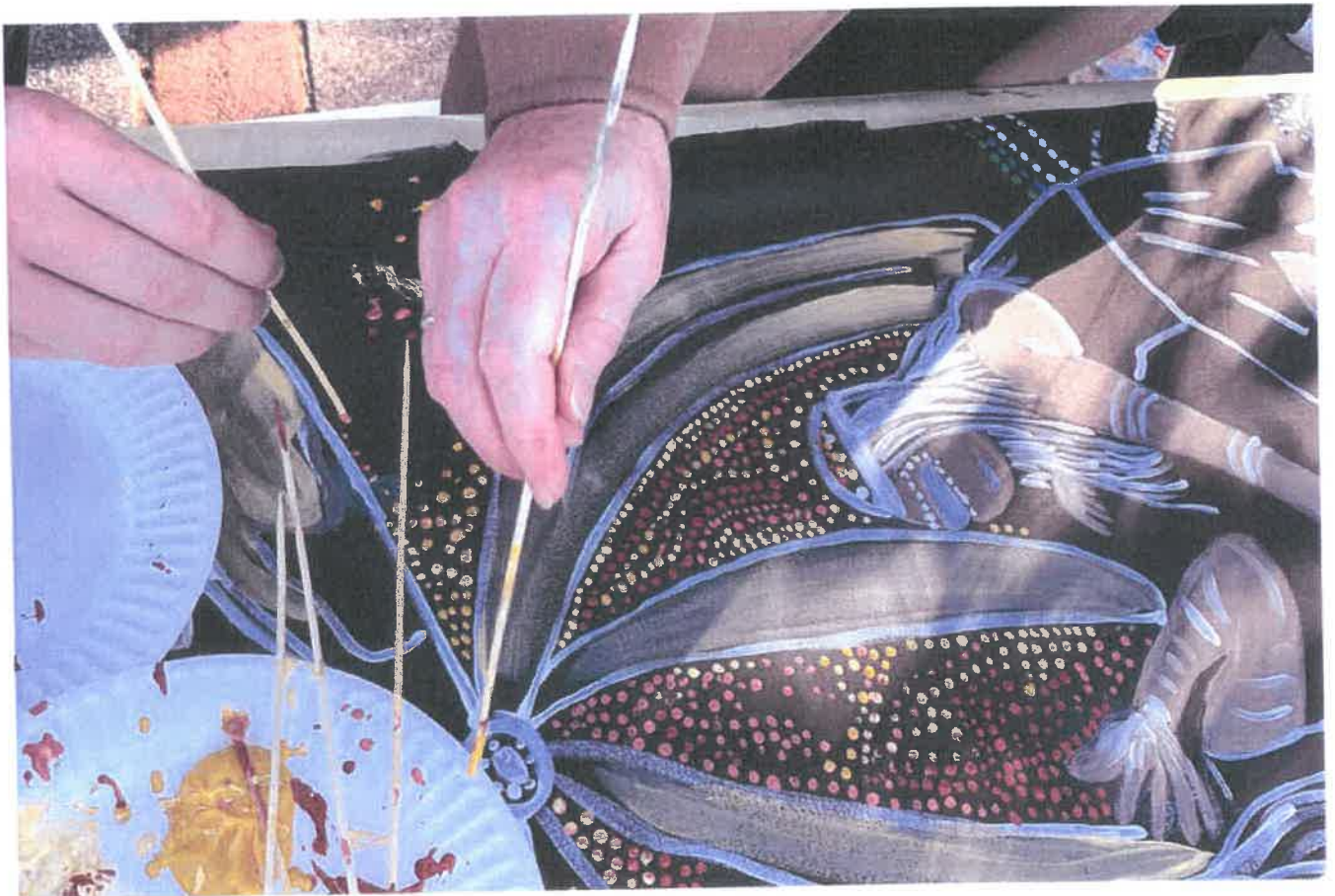
**Taylor
Burrell
Barnett**

Acknowledgement of country



We respectfully acknowledge the traditional custodians of the land on which we live and work, and recognise their continuing connection.

We pay our respects to the Elders past and present for they hold the memories, the traditions, the culture and hopes that, through meaningful connection, we aim to apply to the design and planning of communities now and in the future.



Document Information

Scheme Amendment Request

Superlot D – Lot 9510 on Deposited Plan 55557

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Revision	Status	Author	Approved by	Date Issue
1	Draft	M Willcock	L Barnett	1/11/2024

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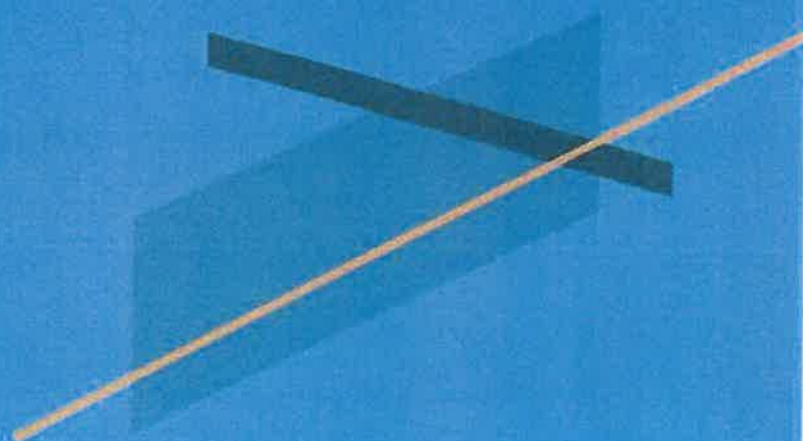
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1.0

Introduction



1.0 Introduction

1.1 Background

This Scheme Amendment Request has been prepared on behalf of the landowner, Exmouth Superlot Pty Ltd, in support of rezoning Lot 9510 Murat Road, Exmouth, from the 'Special Use 7' zone ('SU7') to the 'Urban Development' zone under the Shire of Exmouth *Local Planning Scheme No. 4* (LPS 4).

Since 2021, the Shire has been actively advocating government to fast-track the release of Superlot D for residential housing. Since that time, the Shire has been aiming to ensure land is delivered to suit local market needs. In 2024, Superlot D was sold and detailed planning and design is underway to deliver housing.

Rezoning the site will facilitate the subdivision and development of Superlot D which, in turn, will boost housing supply, benefit local businesses and support the growth and diversification of the local Exmouth community.

The rezoning of the land to the 'Urban Development' zone aims to provide a standard zone under LPS 4, that is contemporary and consistent with the state government's planning reform program to modernise the planning framework. The 'Urban Development' zone provides for a consistent, efficient and streamlined planning procedure that can facilitate new housing and enabling works for critical infrastructure. The rezoning is administrative in nature however, importantly, it will facilitate other planning processes to be prepared to expedite a high-quality subdivision application and facilitate development for housing.

The adoption of this scheme amendment for advertising is an important first step in unlocking this land for residential development, so that the proposal can be referred to the:

- Minister for Planning pursuant to s.83A of the *Planning and Development Act 2005* for approval for advertising under s.84; and
- EPA for a decision under section 48A of the *Environmental Protection Act 1986*.

We would seek the Shire's earliest initiation of this request as a 'Standard' amendment.

1.1.1 The Proponent

Exmouth Superlot Pty Ltd owns the freehold land. A project team has been commissioned to provide advice and technical expertise to deliver housing, including:

- **Taylor Burrell Barnett** – town planning and urban design;
- **Porter Consulting Engineers** – civil design and engineering;
- **Western Environmental** – environmental assessment and bushfire accredited practitioner;
- **Oversby Consulting** – hydrologist;
- **Plan E** – landscape architect;
- **JBA** – surveyor;
- **PTG** – traffic impact assessment; and
- **Steve Corsini** – Aboriginal Cultural Heritage.

1.1.2 Report Format

This report is prepared in support of a Scheme Amendment Request to the Shire of Exmouth *Local Planning Scheme No.4* (LPS 4). The report is structured to provide a high-level description of the project; a description of the scheme amendment area; and a description of the requested amendment to the scheme maps and text.

1.2 Scheme Amendment Request

The amendment request seeks to:

- rezone the subject site from SU7, to the 'Urban Development' zone;
- delete 'SU7' from Schedule 4 – Special Use Zones in the LPS 4 scheme text; and
- delete reference to the site in Additional Use 8 (A8).

The Scheme Amendment and Map is provided in Appendix A.

The 'Urban Development' zone is appropriate and suitable, for the following reasons:

- The *Local Planning Strategy* identifies Superlot D for 'Future Residential' noting that the subject site could be utilised for residential, composite commercial and tourism purposes. As part of an expression of interest and bid to acquire the site from the state government's development agency (DevelopmentWA), the landowner commissioned a concept design to illustrate the intended development of the land for residential and composite commercial, based on knowledge of the strategic identification of the land for such purposes.
- A review of the existing conditions contained under 'SU7' have been found to impede the delivery of housing. To efficiently plan for the Superlot D, the 'Urban Development' zone and removal of the special use conditions enables the proponent to undertake subdivision and development in a timely manner.
- Having regard to the planning reform program that is underway at a state level, the 'Urban Development' zone is a standard zone typically used in locations that would benefit from coordinated land delivery. The implementation of the planning reform program supports 'Urban Development' zones, and in contrast, the planning reform program does not support special use zones.
- The 'Urban Development' zone provides for orderly and proper planning processes in relation to subsequent subdivision and development. Rezoning to 'Urban Development' also facilitates parallel processes to expedite housing supply. Under the LPS 4 scheme text (as its currently written for the 'Urban Development' zone) and the Deemed Provisions, the landowner will be able to prepare planning proposals that do not prejudice subsequent use and development of land.
- 'SU7' refers to the Exmouth Marina Village Outline Development Plan (ODP). Due to the age of the ODP, it is not in a manner and form that is required of a contemporary structure plan, and its design and anticipated uses and development outcomes are no longer consistent with the Shire's more contemporary planning vision. The ODP is also due to expire on 19 October 2025. It is therefore more appropriate to remove SU7 completely, and apply a standardised and contemporary 'Urban Development' zone which provides suitable head of power provisions for new planning instruments.

1.3 Pre-Lodgement Consultation

The following information in **Table 1** provides an overview of pre-lodgement consultation that has been undertaken with DPLH, the Shire of Exmouth and the state government regarding the proposal.

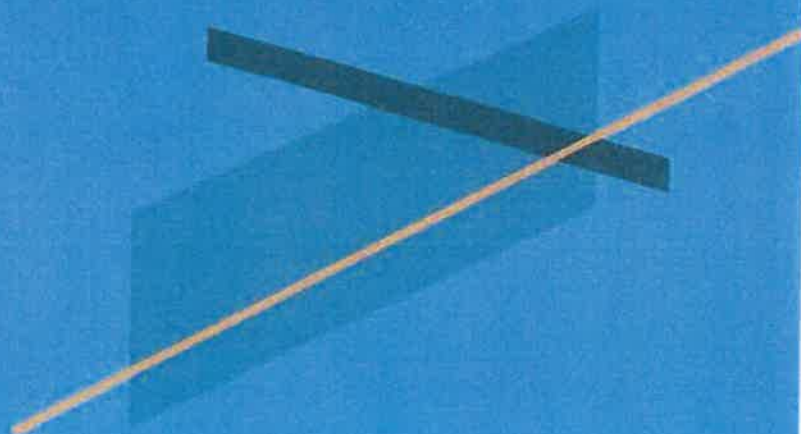
Table 1 Summary of Consultation regarding the Proposal

Date	Attendees	Purpose
14 September 2023	Exmouth Chamber of Commerce and Industry and Client	<ul style="list-style-type: none">• Provide an overview of proposed development of Superlot D and seek feedback on housing needs of local businesses.
14 September 2023	Shire of Exmouth Chief Executive Officer and Planning Staff	<ul style="list-style-type: none">• Provide an update on the proposed development and seek feedback on the initial concept plan.
16 September 2023	Exmouth General Community Consultation	<ul style="list-style-type: none">• Provide information to the general community regarding the development and seek feedback on their housing needs and wants.
24 May 2024	Shire of Exmouth, Taylor Burrell Barnett and Client	<ul style="list-style-type: none">• Provide an update on the purchase of Lot 9501; overview of current planning framework; review of initial concepts; discussion of planning processes for the site.

Date	Attendees	Purpose
25 September 2024	State Government; Client	<ul style="list-style-type: none"> Presentation of a concept plan for Superlot D.
15 October 2024	Department of Planning, Lands and Heritage; Taylor Burrell Barnett; Client	<ul style="list-style-type: none"> Provide an update on activities undertaken, engagement, and next steps regarding scheme amendment and planning processes.
17 October 2024	Shire of Exmouth, Taylor Burrell Barnett	<ul style="list-style-type: none"> Discussion regarding a scheme amendment request to the 'Urban Development' zone for Superlot D.
17, 30, 31 October 2024	Shire of Exmouth, Oversby Consulting	<ul style="list-style-type: none"> Discussion regarding the site's water management and associated design levels.

2.0

Background



2.0 Background

2.1 Location

Lot 9510 (subject site) is bound by Murat Road to the west; Mortiss Street to the south; the Exmouth marina artificial waterway and Crown Reserve 47981 (for Harbour Purposes, vested to Shire of Exmouth) to the east; Lots 199-207 Cobia Close and the road reserve (Cobia Close) to the north.

2.2 Site area

Superlot D has a legal land area of 17.8829 (source: Landgate). Within Superlot D, a portion of the artificial waterway is included within the property boundaries, associated with the site's interface.

2.3 Ownership

The particulars of the site are provided in **Table 2**.

An easement is registered to Water Corporation (J080718) for existing sewer infrastructure, and this is shown on the Deposited Plan 55557.

Table 2 Certificate of Title Details

Lot Number	Deposited Plan	Volume/Folio	Registered Proprietor
9510	55557	2729/825	Exmouth Superlot Pty Ltd

2.4 Current and surrounding land uses

From the 1960's to 2000-2001, part of Superlot D comprised a western component of the racecourse. Since circa 2000's, the south-western part of Superlot D has been used as a motor race track, used by groups including the Exmouth Kart Club.

The Exmouth Boat Harbour officially opened in 1997. It is understood the racecourse was damaged by Cyclone Vance (22 March 1999), was decommissioned and has been replaced with the Exmouth Boat Harbour and canal development (WA Museum, n.d.). It is understood the site contains an area of uncontrolled fill, likely of topsoil from other parts of the marina development. Parts of the site has been earthworked as part of the construction of the canal development.

Figure 1 provides snapshots of the site during its transition from the racecourse to being integrated with the Exmouth Boat Harbour and canal development.

Surrounding land use is observed to include:

- single residential dwellings and Cobia Close along the northern lot boundary;
- Broadcast Australia owns and operates communication infrastructure on Lot 869 Murat Road. This imposes a buffer of 150m from the mast for any structures greater than 25m in height. The site is immediately west on the opposite side of Murat Road.

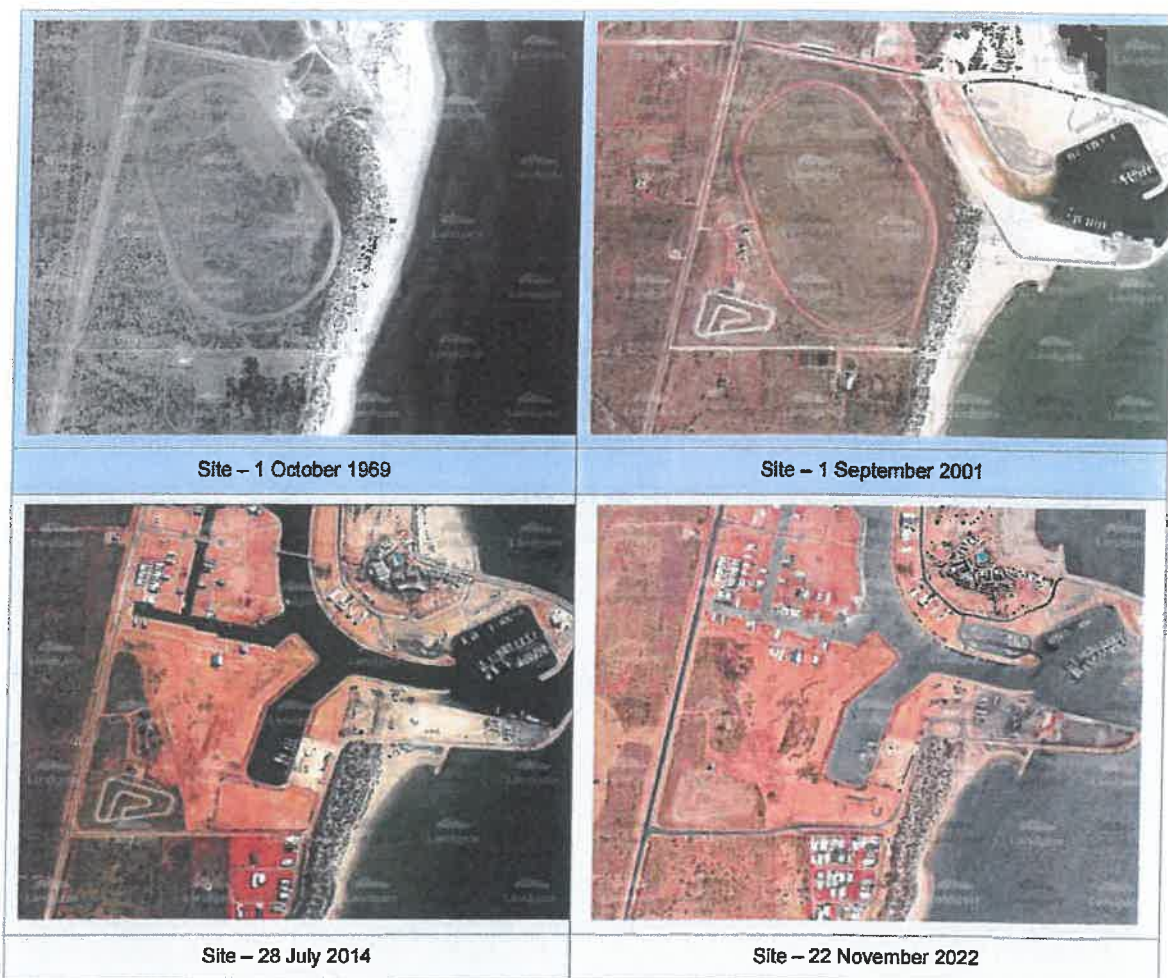


Figure 1 Aerial photos of Superlot D, 1969-2022 (source: Landgate)

2.5 Physical characteristics

Superlot D has been subject to earthworks and previously has been cleared as part of the development of the Exmouth Marina.

Based on a detailed feature survey undertaken in 2015 (refer JDA report in Appendix C) the site has an existing ground level ranging from 4m to 5m AHD, and higher elevations in the south-west of the property at 5.5 to 6.5m AHD. Adjoining the artificial waterways, a limestone rock wall has a surveyed elevation of approximately 1.3-1.4m AHD. Along Cobia Close and the rear of properties is an existing earth bund at an elevation of approximately 5.6m AHD.

The project's hydrologist has reviewed previous studies and investigated the flood management from external overland stormwater flows and ocean storm surge. In consultation with the civil engineer for the project, increasing finished floor levels is expected based on the existing levels of Cobia Close, Murat Road and Mortiss Street, whereby the subject site will be elevated in order to achieve the recommended levels. This will require importation of fill to the site, to be determined through detailed design and planning proposals, such as subdivision.

In the south-west portion of the subject site is the existing go kart track and related demountable structures and shipping containers, along with a raceway tower. It is anticipated the existing facility would be demolished as part of any sequential development of the subject site.

The site has some revegetation. This would be addressed in the context of any design for the site including BMP requirements.

The Mortiss Street bund provides some protection against floodwater for Superlot D. The *Exmouth Floodplain Management Strategy* (SKM 2007) modelled catchments that impacted areas of the Exmouth townsite. The

landowner's project team has examined the mapping and obtained appropriate advice in respect of planning for floodplain management and coastal hazards.

2.6 Infrastructure

Within the site is a 3m wide Water Corporation easement. The easement is related to existing sewer infrastructure. The project team is aware of this infrastructure and going forwards, it would be relocated commensurate with detailed subdivision design and implementation of a subdivision approval to create residential lots and the local road network within Superlot D.

A search for Before You Dig Australia identified the following services within the subject site:

- Water Corporation easement registered to the title is for a critical sewer pipeline. The landowner/applicant would need to liaise with Water Corporation / require approval to work near assets; and
- Horizon Power has a low voltage overhead distribution wire traversing into the property.

The search identified the following services in road reserves adjacent to the subject site:

- Water Corporation has sewerage infrastructure the road reserves of Cobia Place and Mortiss Street; and water infrastructure in the road reserves of Murat Road and Mortiss Street;
- Horizon Power has underground high-voltage distribution cables in the road reserves of Murat Road and Mortiss Street, adjacent to the property;
- NBN has cables in the road reserves of Murat Road and Mortiss Street;
- Telstra has telecommunication infrastructure within the road reserve of Murat Road.; and
- There is no gas in the area.

2.7 Bushfire Risk

Parts of the Superlot D are designated as 'bush fire prone'.

The project's bushfire accredited practitioner has been on-site, and upon examination of the site characteristics, bushfire risk is not considered to be an impediment. It is understood that BAL-29 is the maximum bushfire attack level that may be reached, although the BAL-ratings could be lower.

To enable urban development, bushfire investigations will be required early in the process of planning proposals, to demonstrate risks can be managed. This includes a Bushfire Attack Level (BAL) contour map, identifying any bushfire risk issues and preparation of a Bushfire Management Plan, providing an assessment against the bushfire protection criteria and imposing management requirements.

These documents would be prepared by an accredited Bushfire Planning Practitioner as part of subsequent planning proposals. These are not required for this scheme amendment, as the rezoning does not provide for detailed development requirements on-site.

Further details regarding bushfire risk are addressed in the Environmental Assessment Report, refer Appendix D.

2.8 Aboriginal Cultural Heritage

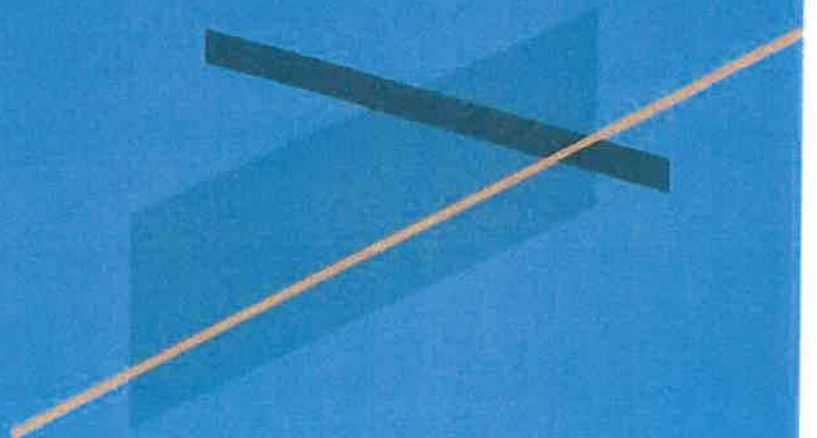
The project team undertook a search of the Aboriginal Cultural Heritage Inquiry System (ACHIS), refer Appendix E. The ACHIS search results indicated that, within Superlot D, there are no ACH registered sites, lodged sites or historic records.

One previous heritage survey, *Report of an Archaeological and Ethnographic Survey of the Coral Coast Marina Resort, Exmouth, North-West Australia* (1989). According to the ACHIS information, the survey did not extend as far south as Lot 9510 on DP55557.

Pursuant to section 15 of the *Aboriginal Heritage Act 1972*, there is a requirement to report on the discovery of Aboriginal Cultural Heritage Places and Objects. It is understood that the landowner is aware of their obligations under the *Aboriginal Heritage Act 1972*.

3.0

Planning Framework



3.0 Local Planning Context

3.1 State & regional planning context

The state and regional planning framework has been duly considered and is described below in **Table 3**.

Table 3 State and regional planning framework applicable to the subject site

Planning mechanism	Applicability
<i>State Planning Strategy 2050 (SPS)</i>	The SPS provides a vision for Western Australia to 2050 and beyond, and is the overarching strategic document informing State, regional and local planning strategies. It identifies the 'central sector' which includes the Gascoyne region to significantly contribute to the State's economy, underpinned by mining, agriculture, fisheries and tourism. The <i>State Planning Strategy</i> recognises Exmouth as a sub-regional centre in the Gascoyne region.
<i>Gascoyne Coast Sub-regional Strategy (GCSRS)</i>	The GCSRS (WAPC, 2018) provides a sub-regional, high-level context for the area that includes the Shire of Exmouth and coastal portions of the Shires of Carnarvon and Shark Bay. In the GCSRS, the Exmouth settlement land-use plan identified Superlot D for 'Residential'; the Exmouth Context Plan identified the proximity of electricity and water reticulated services to Superlot D. Superlot D was recognised in the GCSRS as one of the remaining undeveloped cells suitable for housing.
<i>State Planning Policy 2.0 – Environment and natural resources policy (SPP2)</i>	SPP2 provides general measures for proposals to avoid development that may result in unacceptable environmental damage, and to protect significant features, and promote the sustainable use and management of natural resources.
<i>State Planning Policy 2.6 – State coastal planning policy (SPP2.6)</i>	State Planning Policy 2.6 – State coastal planning policy (SPP2.6) guides the long-term sustainability of WA's coast, including the coastline of the Exmouth Gulf. The policy provides a balanced approach to managing the coastal zone for land use and development. The following policy measures are relevant considerations for the proposed development: i. Ensure that use of the coast, including the marine environment, for recreation, conservation, tourism, commerce, industry, housing, ocean access and other appropriate activities, is sustainable and located in suitable areas. ii. Ensure that land use and development, including roads, adjacent to the coast is sited and designed to complement and enhance the coastal environment in terms of its visual, amenity, social and ecological values. Planning proposals would address recommended floor levels based on the policy and Guidelines. The landowner has obtained advice based on modelling for inundation hazard assessments and, in consultation with Department of Transport, is proposing a finished floor level of 5.95m AHD.
CHRMAP Guidelines	A relevant consideration for Superlot D is the identification of minimum floor levels for habitable structures. Initial investigations undertaken by JDA (refer Appendix C) suggested floor risk mitigation options including importation of fill. The recommended minimum floor level identified in the initial investigations were considered in relation to the boundary of the subject site. Advice based on modelling for inundation hazard assessments has been provided by MP Rogers and Associates who have proposed a minimum floor level of 5.95m AHD. It is noted that the Shire of Exmouth has commissioned a <i>Coastal Hazard Risk and Adaptation Management Plan: Exmouth Townsite</i> (Seashore Engineering), which is in draft.
<i>draft State Planning Policy 2.9 – Planning for water (SPP2.9)</i>	Draft SPP 2.9 will streamline any simplify the current water-related planning policy framework, once finalised and adopted. Planning proposals including scheme amendments need to be accompanied by sufficient information and reporting to demonstrate appropriate protection and management of water resources, in relation to the relevant policy measures and policy outcomes.

Planning mechanism	Applicability
	The information provided with planning proposals would be in accordance with the draft SPP2.9 <i>Guidelines</i> , which specify when and what type of water management report is required.
State Planning Policy 3.0 – <i>Urban growth and settlement</i> (SPP3)	SPP3.0 applies to all development throughout Western Australia, and acknowledges that orderly planning of urban growth and settlement should be facilitated by structure plans. The general principles and provisions contained in the policy would be considered during structure planning.
State Planning Policy 3.4 – <i>Natural Hazards and Disasters</i> (SPP3.4)	SPP3.4 considers a number of natural hazards such as flood risk, bush fire risk, cyclonic activity, coastal erosion and severe storms and storm surge. These are taken into account in relation to the built form, community awareness, and planning for long-term changes. Mitigation is undertaken in relation to the design of the subdivision and development on-site, in accordance with SPPs, guidelines, Australian Standards, Building Code of Australia and other relevant standards.
State Planning Policy 3.7 – <i>Bushfire</i> (SPP3.7)	SPP3.7 outlines measures to reduce risk of bushfire to people, property and infrastructure by encouraging a conservative approach to strategic planning, subdivision, development and other planning decisions proposed in bushfire-prone areas. The project site is identified as being 'Bush Fire Prone' having regard to the Map of Bush Fire Prone Areas. The <i>Guidelines for Planning in Bushfire Prone Areas</i> supplement the objectives and policy measures established in SPP3.7, to assist in their interpretation and advice on how bushfire risk is to be assessed. SPP3.7 outlines the requirement to prepare a Bushfire Management Plan (BMP) and Bushfire Attack Level (BAL) assessment for planning proposals. A Bushfire Management Plan (BMP) will be required at detailed planning stages. The BMP will assess and confirm proposals can achieve a BAL-29 (or lower) rating in accordance with the Guidelines.
State Planning Policy 6.3 – <i>Ningaloo Coast</i> (SPP6.3)	Guiding principles are used for future planning and assessing development, to ensure the protection and sustainable use of the environment for the future. The development would have regard to: <ul style="list-style-type: none"> Sustainable development to improve the attractiveness of the region as a natural and remote place for residents The development integrates economic prosperity in the interests of sustainable development. The policy objectives, guiding principles, and considerations listed under section 5.3 of the SPP6.3 would be considered at future planning stages.
<i>Ningaloo Coast Regional Strategy Carnarvon to Exmouth</i> (NCRS)	The NCRS (WAPC, 2004) informed the SPP6.3 Ningaloo Coast, and established a 30-year land use plan for sustainable tourism and land use on the Ningaloo coast. The strategy provided high-level context for the area that includes the Shire of Exmouth and coastal portions of the Shires of Carnarvon and Shark Bay. The NCRS contained a structure plan for Exmouth which identified Superlot D as part of the marina precinct. The structure plan supported the marina precinct to deliver residential land, and considered that future growth should be integrated with the marina precinct, with appropriate linkages into the town centre.
<i>Government Sewerage Policy</i> (GSP)	The GSP establishes the state government's position on the provision of sewerage services through the planning and development of land. Reticulated sewerage would be delivered during the subdivision of the land.
SPP 7.0 <i>Design of the Built Environment</i> (SPP7)	SPP7 sets out the objectives, principles and framework that will apply to built form proposals. The policy would be duly considered for proposals, such as for subdivision and development.
<i>Liveable Neighbourhoods</i> (LN)	LN is the operational policy to guide planning and subdivision for greenfield and infill sites. The indicative concept design (refer Appendix B) provides an illustration of the future vision of subdivision and development within the subject site, which is understood to adopt the policy principles of LN.
<i>Residential Design Codes</i> (R-Codes)	The 'Urban Development' zone provides for planning proposals to nominate R-Codes, and apply the R-Codes for residential development.
Operational Policy 1.1 – <i>Subdivision of Land (General Principles)</i> (OP1.1)	The OP1.1 will be relevant to the subdivision phase and outlines the requirements for creating new lots. The policy sets out the principles used by the WAPC for determining subdivision applications.
Development Control 1.8 <i>Canal Estates</i> (DC1.8)	The policy provides for policy considerations in relation to the design of canal estates, and would have applied to the original design of the Exmouth Marina. For planning proposals, consideration of the policy would apply in relation to interface with the waterways, public open space, drainage, and other relevant matters.

Planning mechanism	Applicability
<i>Transport Impact Assessment (TIA) Guidelines</i>	A traffic impact study is typically prepared for a planning proposal, to summarise the relevant information in relation to vehicle trips and the level of impact on the movement network. For the scale of the site, a transport impact assessment would be prepared.

3.2 Local Planning context

An overview of the local strategic planning framework is provided in **Table 4**.

Table 4 Local planning framework applicable to the subject site

Planning mechanism	Applicability
<i>Local Planning Strategy</i>	<p>A detailed discussion on the <i>Local Planning Strategy</i> is provided in section 3.2.1. A summary is provided below:</p> <ul style="list-style-type: none"> • Superlot D is identified for 'Future Residential'. • Murat Road is a 'Primary Distributor Road' (care and control of the Shire of Exmouth). • Mortiss Street was recognised as an important connection to the southern area of the Exmouth Boat Harbour. Upgrades were needed to accommodate B-Double heavy vehicles and the treatment of the road was to take into account residential and industrial development fronting the road. • Land immediately south, fronting Mortiss Street, is identified for 'Future Residential' and is subject to a 'Watercourse Floodplain – Developed Case Inundation'. The Mortiss Street Bund is identified for flood mitigation. • Land west includes 'Public Purposes' for telecommunications, associated with the Broadcast Australia site. • Land west is identified for future 'Residential' and a 'Neighbourhood Connector (Future)' which aims to provide a future north-south connection into the Exmouth townsite. • Land east is within the 'Boat Harbour' and 'Waterways'. • The land use intent for the land was for tourism, residential, public spaces and live-work mixed use composite development. • The <i>Local Planning Strategy</i> supported a design review, given the Shire's Tourism Strategy did not support a caravan park in this location and the Local Planning Strategy identified an excess provision of public open space. • The <i>Local Planning Strategy</i> supported the preparation and approval of a new structure plan and design guidelines, having regard to the revised design; an approved district water management strategy; and appropriate interface treatments to the Exmouth Boat Harbour, Cobia Close and land to the south of Mortiss Street. • Development was to be informed by bushfire risk assessment and mitigation, and adequate protection from the 100-year ARI flood.
<i>Exmouth Townsite structure plan</i>	<p>The <i>Exmouth Townsite Structure Plan</i> (2011) was prepared on behalf of the (then) Department of Planning and the Shire of Exmouth to provide context for land use decisions within the townsite.</p> <p>It is regarded to be a district structure plan and identified opportunities and constraints to be accommodated by future development.</p>
<i>District Water Management Strategy</i>	<p>For the subject site, a Local Water Management Strategy is being prepared.</p> <p>For the Exmouth townsite, a DWMS (Cardno 2012) was prepared to identify potential opportunities and constraints for future development. It provides a broad level stormwater management framework and best practice approach having regard to the local context. The DWMS is currently being reviewed by Urbaqua.</p> <p>The DWMS outlines the proposed strategies for the townsite regarding water supply and conservation, stormwater management, groundwater management and monitoring.</p> <p>The DWMS anticipates that future local water management strategies and urban water management plans will be prepared by landowners, in consultation with the Department of Water and Environmental Regulation and the Shire of Exmouth.</p>
<i>Exmouth Floodplain Management Study</i>	<p>The Study (SKM 2007) undertook hydrologic modelling of the catchments of the Cape Range creeklines to model and map the floodplains and develop a floodplain management study. The recommendations related to drainage structures and bunds within the Exmouth townsite; setting aside land within the floodplains; setting minimum floor levels; and monitoring and review.</p> <p>The Study provided relevant information that informed the boundaries of the Floodplain SCA 5, described further in section 3.3.3.</p>

3.2.1 Local Planning Strategy

The Shire's *Local Planning Strategy* outlines the local government's vision and strategic intentions for the next 15 years. The *Local Planning Strategy* identifies the subject site as 'Future Residential', refer **Figure 2**.

Superlot D is vacant land that is contained within the Exmouth Marina Village Outline Development Plan (ODP) area. While the ODP is still technically current by virtue of its existence in the Scheme, it is considered to be outdated and does not reflect the Shire's more contemporary planning vision.

The *Local Planning Strategy* states that the anticipated design, uses and development outcomes for Superlot D, as expressed in the existing Exmouth Marina Village ODP (endorsed in 2009) are now out-of-date, and do not reflect the Shire's more contemporary planning vision.

The *Local Planning Strategy* provides guidance for the detailed design of the site for residential purposes. Below is the quoted section of the endorsed *Local Planning Strategy* as guidance for the future of Superlot D:

- "1) The land use intent for Area 7 (Precinct D) is for tourism, residential, public spaces between waterfront lots in select locations and live-work mixed use composite development. Delivery of the land use intent needs to be in a manner which is compatible with existing surrounding development.*
- 2) The LPS supports a design review of the development vision for Area 7 (Precinct D). Specifically, the existing structure plan references a caravan park land use and nominates a large public open space area adjacent to Murat Road. Given the Shire's Tourism Strategy does not support a caravan park in this location and the LPS identifies an excess provision of public open space, the local government does not support the inclusion of these land uses in future structure planning.*
- 3) The LPS identifies vacant Area 7 as Special Use Zone which will be subject to the preparation and approval of a new structure plan and design guidelines as a prerequisite to subdivision and development.*
- 4) In assessing a structure plan and design guidelines, the local government will have regard to:*
 - a) The land use intent and revised design vision for Area 7 (Precinct D) with reference to Planning Considerations 1) and 2) above;*
 - b) The approved District Water Management Strategy (as amended);*
 - c) An appropriate interface treatment to the Exmouth Boat Harbour being established to ensure land use compatibility. Investigation into the use of screening devices, such as landscaping, and/or other measures along the eastern interface of Precinct D to further reduce noise, capture wind-borne dust and spray drift and improve visual amenity impacts from the Exmouth Boat Harbour;*
 - d) The Murat Road frontage recognising its importance as a townscape entry statement and consideration of the Murat Road Design Guidelines;*
 - e) The development interface with Precinct B addressing Cobia Close or backing onto lots fronting Cobia Close. Development shall be compatible with the existing residential development, with provision made for the extension of Cobia Close either as a vehicular or pedestrian accessway;*
 - f) The Mortiss Street interface being compatible with traffic accessing the Exmouth Boat Harbour and the adjacent Precinct E through measures such as restricting street access to sensitive land uses, landscape screening devices and live-work mixed use composite development;*
 - g) The requirement for notifications on certificates of title for properties throughout Precinct D advising of noise and other potential emissions from the Exmouth Boat Harbour. Sensitive land uses requiring noise attenuation measures to mitigate noise impacts;*
 - h) Any other matters considered relevant through the advertising of the structure plan and design guidelines; and*
 - i) Bushfire risk assessment and mitigation in accordance with State Planning Policy 3.7 – Planning in Bushfire Prone Areas and the Guidelines for Planning in Bushfire Prone Areas.*
- 5) The extent of the development area being informed by hydraulic modelling to ensure that:*
 - a) Proposed development has adequate protection from a 100 year ARI flood; and*
 - b) Proposed development does not detrimentally impact on the existing 100 year ARI flooding regime of the general area."*



Exmouth Water Reserve

Boat Harbour

Waterways

URBAN LAND USE

Town Centre

SC Bowling Club
S Library
FP Federation Park

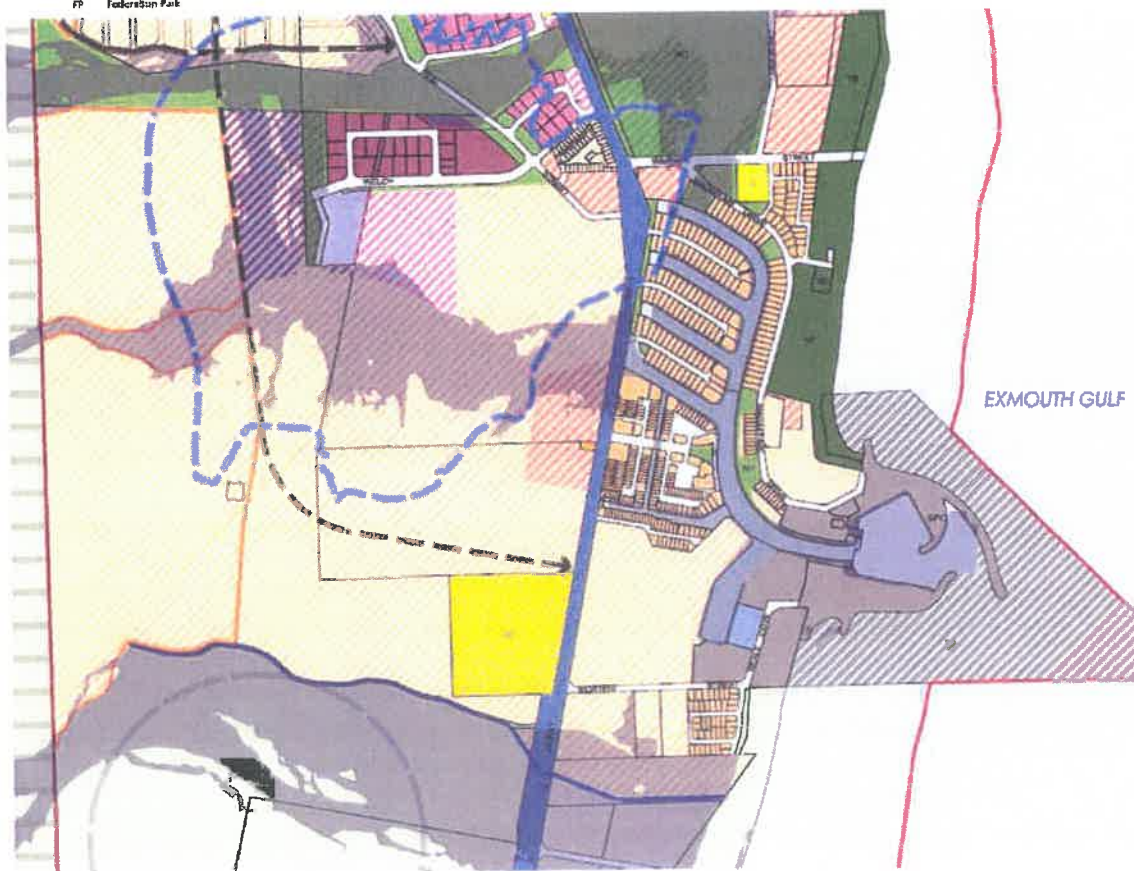


Figure 2 Extract of Local Planning Strategy

3.3 Local Planning Scheme No.4

The Shire of Exmouth *Local Planning Scheme No.4* (LPS 4) was gazetted on the 12 March 2019. The LPS 4 identifies and facilitates the implementation of the *Local Planning Strategy* and relevant regional plans and policies.

The subject lot is currently zoned 'Special Use 7', subject to 'Additional Use 8' (A8) and the Special Control Area 5 – Floodplain (SCA 5), refer Figure 3. These are described below.

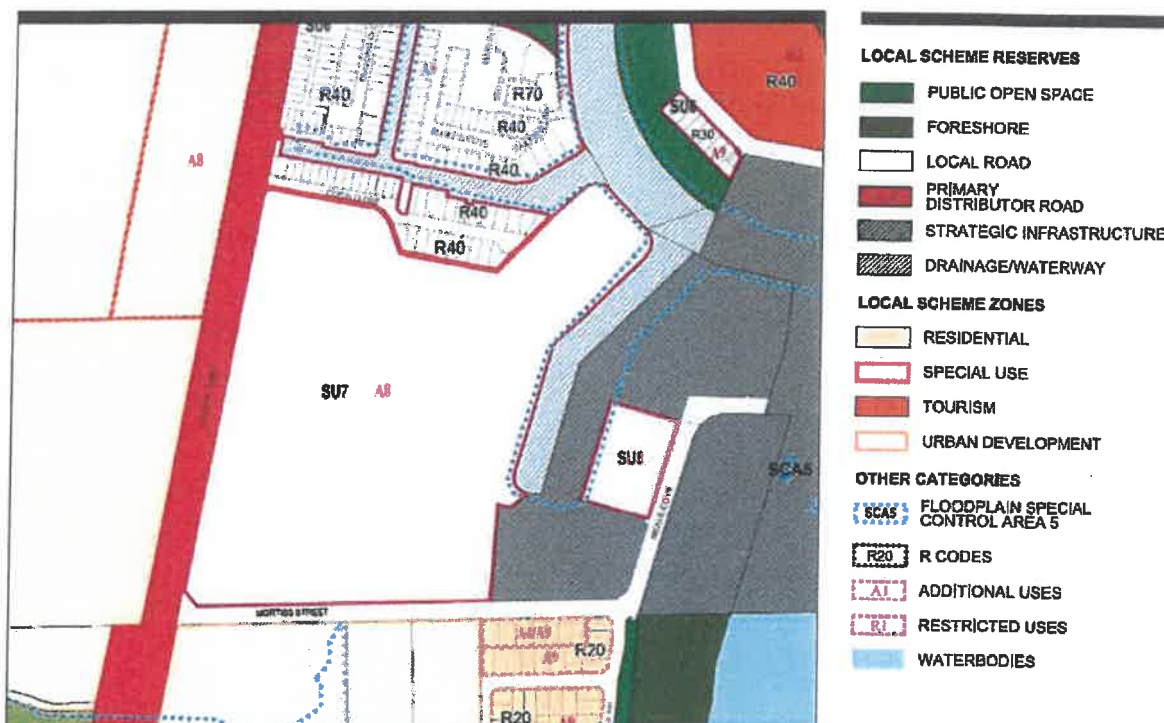


Figure 3 Extract of LPS 4

3.3.1 Special Use 7 zone

'SU7' is contained in Schedule 4 of the scheme text. The wording within SU7 raises inconsistencies and discrepancies with the contemporary planning framework. The condition wording is considered below.

Condition 1 of SU7 is not consistent with the contemporary planning framework, as follows:

- As per **Table 5** the conditions of the SU7 zone require a new structure plan and new design guidelines (as a local planning policy), prior to subdivision and development being supported. Subdivision and development would be supported by the Shire, until such time as a new structure plan was prepared, and design guidelines were prepared as a local planning policy.
- Under the Deemed Provisions, only local governments may prepare, amend or repeal a local planning policy. There is no head of power in the Deemed Provisions for a landowner to prepare a local planning policy. This raises difficulties in terms of implementing the SU7 conditions, as the design guidelines are required by the wording of the conditions to be prepared as a local planning policy. This is not consistent with orderly and proper planning, as the SU7 prevents the landowner to action the conditions, whilst requiring the conditions to be actioned prior to subdivision and development.

The scheme amendment proposes to rezone the subject site to 'Urban Development' zone, which provides several benefits and advantages. Under the Deemed Provisions, a landowner may prepare a structure plan and may also prepare subdivision and development applications, where such applications do not conflict with the principles of orderly and proper planning, and where the proposal would not prejudice the overall development potential of the area. Through the Deemed Provisions, the contemporary planning framework allows for the expedited processing of planning instruments in parallel.

Condition 2 of SU7 is not consistent with the contemporary planning framework. Local planning policies are intended to be flexible and provide guidance. The wording of SU7 condition 2 indicates that the design guidelines are intended to have the statutory force and effect of the scheme, which differs from the Deemed Provisions in terms of how

policies are given regard. To quote the WAPC planning reform, “while policies provide important guidance, the individual merits of a planning proposal must be considered. As policies are flexible instruments, the purpose and intent of a policy needs to be applied to proposals that may vary from policy standards.”

Deletion of condition 2 will ensure that any local planning policies, including any design guidelines, be considered as flexible planning instruments in a manner consistent with the Deemed Provisions.

SU7 is limited in its identification of a small number of possible land uses that could be considered for the subject site (refer to **Table 5**).

In consideration of these challenges, the scheme amendment proposes to delete the conditions and uses in SU7 and replace with an ‘Urban Development’ zone, which provides for the identification of zones, land use permissibility, urban design and guidance through a number of planning instruments.

Table 5 LPS 4 ‘Special Use 7’ zone extract

Zoning: Special Use ‘SU7’	
Special Use 7	Conditions
<p>As a ‘D’ use:</p> <ul style="list-style-type: none"> • Bed and breakfast; • Grouped dwelling; • Holiday accommodation; • Holiday home; • Hotel; • Motel; • Single house; • Tourist development <p>As an ‘A’ Use:</p> <ul style="list-style-type: none"> • Industry - light; • Industry - service; • Marine support facility; • Service station; • Telecommunications infrastructure; • Trade display; • Warehouse/storage 	<ol style="list-style-type: none"> 1. Applications for subdivision and development approval shall not be supported unless: <ol style="list-style-type: none"> (a) the Exmouth Marina Village Outline Development Plan has been amended as a new structure plan for Lot 9510 on Plan 55557 to the satisfaction of the local government, pursuant to Part 4 of the deemed provisions; and (b) New Design Guidelines have been prepared for the structure plan area, which revoke the Exmouth Marina Village Broad Design Guidelines, and adopted as a local planning policy under Part 2 of the deemed provisions. 2. The Design Guidelines adopted under condition 1(b) above are to be implemented as if they form part of the Scheme.

3.3.2 Additional Use

Additional Use 8 was inserted into the scheme in 2022, for a ‘major event’ land use definition associated with the total eclipse that occurred on 20 April 2023. The description of land column specifically refers to “Lot 9510 on DP5557”, being Superlot D/subject site (**bold** for emphasis). A copy of the Additional Use 8 uses and conditions are contained in **Table 6**.

The ‘Additional Use 8’ serves no ongoing purpose to the subject site. The conditions of the ‘Additional Use 8’ required buildings and/or structures used for the major event, to be removed from 4 May 2023. For Superlot D, it is understood that the site was not utilised for these Additional Uses during the ‘major event’ period and these uses are not observed on-site. The scheme amendment proposes to delete reference to Lot 9510 from A8.

Table 6 LPS 4 Additional Use A8 extract

No.	Description of Land	Additional Use	Conditions
A8	<p>Lot 9510 on DP5557,</p> <p>Lot 1 on DP47770, Lot 848 on DP175175 Lot 715 on DP173019, Lot 112 on DP182633, Lot 220 on DP192031, Lot 101 on DP180602, Lot 1403 on DP192085, Part Lot 1419 on DP219750, Lot 1586 on DP2986, Lot 166 on DP238089, Lot 1 on DP85354, Lot 389 on DP21027 Lot 1 on</p>	<p>As a ‘D’ use:</p> <p>Major Event Use</p>	<ol style="list-style-type: none"> 1. The purpose of the additional use is to facilitate a ‘major event’ within the Shire. 2. In considering an application for development approval, the local government may, consider the following matters in addition to those which it may have regard to under the Scheme.: <ul style="list-style-type: none"> • Whether the use is connected to and will facilitate the major event within the Shire;

No.	Description of Land	Additional Use	Conditions
	DP77755, Lot 392 on DP210127, Lot 393 on DP210127, Lot 2 on SP12562, Lot 388 on DP210127, Lot 2 on DP92275, Lot 376, 377, 378, on DP210127, Lot 1381 on DP408201, Lot 1375 on DP408201, Lot 374 on DP210127 Part Lot 5000 on DP55568, Lot 1436 on DP220338, and 510 on DP408201, Lot 20 on DP209501		<ul style="list-style-type: none"> • The need, considering the capacity in local housing and current tourism accommodation; • Vehicular access arrangements and internal vehicle and pedestrian movements; • Occupancy limitations; • Provision of suitable setbacks and siting of development in the manner that considers surrounding land uses; • Measures to manage visual amenity impacts; • The impacts on the natural environment. • Site rehabilitation plans • Transitioning plans; • Rubbish disposal; • Servicing including wastewater disposal water drainage and power; and • Toilet and other facilities. <ol style="list-style-type: none"> 3. The local government is to be satisfied that the proponent has identified appropriate strategies to manage issues by siting of land use in the context of surrounding existing and proposed land uses; and providing adequate screening measures such as fencing. 4. The additional use shall effectively start from 06 April 2023. 5. The additional use shall cease on the 04 May 2023. 6. Any development approval issued by the local government for the additional use shall be no later than 04 May 2023. 7. Non-conforming use rights do not apply to the additional use. 8. After 04 May 2023, any buildings and/or structures that had been used for the additional use shall be removed unless separate development approval is granted for uses consistent with the zoning.

3.3.3 Floodplain (SCA 5)

The scheme amendment does not propose any modifications to SCA 5.

The purpose and objectives of the SCA 5 are to minimise impacts on the floodplains, avoid subdivision and development within the high hazard floodplains, and to ensure adequate flood protection. In considering scheme amendments and other planning proposals, the local government shall have regard to the scheme provisions in clause 5.6.2, quoted below:

“(a) The general presumption against subdivision and development within the floodplain unless —

(i) Hydraulic modelling has been prepared to the satisfaction and approval of the Department of Water and Environmental Regulation;

- (ii) *In respect of land within the high hazard flood plain, suitable controls are in place to ensure no development will encroach into the high hazard floodplain, excluding earthworks for the provision of essential roads, bridges, footpaths and jetties.*
- (b) *Building levels within the floodplain achieving the recommended minimum floor level of at least 0.5 metres above the relevant 100 year ARI flood level for the location having regard to advice from the Department of Water and Environmental Regulation."*

3.4 Existing structure plans

As previously mentioned, the Exmouth Marina Village ODP is considered to be out-of-date. The *Local Planning Strategy* (refer section 3.2.1) supported a design review, and relevant comments are provided below:

- The land use intent for the land was for tourism, residential, public spaces and live-work mixed use composite development.
- The *Local Planning Strategy* supported a design review, given the Shire's *Tourism Strategy* did not support a caravan park in this location and the *Local Planning Strategy* identified an excess provision of public open space.
- The *Local Planning Strategy* supported the preparation and approval of a new structure plan and design guidelines, having regard to the revised design; an approved district water management strategy; and appropriate interface treatments to the Exmouth Boat Harbour, Cobia Close and land to the south of Mortiss Street.

3.5 Local planning policies

A review of the Shire's local planning policies has been undertaken in context to the scheme amendment for the subject site, refer **Table 7**.

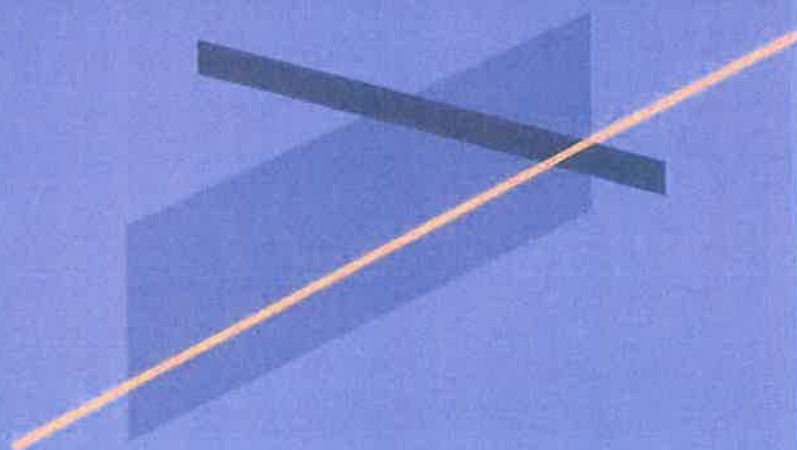
Table 7 Shire of Exmouth local planning policies

Local planning policy	Applicability
LPP1 – Colour Palette for Developments	Aims to provide a consistent colour palette for development within the Shire, influenced by colours from the natural environment. The colour palette is used for new development, excluding the 'Residential' zone. Given this, it is likely the colour palette would only be considered for non-residential development.
LPP2 – Container Deposit Scheme (CDS) Infrastructure	Does not directly apply to the scheme amendment.
LPP3 – Exmouth Boat Harbour Development Plan	Does not directly apply within the subject site; however, provides contextual information for the areas east of the subject site. The policy provides guidance for use and development within the adjacent waterway, allowing for a limited range of land uses, and allowing for the movement, mooring and penning of recreational and commercial boats in the 'seabed precinct'. The policy provides guidance for development within other precincts in the boat harbour, to the east. All harbour breakwaters, groynes, jetties, spurs and other harbour water access and service infrastructure are not to be disturbed or modified without the express written consent of the Department of Transport.
LPP4 – Public Art Contributions	Does not directly apply to the scheme amendment. The LPP4 applies when " <i>Private developments (including additions and alterations) involving commercial, residential (not including single houses or grouped/multiple dwellings of less than 5 dwellings) and or mixed residential/commercial developments over the value of \$2,000,000 are required to provide Public Art, to reflect or enhance local cultural identity.</i> "
LPP5 – Advertisement Signs	Does not directly apply to the scheme amendment. The policy will apply should any advertising structures or signs be required/proposed within the subject site.
LPP6 – Exmouth Area Defence Sites Protection	The scheme amendment area is not identified within the protection areas contained in Attachment A of the LPP6. The LPP provides guidance for the local government in

Local planning policy	Applicability
	relation to liaising with Department of Defence which may be undertaken when rezoning is proposed, to ensure that no land use conflicts with Defence operations.

4.0

Proposal



4.0 Proposal

4.1 Description of the amendment

The proposed amendment seeks to remove provisions and references contained in the scheme for the 'Special Use 7' zone and remove reference to Lot 9510 in Additional Use 8 (A8). The proposed change is consistent with the planning reform intentions and would result in the application of a standard 'Urban Development' zone which provides for detailed planning to be undertaken. The SU7 and A8 conditions are contained in sections 3.3.1 and 3.3.2 for reference.

The 'Urban Development' zone is an existing zone in the LPS 4 and facilitates a consistent, streamlined and contemporary planning framework for the subject site. This also ensures the scheme text is easier to understand and navigate.

The 'Urban Development' zone is appropriate as it is a standard zone that is properly designed to ensure the planning instruments are used appropriately and consistently to achieve good outcomes. For Superlot D, the property is contained in one lot and can be delivered with minimal impact on surrounding use and development. The detailed design and technical considerations will be suitably dealt with through the preparation of detailed planning proposals. The focus will therefore be on the detailed design to deliver housing supply and high-quality development outcomes to the benefit of the community and local government.

Accordingly, this amendment does not propose any specific development standards, as these can be considered and determined in accordance with subsequent planning proposals.

4.2 Planning justification

Through the SU7 zone, relevant clauses within the Deemed Provisions are inconsistent in terms of their ability to be implemented. The proposal aims to remove the SU7 conditions and streamline the planning framework through the rezoning to 'Urban Development' zone.

Pursuant to clause 3.3.7 of the LPS 4, if the zoning table does not identify any permissible uses for land in a zone the local government may, in considering an application for development approval for land within the zone, have due regard to any of the following plans that apply to the land: a structure plan; an activity centre plan; or a local development plan.

With an 'Urban Development' zone, clause 15 of the Deemed Provisions is applicable, quoted below:

"A structure plan in respect of an area of land in the Scheme area may be prepared if —

(a) the area is —

- (i) all or part of a zone identified in this Scheme as an area suitable for urban or industrial development; and*
- (ii) identified in this Scheme as an area requiring a structure plan to be prepared before any future subdivision or development is undertaken;*

or

- (b) a State planning policy requires a structure plan to be prepared for the area; or*
- (c) the Commission considers that a structure plan for the area is required for the purposes of orderly and proper planning."*

Pursuant to clause 27 of the Deemed Provisions, the opportunity is provided for parallel processing of other applications, where clause 15 applies. Clause 27(2) of the Deemed Provisions states that:

"(2) A decision-maker for an application for development approval or subdivision approval in an area referred to in clause 15 as being an area for which a structure plan may be prepared, but for which no structure plan has been approved by the Commission, may approve the application if the decision-maker is satisfied that —

- (a) the proposed development or subdivision does not conflict with the principles of orderly and proper planning; and
- (b) the proposed development or subdivision would not prejudice the overall development potential of the area."

This is an improved approach to controlling planning of the subject site. The current wording contained in SU7 requires structure planning and preparation of design guidelines prior to any subdivision or development being supported. With the standardised approach available in the LPS 4, and through the application of clauses 15 and 27 of the Deemed Provisions, the landowner can collaborate with the local government and decision-makers to undertake a number of planning proposals in parallel, in a manner consistent with orderly and proper planning, without prejudicing the overall development potential of the area.

4.2.1 Type of Amendment

Pursuant to the *Planning and Development (Local Planning Schemes) Regulations 2015*, this proposed amendment is considered to be categorised as a standard amendment. Further justification is provided in **Table 8** having regard to the type of amendment described in the *Regulations*.

Table 8 Planning and Development Regulations Amendment Classifications

Type of Amendment	Comment
<p><i>standard amendment means any of the following amendments to a local planning scheme –</i></p> <ul style="list-style-type: none"> (a) <i>an amendment relating to a zone or reserve that is consistent with the objectives identified in the scheme for that zone or reserve;</i> (b) <i>an amendment that is consistent with a local planning strategy for the scheme that has been endorsed by the Commission;</i> (c) <i>an amendment that would have minimal impact on land in the scheme area that is not the subject of the amendment;</i> (d) <i>an amendment that does not result in any significant environmental, social, economic or governance impacts on land in the scheme area;</i> (e) <i>any other amendment that is not a complex or basic amendment.</i> 	<p>The amendment is standard for the following reasons:</p> <ul style="list-style-type: none"> (a) The amendment relates to an existing zone in the scheme, and the amendment seeks to retain the general principles for the site that are referred to in the 'Special Use 7' zone. (b) The proposed scheme amendment is consistent with the Shire of Exmouth Local Planning Strategy, which identifies the subject site as 'Future Residential'. (c) the amendment will have minimal impact on land. The subject lot is capable of being subdivided and developed in a manner that is integrated and interfacing with the existing lots to the north, existing road network and artificial waterway. (d) the amendment provides a contemporary zone and head of power for subsequent subdivision and development to address environmental, social, economic and governance matters that may relate to the subject site.

4.3 Opportunities, constraints and issues

- While the ODP is still technically current by virtue of its existence in the Scheme text, its content is generally regarded by the *Local Planning Strategy* to be outdated, and not reflective of the Shire's more contemporary planning vision.
- The proponent has undertaken a design process to identify land uses, residential typologies and lot sizes, road network, and public open space provision based on more current planning and design principles. The concept plan (refer Appendix B), provides for a contemporary vision for the development of Superlot D.
- Studies would be undertaken as part of detailed design, in relation to bushfire management, transport and traffic, local water management, engineering and servicing, hydrology and coastal processes.
- The local government will have regard to the approved DWMS (Cardno 2012) and the Lot 9510 Murat Road (Superlot D), Exmouth Assessment of Flood Risk Mitigation Options (refer Appendix C).
- The development of the Superlot D will be informed by hydraulic modelling to ensure that the proposed development has adequate protection from a 1% AEP flood and does not detrimentally impact on the existing 1% AEP flooding regime for the general area. Building levels will achieve recommended minimum floor levels.

- Under the 'Urban Development' zone, clause 3.10.2.3 of LPS 4, and clauses 15 and 27 of the Deemed Provisions, provide for a decision maker to consider proposals. A decision maker may approve subdivision and/or development of land prior to a structure plan, if the local government is satisfied that this will not prejudice the future structure planning in the area. In this regard, immediate and short-term earthworks, importation of fill, infrastructure and other enabling works on-site, can be facilitated ahead of structure planning, offering timely commencement of development of this much-needed residential land.
- In consideration of expediting delivery of housing supply, that, whilst the scheme amendment is progressing, the landowner can undertake detailed design work over the site to run parallel processes relating to early works, importation of fill, subdivision design and development design.

4.3.1 Indicative Concept Plan

As part of testing development rationales for the subject site, an illustration of a possible subdivision and development vision is provided in Appendix B. The following considerations and fundamental design objectives have been investigated:

- Respectful interface to existing residents to the north;
- Providing an appealing and welcoming gateway entrance to Exmouth;
- Opportunities for a diverse mix of housing opportunities that is appropriate for the climate and a mix of dwelling typologies;
- Properties that support compatible employment-generating businesses and live-work opportunities;
- Acknowledging the pragmatic constraints on natural resources and water availability, balanced with delivering high quality streets and open space. This means that the subject site would provide of low-water usage landscaping and appealing tree lined streets where possible;
- Acknowledging and providing for local streets and passive surveillance to create a safe and secure component of the Marina; and

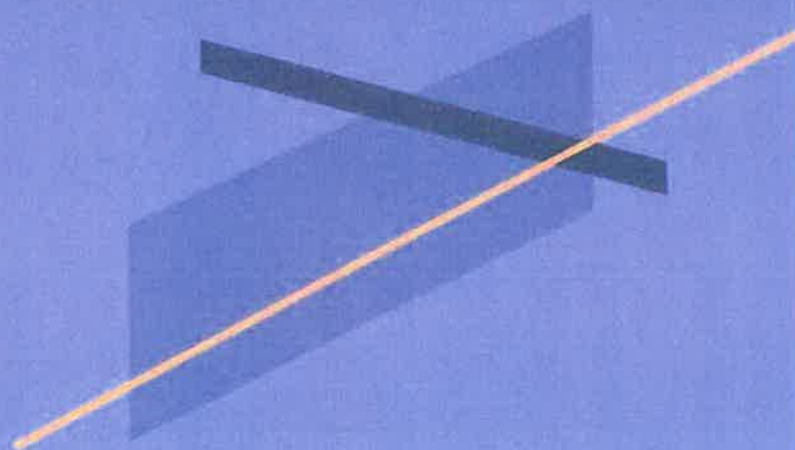
Appropriate protection of existing areas and the subject site to provide for flooding and sea level rise, through sensitive modification to the landform (which involves the importation of fill).

Going forward, it is anticipated that planning instruments will propose outcomes that have regard to these design considerations.

Detailed technical investigations are progressing for the site based on this indicative development concept framework. Future planning proposals will progressively refine this concept proposal as a result of rigorous investigations. As such, this development concept may alter from the proposal attached at Appendix B.

5.0

Conclusion



5.0 Conclusion

The Shire's endorsed *Local Planning Strategy* identifies the land for residential development opportunities.

The proponent will proceed with development of the site in accordance with the scheme amendment request to rezone the land to the 'Urban Development' zone. This provides a contemporary planning framework, consistent with planning reform, to facilitate subdivision and development.

In consultation with the Shire of Exmouth and the Department of Planning, Lands and Heritage, the 'Urban Development' zone removes the 'Special Use 7' zone and provisions, which currently limit opportunities to undertake subdivision and development in an expedited manner. The proposed 'Urban Development' zone facilitates a range of planning processes that can be undertaken in parallel, to significantly reduce timeframes and fast-track delivery of new residential lots to bolster supply.

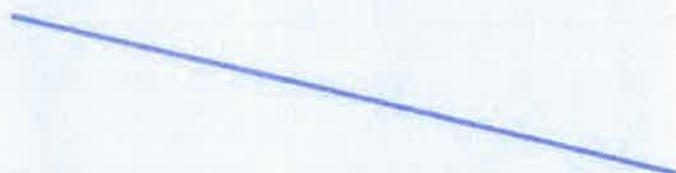
This report outlines the rationale for a Scheme Amendment request to rezone the land to the 'Urban Development' zone and it is considered suitable taking into account:

- The 'Urban Development' zone provides a head of power for planning instruments to ensure development is consistent with the intended land uses and residential opportunities; and
- The scheme amendment has demonstrated compliance with the state and local planning framework.

The Shire of Exmouth is respectfully requested to initiate the 'standard' scheme amendment. The following Appendix A provides the Scheme Amendment map and text, adoption page and approval page.

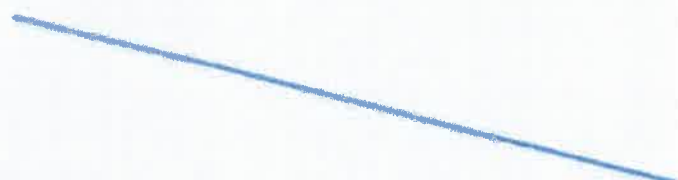
Appendix A

Scheme Amendment Text



Appendix B

Indicative Concept Plan





Legend

LAND USE

[Symbol]	Residential - Large Lot Typology (35/46m depths)	7.3374ha (40.9%)
[Symbol]	Residential - Medium Lot Typology (30m depths)	1.8638ha (10.4%)
[Symbol]	Residential - Small Lot Typology (20/25m depths)	0.7662ha (4.2%)
[Symbol]	Non-residential	2.5279ha (14.1%)
[Symbol]	POS and Drainage	1.2398ha (5.9%)
[Symbol]	Road Reserve	4.1980ha (23.5%)

- Draft Development Principles (Vision):**
- Attain a unique neighbourhood with an appropriate 'Exmouth Sense of Place'.
 - To enable diverse lifestyle opportunities that fulfill local and regional needs.
 - To provide an integrated and sustainable neighbourhood.
 - To implement innovative time and cost-effective housing development strategies.
- Draft Design Objectives:**
- Achieve a great sense of arrival by establishing new gateways at key locations.
 - Promote a mix of land uses to provide employment, housing and recreational considerations.
 - Provide a diverse range of lot types for specific local household and lifestyle considerations.
 - Achieve a clear, legible movement network for pedestrians and vehicles.
 - Coordinate efficient house development assistance through established environmental and cost benefits.
 - Adopt climate sensitive design principles within the Masterplan for long term environmental and cost benefits.

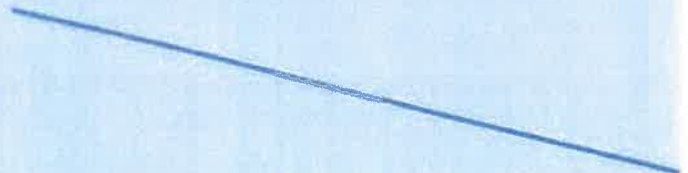
- Development Concept Key Features:**
1. Proposed primary estate gateway entry, incorporating distinct entry landscaping and boulevard road treatment.
 2. Proposed secondary vehicle access to Murat Road via Coble Close.
 3. Proposed landscaped bund design interfaces to Murat Road to improve streetscape and mitigate visual impact of vertical retaining (bund gradient proposed at 1:3).
 4. Public Open Space configured to enhance Exmouth arrival experience through appropriate, endemic and landscaping feature.
 5. Key pedestrian entry feature connecting neighbourhood with local streetscape and public open space to provide a direct access to principal shared path connections to town (bund gradient to Murat Road proposed at 1:3).
 6. Proposed extent of Stage One - approximately 110 lots.
 7. Proposed lots oriented to address Coble Close as their primary frontage which concludes the Coble Close streetscape.
 8. Key viewlines and overland drainage flow-path reserve, may incorporate POS improvements at upper ground level.
 9. Key drainage floodway located at existing low point.
 10. Moderate sized squat lots provide opportunities for diverse dwelling types.
 11. Proposed lots with vehicle access from internal road and dwelling outdoor living oriented to landscaped boulevard street.
 12. Potential commercial / service station development opportunity at key entry location.
 13. Proposed composite commercial and residential lots (home/work) to provide sustainable employment outcomes.
 14. Flexible non-residential land uses located as transitional development between Marina Industrial and residential.
 15. Proposed authority secondary vehicle access to Murat Road via Morley Street.

Preliminary Development Concept Masterplan Exmouth Marina - Precinct D - Murat Road, Exmouth

A Fowler Group Project

Appendix C

Assessment of Flood Risk Mitigation Options





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Date : 26 May 2023
Our Ref : J7207d
Pages : 26

LOT 9510 MURAT ROAD (SUPERLOT D), EXMOUTH ASSESSMENT OF FLOOD RISK MITIGATION OPTIONS

Dear John,

Please find below JDA report detailing flood risk mitigation options for Lot 9510 Murat Road, Exmouth, as requested. This report is presented in the following sections:

1. Introduction
2. Exmouth Floodplain Management Study (SKM, 2007)
3. Refinement of Exmouth Floodplain Management Study (JDA, 2022)
4. Exmouth Marina Village Drainage Design & Management Plan (RPS, 2010)
5. 10 June 2021 Flood Event and Impacts to Existing Development
6. Finished Floor Level Design Guidelines
7. Flood Mitigation Options
8. Summary

1. INTRODUCTION

1.1 Background

Lot 9510 Murat Road, Exmouth (also known as Superlot D) is located in the south-west corner of Exmouth Marina and is bound by Cobia Close to the north, Murat Road to the west, Mortiss Street to the south and Neale Cove to the east. Note that Mortiss Street was formerly referred to as Market Street (Figure 1).

Superlot D is zoned Future Residential in the Shire of Exmouth Local Planning Scheme and is designated as Future Residential Area 7 (TBB, 2019). Proposed development is currently subject to the Exmouth Marina Village Outline Development Plan (2003) which proposes dry lot residential, caravan park, recreation, mixed use residential/low key marine based uses. JDA understands residential or tourist/temporary workers accommodation is the likely future land use for the area.

Site survey (Denada, 2015) (see Appendix A) shows existing topography across the lot generally ranges from 4 to 5 mAHD with higher elevations in the south-west of lot at 5.5 to 6.5 mAHD. A 3m wide bund with top elevation between 5.7 to 5.5 mAHD also exists along the northern boundary of Superlot D, to protect lots fronting Cobia Close from any flood water from Superlot D.

Geotechnical investigation by Golder Associates (2006) shows surface soils generally comprise clayey sands, sandy clays and clayey gravel to depths of between 1 and 5 m. An area of uncontrolled fill, likely of topsoil from other parts of the marina development, was identified in the north of the lot and recommended to be removed.

1.2 Objective

Flood mapping presented in the *Exmouth Floodplain Management Study* (SKM, 2007b) for the Exmouth townsites shows Superlot D inundated during the 1 in 10, 25 and 100 year (10%, 4% and 1% AEP) flood events.

Whilst Superlot D is zoned for development, we understand the urban form and engineering design is impacted by the potential risk of flooding, restricting viability of development.

JDA has therefore investigated three possible flood risk mitigation options for Superlot D as follows:

- Importation of fill;
- Construction of a levee or bund; or
- Use of an alternative built form.

Presented below is a summary of flood mapping, proposed design criteria and a desktop review of the options.

2. EXMOUTH FLOODPLAIN MANAGEMENT STUDY (SKM, 2007A&B)

SKM was commissioned by the then Department of Water (now Department of Water and Environmental Regulation) to develop the Exmouth Floodplain Management Study for the town of Exmouth. This study consisted of a Flood Modelling Report (SKM, 2007a) and a Floodplain Management Strategy (SKM, 2007b). Hydrologic modelling of the upper catchments west of the townsite were modelled in RORB for the 10, 25, 100 and 500 year ARI flood events and inputted into a 2D MIKE-21 hydraulic model at the upstream (western) boundary of the Exmouth townsite.

Aerial laser scanning survey data was collected by Fugro pre-2007 and provided as irregularly spaced elevation data points from which a 5 m resolution digital elevation model [DEM] was developed for input into the MIKE-21 hydraulic model (SKM, 2007a). The coarser resolution resulted in the DEM not adequately accounting for some infrastructure smaller than the grid size, such as the higher elevation of Murat Road compared to the surrounding topography and therefore stormwater flow was assumed to flow unimpeded locally east to west across Murat Road.

Whilst SKM (2007b) considered and modelled 9 scenarios for the 100 year ARI flood event, the 'Existing Case' DEM scenario is used as the basis for assessment in this report. This 'Existing Case' scenario includes pre-approved catchment modifications including lot filling, inclusion of additional canal arms, designation of specific weir crest elevations and the breakout flow from the adjacent Market Street Creek Catchment. The exclusion of the constructed Market Street Creek bund in this scenario is consistent with recent investigations that have questioned the structural integrity of the bund, and it's future viability to be repaired or upgraded.

In this scenario, the pre-approved fill level adopted for the Exmouth Marina Village lots was 5.25 mAHD, with the barrier walls around the canal set at 5.3 mAHD.

The north-eastern portion of Superlot D was assumed to be filled in the SKM (2007a) model at 5.25 mAHD, with the south-western portion retained in existing condition unfilled.

Figure 2 shows the SKM (2007a&b) 100 year ARI 'Existing Case' flood inundation depth and level mapping. For Superlot D, flood level ranges from 5.3 mAHD along the canals (the adopted barrier wall level) to 6.5 mAHD in the south-west corner of the Lot. The modelled lot fill level of 5.25 mAHD in the north-east portion of the Lot is discernible by the low modelled flood depths (< 0.2 m) in this area, and by the higher flood depths immediately along the western boundary of the fill. The lower lying south-west portion of the Lot was filled between 2007 and 2011 by approximately 0.8 to 1 m with approximate present-day topography apparent for Superlot D from the Denada (2015) survey (attached as Appendix A).

Figure 3 shows the SKM (2007a) 'Existing Case' scenario flood hazard and zoning mapping with floodway and flood fringe delineated. Superlot D was assumed to be filled for development in this scenario, and was not shown as being within the floodplain of the Marina or Market Street Creek catchments.

An area to the south-east of Superlot D in SKM (2007b) was not given a floodplain classification but instead described as an 'Area Under Further Investigation'. Some of this area has since been developed as the Sea Raven Estate residential precinct. The remaining areas along with additional areas west to Murat Road form part of Future Residential Area 6 in the Local Planning Scheme (TBB, 2019). JDA has not been provided with further details of the existing development and therefore cannot comment on the impact of this development to the surrounding Market Street Creek floodplain.

Note that in JDA (1999) a floodway was proposed to convey water from Mortiss Street into the southern canal, alongside the eastern boundary of Superlot D. This floodway was one of two outlets proposed to alleviate floodwater from the Market Street catchment contained behind the coastal dune system. The other proposed

outlet was a dune breakout located approximately 900 m further south. Flood modelling in SKM (2007b) did not include the Mortiss St floodway, and all water was assumed to discharge to the southern outlet.

Also note that flood modelling performed by SKM (2007a) was conducted using the rainfall intensity frequency duration (IFD) data from the now superseded 1987 version of Australian Rainfall and Runoff (IEAust, 1987). This IFD has been replaced by new IFDs from the Bureau of Meteorology (BoM, 2016) which have been incorporated into the current version of Australian Rainfall and Runoff (Ball et al., 2019) and account for over 30 years of additional rainfall data. The revised design rainfalls in Exmouth for the 100 year ARI (1% AEP) event have reduced approximately 30% across durations of 1 and 3 hours; which were deemed critical for the Exmouth townsite catchments in the SKM (2007b) modelling.

3. REFINEMENT OF EXMOUTH FLOODPLAIN MANAGEMENT MODELLING (JDA, 2022)

In December 2022, JDA refined the Exmouth flood model presented in SKM (2007a) for the Market Street Creek catchment area, which includes Superlot D. The refinement included use of updated rainfall IFD data, Australian Rainfall & Runoff 2019 revised flood modelling methodology and a finer hydraulic model DEM resolution grid from 5 m to 2 m of the original SKM DEM.

JDA revised modelling indicated maximum flood water levels across Superlot D were substantially lower than those shown in SKM (2007). This was due to the combined effect of lower IFD design rainfall depths, more accurate representation of the elevation profile of the Market Street Creek flood protection bund, Murat Rd and the catchment as defined by the Fugro (2006) and De Nada (2015) LiDAR survey dataset.

The flood modelling also showed the Market Street Creek flood protection bund (in 2007 survey condition) withstands the 1 in 100 AEP event, and in particular, there was no discharge of floodwater across Murat Road and into Superlot D between Cobia Close to the north and Mortiss Street to the south, in both the 20% AEP and 1% AEP flood events (see Figure 4).

These modelling refinements were presented to DWER, to review the requirement for importation of fill to raise lot level to achieve DWER's floodplain management guideline for minimum habitable floor levels to be 500 mm above the 1 in 100 AEP.

DWER advised JDA on 27 January 2023 that whilst the modelling demonstrates the Market Street Creek flood protection bund withstands the 1 in 100 AEP event, additional flow from a break-out should the bund fail, and due to other aspects of its design and maintenance, they are unable to comment on whether the bund is suitable to provide 1 in 100 AEP flood protection.

Notwithstanding the above, DWER recommend minimum habitable floor levels along the western and southern boundary of the lot should be above the adjacent 1 in 100 AEP flood levels, however a lower freeboard (say 250 mm to 300 mm) than their recommended 500 mm may be considered.

4. EXMOUTH MARINA VILLAGE DRAINAGE DESIGN & MANAGEMENT PLAN

The Exmouth Marina Village Drainage Design and Management Plan (RPS, 2010) describes the drainage design features of the Marina Village. Previous drainage management plans were adopted but updated following the severe rainfall and flooding event in June 2002 and the associated revisions to the then current Exmouth Flood Management Strategy (JDA, 2002).

Stormwater generated within the Marina Village was proposed to be either infiltrated at-source or piped to the downstream contaminant traps during the 'normal' rainfall events. During intense rainfall events associated with thunderstorms or cyclones, stormwater would be trapped and flow within road reserves and swales to the downstream canals.

Internal drainage within Superlot D was proposed to flow north-east via a table drain towards a continuous deflective separator and thereafter outflow to the canal.

A minimum lot level of 5.5 mAHD was recommended in JDA (2002) and adopted in RPS (2010) for development adjacent to floodways and 5.25 mAHD elsewhere within the Marina Village, the latter of which is applicable to Superlot D.

5. 10 JUNE 2021 FLOOD EVENT AND IMPACTS TO EXISTING DEVELOPMENT

A flood event occurred at Exmouth on the 10 June 2021 with 173.4 mm recorded in the 24 hours to 9 am at the Bureau of Meteorology's Exmouth Town gauge (Site ID: 005051). Anecdotal reports in Gorman (2021) suggest rainfall of 193 mm in the north of the townsite and 218 mm in the south, with most of the rain recorded between 3 and 4 am. Imagery captured after the 10 June 2021 flood event and presented in Gorman (2021) shows significant ponding of water south of Superlot D on Mortiss Street, adjacent to the Sea Raven Estate subdivision.

Imagery from 2018/19 indicates that Mortiss Street and Neale Cove east of Superlot D were re-aligned and that a drain/floodway along the eastern boundary of Superlot D from Mortiss Street to the southern canal was filled-in.

Whilst the inundation was restricted to the road reserve adjacent to the Sea Raven Estate subdivision, it is unclear whether this is the intended stormwater design of this road and the estate.

Aerial photographs of Superlot D after the flood event showed shallow areas of ponded water, likely resulting from infiltration excess overland flow into localised depressions within the lot.

6. FINISHED FLOOR LEVEL DESIGN GUIDELINES

5.1. Local Planning Strategy

As per the Local Planning Scheme, proposed development in Superlot D is to have adequate protection from the 100 year ARI flood, and not detrimentally impact the existing 100 year ARI flooding regime of the general area.

It recommends minimum lot level within the Marina Village should be generally set at 5.25 mAHD, and filled to a level not less than 500 mm above the 1:100 year ARI flood level as advised by Department of Water, described in the next section below.

Figure 3 from SKM (2007b) also indicates Superlot D is not within the floodplain of the Market Creek or Marina Creek catchments, and development of this site is therefore unlikely to cause detrimental impact to the existing flooding regime of these catchment areas.

5.2. Department of Water & Environmental Regulation

Department of Water and Environmental Regulation (DWER) has provided floodplain management advice on two occasions as follows:

- 1) 22 Jun 2022 – Minimum floor levels based on *Exmouth Flood Modelling Report* (SKM, 2007)
- 2) 27 Jan 2023 – Minimum floor levels based on *JDA Refinement of Exmouth Flood Modelling Report* (JDA, 2022)

Advice initially provided by Department of Water and Environmental Regulation (DWER) on 22 June 2022 is presented in Appendix B and is summarised as follows:

DWER provides advice and recommends guidelines for development on floodplains with the object of minimising flood risk and damage. It uses the following guiding principles to ensure proposed development in floodprone areas is acceptable with regard to major flooding:

- *Proposed development has adequate protection*
- *Proposed development does not detrimentally impact on the existing flooding regime*

DWER's floodplain management guidelines stipulate minimum habitable floor levels to be 500 mm above the appropriate 1 in 100 AEP flood level to ensure adequate flood protection.

DWER 1 in 100 AEP flood levels based on modelling presented in SKM (2007) without the Market Street Bund, ranges from 5.0 to 6.5 mAHD for Superlot D (Appendix D). Adopting the 1 in 100 AEP flood level plus 500 mm, minimum floor level recommended by DWER for Superlot D ranges from 5.5 to 7.0 mAHD.

DWER also advise an impact assessment of filling Superlot D is not required, if minimum floor levels in the existing Mortiss Street Subdivision (Sea Raven Estate) are greater than 5.25 mAHD. As-constructed survey for Stage 1 of this subdivision indicates finished fill levels in lots are around 5.20 mAHD. DWER has reviewed this survey and subsequently advised minimum habitable floor levels are expected to exceed 5.25 mAHD and that no additional modelling is considered necessary (see Appendix B).

On 27 January 2023, DWER provided additional advice following review of *JDA Refinement of Exmouth Flood Modelling Report* (JDA, 2022). It recommended minimum habitable floor levels along the western and southern boundary of the lot could have a lower freeboard between 250 mm to 300 mm above the adjacent 1 in 100 AEP flood levels, rather than 500 mm.

Therefore adopting the 1 in 100 AEP flood levels provided by DWER from SKM (2007) plus 300 mm freeboard, minimum floor level recommended by DWER for Superlot D ranges from 5.3 to 6.8 mAHD.

5.3. Department of Transport

Preliminary advice provided by Department of Transport (DoT) on 4 May 2022 is presented in Appendix C and is summarised as follows:

State Planning Policy 2.6 State Coastal Planning Policy (WAPC, 2013) requires that the allowance for storm surge inundation ('S4 Inundation') be set at the maximum extent of inundation from a 500 year ARI (0.2% AEP) storm surge event plus the predicted extent of sea level rise.

Seashore Engineering (2018) provides estimates of extreme design water level at a number of WA coastal locations including Exmouth. These estimates are deliberately conservative and are for preliminary analysis of coastal inundation risk associated with tropical cyclones. For Exmouth, the 500 year ARI (0.2% AEP) design water level is 5.2 mAHD, similar to the adopted barrier floor level of 5.3 mAHD in SKM (2007b) along the canals.

Assuming a planning horizon to 2110 and associated potential sea level rise of 0.9 m, the potential inundation level for Superlot D is 6.1 mAHD for the 500 year ARI (0.2% AEP). This indicates the minimum lot levels adopted in RPS (2010) for the Marina Village of 5.25 mAHD are inadequate for managing storm surges under a future climate scenario.

A Coastal Hazard Risk Management and Adaptation Plan [CHRMAP] for the Exmouth townsite is currently in preparation and due for completion in late-2023, which may result in revised flood levels for Superlot D.

Notwithstanding the above, JDA understand MP Rogers & Associates have been commissioned by DevelopmentWA to prepare a separate coastal inundation assessment report for Superlot D, and will confirm minimum lot levels required from a coastal inundation perspective.

5.4. Recommended Minimum Floor Level

Recommended minimum floor level based on the above guidelines for 1 in 100 AEP flooding from stormwater is summarised below. Minimum floor levels for coastal inundation is addressed by MP Rogers & Associates separate from this report.

Local planning design guidelines indicate minimum floor level for Superlot D to be 5.25 mAHD.

DWER floodplain management guidelines and advice indicate minimum floor level is to be the 1 in 100 AEP flood level + 300 mm freeboard, resulting in floor level between 5.3 to 6.8 mAHD. These values applicable to the boundary of Superlot D is shown in Figure 5.

7. FLOOD RISK MITIGATION OPTIONS

Preliminary investigation by JDA suggests flood risk mitigation options for Superlot D may include, but not be limited to:

- Importation of fill;
- Construction of a levee or bund; or
- Use of an alternative built form.

Presented below is a desktop review of each of these options.

7.1 Importation of Fill

Importation of clean sand fill can be used across Superlot D to ensure it remains above flood water, and also has sufficient separation from the finished lot level to any potential groundwater perching on any underlying low permeability soils.

Section 5.4 outlines the guidelines for the minimum recommended floor level. Figure 5 presents these levels around the boundary of the site ranging from 5.3 to 6.8 mAHD.

Based on current natural surface level of approximately 5.0 mAHD, this represents importation of between 0.3 m to 1.8 m of sand fill.

7.2 Levee/Bund

To protect from inland flooding along the western and southern boundaries, a levee/bund could be constructed with top elevation at DWER recommended minimum floor level of 1 in 100 AEP flood level + 300 mm. Engineering design, extent, form and maintenance requirements would need to be further assessed during detail design.

Construction of a levee/bund may be a more economic method to protect Superlot D against flooding compared to importation of fill.

7.3 Use of Alternative Built Form

An alternative built form is construction of elevated houses on poles/stilts. Whilst common in the eastern states, this construction form is rare across Western Australia. The existing topography of Superlot D would need to be earthworked and graded to allow surface runoff towards the canals.

Stormwater flow from within the lot and any potential overflow from Murat Road would flow within road reserves or for larger events overland beneath housing floor levels. Habitable floor levels would need to be a minimum 300 mm above the 1 in 100 AEP flood level. Stilted housing will not detrimentally impact surrounding floodplains as the general landform is mostly unchanged, if not improved, as grading of the lots to the canals would reduce impedance to flow from surrounding areas.

Stilted housing is likely more appropriate should Superlot D be developed as tourist or temporary workers accommodation rather than residential, as aesthetically there will be a height differential compared to surrounding Marina Village lots.

8. SUMMARY

Flood mapping presented in the *Exmouth Floodplain Management Study* (SKM, 2007b) for the Exmouth townsite shows Superlot D inundated during the 1 in 10, 25 and 100 year (10%, 4% and 1% AEP) flood events.

DWER floodplain management guidelines and advice indicate minimum floor level is to be the 1 in 100 AEP flood level + 300 mm freeboard to protect against inland flooding, resulting in floor level between 5.3 to 6.8 mAHD.

Based on this review, JDA consider construction of a levee/bund along the western and southern boundaries, is the most appropriate measure to mitigate the 1 in 100 AEP flood risk event for Superlot D.

Attachments

Figure 1: Location Plan

Figure 2: SKM (2007b) 'Existing Case' 100 year ARI Flood Depths and Levels

Figure 3: SKM (2007b) 'Existing Case' 100 year ARI Flood Zoning

Figure 4: Minimum Fill Levels

Appendix A: Superlot D Detail Survey (Denada, 2015)

Appendix B: DWER Email Correspondence (22 June 2022)

Appendix C: DoT Email Correspondence (4 May 2022)

References:

Ball J., Babister M., Nathan R., Weeks W., Weinmann E., Retallick M. & Testoni I. (Eds) (2019) *Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia*.

Denada Surveys (2015) *Detail Survey, Murat Road Exmouth*. Date Surveyed 03-04 February 2015, Sheets 1 to 3 Rev B, 18 February 2015.

Golder Associates (2006) *Geotechnical Studies Exmouth Marina Village Superlot D, Exmouth*. Prepared for Benchmark Projects Australasia, Report no 05642078-R03, August 2006

Gorman, V. (2021) *Holiday town Exmouth flooded as some residents experience heaviest rain of their lives*. ABC News, 10 June 2021. Available from <<https://www.abc.net.au/news/2021-06-10/exmouth-wa-floods-as-storm-dumps-200-millimetres-of-rain/100205868>>

Institute of Engineers Australia [IEAust] (1987) *Australian Rainfall and Runoff: a Guide to Flood Estimation*.

JDA (2002) *Review of Exmouth Flood Management Strategy: Assessment of June 2002 Flood Event*. Doc Ref: J3058h. Prepared for Shire of Exmouth, September 2002.

RPS (2010) *Drainage Design & Management Plan – Exmouth Marina Village*. Prepared for Landcorp, Report No. M01053, Rev 0 dated November 2010.

Seashore Engineering (2018) *Design Storms for Western Australian Coastal Planning: Tropical Cyclones*. Doc Ref: SE015-01 Rev B. Prepared for Department of Transport, 24 January 2018.

SKM (2007a) *Exmouth Floodplain Management Study – Flood Modelling Report*. Prepared for Department of Water, Dec 2007.

SKM (2007b) *Exmouth Floodplain Management Study – Floodplain Management Strategy*. Prepared for Department of Water, Dec 2007.

Taylor Burrell Barnett [TBB] (2019) *Shire of Exmouth Local Planning Scheme*. Rev 10, March 2019. Prepared in association with Terra Rosa Cultural Resource Mapping and Hyd2o Hydrology.

Western Australian Planning Commission [WAPC] (2013) *State Planning Policy 2.6 - State Coastal Planning Policy*. Western Australian Planning Commission, Perth.

Should you have any queries with this report, please do not hesitate to contact Matthew Yan matt@jdahydro.com.au.

Regards,



JDA CONSULTANT HYDROLOGISTS

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Data Source:



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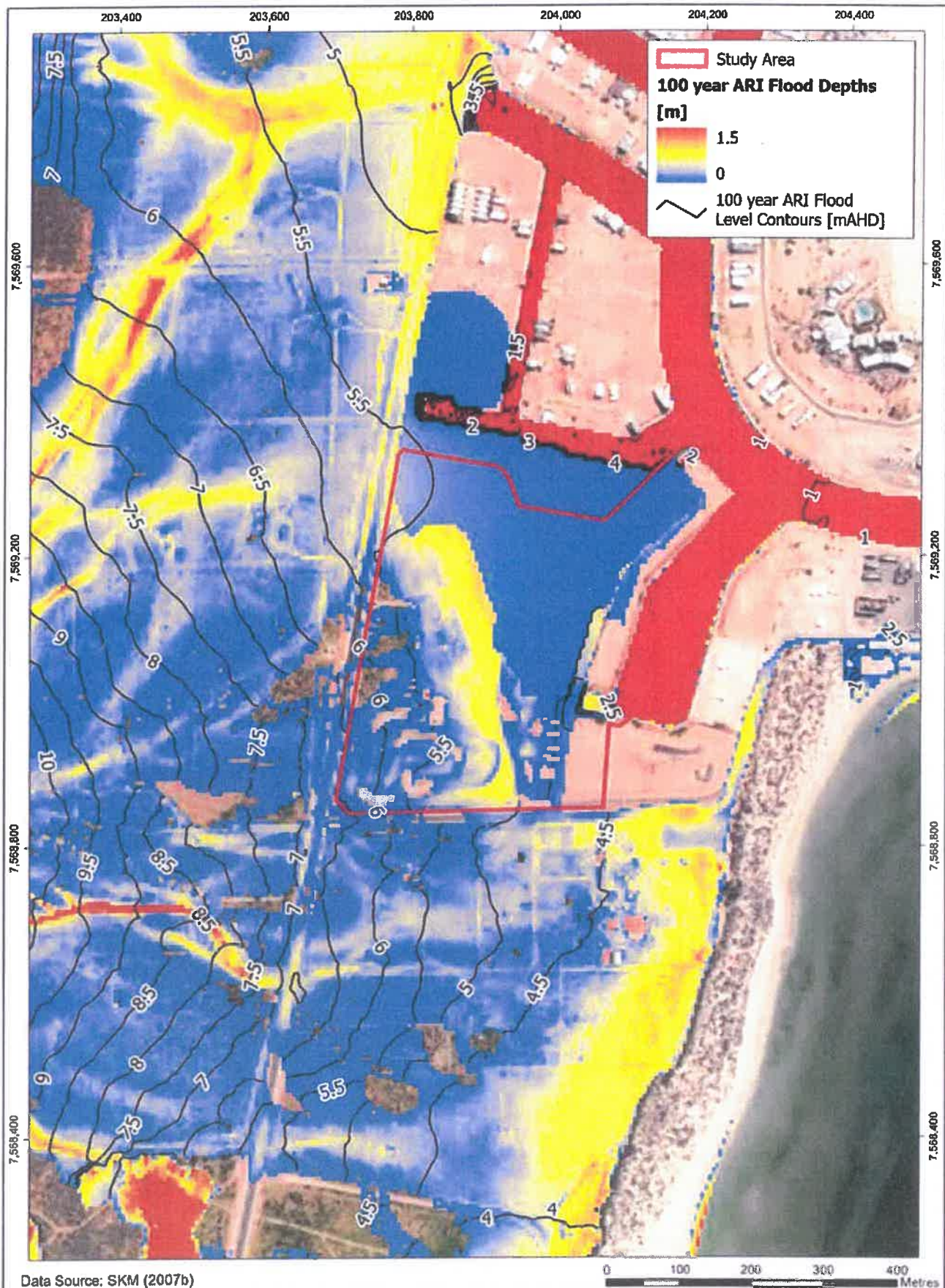


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Coordinate System: GDA 94, Zone 50
Development WA
Lot 9510 Murat Road (Superlot D), Exmouth: Flood Resolution Options
Figure 1: Location Plan





Data Source: SKM (2007b)



Job No. J7207
 Scale: 1:7,000 @A4
 Coordinate System: GDA 1994 MGA Zone 50
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Development WA
 Lot 9510 Murat Road (Superlot D), Exmouth: Flood Resolution Options
**Figure 2: SKM (2007b) 'Existing Case' 100 year ARI
 Flood Depths and Levels**



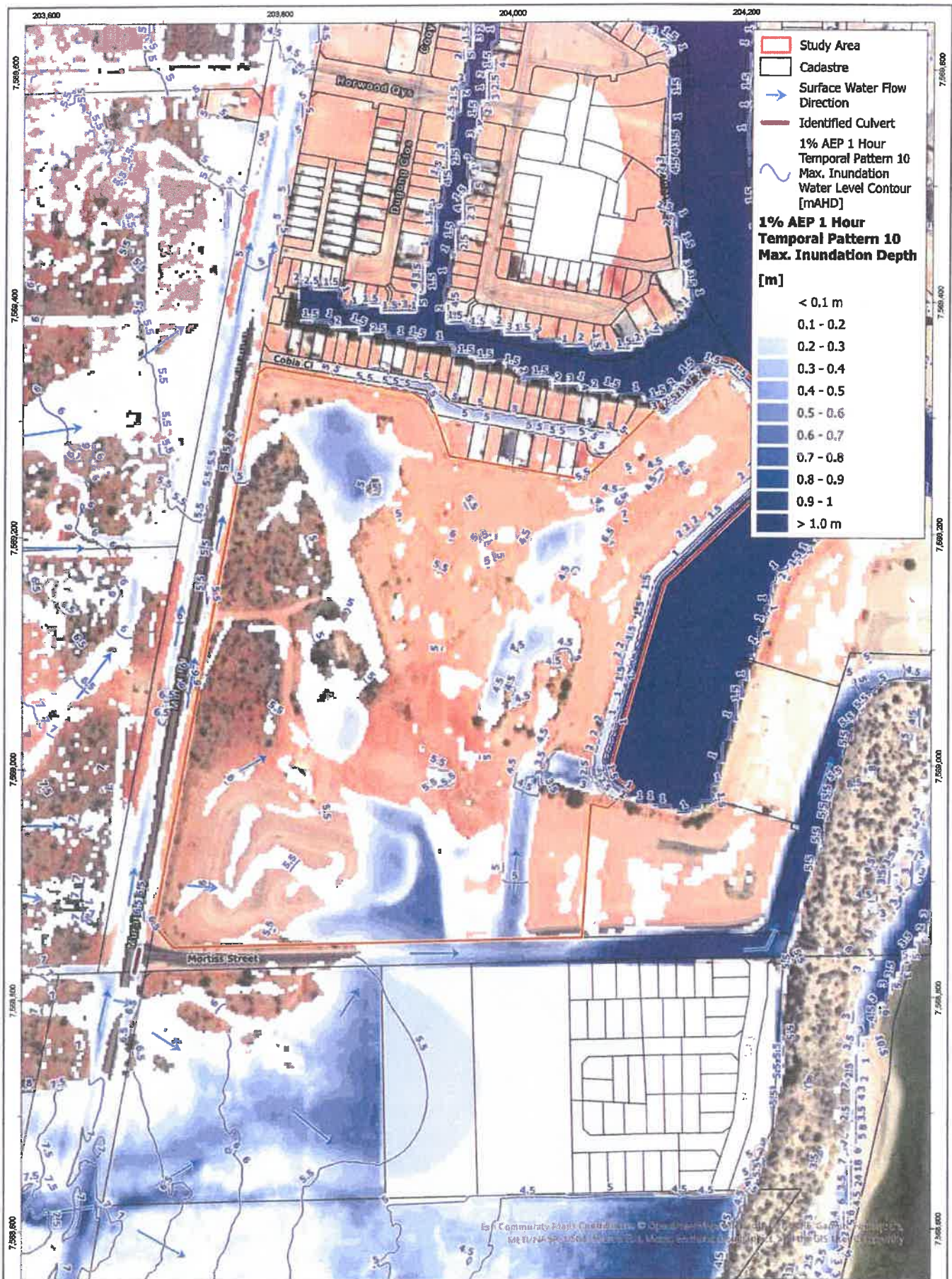
Data Source: SKM (2007b)



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Development WA
 Lot 9510 Murat Road (Superlot D), Exmouth: Flood Resolution Options
Figure 3: SKM (2007b) 'Existing Case' 100 year ARI Flood Zoning



Data Source: Detail Survey Mural Road, Exmouth, Plan No. 101550-001b Rev. B, De Nada Surveys for Landcorp, 10/02/2015; (Figure 6 from J7207b, 16/12/2022)

Coordinate System: GDA 1994 MGA Zone 50



Job No. J7207
Scale: 1:3,000 @A3

0 50 100 150 200 Metres

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Development WA
Lot 9510 Mural Road (Superlot D), Exmouth: Flood Resolution Options
Figure 4: Revised 1% AEP 1 Hour Flood Mapping



Data Source: SKM (2007b)



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 Scale: 1:7,000 @A4
 Coordinate System: GDA 1994 MGA Zone 50
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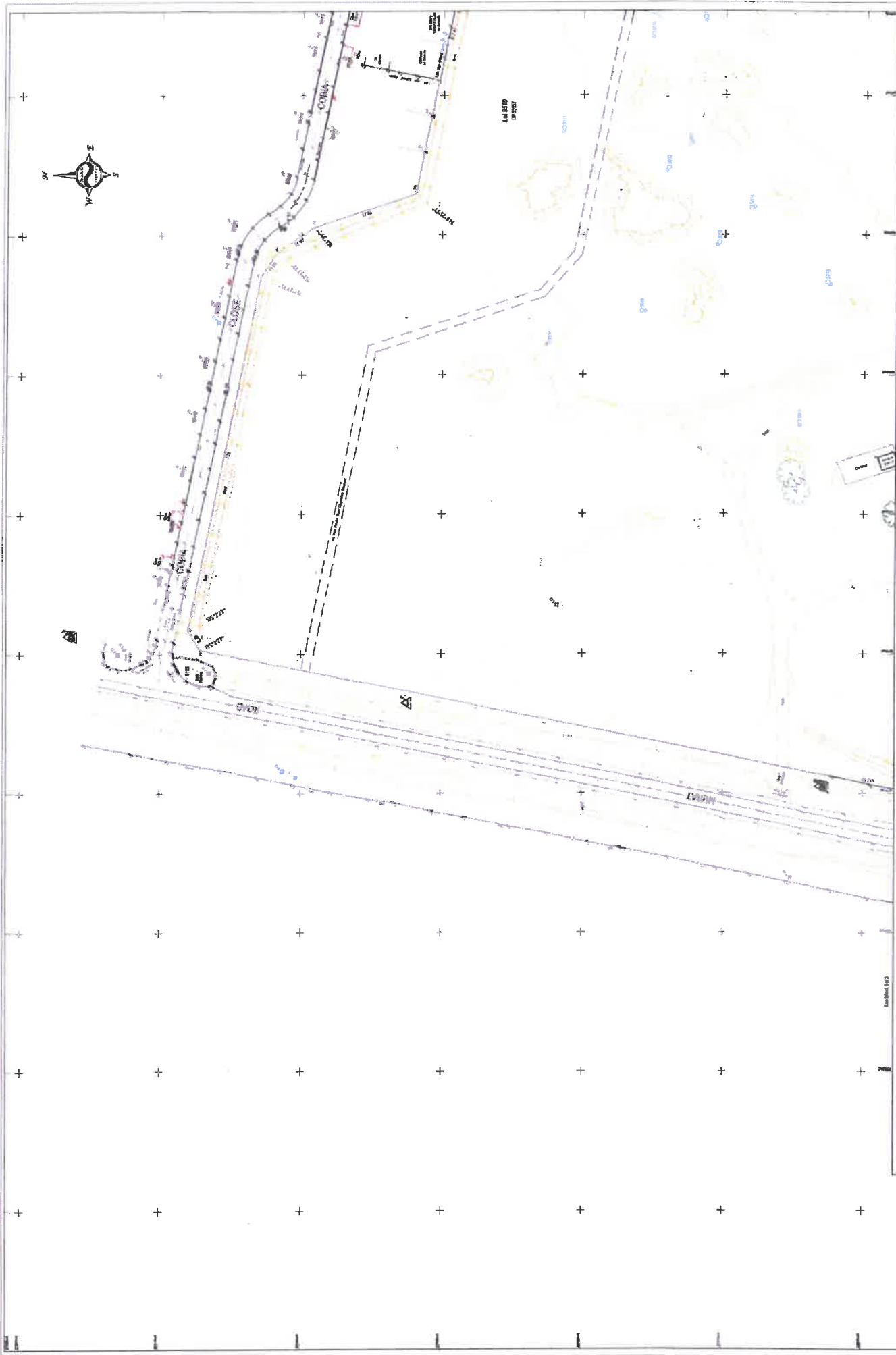


Development WA
 Lot 9510 Murat Road (Superlot D), Exmouth: Flood Resolution Options

Figure 5: Minimum Fill Levels

APPENDIX A

**Superlot D - Detail Survey
(Denada, 2015)**



DE NADA
SPECIALIST SURVEYING & CONSULTING
100/110 Main Street, Port Moresby
Tel: 675 521 1100 Fax: 675 521 1101
Email: info@denada.com.pg

LANDCORP

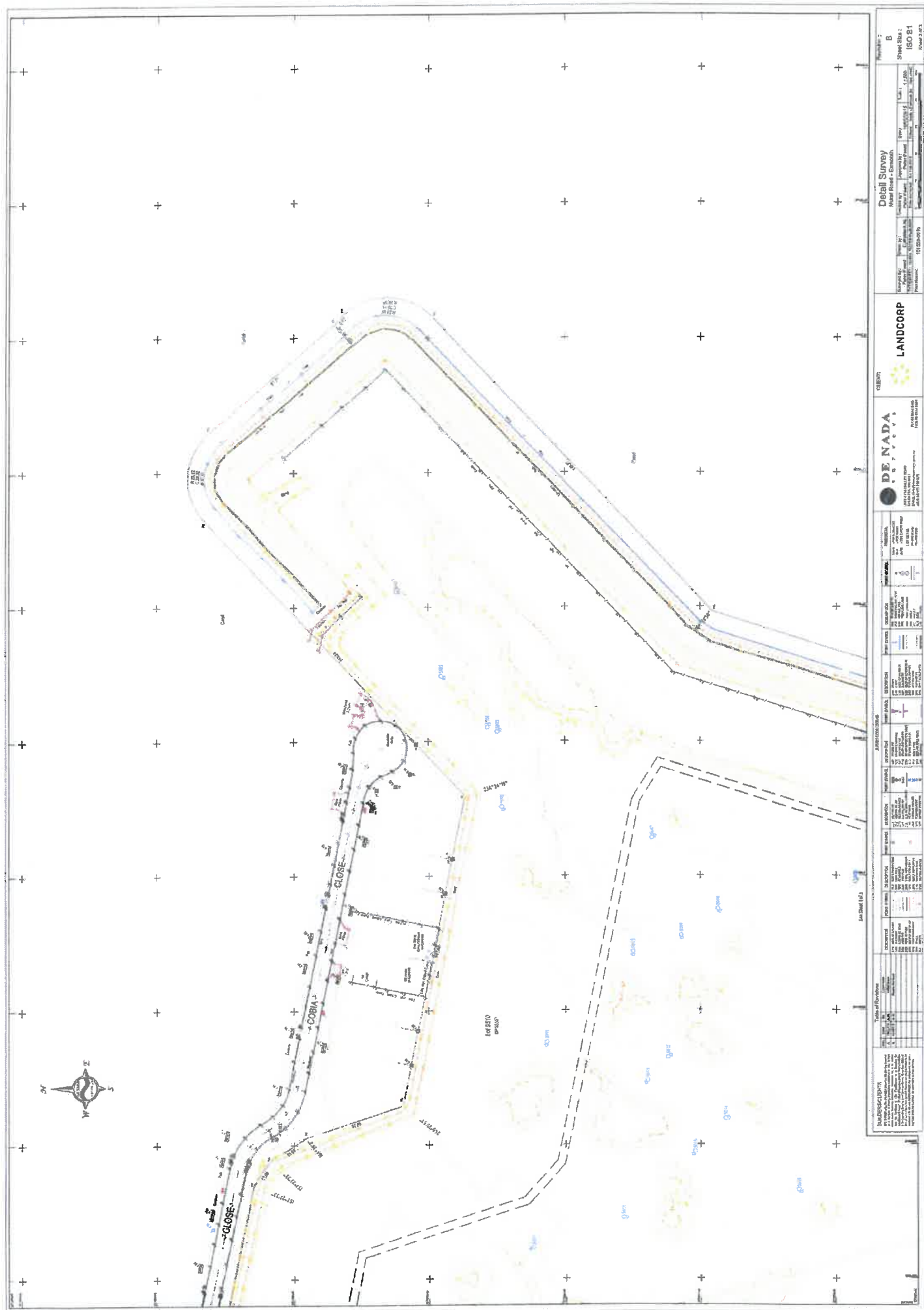
Detail Survey
Main Road - Borend
Project No: 100/110 Main Street
Scale: 1:100
Date: 10/10/2019
Sheet No: 1 of 1
ISO 9001

Legend

Symbol	Description
[Symbol]	Boundary
[Symbol]	Proposed Road
[Symbol]	Existing Road
[Symbol]	Water
[Symbol]	Vegetation
[Symbol]	Building
[Symbol]	Other

Notes

1. All measurements are in meters.
2. The survey was conducted on 10/10/2019.
3. The map shows the proposed road layout.
4. The map includes a grid of points marked with '+'.
5. The map is oriented horizontally.



APPENDIX B

DWER Email Correspondence (22 June 2022)

Matthew Yan

From: Simon Rodgers <simon.rodgers@dwer.wa.gov.au>
Sent: Wednesday, 22 June 2022 9:52 AM
To: Matthew Yan
Subject: Floodplain management advice - Lot 9510 Murat Rd, Exmouth - Matthew Yan - 22062022
Attachments: Ascon levels - Market St - Stage 1.pdf

Categories: Other

Hi Matthew

Based on the survey information provided, that shows finished fill levels of ~ 5.20 m AHD and an assumption that subsequent stages of the development (ie, Lots 21 to 23 and 37 to 44) have been constructed to similar levels, minimum habitable floor levels are expected to exceed 5.25 m AHD. Consequently, additional modelling to demonstrate the impact of the proposal on major flooding is not considered necessary.

Regards

Simon Rodgers
Supervising Engineer
Surface Water Assessment and Flood Risk Science

Department of Water and Environmental Regulation
Prime House, 8 Davidson Terrace, JOONDALUP WA 6027
Locked Bag 10, Joondalup DC, WA 6919
T: (08) 6364 6923 M: 0429 080 517
E: simon.rodgers@dwer.wa.gov.au | www.dwer.wa.gov.au

From: Matthew Yan <Matt@jdahydro.com.au>
Sent: Monday, 20 June 2022 5:50 PM
To: Simon Rodgers <simon.rodgers@dwer.wa.gov.au>
Subject: RE: Floodplain management advice - Lot 9510 Murat Rd, Exmouth - Matthew Yan - 22042022

Hi Simon,

Further to your email below, particularly with reference to the highlighted text regarding confirmation of finished levels in the Sea-Raven Estate on Mortiss Street, please find attached the Stage 1 as-constructed survey levels as requested.

The survey indicates earthwork levels generally around 5.20 mAHD. We presume earthworks contract for the site may have been let with minimum earthworks level of RL 5.20 for all lots, with requirement that finished floor levels (FFL) having a minimum top of slab level at 5.25 mAHD.

Based on the above, can you confirm the Department is now satisfied that proposed development of Lot 9510 Market Street will not impact other development and that no further flood modelling is required.

Please do not hesitate to contact me should you have any queries or need to discuss further, thanks.

Regards,

Matthew Yan
Principal Environmental Hydrologist



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From: Simon Rodgers <simon.rodgers@dwer.wa.gov.au>
Sent: Friday, 22 April 2022 3:53 PM
To: Matthew Yan <Matt@idahydro.com.au>
Subject: Floodplain management advice - Lot 9510 Murat Rd, Exmouth - Matthew Yan - 22042022

Hi Matthew

The Department of Water and Environmental Regulation provides advice and recommends guidelines for development on floodplains with the object of minimising flood risk and damage. The department uses the following guiding principles to ensure proposed development in floodprone areas is acceptable with regard to major flooding:

- proposed development has adequate protection
- proposed development does not detrimentally impact on the existing flooding regime

The *Exmouth Floodplain Management Study (2007)* and Market Street Levee, Exmouth – Flood Mitigation Works Detailed Design Report (2014) is used as the basis of the following discussion. Hydraulic modeling has determined the extent and levels of 1 in 100 AEP flooding for the following 2 scenarios:

- (1) complete failure/breaching of the entire existing Market Street bund
- (2) no failure/breaching/overtopping of the entire existing Market Street bund

Based on the above modeling and a recognition that only partial failure of the existing Market Street bund would be expected, the more likely 1 in 100 AEP flood levels at 6 key locations are shown on the attached plan (refer Attachment). It is considered that these flood levels represent a more realistic estimation of 100 year ARI flooding due to the unknown extent of actual levee failure/breaching. Based on our floodplain development guidelines and the above discussion, minimum habitable floor levels of 500 mm above the appropriate 1 in 100 AEP flood level (as shown on attached plan) to ensure adequate flood protection.

The above modelling was used to provide advice during the planning for the existing developments within the Exmouth Marina Village and the subdivision at the western end of Mortiss Street. The modelling included filling within both the Mortiss Street developed area and Lot 9510. **If you are able to confirm the minimum floor levels within the existing Mortiss Street subdivision are greater than 5.25 m AHD, no additional flood modelling is necessary to assess the impact of proposed development on Lot 9510.**

My understanding is that the State Coastal Planning Policy (SPP2.9) would be applicable to this location. The Shire of Exmouth and/or Department of Transport (Fangjun Li in their Coastal Management team may be a good contact) should be contacted for the latest information on Coastal Hazard Risk Management and Adaptations Planning for the Exmouth area.

It should be noted that this advice is related to major flooding only and other planning issues, such as stormwater drainage, environmental and ecological considerations, may also need to be addressed.

Regards

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Supervising Engineer
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Locked Bag 10, Joondalup DC, WA 6919
T: (08) 6364 6923 M: 0429 080 517
E: simon.rodgers@dwer.wa.gov.au | www.dwer.wa.gov.au

From: Matthew Yan Matt@jdahydro.com.au
Sent: Wednesday, 13 April 2022 4:09 PM
To: Simon Rodgers simon.rodgers@dwer.wa.gov.au
Subject: Lot 9510 Murat Rd, Exmouth - Flood Advice

Hi Simon,

JDA have been appointed by DevelopmentWA to assist with hydrological advice associated with future urban development of Lot 9510 Murat Rd, Exmouth (location plan attached). Are you able to provide confirmation and/or guidance on the following queries:

Flood Level

Attached is an image from the SKM 2007 Exmouth Flood Study showing 100 year ARI flood mapping, with flooding across the Lot (Figure A-14).

With regards to finished lot levels, the Exmouth Marina Village Drainage Design Management Plan (RPS, 2010) states:

"The Shire of Exmouth, in consultation with the Department of Water, is using this study as a reference to determine minimum finished development levels for future development within the Exmouth Marina Village. The Shire will require land proposed for residential development to be filled to a level not less than 500 mm above the 1:100 year ARI flood level, as part of the Exmouth Floodplain Management Study (2007)."

Based on the above, can you please confirm minimum floor levels required for Lot 9510?

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To achieve required flood clearance, the site would be filled or a flood mitigation structure such as a bund is constructed around the affected perimeter of the site. This would reduce available flood storage volume and impact adjacent flood levels and flow in neighbouring properties. In the Flood Zoning Existing Case attachment (Figure B-4), Lot 9510 is shown clear of being in any designated Flood Way or Flood Zone.

Can you confirm development of this Lot with fill above the 100 yr ARI flood level (ie. without flood storage) has already been considered as part of this Flood Study and is acceptable (ie. has negligible impact on adjacent properties)?

SPP 2.6

We note SPP 2.6 has come into effect since the SKM 2007 Flood Study was prepared. Can you advise if this is applicable, and if so what levels we need to be cognisant of?

Thanks in advance. Feel free to call if you have any queries or need to discuss further, thanks.

Regards,

Matthew Yan

Principal Environmental Hydrologist



JDA CONSULTANT HYDROLOGISTS

Suite 1/27 York St, Subiaco WA 6008 | PO Box 117, Subiaco WA 6904 |
Direct: (08) 6380 3423 | Reception: (08) 9388 2436 | www.jdahydro.com.au

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Lot 9510 Murat Rd EXMOUTH



LEGEND

- Lot 9510 Murat Rd
- 1% (1 in 100) AEP average flood marks (m AHD)
- 0.5m Contours (m AHD)
- Levees

0 50 100 Metres

Datum and Projection Information
 Vertical Datum: AHD71
 Horizontal Datum: GDA84
 Projection: MGA Zone 90
 Spheroid: GRS80

Project Information
 Client: Simon Rodgers
 Map Author: Andrew Watson
 Task ID: 31385
 Compilation Date: 22/04/2022
 Edition: Version 2

SOURCES

The Department of Water and Environmental Regulation acknowledges the following datasets and their custodians in the production of this map:

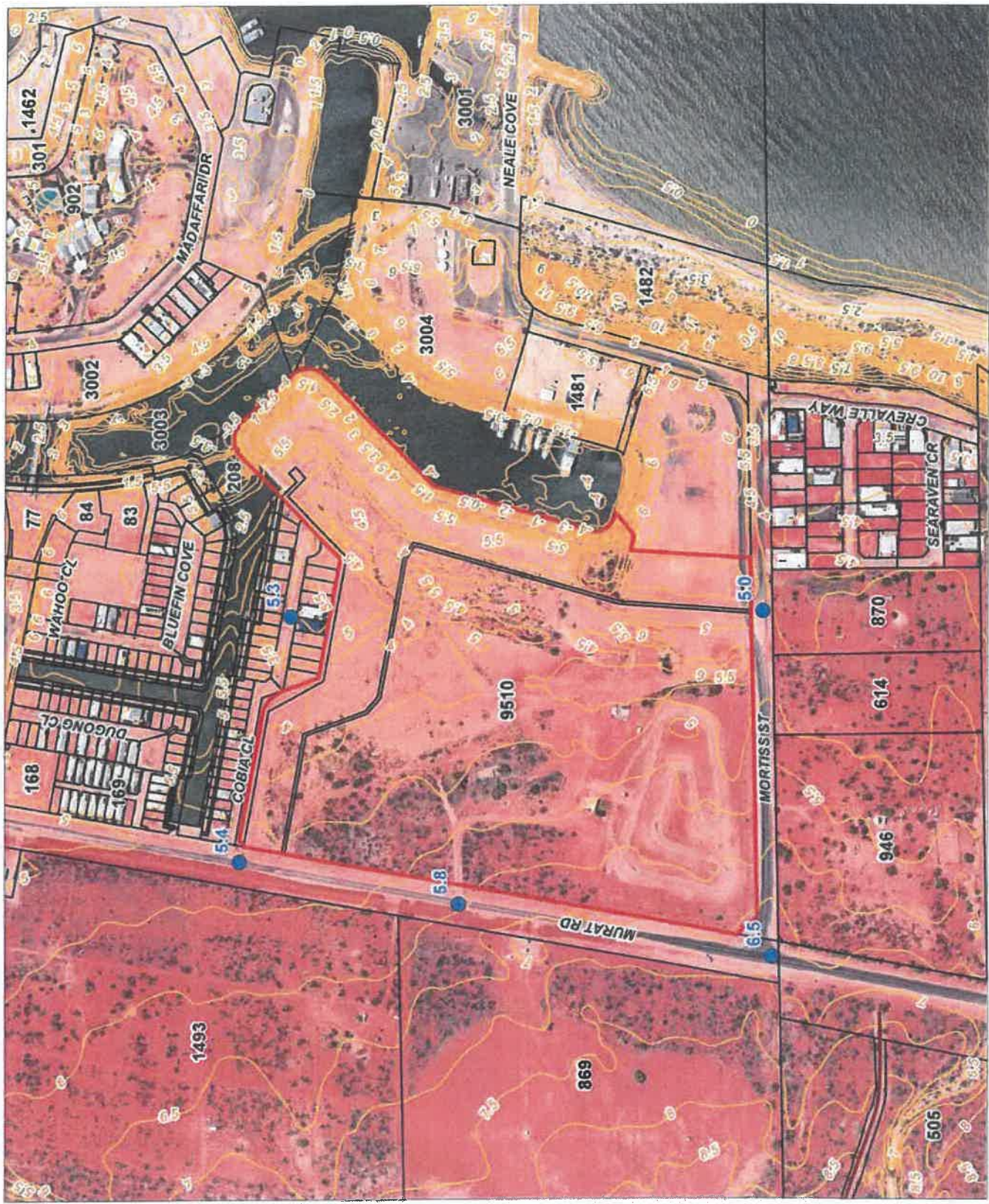
- Road Centreline, DLI - Landgate - 2015
- Land Name (DATE_201) - Landgate - 2021
- Boundary Trench 10m Orthorectified - Landgate - 2020

Government of Western Australia
 Department of Water and Environmental Regulation

This map is a product of the Department of Water and Environmental Regulation and was prepared on 22/04/2022.

The map was produced with the intent that it be used for display purposes at the scale of 1:5,000 when printed at A4.

While the Department of Water and Environmental Regulation has endeavored to ensure the accuracy of the information presented on this map, it does not warrant the accuracy or completeness of the information presented on this map for any particular purpose.



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5708.00
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AL 0.000



<p>Rev. Initials Description Drawn Date Checked</p> <p>SAH 23.02.2010</p>		<p>The contents of this plan are correct and correct as of the date stated above. Our evidence is that all measurements and parties holding in relation to this plan should satisfy themselves of the plan accuracy by consulting Matthew Nolan and Partners Surveyors</p>		<p>NORTH</p>		<p>EXMOUTH LOT 11 MARKET STREET FINAL EARTHWORKS LEVELS</p>		<p>Scale 1:500 @ A1 Datum EXMD44MD</p>					
<p>SCALE 1:500 @ A1 - 1:1000 @ A3</p> <p>ALL DISTANCES ARE IN METRES</p>		<p>The boundaries shown on this plan are not ascertained as part of this survey. Therefore, the plan does not guarantee their accuracy. Existing boundaries, easements, or interests are not depicted and it is the user's responsibility to obtain this information. The vertical placement of the indicated boundaries is not provided for any proposed works on or near existing boundaries.</p>		<p>FILES Project: 10.12.00 Survey - Plan No: 94395-03 - 94395-03-02</p>		<p>Level 1 2 Sable Drive Jandakot W.A. 6164</p> <p>PO Box 3628 Bunbury W.A. 6264 Australia</p> <p>Tel: (09) 8456 1801 Fax: (09) 8456 1800 email: info@matthewnolan.com.au www.matthewnolan.com.au</p>		<p>Matthew Nolan and Partners Surveyors Pty Ltd ABN 60 609 565 211</p>		<p>Drawn: SAH Surveyor: M.HAWKER Surveyed: 10/02/2010 Revision: A</p>		<p>Job No. 94395 Drawing 94395-03 Revision A</p>	

APPENDIX C

DoT Email Correspondence (4 May 2022)

Matthew Yan

From: Li, Fangjun <Fangjun.Li@transport.wa.gov.au>
Sent: Wednesday, 4 May 2022 11:25 AM
To: Matthew Yan
Cc: Meuleners, Michael
Subject: RE: Lot 9510 Murat Rd, Exmouth - Flood Advice

Categories: Other

Hi Matthew

The Schedule One of SPP 2.6 requires the allowance for the risk of inundation to be the maximum extent of storm inundation (defined as the peak steady water level plus wave run-up) plus the sea level rise value of 0.9m. The allowance for storm inundation is to be based on ocean forces and coastal processes that have a 0.2 percent or one-in-five hundred probability of being equalled or exceeded in any given year of the planning timeframe.

As you have mentioned that the Exmouth cyclone modelling is not available at the moment. A conservative estimate of peak steady water level during a 500-year ARI cyclone for the Exmouth coast is 5.2m AHD at present day. Add on the 0.9m sea level rise allowance the ocean cyclone inundation level for 100 year planning timeframe will be 6.1m AHD, which is quite high.

We are open for other suggestions with justifiable cyclone modelling document.

Regards,

#

Fangjun Li
Manager Coastal Engineering and Management | Maritime | Department of Transport
5 Newman Court, Fremantle WA 6160
Tel: (08) 94357545 | Mob: 0408926512
Email: Fangjun.Li@transport.wa.gov.au | Web: www.transport.wa.gov.au



CLEAR DIRECTION * FRESH THINKING * EXCELLENT SERVICE * GREAT PEOPLE

From: Matthew Yan <Matt@jdahydro.com.au>
Sent: Wednesday, 4 May 2022 11:02 AM
To: Li, Fangjun <Fangjun.Li@transport.wa.gov.au>
Subject: FW: Lot 9510 Murat Rd, Exmouth - Flood Advice
Importance: High

CAUTION: This email originated from outside of DOT. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Fangjun,

Just a quick email to see if you've had a chance to peruse my email below?

If you need any additional information or clarification, feel free to contact me by phone or email. Thanks.

Regards,

Matthew Yan
Principal Environmental Hydrologist



JDA CONSULTANT HYDROLOGISTS

Suite 1/27 York St, Subiaco WA 6008 | PO Box 117, Subiaco WA 6904 |
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Please consider the environment before printing this e-mail

From: Matthew Yan
Sent: Tuesday, 26 April 2022 1:51 PM
To: Fangjun.Li@transport.wa.gov.au
Subject: FW: Lot 9510 Murat Rd, Exmouth - Flood Advice

Hi Fangjun,

JDA are assisting DevelopmentWA with hydrological advice associated with future urban development of Lot 9510 Murat Rd, Exmouth (location plan attached).

Simon Rodgers (DWER) has provided advice with regards to floodplain development (see email attached), and recommended that I contact you with regards to State Coastal Planning Policy (SPP 2.9).

I understand that a Coastal Hazard Risk Management and Adaptations Plan is being prepared for the Exmouth area, but unlikely to be completed until next year. Consequently, are you able to advise any implication or guideline that we would need to be aware of for future development of Lot 9510?

Feel free to contact me if you have any queries or need to discuss further, thanks.

Regards,

Matthew Yan
Principal Environmental Hydrologist



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Regards,

Matthew Yan

Principal Environmental Hydrologist



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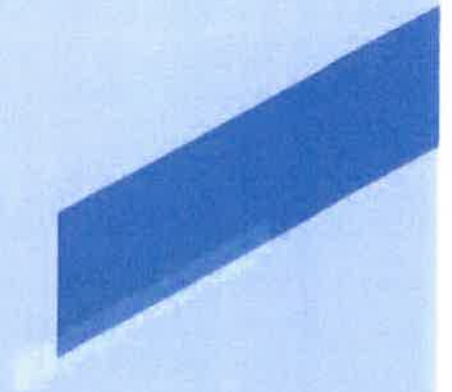
Appendix D

Environmental Assessment Report



Appendix E

Aboriginal Cultural Heritage Management
Preliminary Investigations





SJC Heritage Consultants
PO BOX 746
KALAMUNDA
WA 6926

2 August 2024

Mr Brenton Dowling
Celsius Land
PO Box 1021
East Victoria Park
WA 6981

Dear Brenton

**LOT 9510 MURAT ROAD, EXMOUTH - ABORIGINAL CULTURAL HERITAGE MANAGEMENT
PRELIMINARY INVESTIGATIONS**

Further to our telephone conversations I have undertaken some preliminary investigations regarding any known Aboriginal Cultural heritage on the parcel of land Lot 9510 Murat Road, Exmouth.

The land is Freehold Title. The WA Aboriginal Heritage Act 1972(2023) recognises the continuation and co-existence of rights in regard to Heritage Protection, transmission of Cultural Knowledge and Obligations in regard to traditional cultural practices.

The area falls inside the Native Title Determination Gnulli, Gnulli #2 Gnulli #3 - Yinggarda, Baiyungu and Thalanyji People.

The Prescribed Body Corporate for the determination area is Nganhurra Thanardi Garrbu Aboriginal Corporation RNTBC established in February 2022.

According to the Office of the Registrar of Indigenous Corporations (ORIC), the current board members of NTGAC are Paul Baron, Charle Baron, Harold Dickerson, Hazel Walgar, Karla Dittums, Rachel Cooyou.

The board are assisted by Yamatji Maarlpa Aboriginal Corporation Representative Body.
NTGAC@ymac.org.au

A search of the Department of Land Planning And Heritage (DPLH) Aboriginal Heritage Information System (AHIS) was conducted on 3 August 2024

- Search using Street Address "Lot 9510, Murat Road, Exmouth" = Address Not Found
- Search using Custom Polygon (extending over Lot 9510 and surrounds (Figure 1)

The AHIS search results indicated

- No ACH Registered Sites
- No ACH Lodged (Reported/Interim/Pending Sites)
- No ACH Historic Records
- One Previous Heritage Survey

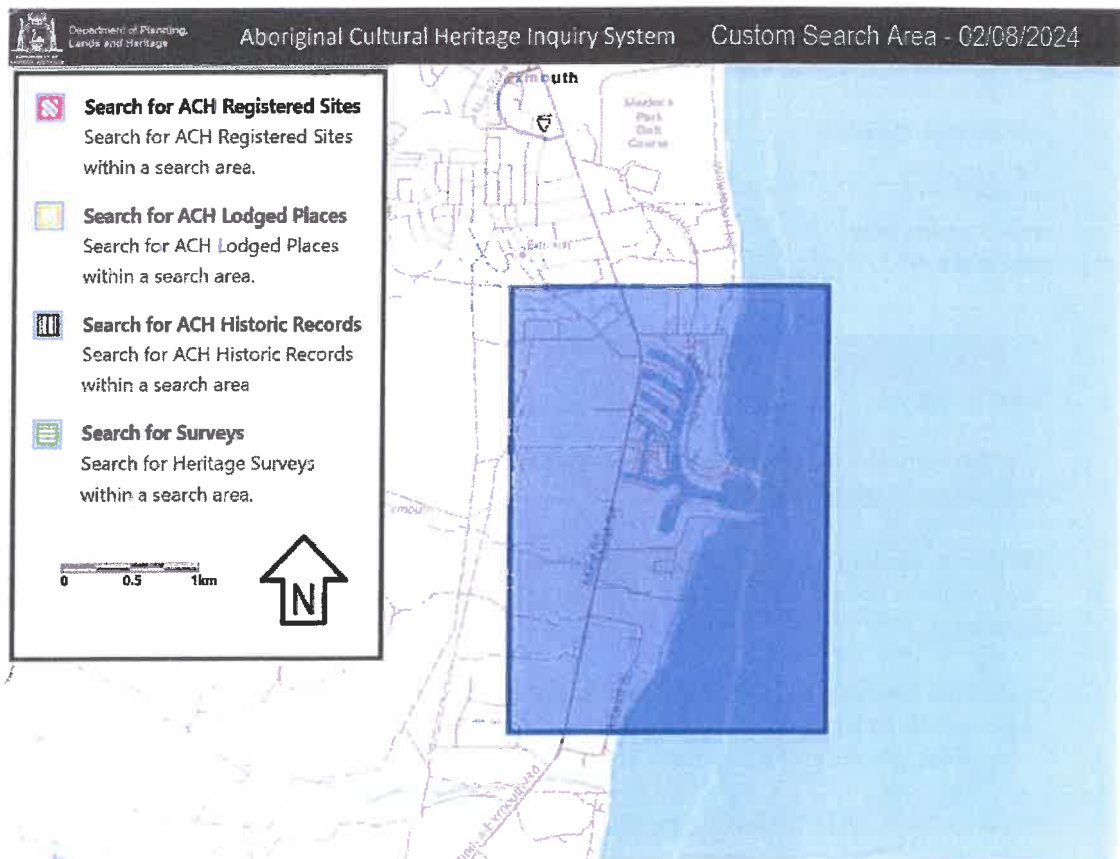


Figure 1. DPLH AHIS custom polygon search area.

Previous Heritage Surveys

It should be noted that there is a requirement under the AHA1972 Section 15 to report the discovery of Aboriginal Cultural Heritage Places and Objects. There is no requirement on a land user to report that a heritage survey has been carried out where no heritage was discovered. It is therefore possible that other heritage surveys may have been conducted over the area in question, but have not been reported to the DPLH

A search of the DPLH AHIS revealed one previous heritage survey has been reported within the custom search box. According to the DPLH AHIS the survey did NOT extend as far south as Lot 9510 Murat Road.

Previous Heritage Survey Information

Heritage Survey Area 102896

Survey Area ID 12558

Survey Report ID 102896

Survey Report Authors = Veth, P. & Wright, G.

Survey Report Title = Report of an Archaeological and Ethnographic Survey of the Coral Coast Marina Resort, Exmouth, North-West Australia. Dec.1989.



Survey Area Description = The survey area consists of Stage 1 of the Coral Coast Marina Resort development at Exmouth, as per figure 2.

Survey Type = Archaeological/Ethnographic

Spatial Accuracy = Very Good

Field Survey = Yes

Desktop Survey = Yes

The DPLH search results summary does not include the names of the Aboriginal people who were consulted as part of the Veth and Wright heritage survey. A request can be made to the DPLH for the names of the people who were consulted and for a copy of the report.

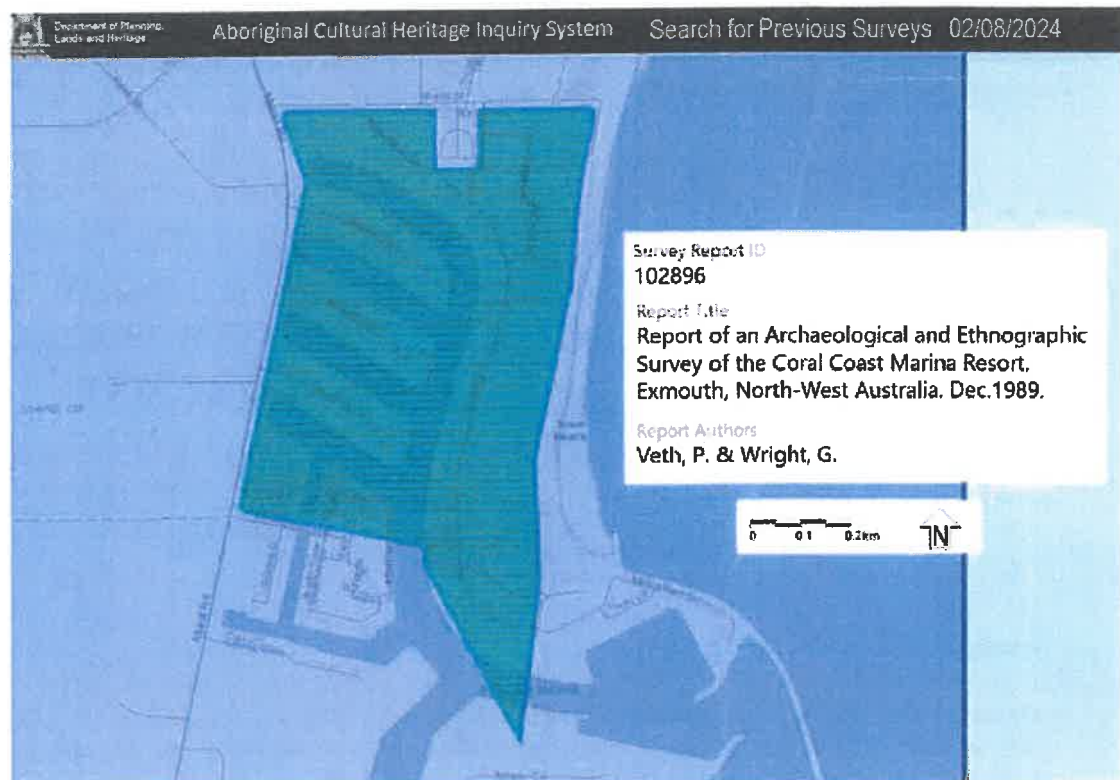


Figure 2. Area encompassed by the Heritage Survey Report ID 102896, conducted by Veth, P. & Wright, G. in 1989.

Stephen Corsini

BA Hons Archaeology UWA 1992; Grad. Cert. Applied Anthrop. UWA 2012

Principal, SJC Heritage Consultants

Mobile: 042 993 7071

Planning and Development Act 2005
RESOLUTION TO AMEND LOCAL PLANNING SCHEME
Shire of Exmouth Local Planning Scheme No.4
Amendment No. 13

Resolved that the Local Government pursuant to Section 75 of the Planning and Development Act 2005, amend the above Local Planning Scheme by:

1. Rezoning Lot 9510 on Deposited Plan 55557, Exmouth from the 'Special Use 7' zone to the 'Urban Development' zone;
2. Deleting 'SU7' from 'Schedule 4 – Special Use Zones';
3. Deleting 'Lot 9510 on DP5557' from 'A8' in 'Schedule 2 – Additional Uses' and remove 'A8' from 'Lot 9510 on DP5557' on the Scheme Maps; and
4. Amending the Scheme Map accordingly.

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COUNCIL ADOPTION

This Standard Amendment was adopted by resolution of the Council of the Shire of Exmouth at the Ordinary Meeting of the Council held on the 21st day of November 2024

.....
SHIRE PRESIDENT

.....
CHIEF EXECUTIVE OFFICER

COUNCIL RESOLUTION TO ADVERTISE

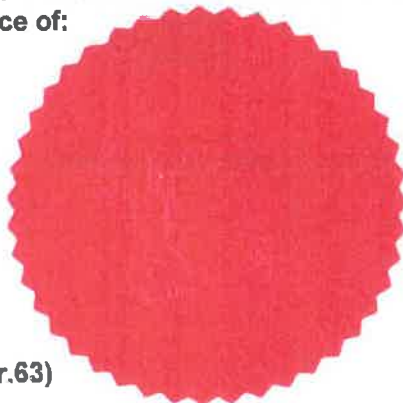
by resolution of the Council of the Shire of Exmouth at the Ordinary Meeting of the Council held on the 21st day of November, 2024, proceed to advertise this Amendment.

.....
SHIRE PRESIDENT

.....
CHIEF EXECUTIVE OFFICER

COUNCIL RECOMMENDATION

This Amendment is recommended for support by resolution of the Shire of Exmouth at the Ordinary Meeting of the Council held on the 29th day of May, 2025 and the Common Seal of the Shire of Exmouth was hereunto affixed by the authority of a resolution of the Council in the presence of:



.....
SHIRE PRESIDENT

.....
CHIEF EXECUTIVE OFFICER

WAPC ENDORSEMENT (r.63)

.....
[Signature]

It is hereby certified that this is a true copy of the Scheme Amendment, final approval to which was endorsed by the Minister for Planning on 11/10/2025

**DELEGATED UNDER S.16 OF
THE P&D ACT 2005**

DATE..... 18-Aug-2025

Certified by [Signature]

APPROVAL GRANTED

Officer of the Commission Duty authorised pursuant to Section 24 of the Planning and Development Act 2005 and Regulation 32(3) Scheme and Regulation 63(3) (Amendment) of the Planning and Development (Local Planning Scheme) Regulations 2015.

.....
MINISTER FOR PLANNING

DATE.....