SILVER CITY DRAFT STRUCTURE PLAN

February 2026

SHIRE OF
CHRISTMAS ISLAND

Approval Page

To be inserted by the WAPC upon approval

Table of Amendments		
Amendment No.	Summary	Date approved by the WAPC
1		
2		
3		
4		
NOTE: The previous and current versions of the Structure Plan are available on the Western Australian Planning Commission (WAPC) and Shire of Christmas Island websites.		

EXECUTIVE SUMMARY

The Silver City Structure Plan (the Structure Plan) has been prepared on behalf of the Shire of Christmas Island (SOCI) under the Australian Government's Housing Support Program (HSP) designed to help achieve the National Housing Accord target of building 1.2 million new, well-located homes over 5 years from 1 July 2024. The HSP Stream 1 supports the delivery of increased housing supply by focusing on projects, such as this Structure Plan, that improve building planning capability for areas targeting future housing projects.

Silver City is a suitable location to provide the long-term expansion of the urban area on Christmas Island. The Structure Plan developable topography is no more severe than the adjoining existing Silver City settlement, most parts of its elevated position enjoy sweeping ocean view, it can capture existing services in close proximity and offers enhanced vehicular accessibility to the port and coastal settlements.

The need to formulate a Structure Plan at Silver City is a pre-requisite to future development under the Local Planning Scheme No.2 (LPS No 2). The SOCI current Local Planning Strategy (LPS 2015) endorsed by the Western Australian Planning Commission (WAPC) in May 2015 specifically advocates to "*Plan for a total population of 5000 permanent people as per the community-endorsed 2018 Plan."* The aim of the LPS 2015 at the time and pertinent to Silver City ten years later, is to "*Provide short term opportunities to increase the housing stock on the Island and encourage local private investment. Developments should be encouraged to make more efficient use of land as well as attract additional small businesses."*

Like many isolated small communities, Christmas Island is experiencing the challenging correlation between population levels, job opportunities and housing capacity. The permanent resident population, at its highest at the 2011 Census with 2,072, came down to 1,692 at the 2021 Census and was estimated at 1250 at the end of 2024.

The SOCI considers that a renewed economic output, supported by improved air accessibility and driven by the Departement of Planning Land and Heritage (DPLH) Crown land Enquiry Form (CLEF) process and the Department of Finance Commonwealth Property Disposal Policy (CPDP) is an important method to ultimately attract investment in new economic drivers (mainly targeting Singapore) such as urban food export, higher education, research and tourism. Such economic approach continues to coincide with community expectations.

A whole of island *Christmas Island Strategic Assessment (CISA* was active between 2019 and 2023 and designed as a land use planning tool for the streamlining of environmental approvals under the *Environmental Protection and Biodiversity Conservation Act 1999*. The life of the assessment was set at 30 years. From the outset the SOCI sought to ensure the CISA land use plan was to coincide with future land use planning associated with the review of the Shire LPS and capable of accommodating a permanent population of 5000 residents in order to maintain a sustainable economic output on the Island post-mining and be aligned with the population target of the SOCI 2015 LPS in force

The CISA was paused in June 2023 by the Australian Government due to significant ongoing policy and law reforms however the Silver City Structure Plan has taken into account all environmental, planning and land use aspects envisaged for the precinct during the 2019 to 2023 CISA activities.

The Structure Plan area will play a role in ensuring the resilience of the Flying Fish Cove community residing at the Kampong. In 2010 the Attorney-General's Department commissioned the Indian Ocean Territory Climate Change Risk Assessment that identified the following risks and vulnerabilities for the Kampong at Flying Fish Cove:

- Sea level rise expected to exacerbate inundation, storm and tidal surge, erosion and other coastal hazards potentially threatening Flying Cove jetty, wharf and boat ramp as well as the Kampong see wall and buildings beyond and

- Increase intensity in cyclonic rain inducing land slide and associate rock fall around Flying Fish Cove with potential impact to the structural integrity of buildings and amenities.

The need to address the vulnerability of the Kampong community is echoed in the SOCI's 2015 LPS that specifically advocates: *"Develop a long-term residential transition plan (20-30 years) for the Kampong towards safer existing and new urban areas".*

Published by the Australian Institute for Disaster Resilience and the Commonwealth Department of Home Affairs, the *2020 Land Use Planning for Disaster Resilient Communities* Handbook provides guidance on national principles and practices relevant to communities at risk and the role land use planning can play. Following the handbook guidance to achieve disaster resilience, the SOCI has facilitated workshops with the Kampong community to explore relocation options and opportunities in 2020 and 2021 whilst pursuing its review of its LPS 2015.

As part of the HSP-Stream 1 program, the SOCI has facilitated workshops on the 7 and 14 November 2024 to further gauge the community's sentiments and expectations. This highlighted the need to consider at Silver City medium density apartments, low density residential homes for families with children, housing for ageing persons, local commercial outlets and neighbourhood public open spaces.

As of November 2024, the Kampong population is 427 of which 147 are children.
This indicates that the orderly relocation of the Kampong residents could require land to accommodate up to 170 dwellings on single lots or apartment format. The Structure Plan, will allow the SOCI to prosecute its commitment to identify, reserve, protect and ultimately supply land assets and oversee the construction of affordable housing to ensure the long-term resilience of the Kampong community.

The Structure Plan covers an area of 28.33Ha of which 52.42% is a dedicated natural area forming a permanent Environmental Conservation buffer with Murray Road and the adjacent National Park. This environmental impact mitigation approach is supplemented by the additional allocation of 2.84Ha of Public Open Space accommodating neighbourhood parks and natural drainage areas.

The main purpose of the Structure Plan is to finalise the consolidation of the existing Silver City residential area by facilitating the establishment of the equivalent of 300 homes over the next 30 years without significantly impacting on existing services. It provides for an additional mixed-use precinct in the most elevated area with multiple road frontage providing employment opportunities with 2,400 m^2 of commercial floor space to cater for local neighbourhood shops and the possible establishment of facilities for visitors.

Vehicular movement to and from the Structure Plan Area is mainly provided via two road connections introduced along Murray Road to minimise traffic impact on the adjacent established residential area; and a road link with Sunset Place to enhance local vehicular connectivity. The Structure Plan capacity is expected to meet the social and affordable housing immediate demand and in the longer term attract new businesses and investments to the Island in order to pivot the Island economy post mining.

The Plan also provides the SOCI with the opportunity to implement a near zero carbon emission policy for the build form expected maximise the capture solar energy on roofs and well exposed walls and set aside land assets for the establishment of community batteries.

Silver City Executive Summary Table				
Total area covered by the Structure Plan	**28.33** Hectares			
Area of each proposed land use				Area %
Residential	Hectares	Lot Yield	Dwellings	
Residential R 17.5 (Average lot size 900 m2)	2.13	26	26	7.52
Residential R 40	2.00	4	80	7.06
Residential R 60	1.37	3	83	4.84
Total estimated residential lot yield		33		
Other Residential (transfer to adjoining residential)	0.21			0.74
Mixed use	2.39	1		8.44
Parking/Landscaping 30%	0.72			
Commercial 10% (Estimated floor space)	0.24	gross lettable		
Residential 60% (Dwellings @ R80)	1.43		114	
Total residential	7.14			27.55
Total estimated number of dwellings			303	
Estimated dwelling density	42	per hectare		
Estimated population (@ 2.5 p/household)			893	
Neighbourhood Parks	1.60	3		5.65
Landscaped Corridors (ecology and drainage)	1.24	9		4.38
Environmental Conservation (natural area)	14.85			52.42
Road Reserves	2.55			9.00

Housing Support Program (HSP) Team	
This Structure Plan has been prepared with the collaborative technical input from the following entities:	
Project Supervision and community engagement	Shire of Christmas Island
Affordable housing needs	Christmas Island Women's Association
Project Coordination and Town Planning	Calmy Planning & Design
Geographic Information System	Jeffrey Planning & Mapping
Civil Engineering and Essential Services	David Wills & Associates
Electrical Engineering	APD Global
Geophysical Survey	MNG SubSpatial
Environmental Assessment and Approvals	JBS&G
Clean Energy Input - Stage 1A	Unlimited Energy
Neighbourhood Wind Power Generation – Stage 1A	VAWT-X and Flinders University
Disclaimer	
This document follows the prescribed format of the ***WA Panning Manual Guidance for Structure Plans August 2023*** It has been produced by the Housing Support Program Team on behalf of the Shire of Christmas Island. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith and on the basis that the Housing Support Program Team employees and agents are not liable for any damage or loss whatsoever which may occur as a result of action taken or not taken, as the case may be, in respect of any representation, statement, opinion or advice referred to herein. Professional advice should be obtained before applying the information contained in this document to particular circumstances.	

ACRONYMS

CHP	Community Housing Provider
CIDHS	Christmas Island District High School
CI	Christmas Island
CIP	Christmas Island Phosphates
CISA	Christmas Island Strategic Assessment
CIWA	Christmas Island Women's Association CIWA
CLEF	Crown Land Enquiry Form
DFES	Department of Fire and Emergency Services
DITRDCSA	Department of Infrastructure, Transport, Regional Development, Communication, Sport and the Arts
DOS	District Open Space
DPLH	Department of Planning Land and Heritage
DWA	David Wills & Associates
DWER	Department of Water and Environmental Regulation
EAR	Environmental Assessment Report
HAFF	Housing Australia Future Fund
HSP	Housing Support Program
IDC	Immigration Detention Centre
IOT	Indian Ocean Territories
LPS 2015	Local Planning Strategy 2015 (active and under review)
LPS No.2	Local Planning Scheme No.2 (active)
POS	Public Open Space
PRL	Phosphate Resources Limited
R-Codes	Residential Design Codes of Western Australia
SOCI	Shire of Christmas Island
VAWT	Vertical Axis Wind Turbines
WAPC	West Australian Planning Commission

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PART ONE - Implementation

1.STRUCTURE PLAN AREA AND OPERATION

The Structure Plan (the Plan) applies to the area depicted at f**igure 1 p.23**.

The Plan is in effect from the date stated on the approval page (a date decision letter will be distributed to the SOCI) and for a period of 10 years or for any other period approved by the WAPC. The instruments that will inform the implementation of the Structure Plan will be the reviewed 2015 Local Planning Strategy (LPS 2015) and ultimately a new Local Planning Scheme (LPS No.3).

2. PURPOSE

The Silver City Structure Plan aligns with the core objective the Australian Government's Housing Support Program (HSP) designed to help achieve the National Housing Accord aspirational target of building 1.2 million new, well-located homes over the next five years.

One of the immediate actions of the Accord is to improve zoning, planning and land release and identify whether suitable Commonwealth land can assist as part of the contribution to delivering social and affordable housing. The HSP is designed to accelerate the delivery of increased housing supply by funding the SOCI to advance planning and environmental approvals associated with the objectives of this Structure Plan and increase housing affordability on the island.

The key objectives of the Structure Plan are to:

a) assist the DITRDCSA in exploring options for disposal of Crown Land;
b) increase social and affordable housing offerings on the island in line with identified needs spanning more than a decade;
c) provide choices for the local community in need of housing and develop dwellings on single lots or grouped format;
d) facilitate the orderly growth of the permanent resident population to 5000 over the next 30 years;
e) provide an integrated transition solution to support the resilience and, in time, the relocation of the Kampong residents at risk from the effects of climate change at Flying Fish Cove;
f) capture the possibilities to connect to the existing service infrastructure available within and around the Silver City settlement;
g) create two direct road connections onto Murray Road and the port area and or Gaze Road that by-passes Poon Saan;
h) allow for the establishment of a 100m wide environmental conservation and ecological buffer with the National Park along Murray Road; and
i) ultimately assist the island economic transition from mining and immigration to tourism, higher education, research and agri-businesses by facilitating the establishment of sufficient housing to allow these new economic drivers to thrive.

3. STAGING

3.1 Introduction and funding mechanisms

The implementation of the Structure Plan is intended to be prosecuted in 4 stages as depicted at **figure 2 p.14**. The release of Crown Land is subject to agreement by the Minister for territories and the Minister for Finance. Subsequently it may become possible for the SOCI to subdivide land in accordance with the Structure Plan and the stages defined in this section.

Consistent with the objective of the HSP Stream 1, the four stages will be subject to a Form 1A application to the WAPC for approval of freehold subdivision (refer to preliminary concept subdivision layout at **Appendix 1**). A concurrent application for a permit to clear native vegetation under *Part V of the Environmental Protection Act 1986 (CI)* will be submitted to the Department of Water and Environmental Regulation (DWER).

This early subdivision and land clearing process is the essential tool for the timely identification and creation of developable lots required to construct housing projects. The construction of roads and services for these early projects will be dependent on the *2022 National Housing Accord* collaborative and innovative financing arrangements available to the SOCI through the National Housing Infrastructure Facility (NHIF) and other avenues. As the primary land owner, the SOCI will have responsibility for the orderly programming and coordination to establish roads and install essential services and will cover infrastructure costs and maintenance from rates and the proceeds of land sales of the new housing area.

The Housing Australia Future Fund (HAFF), for its part, will seek to assist superannuation and institutional capital investment in social and affordable housing, alongside established state and territory programs. The SOCI will continue to explore models for funding and construction of social housing. This may include the availability of Government grants. Land allocation will be made for affordable housing where the SOCI may be eligible as funding recipient of the NHIF facility for the construction of roads and services whilst affordable housing providers could be eligible as funding recipients of the HAFF

3.2 Short term (2 to 3 years)

Stage 1 is intended to expedite the early release of social and affordable housing on an as needed basis. This stage lays on the lowest east side terrace of the Structure Plan area. It offers the best option to develop new housing projects along a new 1,550m road within a 16m wide Road Reserve, connecting Murray Road (altitude 85m AHD) directly to Sunset Place. That new road link is depicted as a neighbourhood connector on the Structure Plan Map at **figure 1 p.23**. This stage provides three R60 lots that could accommodate up to 82 dwellings and 3,800m^2 of POS. The dwelling yield is not expected to be entirely realised given the height limitation to three storeys and building length not exceeding 30m to increase access to natural light, encourage natural ventilation and reduce dependency on air conditioning. The provision of sewer will require a pump station to allow discharge on an existing sewer access chamber close to sunset Place as illustrated at **figure 2 p.14** (refer also to the infrastructure and servicing strategy at **Appendix 3**).

3.3 Medium term (5 years)

Stage 2 occupies the larger developable land area of the Structure Plan. It relies on the construction of the second 1,330m road connector from

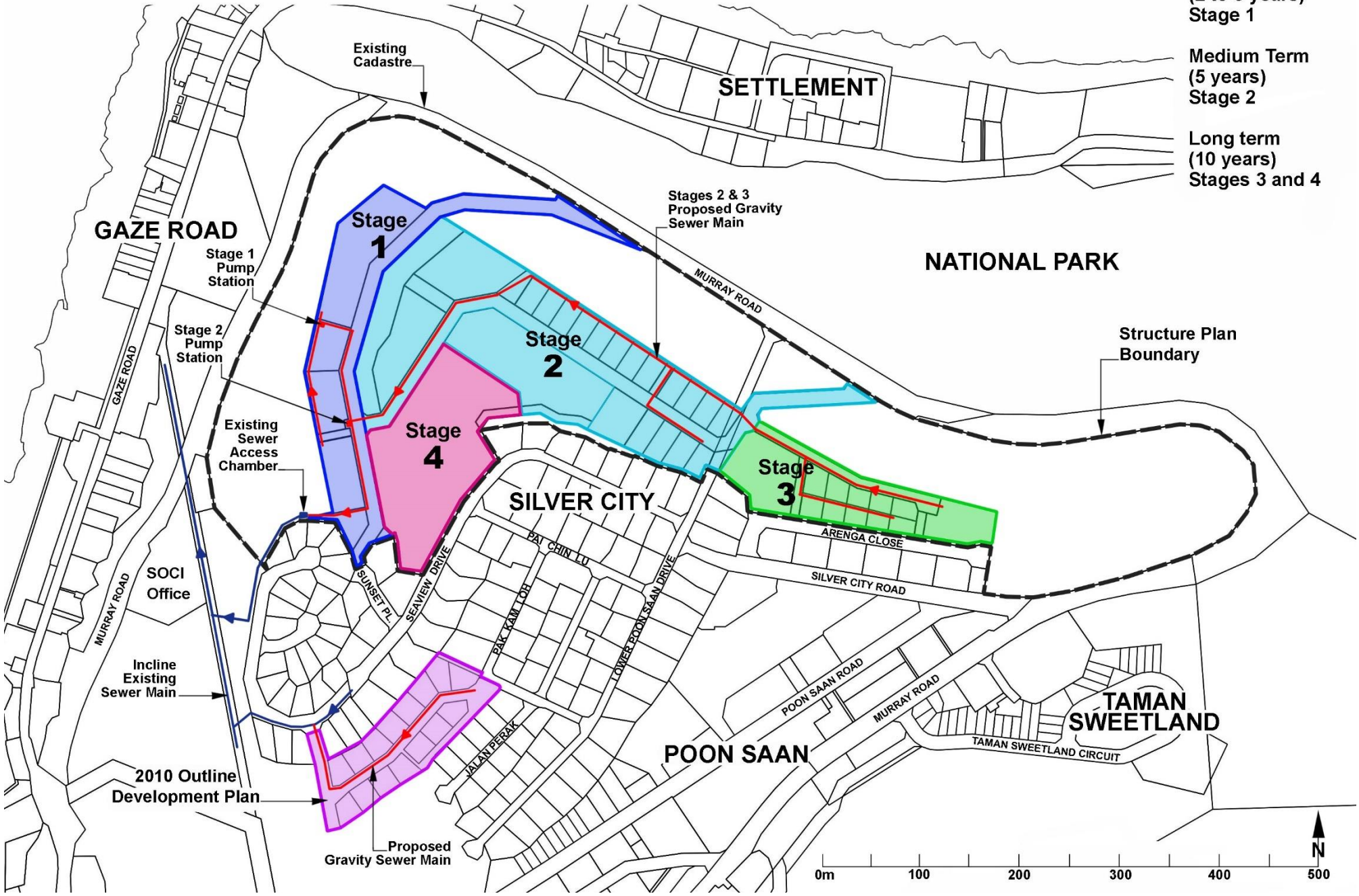
Murray Road (altitude 115m AHD) westward to the Stage 1 connector. This second neighbourhood connector, within a 16m Road Reserve, will provide access to two R40 lots with capacity to establish 43 dwellings and 16 R17.5 lots with a lot average of 928m^2. The total POS area for Stage 2 is 1.1Ha with 22% allocated for recreation, 14% to facilitate road drainage and 64% associated with terrace cliff. The bulk of the sewer system for stage 2 operates by gravity mainly from east to west until the sewer main reaches the stage 1 road where a second pump station will be required for the system to continue southward as per stage 1.

3.4 Long term (10 years)

Stage 3, located on the eastern side of the Structure Plan, relies on the construction of a 430m road in a cul de sac configuration within a 12m Road Reserve. The road will service 2 R40 lots with capacity to establish 36 dwellings and 5 R17.5 lots with an average lot size of 626m^2. A further 5 R17.5 lots with a lot average of 671m^2 and access from Arenga Close are also included in this stage.

Stage 4 has a challenging topography not conducive to small lot subdivision. It relies on the completion of stages 1 and 2 in terms access to its lower section and overall serviceability. This 3.49Ha site is not included in the Housing Support Program Stream 1 subdivision and land clearing program. The Structure Plan identifies a Mixed use zoning for this single land parcel with 30% allocated to parking and landscaping, 10% to accommodate some 3,500m^2 of commercial space and 60% or 2.09Ha for residential use at R80 thus potentially yielding up to 168 dwellings.

Figure 2 Development stages & indicative timeline



4. SUBDIVISION AND DEVELOPMENT REQUIREMENTS

4.1 Land use zones and reserves

The designated proposed zones/precincts and reserves are depicted in the Structure Plan map at **figure 1 p.23**.

4.1.1 Zones

Zoning

The zones shown on the Structure Plan map are consistent with all aspects of the Local Planning Scheme No.2.

The aims of the LPS No.2 zones are to:

- appropriately plan for the Island's diverse cultural, topographic and climatic characteristics;
- provide for future urban expansion in appropriate areas;
- enhance and diversify the Island's economic base through the provision of land for a range of economic activities;
- recognise and enhance the Island's unique heritage, both built and cultural;
- provide appropriate controls to protect development from the effects of extreme weather events; and
- preserve the Island's unique natural attributes and environmental values.

4.1.2 Road reserves

The Road Reserves shown on the Structure Plan map are consistent with those found in the LPS No.2 map. The Reserves represents 2.55Ha or 9% of the total Structure Plan area. The hierarchy of these Reserves which, for the purpose of definition only have relative correspondence with Main Roads WA Road types, are solely used as a point of reference since the mainland traffic criteria cannot reflect the island circumstances where there is no possible interference or impact of regional external traffic on local vehicular movements.

The geographic location of the Structure Plan and its topography illustrate the importance of the dual access onto Murray Road. In this the Structure Plan area does not offer nor expect any significant through traffic from the other neighbourhood of the island apart from a few residents in the lower part of Silver City.

The Reserves for the two neighbourhood connectors are expected to mainly service the internal need of the Structure Plan area and as such can be identified as Access Road A with a width set at 16m. This reserve type is commonly found in the Silver City and Drumsite residential network. There is no immediate intention from the SOCI to plant trees on the verges of this Reserve type.

The width of the Reserve for the road servicing stage 3 is set at 12m.

Street verge

The care and maintenance of all street verges is the responsibility of the SOCI. Verge landscaping, including natural lawns, verge gardens (ornamental or food producing) are the responsibility of the householder of the property adjacent to the verge. The SOCI encourages residents and businesses to take pride in their verges to enhance the aesthetic value of their properties and the streetscape as a whole. At the time of implementation, the SOCI will introduce a *Street Verge Landscaping Guidelines* document for every Reserve type to cover what will be restricted or permitted to private owners including dedicated visitor's and or longer-term street parking arrangements.

4.1.3 Public open space

The total area of the Structure Plan is 28.33Ha. The POS distribution across the Structure Plan comprises of three Neighbourhood Parks totalling 1.60Ha and nine Landscaped Corridors (ecology and drainage) totalling 1.24Ha making a total for POS of 2.84Ha which is 10% of the total Structure Plan area. It is expected that a maximum of 10% of the POS area will be required for stormwater drainage purposes.

Neighbourhood parks

Three Neighbourhood Parks representing 1.60Ha, or 5.65%, of the total Structure Plan area are to address the needs of the residential areas. Two are strategically positioned adjacent the R60 lots at the lower Terrace and the third one sits amongst the R17.5 lots in the upper section of the Structure Plan.

Drainage

The location of drainage basins are shown on the Structure Plan Map at **figure 1 p.23**. An average of 6% of the POS areas should be used for stormwater drainage purposes. It is expected that a maximum of 10% of the POS area will be required for stormwater drainage purposes. (refer to infrastructure and servicing strategy at **Appendix 3 S.2 para.2.4.6 at p.7**).

4.1.4 Other Reserves

Environmental Conservation

The Structure Plan proposes the creation of a 14.85Ha Environmental Conservation area, representing 52.42% of the total area covered by the Structure Plan area, to provide an ecological buffer to the Christmas Island National Park.

Remnant vegetation in Silver City, zoned Urban Development under LPS No.2 has been identified as part of a 120m buffer to habitat critical to the survival of the species.

The Future Environmental Conservation area will ensure visual amenity is maintained, will act as a buffer to the nearby Christmas Island Frigatebird colony.

4.2 Density and development

4.2.1 Density and R-Codes

The Structure Plan map at **figure 1 p.23** designates the proposed Zones and Reserves for the Structure Plan area.

The Structure Plan identifies a number of areas suitable for urban expansion, and future subdivision of these areas will be required to have consideration for the objectives and requirements of the R-Codes. The Structure Plan guiding principles for density distribution is influenced by the topography, the vehicular entry points from Murray Road and the ability to maximise ocean views for the larger number of dwellings, in particular for Stage 1.

4.2.2 Locational criteria

An R-Codes plan is to be submitted at the time of subdivision for the entire Structure Plan area. The plan will allocate R-Codes for proposed street-blocks/lots (as the case requires). Once approved by the WAPC, the R-Codes plan forms part of the Structure Plan.

The SOCI's locational criteria for the R60 zoning within the greenfield Structure Plan are:

- ability to offer housing affordability cost effectively by prioritising multi-storey apartments at Stage 1;
- apartment types and sizes expected in public and social housing;
- the expectation that higher R-Codes have visual connectivity to Flying Fish Cove; and
- respond to community aspiration from Kampong residents eager to maintain such visual contact to the ocean.

The locational criteria for the R40 zoning are:

- larger apartment types and sizes expected in social and affordable housing at Stage 2;
- the need to achieve housing affordability for such apartment format for all age groups and single women in particular; and
- provide further supply for R40 at Stage 3.

The locational criteria of the R17.5 zoning are:

- highest and best use of low gradient land at Stage 2;
- offer large 900m^2 lots to accommodate large families;
- allow for the comfortable development of ancillary dwellings to maintain family cultural cohesion with the seniors age group; and
- provide further supply for R17.5 at Stage 3.

Lots zoned R17.5 found at the Silver City residential area are most popular. They are larger than the regulatory 571m^2 and range from approximately 820m^2 to 1000m^2. The total R17.5 zoned area of the Structure Plan covers 2.13Ha divided in 26 lots thus generating an average lot size of 821m^2. This provides sufficient space to accommodate large families, the parking of boats, the establishment of fruit and vegetable gardens and the comfortable development of ancillary dwellings offering the opportunity to maintain family cultural cohesion with the seniors age group.

The total R40 zoned area of the Structure Plan covers 2.0Ha divided in 4 lots that could accommodate 80 dwellings. This R-Code is expected to provide a built form not exceeding two storeys in small clusters of apartments.

The total R60 zoned area of the Structure Plan covers 1.37Ha divided in 3 lots, that could accommodate 83 dwellings. This R-Code is expected to provide a built form not exceeding three storeys with modest size apartment blocks sufficiently separated from one another to increase vista choices and capture the natural cooling benefit of the ocean winds.

There is a presumption that the R40 and R60 lots will not be further subdivided in smaller parcels unless otherwise supported by the SOCI. A finer grain preliminary concept subdivision layout for Stages 1-3 is attached at **Appendix 1**.

4.2.3 Development provisions

The development provisions applicable to the Structure Plan area are as follows:

a) land use permissibility and general provisions in the residential zones shall be the same as those within those zones under the Local Planning Scheme No. 2.
b) all dwellings are required to comply with the Residential Design Codes unless otherwise provided for in this Structure Plan.
c) development for each site is to be in accordance with the density coding identified in the Structure Plan Map (refer to **figure 1 p.23**).
d) solar arrays on skillion roofs in one or more segments to maximise decarbonisation are mandatory on all buildings.
e) a minimum of one third of east, north and west façade areas are to be utilised for the capture of solar energy.
f) for R40 & R60 lots:
   i. with the exclusion of undercroft parking, buildings on sites zoned R40 are not to exceed 2 storeys.
   ii. with the exclusion of undercroft parking, buildings on sites zoned R60 are not to exceed 4 storeys (including ground level).
   iii. a minimum of one on-site parking bay per dwelling/apartment shall be provided.
   iv. all outdoor parking areas are to be paved with green pavers with exception of the mandatory disabled bays.
   v. loft areas within roof spaces permitted (as a result of skillion roof forms).
g) all developments are to be set back 6m from all streets.
h) where lots share a boundary with POS the side setback is to be 4m.

4.2.4 Development layout

Land uses within the Mixed use lot are calculated as a percentage of the lot area as follows: Parking/Landscaping 30% representing 1.05Ha, Commercial 30% representing 3500m2 of gross lettable area and 60% Residential representing 2.09Ha with an R80 density that could accommodate 168 dwellings. The Mixe use lot will require the formulation of a Precinct Plan pursuant to the requirements of the *State Planning Policy 7.2* and where the building height will be at the SOCI's discretion.

4.2.5 Local Development Plans (LDP)

The formulation of LDPs, pursuant to Schedule 2, Part 6, Clause 48(1) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, is not considered desirable or appropriate for the orderly implementation of the Structure Plan.

4.2.6 Interface with adjoining areas

The Structure Plan interfaces with adjoining areas in four directions, identifiable at **figure 5 p.30** and as follows:

a) to the north, east and west, no land use transition or development interface are envisaged as the future environmental conservation area provides a significant vegetation (and visual) buffer to Murray Road in all three directions;
b) to the south, the Structure Plan integrates with the existing residential context of the Silver City neighbourhood area and is purposely connected via the extension of Sunset Place into the proposed neighbourhood connecter in Stage 1 through to Murray Road;

4.2.7 Heritage

There are no heritage features or buildings within the Structure Plan area that would require a protection mechanism

4.3 Other requirements

4.3.1 Bushfire protection

Christmas Island is not identified as a bushfire prone area on the WA Department of Fire and Emergency Services (DFES) Map of Bushfire Prone Areas that covers the Indian Ocean Territories. In this instance, the WA *State Planning Policy 3.7 Bushfire* and accompanying *Planning for Bushfire Guidelines* are not applicable to the proposed Structure Plan.

There is no historical record referring to bushfires having occurred on the island, due to generally unfavourable fire weather conditions (i.e. monsoonal climate, high annual rainfall, winter dry season, high relative humidity) and vegetation characteristics that are not conducive to bushfire occurrence (i.e. rainforest with very high moisture content and minimal surface fuel due to nutrient cycling).

No island wide Bush Fire Management Plan has ever been formulated. There is no Fire Danger Ratings available for Christmas Island to assist in determining Bush Fire Risks. A bushfire Management Plan may be formulated in the future to inform risk management approaches.

From a planning perspective the LPS No. 2 has no provision to implement and or enforce the prescriptions of the *Bush Fires Act 1954 - Part III Prevention of bush fires - Division 6 General restrictions, prohibitions and offences - Section 33 Local government may require occupier of land to plough or clear fire-break.*

4.3.2 Infrastructure arrangements

Roads

The proposed roads are typically 6m wide with kerbing on one or both sides. All roads and intersections have been designed to allow a 19m long articulated truck to access the roads.

The intersections of the two connecting roads to Murray Road have been designed with slip lanes provided for vehicles heading west on Murray Road. These slip lanes will enable vehicles to slow down after turning from Murray Road to access the development area. These two roads have grades of up to 6%, with the steepest grade at the exit from the development onto Murray Road with a maximum grade of 15%.

The proposed road extending from the northern end of Sunset Place is required to be located over steep limestone terrain, which is at approximately 27%. The limestone in this location is to be cut and retained where required so that the road gradient is reduced to a maximum of 15%. The rest of the proposed roads are within typical gradients of less than 12%.

Red Crab Migration

Vehicular movements represent a major threat to the red crab during the migration period that can span during the wet season from October to January were sections of roads can be closed under the direction of National Park. At the road detail design and or construction stage, the SOCI will consult with the National Park staff to ensure the design, and location of impact mitigation infrastructure for red crab migration is adequately provided.

Sewer

The existing sewer in Silver City serves the residential area with a 150mm diameter PVC pipe. This 150mm diameter PVC pipe discharges to the northwest of Silver City at an average grade of approximately 1 in 6. The Water Corporation is to confirm the whether the sewer system downstream of Silver City is required to be upgraded. It is anticipated that there is adequate capacity in the existing system to serve Stage 1 of the development.

Water

The existing residential lots in Sunset Place are served with a 63mm diameter MDPE water main extending from a 150mm diameter PVC Class 12 main in Seaview Drive. The houses along Seaview Drive (section running northwest to southeast) are served at the rear of the lots with a 100mm diameter Galvanised Wrought Iron (GWI) pipe.

The residential lots along Arenga Close are served with a 110mm diameter High Density Polyethylene (HDPE) water main.

Power

Overall estimated electrical load requirement for the proposed infrastructure is calculated based on AS3000 standards. The proposed structure plan for Silver City is estimated to need 1.12MVA where 41kVA is residential demand and 1.040MVA is commercial demand. The proposed structure plan requires the installation of a new 1MVA for the commercial lot and the residential lot will be fed from the existing transformers.

The design provides the electrical supply connections for the proposed lots in Silver City which will be supplied by IOTPS. The design basis for this connection are as follows:

- Maximum demand of Silver City not to exceed 1.1 MVA- the maximum demand was done on basis of AS 3000 (KVA/m^2). The exact maximum demand will be done once the modelling of the area is done by IOTPS.
- The new residential lots will be supplied from the existing transformer 112 and 503.
- The site will have an individual 1MVA transformer to supply the load.

Communications

Following a review of the existing communications infrastructure in the Silver City area, it is assumed that optic fibre infrastructure is available in Seaview Place. This presents an opportunity to extend high-speed connectivity to support key facilities in the area.

To implement this, the following infrastructure works are proposed:

- Identification and confirmation of existing fibre routes along Seaview Plan, including location of existing pits and conduit pathways;
- Installation of new P50 communications conduits to provide connections to existing fibre infrastructure;
- Connection of the new conduits into the existing pits to integrate with the current network pathway and enable seamless fibre extension;
- Upgrade of existing communication pits where necessary to meet current standards for size, accessibility, and capacity; and
- Installation of new pits where required to support conduit runs, allow for efficient cable pulling, and provide access points for future maintenance.

These works will ensure reliable, standards-compliant connectivity to the NBN, with flexibility for future network expansion. The combined use of existing and new infrastructure will also minimize disruption and reduce overall construction costs.

4.3.3 Development contributions

The Shire lodged a Crown Land Enquiry Form (CLEF) with the WA Department of Planning Land and Heritage (DPLH) on the 12 December 2024 in order to obtain in freehold from the Commonwealth the section of the Structure Plan shown at **figure 4 p.28**. This step is considered necessary to facilitate the orderly construction of affordable and social housing projects.

The early steps to implement the greenfield Structure Plan will be a public endeavour. The financial participation to clear vegetation, initiate land and

geotechnical surveys, produce deposited plans and register titles, conduct earthworks, construct roads and install the infrastructure to provide essential services for each lot and build housing is expected to be achieved with Commonwealth assistance.

The *National Housing Accord 2022* designed to facilitate collaboration and improve financing for new social and affordable housing projects intends to *"Provide availability payments and other innovative financing techniques through the Housing Australia Future Fund (HAFF) and/or National Housing Infrastructure Facility (NHIF) that will seek to facilitate superannuation and institutional capital investment in social and affordable housing, alongside established state and territory programs".* The SOCI is committed to explore the most appropriate avenues to obtain funding for the implementation of the Structure Plan.

Notwithstanding and without ignoring the standard infrastructure contribution requirements associated with the *WA State Planning Policy 3.6* and the outcome of the CLEF process, the SOCI and the DITRDCSA are at the early stage of negotiating a development contribution framework that could reflect the unique circumstances of Christmas Island displaying close market characteristics.

These negotiations, affecting development contributions, could include but are not limited to the following actions and or intentions:

- land allocation for public housing where the Commonwealth will fund the construction and pay the appropriate SOCI rates;
- the SOCI to redirect rates towards infrastructure and maintenance;
- land allocation for affordable housing through Government affordable housing schemes and funding programs with rates and sale processes to be allocated to the infrastructure and maintenance for the new housing areas; and
- allocation of free hold land blocks where the income for sale processes and rates to also be allocated to the infrastructure and maintenance with the new housing area.

The reservation of land to specifically assist with the relocation of the Flying Fish Cove residents is likely to require the design and creation of an agreed funding scheme allowing freehold owners to access, on a like for like basis, developed freehold titles in the new allocated areas.

4.3.4 Protection or management of landscape features

The Environmental Assessment Report (EAR) (**Appendix 2**) describes the environment and outlines proposed environmental management strategies for the Structure Plan Area. These will be dependent on conditions of approval but are likely to include a weed management plan and a fauna management plan. No conservation significant flora has been found in the Structure Plan Area so it is unlikely that a flora management or relocation plan will be required.

4.3.5 Water resource management

On Christmas Island, the use of infiltration basins and channels offers a viable and sustainable approach to water management. Given the island's porous limestone terrain, these systems are simple widely used and particularly well-suited to the environment. They require minimal maintenance and deliver multiple benefits, including reducing surface runoff, improving water quality, and enhancing groundwater recharge. Their integration into local infrastructure planning supports nature-based solutions tailored to the island's unique ecological and geological conditions.

5. ADDITIONAL DETAILS

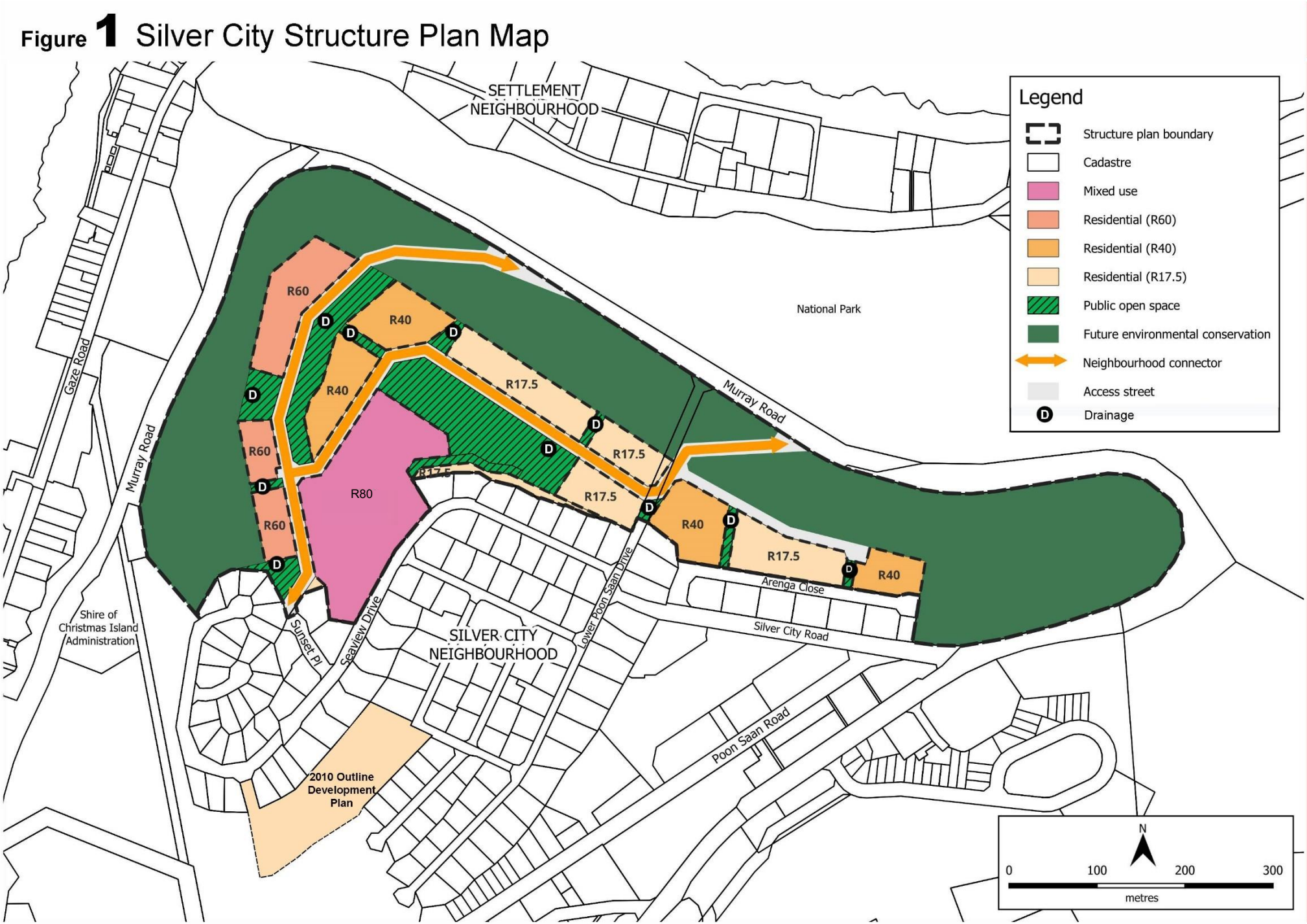
5.1 Information to be submitted with an application

Additional information/purpose	Approval stage	Responsible agency (consultation required)
Conveyance Infrastructure Report for Water Supply	Subdivision (pre-design)	Water Corporation
Treatment Plant and Conveyance Infrastructure Report for Sewerage System	Subdivision (pre-design)	Water Corporation
Building Site Profile / Level Guidelines Plan	Subdivision	Shire of Christmas Island
R-Code Plan (to allocate R-Codes for proposed street blocks/lots)	Subdivision	Shire of Christmas Island

5.2 Studies required under condition of subdivision/development approval

Additional information/purpose	Responsible agency
Geotechnical Report, including locating underground voids and certification the land is physically capable of development.	Shire of Christmas Island
Stormwater Drainage Management Plan	Shire of Christmas Island
Road Pavement Construction Materials Study	Shire of Christmas Island
Engineering Drawings for water supply and sewerage	Shire of Christmas Island
Engineering Drawings for earthworks, roads and footpaths	Shire of Christmas Island
Engineering Drawings for power supply and street lighting	Indian Ocean Territory Power Services

Figure 1 Silver City Structure Plan Map



PART 2 – Explanatory Section

1. INTRODUCTION AND PURPOSE

The Silver City Structure Plan has been prepared for the SOCI under the Australian Government's Housing Support Program (HSP) designed to help achieve the National Housing Accord target of building 1.2 million new, well-located homes over 5 years. The HSP supports the delivery of increased housing supply by funding projects that seek to deliver enabling infrastructure, provide amenities to facilitate new housing development or improve building planning capability.

The Structure Plan represents the first Stream of the HSP that provided funding to State, Territory and Local governments for projects which could advance and improve planning capability and land subdivision readiness ahead of the construction of new affordable homes on the island.

The Structure Plan represents the guiding planning instrument to facilitate future residential and Mixed use development on the northern edge of the Silver City settlement with dual access from Murray Road. It provides the long-term planning rationale and mechanisms to inform the detailed planning and design arrangements including implementation, staging and expected character of development.

This 'Greenfield' Structure Plan targets the development of vacant Unallocated Crown Land (UCL) adjacent to the Silver City existing settlement. It is intended to ultimately develop as a residential and Mixed use area by expanding freehold land offerings at an affordable price to support the expansion and diversification the island economy post mining and immigration.

The LPS 2015 identified the need to ensure that the Christmas Island economy achieves greater diversification and moves away from its traditional dependency on phosphate mining. The consensus of opinion, at the time and pertinent ten years later, is "*that the relevant economic drivers for Christmas Island include population growth, local food production, tourism opportunities, construction material supply, future economic activities, private investment, accommodation supply and home business/.*"

Section 4.1.1 of the LPS 2015 deals with population growth and illustrates a determinant challenge for the island:

"Current Issue; The lack of accurate information defining the extent of freshwater resources prevents the establishment of definite population targets.

Strategic Response; Mapping of the basalt layer. Plan for a total population of 5000 permanent people as per community-endorsed 2018 Plan.

Current Issue: There is an acute shortage of accommodation on the Island and a need for more accommodation.

Response: Identify suitable areas for future urban expansion, encourage the development of a Crown land release plan to facilitate the development of identified new urban areas."

2. SITE AND CONTEXT ANALYSIS

2.1 Physical context

The location and broad context of the Structure Plan site is shown at **figure 3 p.26**. The Structure Plan site is situated immediately north of the Silver City and Poon Saan residential areas and sits within an undeveloped area bounded by Murray Road on three sides. The Silver City residential area is characterised by single dwellings (R17.5) of single or two stories and accommodates small public park areas.

The Poon Saan residential neighbourhood is characterised by higher density 3 storey apartment buildings, that reflect the historic British Phosphate Commission architecture of the area. Poon Saan also includes some light industrial uses, commercial developments (offices, mini supermarket, café & restaurant) as well as community infrastructure (outdoor cinema, playgrounds and sports courts). The Poon Saan retail area accessibility is approximately 500m from Stage 3 and 900m from Stage 2.

The eastern portion of the Structure Plan area is situated on relatively gentle slopes that is conducive to the continuation of the existing residential pattern of Silver City. The western portion has a series of more gently sloped plateaus, separated by steep cliff areas, that provide opportunities for larger lots and more intensive development to take advantage of ocean views to the northwest and west.

The steepest portions of the site on the northern and western edges adjacent to Murray Road are well located to supplement the creation of an environmental conservation area functioning mainly as an ecological buffer to the National Park north of Murray Road.

Details of the local environment, including climate, soils, vegetation, topography, total water cycle, landscape features, key views, and local character (where relevant) are provided in the Environmental Assessment Report at **Appendix 2**.

North of the Structure Plan area, but separated by remnant vegetation and a road, is a colony of the Christmas Island Frigatebird (*Fregata andrewsi*) which is currently protected within the Christmas Island National Park and is Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Numerous threats place the Christmas Island Frigatebird at risk, with local threats including encroachment of weeds into breeding colonies.

Figure 3 Location Plan and Broad Context

2.1.1 Land tenure

Almost all of the Structure Plan area is within the Crown Land portfolio. The location and land status are depicted at **figure 4 p.28**. Approximately 67.41% of the 28.33Ha Structure Plan area is a portion of Unallocated Crown Land Lot 606 on Deposited Plan 74724 and 31.81% is a portion of Unallocated Crown Land Lot 3019 on Deposited Plan 43321. The remaining 0.78% is made up of an unconstructed portion of the Lower Poon Saan Drive Road reserve.

2010 Outline Development Plan

The SOCI endorsed 2010 Outline Development Plan provides an additional 15 R17.5 lots within a portion of Lot 606 (refer to **figure 4 p.28**). Whilst not forming part of this Structure Plan, the ODP area has been included in the HSP Stream 1 scope of work to obtain land clearing permit and finalise the subdivision.

The ODP area is identified in LPS No.2 Scheme map and is located within an existing serviced residential area. Therefore, it is ideally placed to provide early relief to the housing supply on the island.

Part of Lot 116 Sunset Place

The proposed new road link between Murray Road and Sunset Place will require the excision of part of private lot 116 on Diagram 218117 (refer to **Appendix 1 – Sheet 2**). The owner has provided agreement in principle for the required excision.

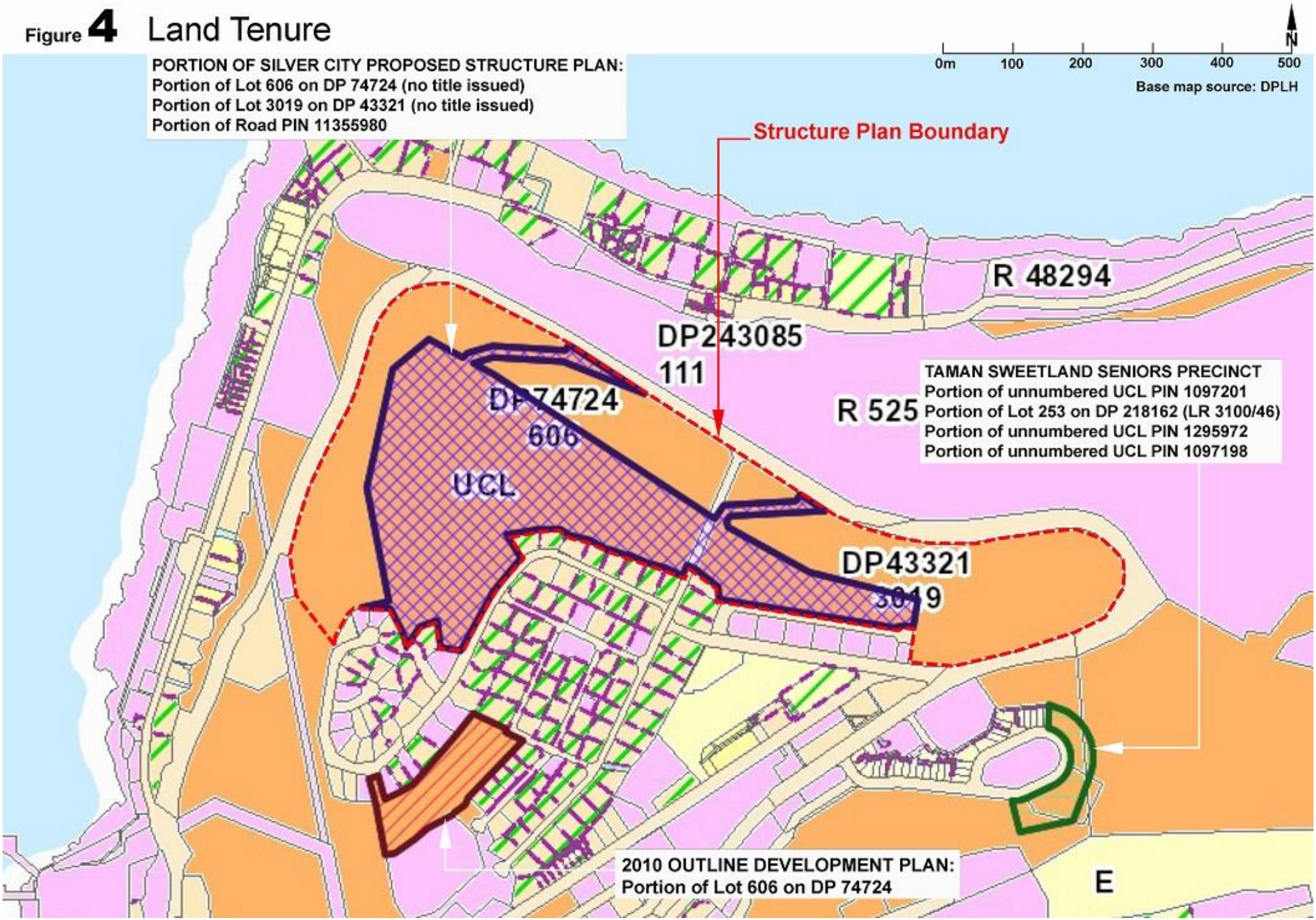
Lots 48, 50 and 59 Seaview Drive

Whilst the cadastral boundary of Lots 48, 50 and 59 Seaview Drive will remain unchanged, the northern extension of Sunset place will require alteration of existing stormwater arrangements. The civil engineering detail design phase will need to ensure the protection of these lots against stormwater flooding.

Land ownership rationalisation

Developments on existing lots 274, 275, 58 and 59 facing Seaview Drive have historically encroached beyond the lots northern cadastral boundary (refer to **Appendix 1 – Sheet 4**) The Structure Plan process allows for the tentative enlargement of these lot northward subject to future land acquisition arrangement to be supported by the DPLH.

Figure 4 Land Tenure



2.2 Community context

Like many isolated small communities, Christmas Island is experiencing the challenging correlation between population levels, job opportunities and housing capacity. The permanent resident population, at its highest at the 2011 Census with 2,072, came down to 1,692 at the 2021 Census and was estimated at 1,250 at the end of 2024. A renewed economic output, supported by improved air accessibility and driven by Crown land release and investment in new economic drivers (mainly targeting Singapore) such as urban food export, higher education, research and tourism continues to coincide with community expectations.

The cultural diversity of Christmas Island originates from the late nineteenth and early twentieth century with the import of thousands of indentured Cocos (Keeling) Islanders, Mainland Chinese, Malays and Sikhs workers to service the phosphate mine and other island operations. The island experienced further diversification in the 1950s when it was administered by the Colony of Singapore. New labourers were recruited from Singapore, Malaya, the Cocos (Keeling) Islands whilst mine supervisors were brought in from Australia.

In 1958 the sovereignty over the island was transferred from the United Kingdom to Australia and that year Christmas Island became an Australian Territory.
The unique historic ethnic diversity of the island has somewhat endured and remains a noticeable component of the overall cultural fabric of the island population to this day. At the 2021 census the CI population exhibited an ancestry makeup of 22.3% Chinese, 17% Australian, 16.1% Malay, 12.5% English and 3.8% Indonesian.

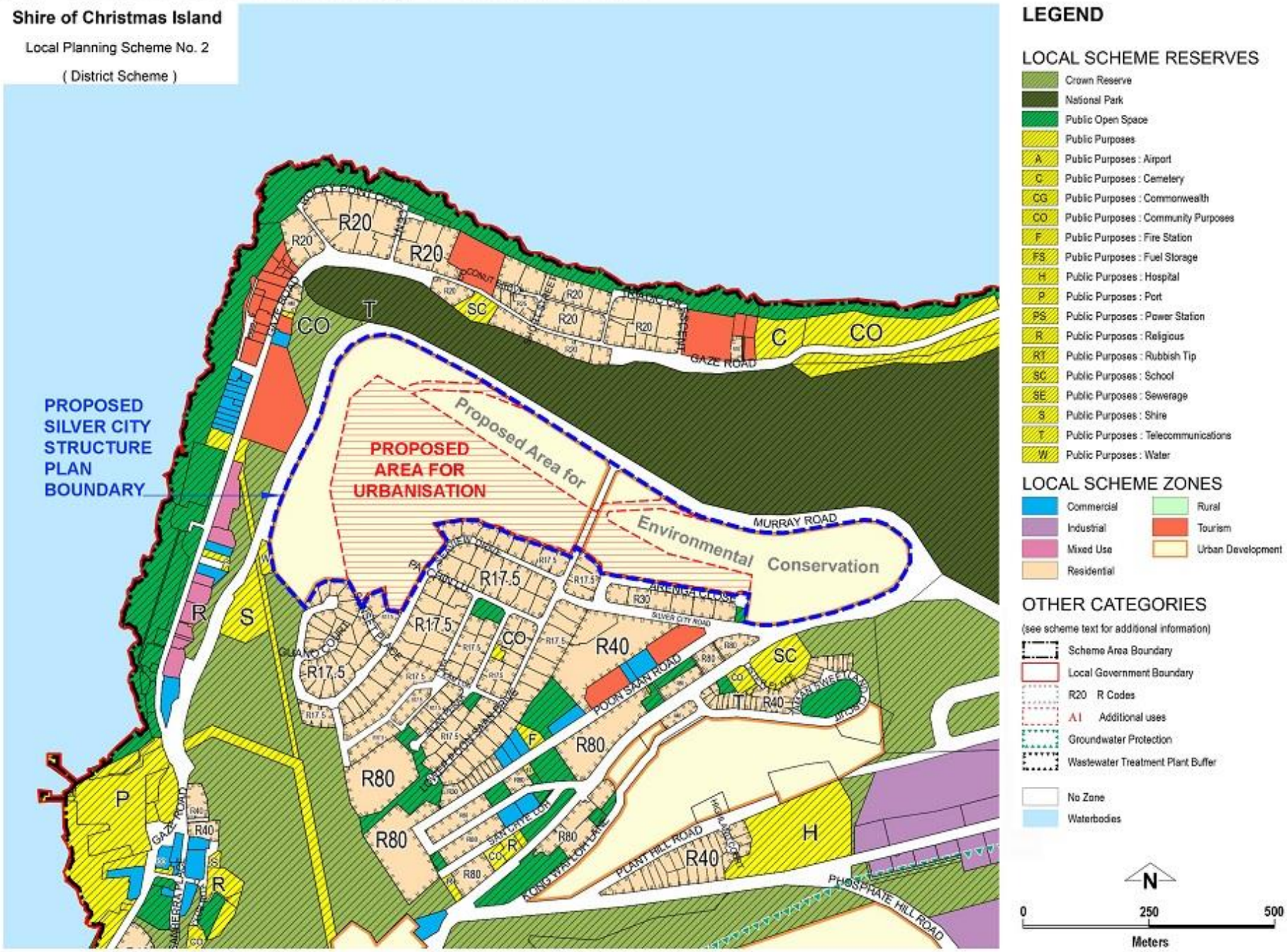
2.3 Planning and governance context

This Structure Plan, consistent with the orderly and proper planning and essential for the future growth and prosperity of the island community, is designed having due regard to the objectives of a number of Western Australian planning documents, including:

- Schedule 2, Part 4 of the Planning and Development (Local Planning Scheme) Regulations 2015;
- State Planning Policy 2.6 State Coastal Planning Policy;
- State Planning Policy 7.0 Design of the Built Environment;
- State Planning Policy 7.2 Precinct Design;
- State Planning Policy 7.3 Residential Design Codes Volumes 1 & 2;
- Liveable Neighbourhoods; and
- Operational Policy 1.1 Subdivision of land general principles 2020.

The relationship between the Structure Plan area and the LPS No.2 is shown at **figure 5 p.30**.

Figure 5 2016 Local Planning Scheme No.2



2.3.1 Shire of Christmas Island 2015 Local Planning Strategy (LPS)

The SOCI LPS was endorsed by the Western Australian Planning Commission (WAPC) in May 2015. The LPS identified the need to ensure that the Christmas Island economy achieves greater diversification and moves away from its traditional dependency on phosphate mining. The relationship between the Structure Plan envelope and the LPS is shown at **figure 6 p.33**.

The consensus of opinion, at the time and pertinent ten years later, is *"that the relevant economic drivers for Christmas Island include population growth, local food production, tourism opportunities, construction material supply, future economic activities, private investment, accommodation supply and home business/."*

Section 4.1.1 of the 2015 LPS deals with population growth and illustrates a determinant challenge for the island:

"Current Issue; The lack of accurate information defining the extent of fresh water resources prevents the establishment of definite population targets.

Strategic Response; Mapping of the basalt layer. Plan for a total population of 5000 permanent people as per community-endorsed 2018 Plan."

The Strategic Directions of the 2015 LPS pertinent to the Silver City Precinct are:

"Current Issue: Fly in-fly out workforce not well integrated with the community and appropriate accommodation in short supply impacting on tourism facilities.

Response: Create quality accommodation for fly in-fly out workforce that can also be used for tourism and local needs (youth)

Current Issue: Lack of tourist facilities

Response: Identification of sites suitable for tourism within the existing settlement

Current Issue: There is an acute shortage of accommodation on the Island and a need for more accommodation.

Response: Identify suitable areas for future urban expansion, encourage the development of a Crown land release plan to facilitate the development of identified new urban areas

Current Issue: Potential fragmentation of communities across the Island

Response: Identification of appropriate areas for urban development in close proximity to public amenities and existing settlements

Current Issue: The cost of urban development on the Island (i.e. infrastructure and construction)

Response: Consolidation of urban development within the infrastructure rich existing settlement area

Current Issue: Increased risk of rock fall in Kampong due to slope instability

Response: Develop a long-term residential transition plan (20-30 years) for Kampong towards safer existing and new residential areas"

In terms of land Use Priorities for the Silver City precinct at section 5.4.2 the 2015 LPS also stipulates:

There are few development opportunities within the precinct for new urban development, and these should be developed primarily for residential uses, with ancillary aged care, short stay, tourism and commercial activities. developments should be encouraged to make more efficient use of land as well as attract additional small businesses.

The area could be developed in stages to meet housing needs on the Island as they evolve. In order to ensure the orderly future development of the area, further detailed structure planning will be required to identify the appropriate land uses and spatial layout. The structure plan will also

need to investigate and address any environmental impacts, including vegetation clearing. A vegetation buffer should be maintained along Murray Road to screen any new development.

This 28.33Ha Structure Plan adheres to the LPS strategic directions and land use priorities by providing:

- 3.49Ha of in the most elevated area with multiple road frontage providing employment opportunities with 3,500m2 of commercial floor space to cater for local neighbourhood shops and the possible establishment of facilities for visitors;
- Some 190 dwellings on single lots or grouped format to address the immediate need for social and affordable housing and contribute to the long-term objective of achieving the 5000-population target; and
- 2.55Ha reserved for the establishment of the road network.

From an environmental and public open space perspective the Structure Plan provides:

- The establishment of a permanent Environmental Conservation zone representing 14.85Ha or 52.42% of the total area to mitigate the impact of the area to be urbanised, acting as buffer with Murray Road to the west and north and forming a continuous ecological supplement to the National Park north of Murray Road; and
- The additional allocation of 2.84Ha of Public Open Space accommodating two neighbourhood parks and dedicated drainage infrastructure and enhanced ecological features.

The Structure Plan also provides the SOCI with the opportunity to implement a near zero carbon emission policy for the built form expected to take advantage of the natural breezes prevalent in this part of the Island, maximise the capture solar energy on roofs and well exposed walls and set aside land reserved for the establishment of vertical axis wind turbines as well as community batteries.

Figure 6 Local Planning Strategy 2015 (Active)

5.4 Poon Saan & Silver City

5.4.1 Objective

To maintain the precinct as the main residential area on the Island through the consolidation of existing developed areas and the identification of appropriate new urban expansion areas.

5.4.2 Land Use Priorities

This precinct has been developed previously with a mixture of high density apartments, concentrated in Poon Saan, and low density single residential lots in Silver City. These two housing types reflect the two different cultures that predominate in the two suburbs. This area will remain as the central residential area on the Island in the short to medium term, with accompanying commercial uses on Lower Poon Saan Road.

There are few development opportunities within the precinct for new urban development, and these should be developed primarily for residential uses, with ancillary aged care, short stay, tourism and commercial activities. Mixed use developments should be encouraged to make more efficient use of land as well as attract additional small businesses. These areas provide short term opportunities to increase the housing stock on the Island and encourage local private investment.

5.4.3 Key Opportunities & Initiatives

Urban Expansion Opportunities

The northern side of Arenga Close represents one of the future urban areas within the precinct that should be utilised for additional residential land uses. This land in the bend of Murray Road is relatively flat compared to other possible development sites and could potentially have views northwards to the ocean. Given the existing road network and service provision, the area could be developed in stages to meet housing needs on the Island as they evolve.

In order to ensure the orderly future development of the area, further detailed structure planning will be required to identify the appropriate land uses and spatial layout. The structure plan will also need to investigate and address any environmental impacts, including vegetation clearing. A vegetation buffer should be maintained along Murray Road to screen any new development.

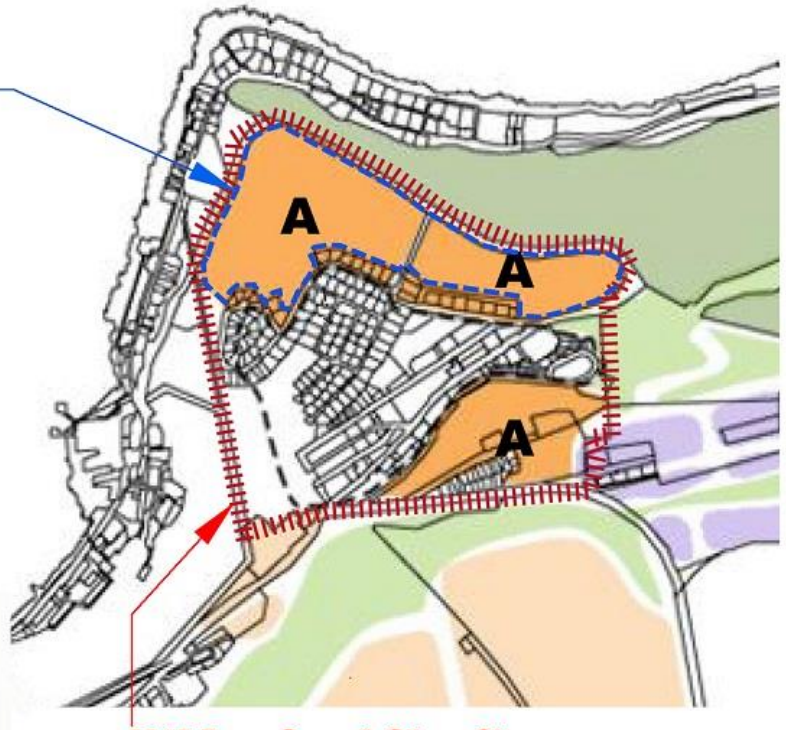
This precinct also includes Taman Sweetland, which consists broadly of the area between Murray Road and the LIA. There is a large area of Unallocated Crown Land between Plant Hill Road and Murray Road that should be developed for residential and commercial uses.

Tourism Opportunities

Further west of the Arenga Close site is a second site that is suitable for development for residential and tourism uses. This site is at the bottom of Seaview Drive and has elevated views of the ocean and lower terrace. The site is ideal for a tourism development to take advantage of these views, nestled within the jungle vegetation. There may also be an opportunity for a pedestrian link down to a redeveloped Cocos Padang site and the Gaze Road Tourism and Commercial Precinct to encourage the direct movement of visitors and residents from Silver City down to the main tourism and commercial precinct. The site is quite steep and has areas of Priority 2 vegetation, so detailed site planning would be required to mitigate these constraints.

5.4.4 Priority Actions

- Detailed structure planning for urban development and hospiral expansion.



2.3.2 Christmas Island Strategic Assessment (CISA) – 2019/2023

A whole of island Strategic Assessment under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC) was initiated in February 2019 through and Agreement between the Federal Ministers for the External Territories and the Environment. From the CISA's outset the SOCI and the then Department of Infrastructure Regional Development and Communications came to the understanding that the CISA Land Use Plan would be best to coincide with the land uses regulated under the statutory local planning instruments. In effect the CISA Land Use Plan would match the land uses depicted in a new draft LPS already under preparation at the time. As part of that process, it was agreed the life of the CISA Plan was to be set at 30 years.

The CISA was paused in June 2023 by the Australian Government "while significant policy and law reforms are ongoing". This change of direction has delayed the possibility for an early release of Crown land and has increased the need to prepare the structure plan at Silver City to enable the potential introduction of new social and affordable housing on the island.

2.3.3 Attorney-General's Department Indian Ocean Territory Climate Change Risk Assessment - 2010

The specific risks and vulnerabilities for the Kampong at Flying Fish Cove are:

- Sea level rise expected to exacerbate inundation, storm and tidal surge, erosion and other coastal hazards potentially threatening Flying Cove jetty, wharf and boat ramp as well as the Kampong see wall and buildings beyond and
- Increase intensity in cyclonic rain inducing land slide and associate rock fall around Flying Fish Cove with potential impact to the structural integrity of buildings and amenities.

In terms of adaptation to the effects of climate change the risk assessment report makes at page vi the following recommendation:
"Adapting to climate change involves preparing for, responding to and coping with climate induces changes. This can be best achieved through government and community working together to improve the ability of island communities to cope with or respond to the impacts of climate change. Hence, it is strongly recommended that a community-based approach be implemented to dealing with climate change over the long term. Of course, there are also a number of immediate short-term issues, such as the protection of coastal infrastructure, life and property, and emergency preparedness that need to be addressed as a matter of urgency, and again it is imperative that community be given the opportunity to be involved in the adaptation planning and decision-making process associated with these activities."

The report makes this specific recommendation:
"Develop a Climate Change overlay for planning development in Christmas Island including a longer-term transition plan for the Kampong".

2.3.4 Land Use Planning for Disaster Resilient Communities – 2020 Handbook

Another purpose of the Structure plan is to provide, when the time comes, land use choices at Silver City to assist with the orderly relocation of the Flying Fish Cove Kampong community at risk from sea level rise, storm surges and rock falls.

The vulnerability of the Kampong area is identified in the SoCI 2015 LPS that specifically advocates at page 46: *"Develop a long-term residential transition plan (20-30 years) for the Kampong towards safer existing and new urban areas".*

Published by the Australian Institute for Disaster Resilience and the Commonwealth Department of Home Affairs, the *2020 Land Use Planning Handbook* provides guidance on national principles and practices relevant to communities at risk and the role land use planning can play for promoting disaster resilient communities.

The SOCI, following the Handbook process, has facilitated workshops with the Kampong Community in 2020 and 2021.

The SOCI resolved at its 22 September 2020 Ordinary Council Meeting to initiate a formal dialogue with the Kampong residents to collaboratively explore a future sustainable planning and social approach in response to on-going climate change induced risks at Flying Fish Cove.

The SOCI subsequently facilitated two workshops where relocation possibilities at Phosphate Hill, Silver City and Taman Sweetland were explored with sustained interest from the community.

As part of the HSP-S1 program, the SOCI has presented the Phosphate Hill and Silver City proposed structure plans (ref. following maps) at public meetings at the Kampong on the 7 and 14 November 2024 to further gauge the community's sentiments and expectations associated with these more detailed plans. It was subsequently agreed the SOCI would prepare a questionnaire to be issued to each household to refine aspirations in terms of future relocation to either Silver City or Phosphate Hill and the desirable housing type being on single 900m^2 lots or apartment format.

As of November 2024, the Kampong population is 427 of which 147 are children. In 2021 the average Australian household size was 2.5. This indicates that the orderly relocation of the residents could require the identification and protection of suitably zoned land to accommodate up to 170 dwellings on freehold lots or strata apartments.

2.3.5 Accommodation Needs Assessment - 2011

The need for new affordable housing on CI is not new and on-going. It was comprehensively documented in the *2011 Accommodation Needs Assessment Christmas Island & Cocos (Keeling) Islands* commissioned by the then Department of Regional Australia, Regional Development & Local Government.

The key matters identified in the report were:

1. immediate need for housing with the 20 to 35 age group;
2. unmet demand for old age group;
3. peaks and troughs prices reflecting fluctuations of the local economy;
4. significant pressure on tourism accommodation;
5. low affordability preventing residents to access home ownership;
6. loan accessibly considerably higher than the main land;
7. absence of housing support funding assistance available in WA or the mainland generally;
8. difficulty in attracting private investment on island and
9. flexibility of housing types needed to respond to changing demand.

The pandemic, the cessation of immigration activities, the increased proportion of non-permanent residents amongst mining staff, the specific increased cost of construction material and logistics, estimated to be 2.4 times Perth prices, and the general effects of rising costs within the mainland economy have all contributed to exacerbate the pressure on the island housing market and its ageing building stock.

3. OPPORTUNITIES AND CONSTRAINTS ANALYSIS

3.1 Precinct boundary and surrounding land uses

The boundary of the Structure Plan is defined generally by the boundary of the Urban Development zone identified in LPS No.2. The boundaries are described in detail as follows (shown at **figure 7 p.38**):

Segments	Definition
A-B	Water Corporation Reserve boundary
B-C	Segment joining Water Corporation reserve to Seaview Drive
C-D	Rear boundary of existing Seaview Drive residential lots
D-E	Rear boundary of existing Seaview Drive residential lots
E-F	Seaview Drive road reserve boundary
F-G	Rear boundary of existing Seaview Drive residential lots
G-H	Arenga Close road reserve and POS boundary
H-J	Silver City Road reserve boundary
J-A	Murray Road reserve boundary

3.2 Physical parameters

The Structure Plan site physical attributes, constraints, opportunities and major vehicular movements are depicted at **figure 7 p.38**.

CISA

There is a need to setback urban development 110m from the boundary of the National Park north of Murray Road. This self-imposed arrangement stems from an approach considered appropriate when establishing the CISA Land Use Plan. The purpose of the setback is to minimise impact on the Frigate Bird habitat and act as a buffer between the future urbanised areas and the National Park. This buffer is to be dedicated to environmental conservation. In this context the proposed environmental conservation zoning will represent over 50% of the Structure Plan total area.

Topography

Topography with 10% gradient or less are suitable for development. There are two cliffs approximately 14m in height traversing the site from north to south. Their footprint is unsuitable for development and are proposed to be included in the POS zone whilst the lower cliff separates Stage 1 from Stage 2. The upper terrace adjacent to Seaview Drive with commanding views onto Flying Fish Cove is purposely assigned to Stage 4 with a Mixed use zoning that could provide retail convenience locally and attract R80 residential and or hospitality function.

Vehicle Access

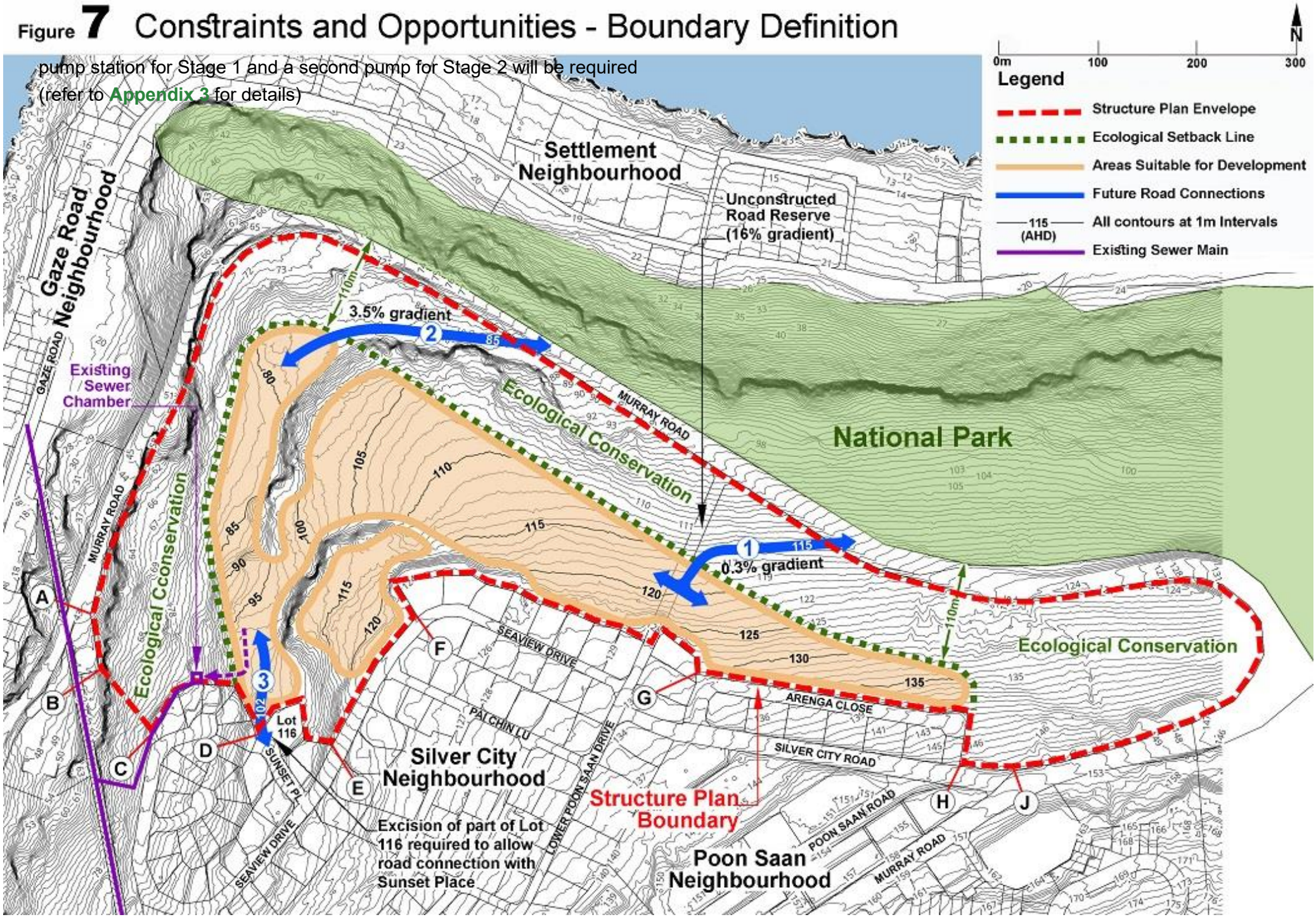
There are limited options to provide vehicular accessibility. LPS No.2 shows an unconstructed Road Reserve linking Murray Road to Lower Poon Saan Drive. The construction of this section of road is not considered feasible given the prohibitive 16% gradient of the Reserve. Consequently, and in replacement, it is proposed to create two vehicular access from Murray Road. An eastern access at 115m AHD with a 0.3% gradient and a northern access at 85m AHD with a 3.5% gradient.
A third access from Sunset Place at 102m AHD is to provide interconnectivity with the Silver City neighbourhood.

Sewer

The ability to connect to the existing sewer network is dependent on the topography. The lowest outlet is located in proximity to Sunset Close in the form of an inspection chamber ultimately linked to the sewer main running down the incline. The lower terrace is below the chamber and a

pump station for Stage 1 and a second pump for Stage 2 will be required (refer to **Appendix 3** for details)

Figure 7 Constraints and Opportunities - Boundary Definition



3.2 Environment

The summary of constraints and opportunities relating to climate, topography, vegetation, fauna flora and heritage are as follows:

Climate

The Christmas Island near equatorial monsoon climate requires special consideration of peak flow conditions and 1:100-year rainfall average return intervals (ARI).

Topography

The proposed environmental conservation area includes steep slopes which limits space available for development and constrains for road and infrastructure locations. The hilltop position provides greater security against rising sea levels and the risks of rockfalls whilst it provides residents with ocean in almost all locations.

Fauna

When the CISA process was active the SOCI agreed that urban development should be setback 110m from the National Park boundary to ensure better protection of the Christmas Island Frigate Bird habitat and fly path. The Structure Plan's proposed Environmental Conservation Area will preserve in perpetuity a buffer to critical habitat for the Frigate Bird.

At the road detail design and or construction stage, the SOCI will consult with the National Park staff to ensure the design, and location of impact mitigation infrastructure for red crab migration is adequately provided.

Several faunas which are listed as Matters of National Environmental Significance occur within the Structure Plan Area, which may require management. Red crabs are abundant in the Structure Plan Area and provision needs to be made for their annual migration. Culverts are proposed at strategic locations to facilitate red-crab movements during their annual migration. Robber crabs are common on the island and are protected. They are at risk from vehicle traffic and clearing activities. Installation of nest boxes for Golden Bosun birds throughout the Structure Plan area would be worthwhile.

At the road detail design and or construction stage, the SOCI will consult with the National Park staff to ensure the design, and location of impact mitigation infrastructure for red crab migration is adequately provided.

Flora/Vegetation

The rainforest includes tall trees to 50m height which may present a tree-fall risk during high winds or when the soil is saturated during high rainfall events. Where possible taller retained trees will be separated from housing by roads. The rapid regrowth rate of tropical vegetation requires continual management of vegetation boundaries and trails.

Heritage

The possibility exists to provide street and or Public Open Space plantings of Mango and Avocado to reflect the Island's history of food insecurity and the added opportunity to bolster the survival of the critically endangered Christmas Island Flying Fox species.

3.3 Pathway to land subdivision

The implementation of the Structure Plan relies on the ability to subdivide the land and create freehold titles to accommodate residential and commercial land uses. The SOCI is willing to facilitate this process for the clearing of land and the creation of titles to occur.

Following advice from the DITRDCSA, the SOCI has lodged with the DPLH a Crown Land Enquiry Form (CLEF) on the 12 December 2024. to obtain in freehold from the Commonwealth the northern portion of the

Structure Plan that can be physically urbanised as depicted at **figure 4 p.28**. This will provide sufficient land to accommodate residential and commercial demand on the island for at least the next decade.

The SOCI seeks to be granted ownership of the referenced Crown Land parcels to facilitate the construction of social and affordable housing projects, reduce youth housing stress, advance the resilience of its at-risk Kampong community at Flying Fish Cove by securing land and housing opportunities away from the coastal area and ultimately prepare the transition of the island economy beyond immigration and mining.

The transfer of Crown Land is governed by the Commonwealth Department of Finance's *Guide to Commonwealth Property Disposals - June 2024* (the Guide). The Shire is considering the Off-Market Concessional Sale pathway to obtain Crown Land in freehold thus allowing the subdivision of the land it controls and oversee the construction and management of new social and affordable housing.

The community benefits identified by the SOCI in order to obtain a Concessional Sale are:

- The construction of new public housing to replace the current stock earmarked for demolition;
- The construction of social and affordable housing to relieve housing stress experienced by the island's 18 to 40 age group;
- Following the requirements of the Minister for Home Affairs *2020 Australian Disaster Resilience Handbook*, to reserve land and facilitate the ultimate relocation and resilience of the Flying Fish Cove Kampong community (427 adults of which 147 are children) at risk from sea level rises, cyclonic storm surge induced inundations and landslides/rockfalls caused by heavy monsoon rains;
- To cater for the housing needs of its growing senior citizens population; and
- To prepare the transition of the island economy beyond immigration and mining.

The adherence to the land uses depicted in the Structure Plans and the provision for a quota of affordable housing to be provided in the residential zones of the Structure Plans could be included as a component of the security of purpose conditions and enforced through mandatory requirements under the Shire Local Planning Scheme.

The SOCI seeks the early security of tenure for all land parcels depicted at **figure 4 p.28** given the SOCI's willingness to facilitate the process of land clearing and the creation of titles to progressively implement the Structure Plan.

4. STAKEHOLDER AND COMMUNITY ENGAGEMENT

Stakeholder and community engagement at the initiative of the SOCI and or the DITRDCSA dealing with matters having direct association with the Structure Plan area has been on-going since 2019.
This sustained engagement was conducted through a range of activities including but not limited to:

- Debates at public meeting;
- Regular presentations and dialogue with Shire Councillors;
- Regular briefings and feedback from DITRDCSA staff on island and in Canberra;
- Presentations to CIP staff on island and PRL staff in Perth;
- One on one consultation with independent local businesses;
- Neighbourhood workshops with residents for each settlement;
- Issuing of questionnaires;
- Consultation with water and power providers; and
- Briefing sessions with the Administrator.

4.1 Christmas Island Strategic Assessment (CISA) – 2019/2023

A whole of island Strategic Assessment under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC) was initiated in February 2019 through and Agreement between the Federal Minister for the External Territories and the Minister for the Environment.

From the outset the SOCI sought to ensure the CISA land use plan was to coincide with future land use planning associated with the review of the Shire LPS and capable of accommodating a permanent population of 5000 residents in order to maintain a sustainable economic output on the Island post-mining and be aligned with the population target of the SOCI 2015 LPS in force.

In effect the CISA Land Use Plan would match the land uses depicted in a new draft Local Planning Strategy then already under preparation.

As part of that process, it was agreed the life of the CISA Plan was to be set at 30 years and capable of accommodating a permanent population of 5000 residents in order to maintain consistency with the SOCI active LPS 2015. The CISA was paused in June 2023 by the Australian Government *"while significant policy and law reforms are ongoing".*

This change of direction has highlighted three matters:

a) the delayed possibility for an early release of Crown land which was a core purpose of the CISA
b) the need for the SOCI, moving forward, to capture acceptable elements of the CISA land use plan to minimise environmental impacts and
c) the merit to prepare the Structure Plans at Phosphate Hill and Silver City to facilitate new developments whilst reactivating Crown land release as catalyst to attract investment and pivot the island economy.

4.2 Land Use Planning for Disaster Resilient Communities – 2020 Handbook

Another purpose of the Structure Plan is to provide, when the time comes, land use choices at Phosphate Hill to assist with the orderly relocation of the Flying Fish Cove Kampong community at risk from sea level rise, storm surges and rock falls. Published by the Australian Institute for Disaster Resilience and the Commonwealth Department of Home Affairs, the *2020 Land Use Planning Handbook* provides guidance on national principles and practices relevant to communities at risk and the role land use planning can play for promoting disaster resilient communities. The SOCI, following the Handbook process, has facilitated workshops with the Kampong Community in 2020 and 2021.

The vulnerability of the Kampong area is identified in the SoCI 2015 Local Planning Strategy that specifically advocates at page 46: *"Develop a long-term residential transition plan (20-30 years) for the Kampong towards safer existing and new urban areas"*

The SOCI resolved at its 22 September 2020 Ordinary Council Meeting to initiate a formal dialogue with the Kampong residents to collaboratively explore a future sustainable planning and social approach in response to on-going climate change induced risks at Flying Fish Cove. The SOCI subsequently facilitate two workshops where relocation possibilities at Phosphate Hill, Silver City and Taman Sweetland were explored with sustained interest from the community (refer to **figure 8 p.44**).

As part of the HSP-S1 program, the SOCI has presented the Phosphate Hill and Silver City proposed Structure Plans at public meetings at the Kampong on the 7 and 14 November 2024 to further gauge the community's sentiments and expectations associated with these more detailed plans noting that as of November 2024, the Kampong population was 427 of which 147 were children.

Considering the 2021 average Australian household size of 2.5 indicates that the orderly relocation of the residents could require the identification and protection of suitably zoned land to accommodate up to 170 dwellings on freehold lots, in strata apartments or social housing apartments.

The main issues raised during these sessions were:

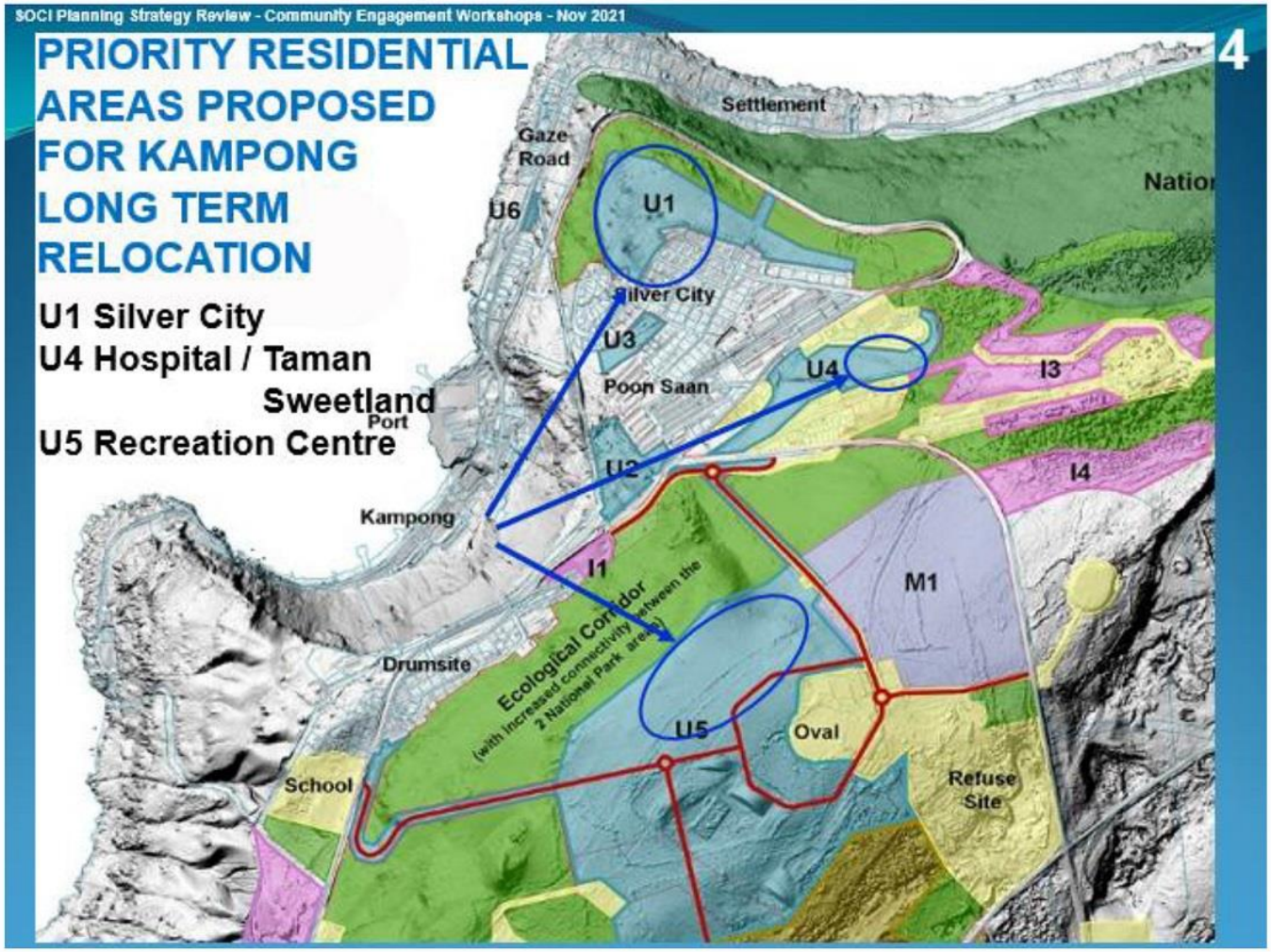
- confirmation of SOCI's role to assist the community in identifying, reserving and or allocating land for future relocation;
- expectation that a formal process involving collaboration between the SOCI and the DITRDCSA to release land be sustained;
- the SOCI and the DITRDCSA agree that a formal community owned evacuation plan need be establish rapidly and not wait for catastrophic event to occur without it;
- residents may only move when they have to, some may take the opportunity to do it early;
- the need to identified quantitative aspirations in terms of future relocation to either Silver City or Phosphate Hill;
- preference for housing on large single 900m2 lots to cater for children, boat, veggie garden and ancillary dwelling for ageing family members;
- apartment format should also be considered to address generational circumstance, affordability and like for like in terms of relocation;
- expectation that, beyond relocation, land use at Flying Fish Cove would not allow hospitality or residential accommodation;
- future land development and housing projects should provide employ local people in priority;

- expectation the relocation of prayer facilities to be considered and land be identified for it at Phosphate Hill;
- realisation that relocation cannot provide same views and access to the beach whilst Silver City can offer views;
- the Phosphate Hill and Silver City Structure Plans, once endorsed, represent the immediate necessary first step to concretely advance the ultimate resilience of the Flying Fish Cove community; and
- that the Commonwealth needed to play a significant role in any relocation planning concerning the welfare of residents, with their informed consent.

Figure 8 Kampong Relocation Priority Areas

1.2 Confirmation of proposed relocation areas

The following drawing was presented for discussion at the Kampong 17 November 2021 Community Engagement Workshop



2020 SOCI proposed CI Strategic Assessment (CISA) Land Use Plan

Three future residential areas deemed suitable for the orderly and progressive relocation of the Kampong residents have been identified by the Shire for the following reasons:

Area **U1** - North of Silver City can provide built form density similar to the Kampong with equal/superior sweeping ocean views.

Area **U4** – Between Taman Sweetland and the Hospital could accommodate Independent Living Units and Age Care.

Area **U5** – In close proximity to the Recreation Centre, outside the mining lease and on flat land. This area can accommodate low density residential on large blocks.

The representatives of the Kampong community support the Shire in securing part of these 3 Unallocated Crown Land assets for the exclusive purpose of the progressive relocation of the Kampong Residents over time.

4.3 Phosphate Resources Limited

Meetings and presentations to PRL and CIP staff have been conducted from November 2024 onward to gauge the effect the Structure Planning may have from a strategic perspective regarding the future of the island economy or the potential impact on mine operations.

PRL's main comments about the Structure Plan are as follows:

- support the SOCI having secured funding HSP Stream 1 funding;
- consider the creation of the Structure Plan as long overdue;
- acknowledge the SOCI CLEF submission did not include mining lease land;
- acknowledge the importance of the initiative to reduce housing shortage and improve Island amenity in the near future;
- emphasise the longer-term benefit of encouraging investment into the island.

In addition, PRL has provided pro bono valuable geophysical information to the DWA engineering team in the form of known location of major fractures in the limestone formation within the Structure Plan area.

4.4 Christmas Island Housing Needs Assessment

The SOCI engaged the Christmas Island Women's Association (CIWA) to lead community consultation efforts and provide insight in assessing the most suitable mix of housing and tenure types to meet the island's housing needs. It was also tasked with reviewing and consolidating the literature on housing stress and housing demand on island.

This noticeably complex assessment (refer to **Appendix 5**) focused on the housing journey of Christmas Island families from the perspective of women, the suitability of housing designs for new developments and options for construction. On this basis the CIWA consulted its 150-person membership from September to December 2024 and conducted a further 20 in-person interviews with women of between 60 to 90 minutes each in the language of the interviewee's choice.

The exercise uncovered lived experiences of women across different generations, cultural backgrounds, time periods and household sizes thus reinforcing this anecdotal common thread: *"If you solve women's problems, you solve societies' problems. If you solve men's problems, women still have problems".*

Terms frequently used in the findings are:

- **Underhoused Household** being long term current Christmas Island residents who are unable to meet the criteria for a home loan and are currently excluded from public housing eligibility;
- **Public Housing** owned and managed on Christmas Island by the DITRDCSA with guidance for eligibility criteria from the WA Dept. of Communities;
- **Social Housing** or rental housing that is owned and/or managed by not-for-profit organisations and generally allocated to lower income households on either income-linked or "affordable" rents in accordance with eligibility and prioritisation policies of each State/Territory or Community Housing Provider;
- **Community Housing Provider** (CHP) is a registered organisation under their State or Territory legislation that delivers affordable housing options for the community through either creating rentals within affordability limits or disposal of homes at below market prices to a select demographic and
- **Affordable Housing** is offered for sale at below the market price in the area, typically by a CHP although historically the Commonwealth as well.

The key findings/recommendations identified by the CIWA with direct and or indirect influence in the Structure Planning process are:

a) reaffirmation the SOCI's March 2022 Christmas Island Housing Stress Survey and subsequent community groups and individuals feedback that the WA benchmarks for entry onto the Christmas Island public housing waitlist have resulted in the creation of an 'underhoused' demographic given the requirement to have 30% of the purchase price in cash to be considered for a loan through the island's sole banking provider;

b) there are sufficient 'underhoused' persons on the island of varying ages to fill at least 24 homes if it were to be made available for them to enter social housing through a CHP, or through amendment to the existing public housing criteria;

c) Islanders do not have access to programs and schemes available through the Housing Australia organisation where tenure to approved land may allow CHPs and other stakeholders to build housing stock on Christmas Island;

d) Housing Australia's six support vehicles are the Affordable Bond Housing Aggregator, the National Housing Infrastructure Facility, the Housing Australia Future Fund, National Housing Accord Facility, Capacity Building and Home Guarantee Scheme;

e) noting the Commonwealth's successful mirroring of the WA Government's 2024 Short Term Rental Accommodation Initiatives which has seen short-stay accommodation stock move back into the long-term market;

f) the proposed Phosphate Hill and Silver City Structure Plan locations as being equally desirable for social and affordable housing developments and noted that Silver City had in-fill potential;

g) the total residential needs for the 2026 to 2030 period are 62 homes representing 16 underhoused single, 12 underhoused couple, 16 incoming young adults (18-24), 12 incoming households (25-39) and 6 seniors (65+);

h) recommending the 24-unit public housing Kampong block set for retirement be replaced with 16 two-bedroom units and 8 three-bedroom units in the Structure Plan areas;

i) using the waitlist for public housing to gauge housing demand presents a distorted view because the benchmarks to enter public housing stock does not permit the working 'underhoused' to register to apply for housing;

j) noting that Flying Fish Cove is a foot-friendly environment with proximity to grocery retail and a significant place of worship. New residential areas in the Structure Plans should incorporate public and social space to encourage interaction between neighbours and especially the elderly;

k) it is essential that pathways be capable of wheelchair and pram access and the design of new social housing areas need not contain fencing security lighting and cameras as a priority;

l) ensure the aging population has access to housing stock that is suitable for elderly to be able to live independently with features such as ramp access and wider door frame should their current homes not continue to be suitable;

m) SOCI and DITRDCSA to research and resolve banking, insurance and geographic limitations in order to assist people seeking to participate in the Christmas Island residential housing market;

n) the CIWA membership and the wider community note the unlikelihood of raising 30% cash deposit whilst paying rent and where the 'bank of mum and dad' phenomena in assisting children to secure accommodation is also mirroring the mainland trend;

o) 20% of CIWA women interviewees had either drained their superannuation completely or sold their own homes to provide one child or several children the means to make up a deposit to enter the private housing market thus resulting for some to living in public housing in their advanced age;

p) the SOCI to seek clarification from the DITRDCSA as to which WA State Government funding could be mirrored from the WA Community Housing Provider sector and applied the IOTs and to subsequently seek to fund a CHP to create a feasibility study on service delivery for Christmas Island;

q) CHPs can provide the governance structure to deliver social/affordable housing programs to residents should they be able to access the according funds to do so from the Commonwealth; and

r) women could not obtain viably a home without a partner or significant family assistance in the private market. A non-private market housing pool which allowed women to pursue career development on island was essential to retain unmarried women on the island pursuing a career and also play a role in providing long-term tenure for families and retired elderly.

5. DESIGN RESPONSE

The Structure Plan design outcomes are consistent with *Liveable Neighbourhoods* taking into account the intent and objectives of the relevant elements, namely Community Design, Movement Network, Lot Layout, Public Parkland, Urban Water Management, Utilities.

5.1 Community design

The Structure Plan design assignment is to connect a new urban area, heavily constraint by topography to the existing Silver City urban matrix. As such the proposed zoning densities and the built form reflects the densities and building typology found in the Silver City and Poon Saan neighbourhoods. The Structure Plan is also responsive to the environmental significance of the National Park to the immediate north with the creation of an environmental conservation buffer to minimise the impact of the new urban area on the National Park itself.

Given the relative remoteness of the Poon Saan retail node, the Structure Plan provides a zone to ensure that the new residents will ultimately have walkable access to shops and commercial outlets. This in turn will benefit the existing residents of Silver City to maximise synergies of land uses.

5.2 Movement network

The vehicular connectivity of the Structure Plan is heavily constrained by the topography that offers a single point of entry into the Silver City neighbourhood at Sunset Place thus ensuring some permeability of movements. By contrast the two connectors to Murray Road offer direct access to the Gaze Road and Flying Fish Cove areas as well as the upper part of the Island. The road configuration for the two connectors can accommodate 19m semi articulated trucks. This will allow the school bus to provide service to the residents with safe pick-up points within the Structure Plan area.

Movement issues are island specific with no real comparison to mainland circumstances. The movement network is designed to accommodate the 5000 permanent residents target and the Road Reserve hierarchy is responsive to that objective. The Structure Plan movement network is designed to feed seamlessly with this overall vision, through the provision of two new main connections from the Silver City and Poon Saan neighbourhoods into the proposed development areas, and ultimately Murray Road.

Public transport on Christmas Island is limited to a handful of buses driving children on school days from each neighbourhood to and from the CIDHS. These buses are also used from time-to-time for special events, community groups or tourism. The Structure Plan provides new road connections into Silver City that can accommodate buses if required, to allow the school bus to service the new residential areas.

The usage of private vehicles, once the privilege of a few in the past, is now the common mode of transport on the island with most adults driving their own car. The carpark demand in the residential areas is expected to be relatively high. The large proposed R17.5 lots provide space for parking of vehicles as well as boats, which is a common requirement on the island.

The use of electric bikes and electric mountain bikes is a fast-growing mode of transport for tourist visitors and locals alike. The Structure Plan provides space in proposed road reserves for dual pedestrian and cycling paths to connect into neighbouring residential and commercial precincts.

Like with all settled areas on the island a 50km/h speed limit is expected to apply within the Structure Plan area.

5.3 Lot layout

The pattern of lots and large blocks have been calibrated taking into consideration the topography to ensure maximum road gradients are appropriate, the establishment of buildings to run parallel to the contours and the ability to retain portions of remnant vegetation within the POS structure.

The supply of large R17.5 lots averaging 821m^2 reflects the community preference for housing on large lots to cater for children's needs, allow the parking of boats as a frequent and common requirement for islanders, provide opportunity for veggie gardens and fruit trees, and build ancillary dwelling for ageing family members and maintain family cohesiveness.

The R60 lots are purposely located at the western edge of the Structure Plan to provide ocean views to the maximum number of residents, in particular offer increased choices to the Kampong residents that may be willing to relocate at Silver City at some stage in the future.

5.4 Public parkland

The public realm is characterised by a leafy environment due to the street tree allowances combined with the intended retention of existing trees within the POS network. This is designed to maintain a strong urban tree canopy as a feature of local identity, promote community health and wellbeing and ultimately generate a cooler environment throughout the area. Public open space is divided into three functions being neighbourhood parks, landscaped drainage corridors, and the cliff area between Stage 1 and Stage 2.

Given topographic constraints and the proximity to the existing Silver City residential area, it is anticipated that existing public open space will also be utilised by nearby residents within the Structure Plan area. In addition to the public open space, 52% of the Structure Plan area is dedicated to an environmental conservation corridor. The three neighbourhood parks distributed throughout the Structure Plan area to provide suitable gathering spaces for the community. These parks are also connected, either directly or visually, to surrounding natural vegetation areas.

There are a further 9 landscaped corridors (or ecological connectors), also disbursed throughout the Structure Plan area, that provide drainage corridors for stormwater management as well as additional landscaped areas as community spaces. These areas also directly connect to surrounding natural vegetation areas. The ecological connectors may also act as red crab migration corridors when they seek to reach the ocean to spawn at the start of the monsoon cycle.

5.5 Urban water management

Christmas Island receives approximately 2,000mm of rain per year, and stormwater drainage systems need to accommodate frequent and high intensity rainfall events. The geology of the Structure Plan area is highly permeable limestone resulting in stormwater draining relatively quickly after rainfall events. On Christmas Island, the use of infiltration basins and channels offers a viable and sustainable approach to water management. They require minimal maintenance and deliver multiple benefits, including reducing surface runoff, improving water quality, and enhancing groundwater recharge. Their integration into local infrastructure planning supports nature-based solutions tailored to the island's unique ecological and geological conditions.

In these geological conditions, sinkholes can form where water is allowed to enter the subsurface at one location. Because of the connected nature of limestone bedding and fracturing, infiltrating water can lead to solutioning and sinkhole formation well downstream of the point of entry. Therefore, control of both surface and stormwater at the site is important.

The development will be served with interconnected channels or pits and pipes, which will direct stormwater to either a stormwater basin, or a controlled outflow channel drain, depending on the site topography (refer **Appendix 3**). Locations of basins and channel drains are directly dictated to by the sloping topography of the area. The drainage infrastructure is located within POS areas distributed throughout the Structure Plan area. In addition, the proposed road reserves have been designed with sufficient width to accommodate the required drainage infrastructure.

Stormwater drainage will be designed to convey a 1 in 5-year storm event and ultimately discharge into a controlled outflow channel drain. The controlled outflow channel drain will be designed to reduce the velocity of the stormwater and ultimately discharge into a basin or channel drain which can retain stormwater runoff from a 1 in 100-year storm event. Pollution from road runoff is to be treated with a vegetated filtered layer installed within the channels and basins.

5.6 Utilities

The proposed servicing strategy (refer **Appendix 3**) has been developed to take into account the existing Water Corporation assets on the island and the topography of the Structure Plan area. Sewer provision will be a majority of gravity sewer, complimented by two short pressure mains, to reduce costs where possible and minimise additional infrastructure by connecting into suitable existing Water Corporation services. This has necessitated three sewer pump stations, strategically located in POS or road reserves. One of the pump stations is envisaged to be a private pump station, to be developed as required to service the northern R40 lot in Stage 2.

Water services will be provided through the installation of a new 100mm PVC pipe to connect with the existing water supply at the northern end of Sunset Place. A maximum head loss of less than 3m throughout the proposed system is anticipated, which complies with Water Corporation requirements.

5.6.1 Staging

The servicing strategy has been designed to be able to be implemented in line with the Structure Plan staging (refer **figure 2 p.14**). Servicing infrastructure can be installed in a staged manner in accordance with the proposed development stages for the Structure plan. Stage 1 will be serviced by Pump Station 1 and Pump Station 2, connecting into the existing sewer at the rear of the adjacent Seaview Drive residential lots utilising the new road connection to also be constructed in Stage 1. Stages 2 & 3 will be serviced by gravity sewer, located either within road reserves to be constructed in those stages or at the rear of the residential lots, which will connect into Pump Station 2.

5.6.2 Funding

The SOCI lodged a Crown Land Enquiry Form (CLEF) with the WA Department of Planning Land and Heritage (DPLH) on the 12 December 2024 in order to obtain in freehold from the Commonwealth the required land area (refer **figure 4 p.28**). This step is considered necessary to facilitate the facilitate and achieve the early construction of affordable and social housing projects.

The implementation of the Structure Plan will be a public endeavour. The financial participation to clear vegetation, initiate land and geotechnical surveys, produce deposited plans and register titles, conduct earthworks, construct roads and install the infrastructure to provide essential services for each lot and build housing is expected to be achieved with Commonwealth assistance.

The *National Housing Accord 2022* designed to facilitate collaboration and improve financing for new social and affordable housing projects intends to *"Provide availability payments and other innovative financing techniques through the Housing Australia Future Fund (HAFF) and/or National Housing Infrastructure Facility (NHIF) that will seek to facilitate superannuation and institutional capital investment in social and affordable housing, alongside established state and territory programs".* The SOCI is committed to explore with the DITRDCSA the most appropriate avenues to obtain funding for the implementation of the Structure Plan.

Notwithstanding and without ignoring the standard infrastructure contribution requirements associated with the *WA State Planning Policy 3.6* and the outcome of the CLEF process, the SOCI will establish a development contribution framework that could reflect the unique circumstances of Christmas Island displaying close market characteristics.

These negotiations, affecting development contributions, include but are not limited to the following actions and or intentions:

- the SOCI to redirect rates towards infrastructure and maintenance;
- land allocation for affordable housing through Government affordable housing schemes and funding programs with rates and sale processes to be allocated to the infrastructure and maintenance for the new housing areas; and
- allocation of free hold land blocks where the income for sale processes and rates to also be allocated to the infrastructure and maintenance with the new housing area.

The reservation of land to specifically assist with the relocation of the Flying Fish Cove residents is likely to require the design and creation of an agreed funding scheme allowing freehold owners to access, on a like for like basis, developed freehold titles in the new allocated areas.

5.7 Built form

Whilst built form aspects are guided by the *State Planning Policy 7.2* rather than *Liveable Neighbourhoods,* the HSP Stream1 focus on the early delivery of affordable housing expects that a coherent approach to the built form can be achieved. The Structure Plan built form responds to the physical and cultural characteristics of the site as follows:

- the capture of ocean views is a dominant aspect to the layout of the built form in particular in the R60 zone;
- efficient solar energy capture to contribute to CO2 emission reduction is facilitated with the mandatory skillion roof required on all buildings;
- apartment buildings are to not exceed 30 m in length to maximise the capture of the prevailing breeze and reduce air conditioning demand; and

.

The single detached houses of the R17.5 lots, the group or multiple dwellings of the R40 lots, the multiple dwellings of the R60 lots, and the components of the mixed-use lot will all contribute to the diversity of the built form as illustrated at **figures 9 p.53** and **figure 10 p.54**.

The building height control for the precinct and more generally the Structure Plan area is set at a maximum 4 storeys including the ground floor. Buildings above 4 floors, expected to be provided with lift infrastructure under the Building Code of Australia, are not considered suitable given the island has only a twice a week air service and the reliance on mainland entities to provide emergency assistance and maintenance services.

The SOCI, who will have front end responsibility for the development of Stage 1, will only consider a maximum of 3 storeys to align with the rest of the island and deliver cost effectiveness and ultimately housing affordability.

Requiring buildings to be established at the street set back line with frequent separation between buildings is designed to improve solar access and create movement permeability for pedestrians and vehicles.

The skillion roof requirement applicable to every building is essential to achieve greater solar energy capture. This approach is supplemented by requiring that a minimum of 1/3 of east, north and west façade area to be utilised for the capture of solar energy.

The expectation of establishing multiple dwellings in the R60 zone will provide sufficient landscape area to provide play area for toddlers, space to grow fruit trees and vegetables. Carpark areas are to be paved with green prefabricated pavers to reduce ambient heat around the buildings, accelerate natural drainage and minimise cost associated with the import of gravel and asphalt.

Figure 9 Indicative Built Form Layout

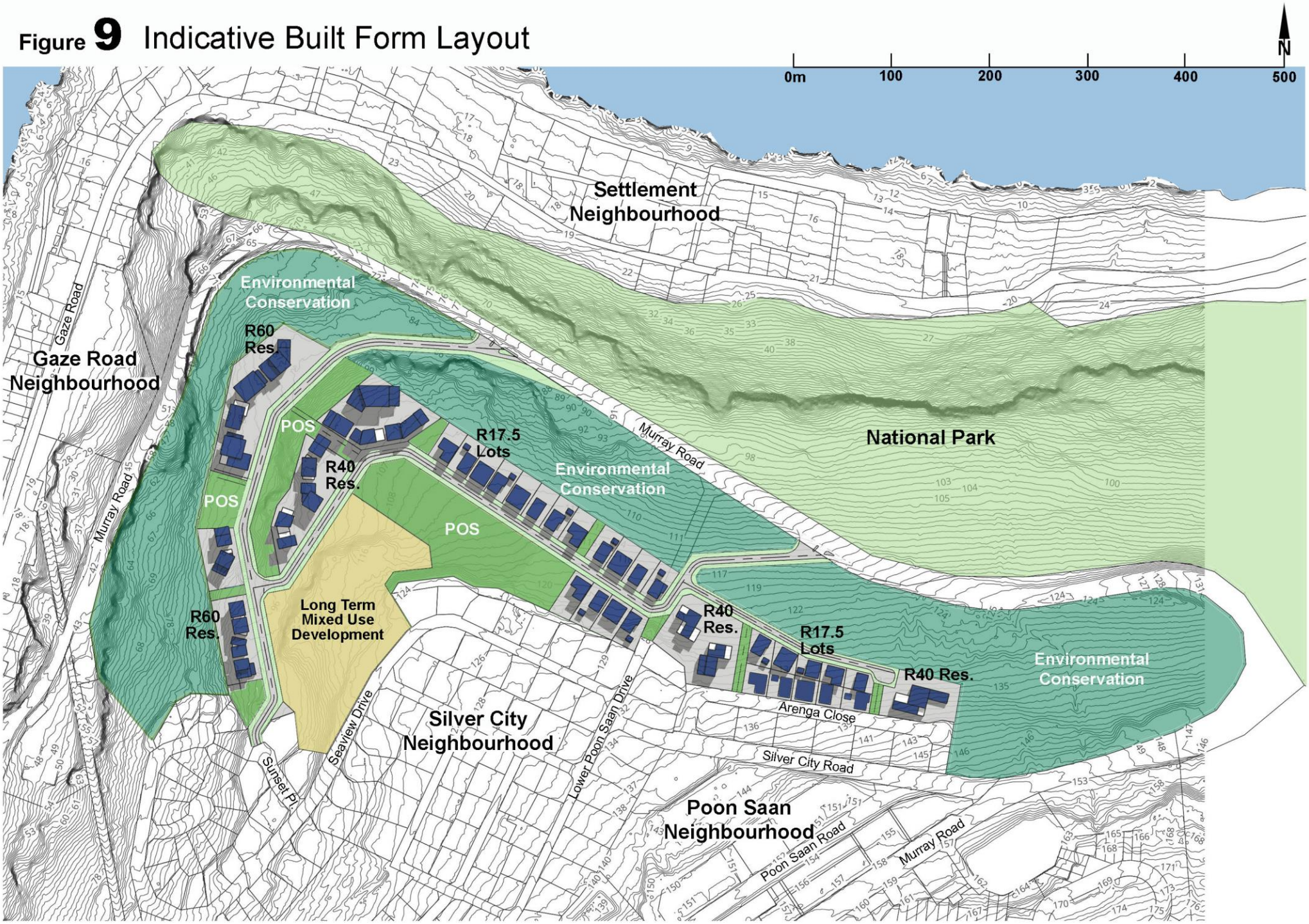
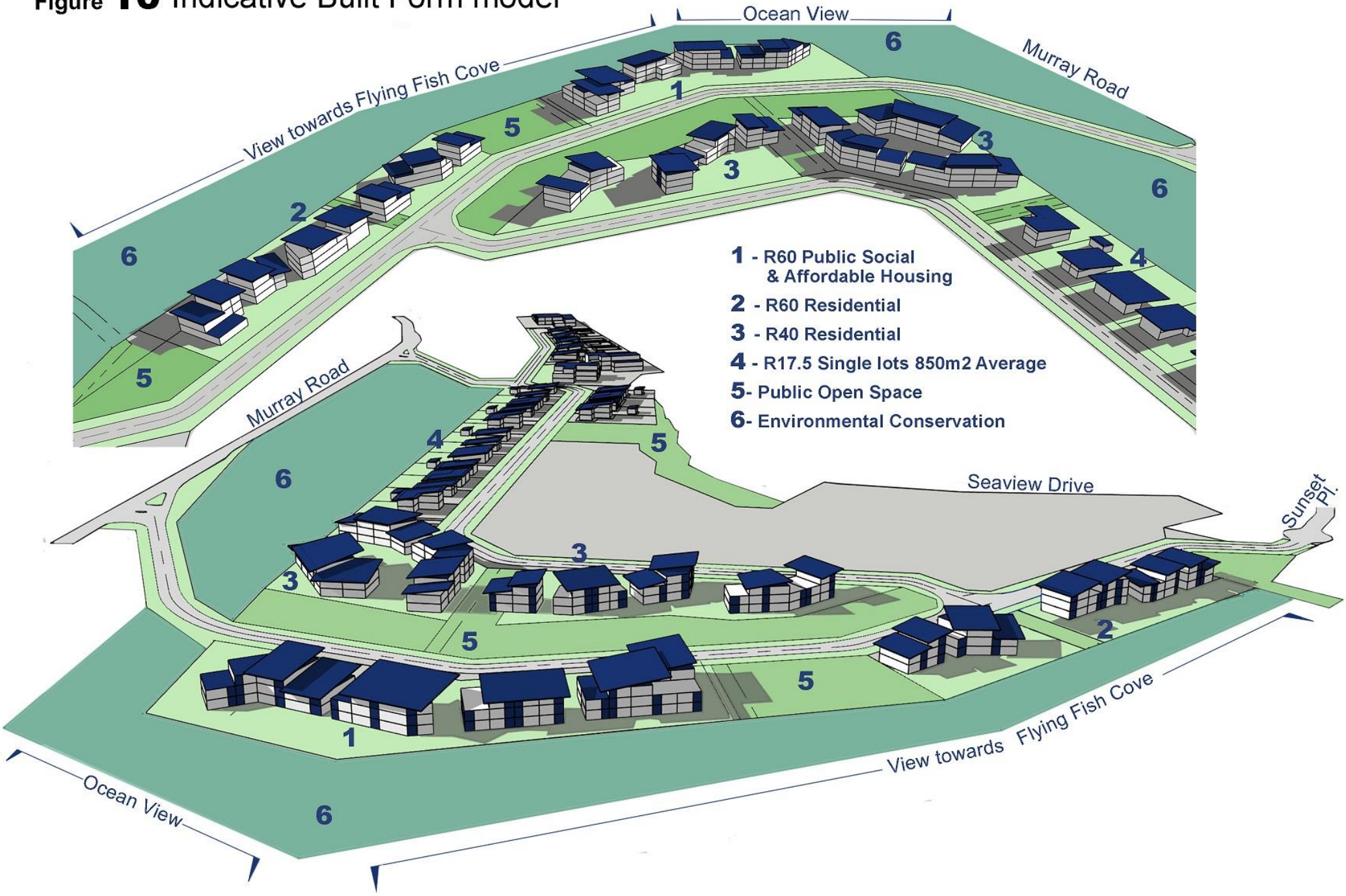
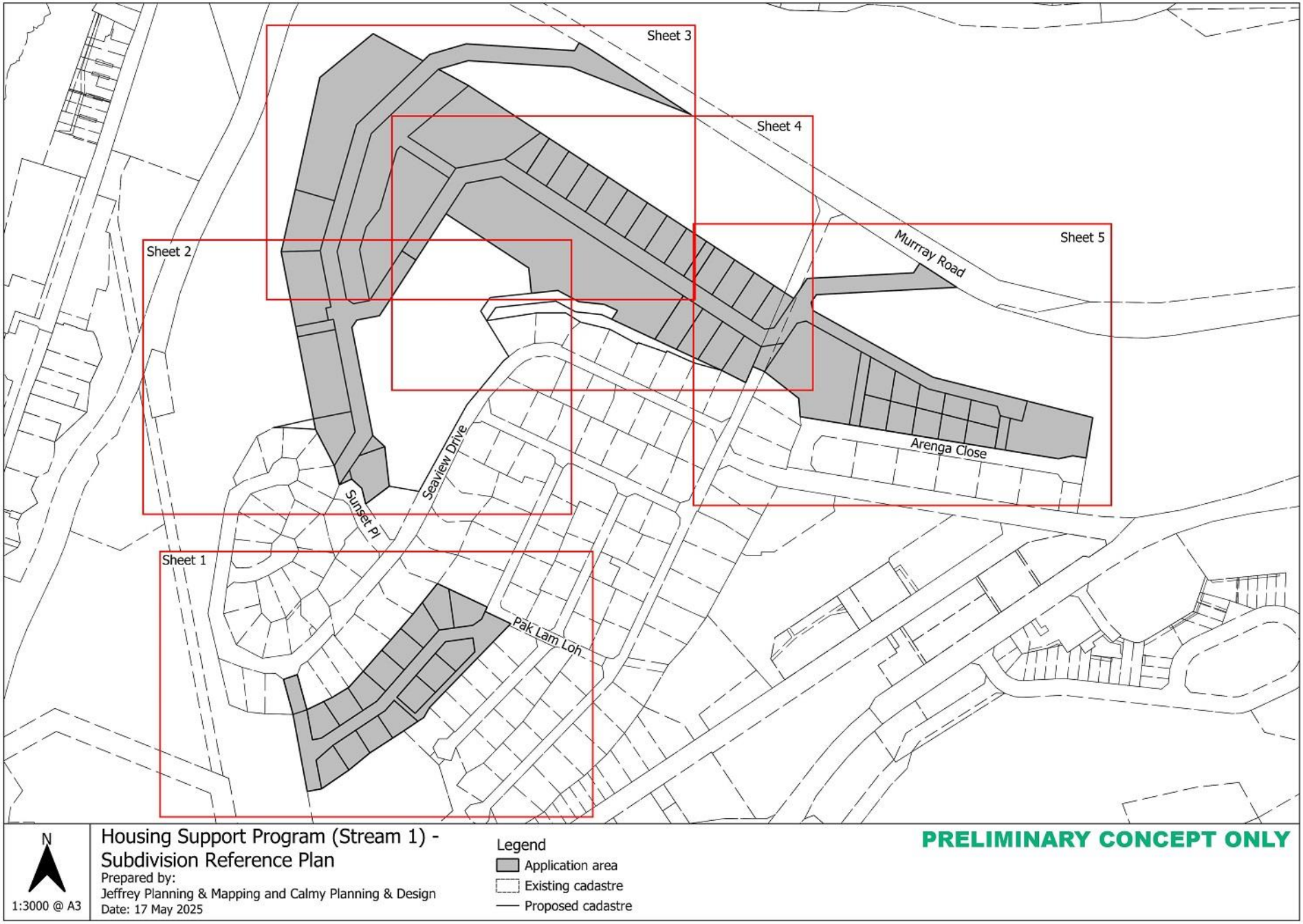


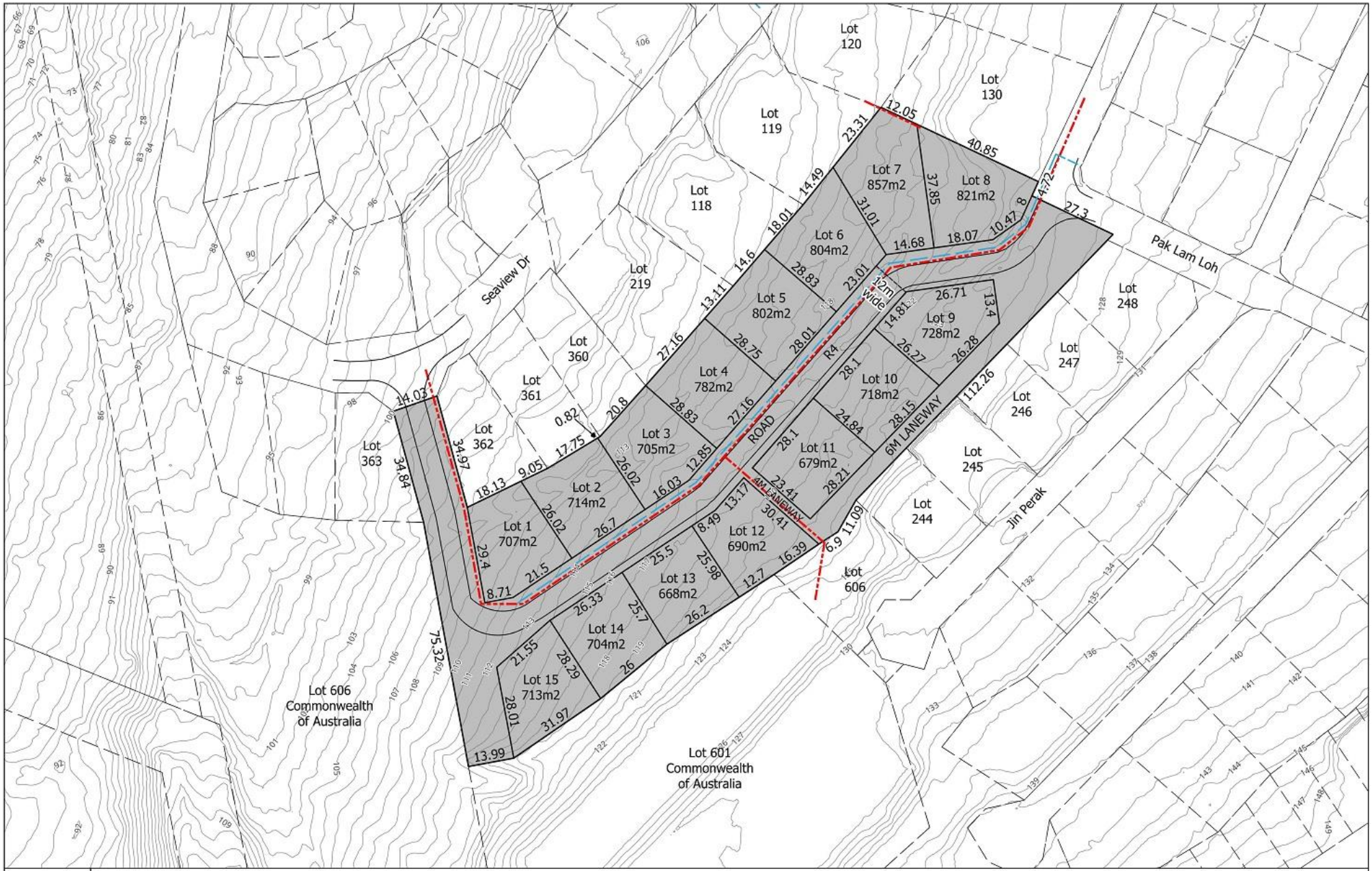
Figure 10 Indicative Built Form model



TECHNICAL APPENDICES

APPENDIX 1 – Preliminary Concept Subdivision

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Lot 1 707m2
Lot 2 714m2
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Lot 601 Commonwealth of Australia
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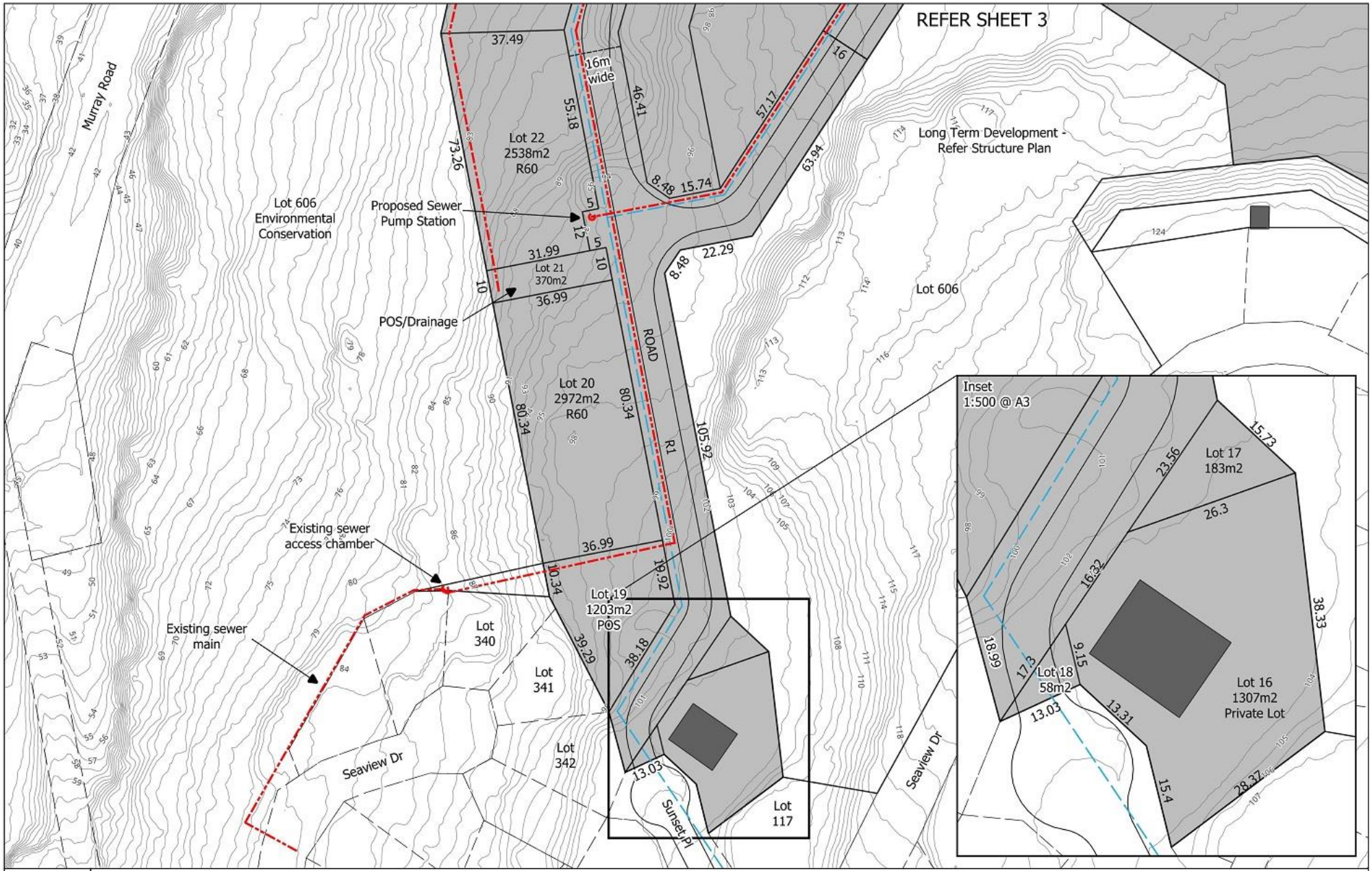
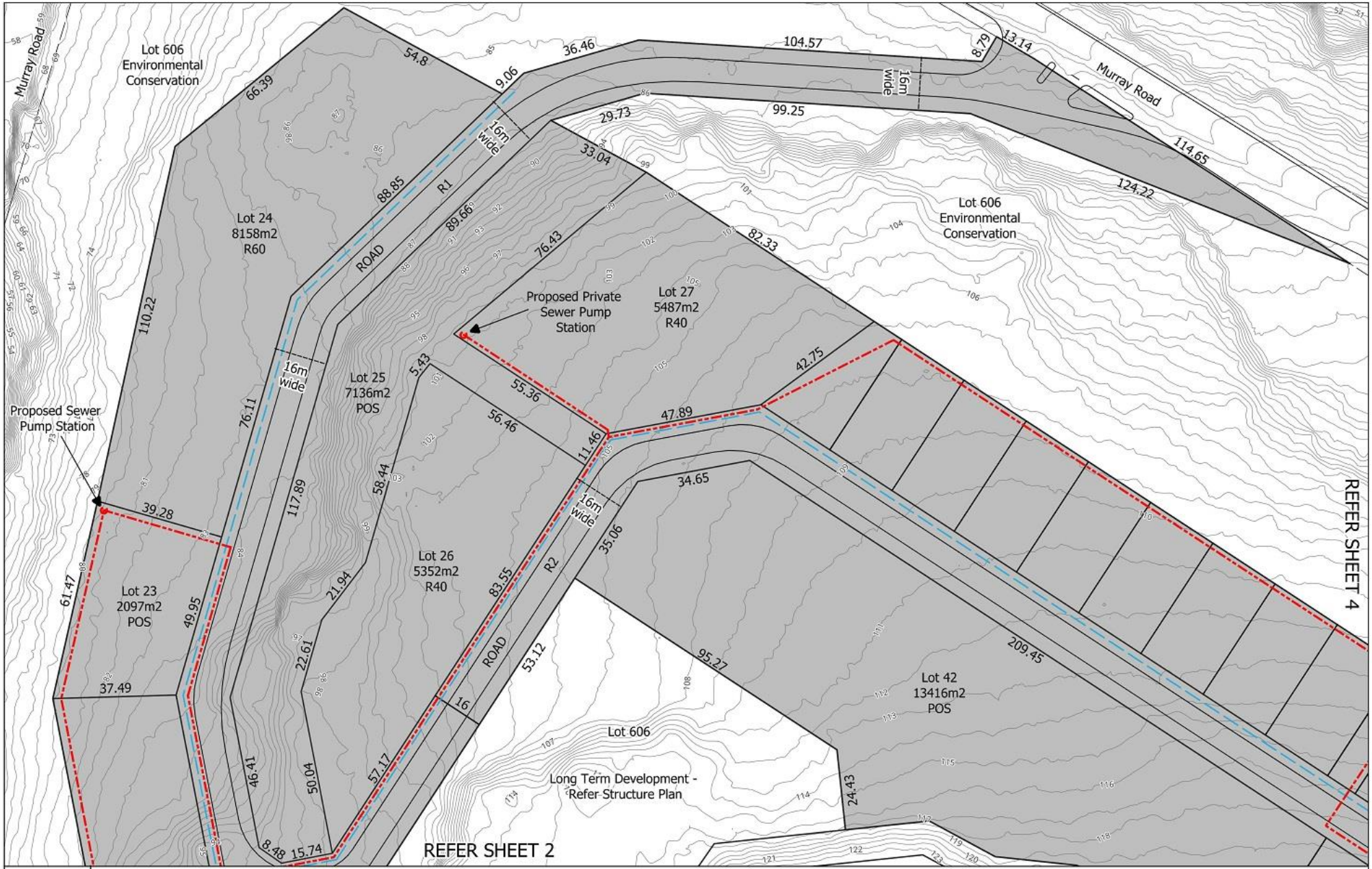
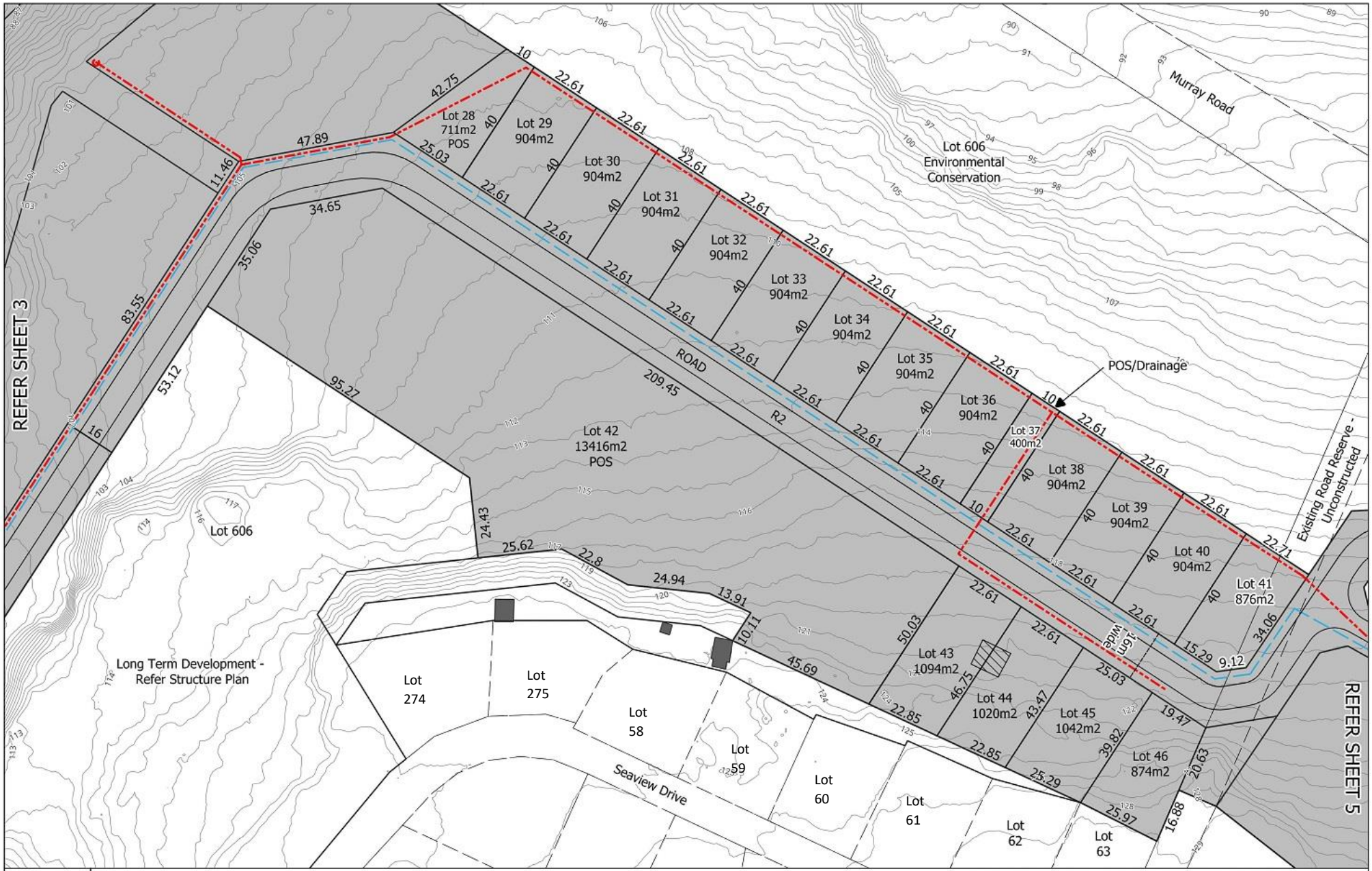
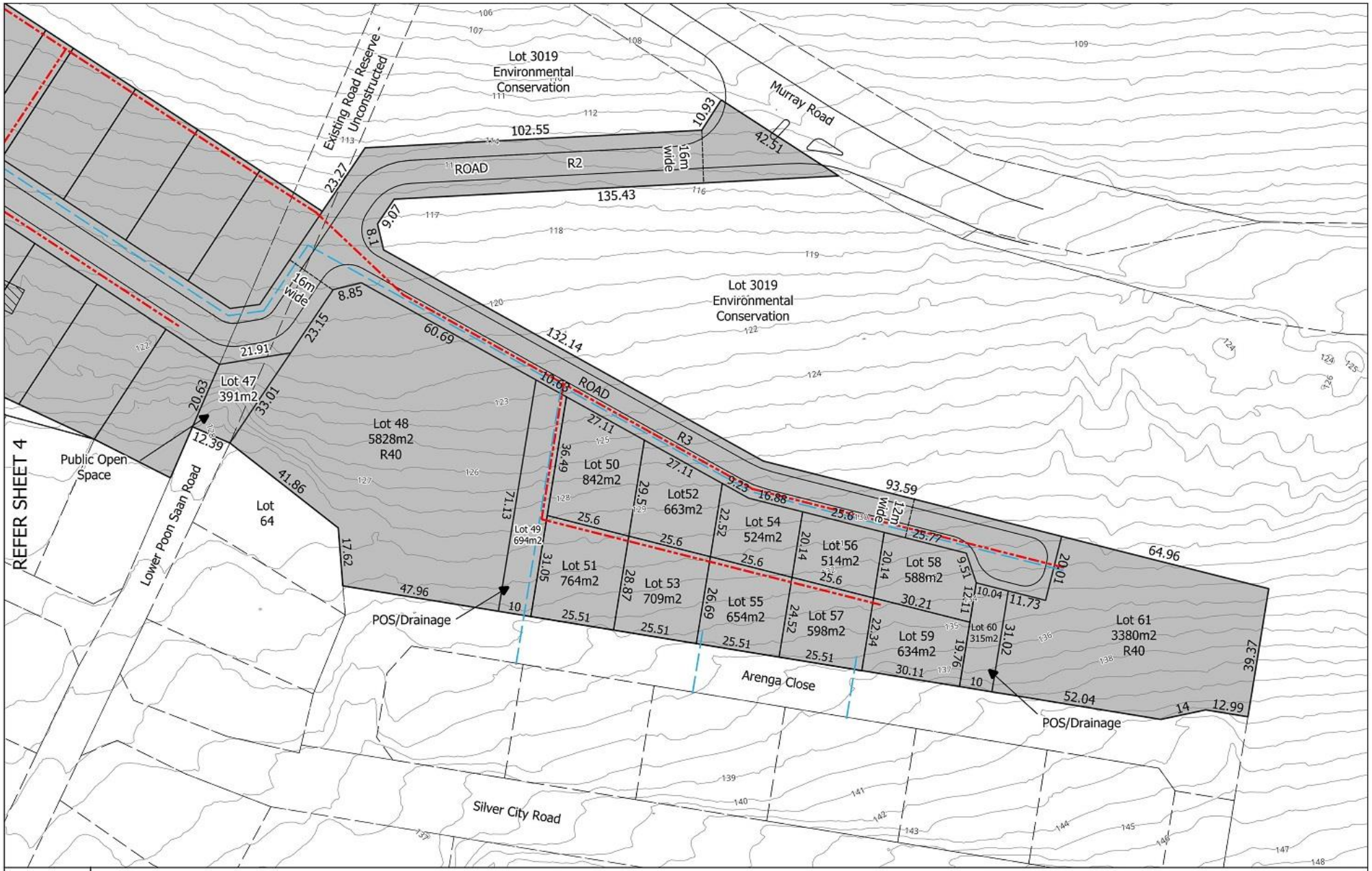
1:1000 @ A3
Housing Support Program (Stream 1) - Subdivision Plan - Sheet 1
Prepared by:
Jeffrey Planning & Mapping and Calmy Planning & Design
Date: 17 May 2025
Legend
Application area
Existing cadastre
Proposed cadastre
Contours (1m)
Proposed water
Proposed sewer
PRELIMINARY CONCEPT ONLY


REFER SHEET 3
Murray Road
Lot 606
Environmental
Conservation
Proposed Sewer
Pump Station
Lot 22
2538m2
R60
16m
wide
37.49
55.18
46.41
57.17
73.26
8.48
15.74
63.94
Long Term Development -
Refer Structure Plan
31.99
Lot 21
370m2
36.99
POS/Drainage
22.29
Lot 606
ROAD
Lot 20
2972m2
R60
80.34
105.92
R1
Existing sewer
access chamber
Existing sewer
main
Lot
340
Lot
341
Lot
342
Lot 19
1203m2
POS
39.29
38.18
19.92
10.34
13.03
Sunset Pl
Lot
117
Seaview Dr
Inset
1:500 @ A3
Lot 17
183m2
15.73
23.56
26.3
16.32
38.33
18.99
17.3
9.15
Lot 18
58m2
13.03
13.31
Lot 16
1307m2
Private Lot
15.4
28.37
N
1:1000 @ A3
Housing Support Program (Stream 1) -
Subdivision Plan - Sheet 2
Prepared by:
Jeffrey Planning & Mapping and Calmy Planning & Design
Date: 12 May 2025
Legend
Application area
Existing cadastre
Proposed cadastre
Contours (1m)
Proposed water
Proposed sewer
Existing buildings - retain
PRELIMINARY CONCEPT ONLY


Murray Road
Lot 606
Environmental
Conservation
66.39
54.8
9.06
36.46
104.57
8.79
13.14
16m wide
Murray Road
99.25
29.73
114.65
124.22
33.04
88.85
R1
ROAD
89.66
76.43
82.33
Lot 24
8158m2
R60
Lot 606
Environmental
Conservation
Proposed Private
Sewer Pump
Station
Lot 27
5487m2
R40
110.22
16m
wide
Lot 25
7136m2
POS
5.43
55.36
42.75
Proposed Sewer
Pump Station
76.11
56.46
47.89
11.46
117.89
58.44
34.65
39.28
16m
wide
35.06
61.47
Lot 23
2097m2
POS
49.95
Lot 26
5352m2
R40
21.94
83.55
R2
22.61
ROAD
53.12
209.45
95.27
37.49
16
Lot 42
13416m2
POS
Lot 606
46.41
50.04
57.17
Long Term Development -
Refer Structure Plan
24.43
8.48
15.74
REFER SHEET 2
REFER SHEET 4
N
1:1000 @ A3
Housing Support Program (Stream 1) -
Subdivision Plan - Sheet 3
Prepared by:
Jeffrey Planning & Mapping and Calmy Planning & Design
Date: 12 May 2025
Legend
Application area
Existing cadastre
Proposed cadastre
Contours (1m)
Proposed water
Proposed sewer
PRELIMINARY CONCEPT ONLY


REFER SHEET 3
REFER SHEET 5
Murray Road
Lot 606
Environmental
Conservation
Lot 28
711m2
POS
Lot 29
904m2
Lot 30
904m2
Lot 31
904m2
Lot 32
904m2
Lot 33
904m2
Lot 34
904m2
Lot 35
904m2
Lot 36
904m2
Lot 37
400m2
Lot 38
904m2
Lot 39
904m2
Lot 40
904m2
Lot 41
876m2
Lot 42
13416m2
POS
ROAD
R2
POS/Drainage
Existing Road Reserve -
Unconstructed
16m
wide
Lot 606
Long Term Development -
Refer Structure Plan
Lot
274
Lot
275
Lot
58
Lot
59
Lot
60
Lot
61
Lot
62
Lot
63
Lot 43
1094m2
Lot 44
1020m2
Lot 45
1042m2
Lot 46
874m2
Seaview Drive
N
1:1000 @ A3
Housing Support Program (Stream 1) -
Subdivision Plan - Sheet 4
Prepared by:
Jeffrey Planning & Mapping and Calmy Planning & Design
Date: 12 May 2025
Legend
Application area
Existing cadastre
Proposed cadastre
Contours (1m)
Proposed water
Proposeds sewer
Existing building - retain
Existing ruin - demolish
PRELIMINARY CONCEPT ONLY


Lot 3019
Environmental
Conservation
Existing Road Reserve - Unconstructed
Murray Road
102.55
10.93
42.51
ROAD
R2
16m wide
135.43
23.27
9.07
8.1
Lot 3019
Environmental
Conservation
16m wide
8.85
23.15
21.91
60.69
132.14
10.63
ROAD
R3
Lot 47
391m2
20.63
33.01
12.39
Lot 48
5828m2
R40
27.11
36.49
Lot 50
842m2
27.11
29.5
Lot52
663m2
22.52
Lot 54
524m2
20.14
Lot 56
514m2
20.14
Lot 58
588m2
9.51
12.11
10.04
11.73
20.01
64.96
93.59
12m wide
9.23
16.88
25.6
25.77
REFER SHEET 4
Public Open Space
Lower Poon Saan Road
Lot
64
41.86
71.13
Lot 49
694m2
25.6
25.6
25.6
25.6
17.62
47.96
31.05
Lot 51
764m2
28.87
Lot 53
709m2
26.69
Lot 55
654m2
24.52
Lot 57
598m2
22.34
Lot 59
634m2
19.76
30.21
Lot 60
315m2
31.02
Lot 61
3380m2
R40
39.37
POS/Drainage
10
25.51
25.51
25.51
25.51
30.11
10
Arenga Close
52.04
14
12.99
POS/Drainage
Silver City Road
N
1:1000 @ A3
Housing Support Program (Stream 1) - Subdivision Plan - Sheet 5
Prepared by:
Jeffrey Planning & Mapping and Calmy Planning & Design
Date: 12 May 2025
Legend
Application area
Existing cadastre
Proposed cadastre
Contours (1m)
Proposed water
Proposeds sewer
PRELIMINARY CONCEPT ONLY